

ABSTRACT

Denise Artus Tillery, A PRELIMINARY EXAMINATION OF THE IMPACT OF A STRUCTURED PRINCIPAL NETWORK ON PRINCIPAL BURNOUT (Under the direction of Dr. Ringler), Department of Educational Leadership, November, 2012.

This study examined the extent to which participation in a formal network has on a principal's personal perception of burnout as measured by the Maslach Burnout Inventory for Educators (MBI-E). The MBI-E consists of 22 questions with responses indicated on a 7 point Likert scale ranging from 0 – 6. It measures three constructs of emotional exhaustion, depersonalization, and personal accomplishment. Analysis was completed on data obtained by surveying principals in New York City and Washington, DC that were also members of National School Leaders Network.

The researcher added 12 questions to the MBI-E in order to examine the categories of gender, age, highest degree earned, state in which they are principal, type of school, level of school, enrollment, years as a principal, extent of burnout and extent of burnout since becoming a network member. Reliability coefficients indicate the survey items were significantly correlated to each other within each construct of the MBI-E.

Demographic characteristics were combined with each construct and analyzed. The findings support the conclusion that principals generally report experiencing less perceived burnout since becoming an SLN member. These were not significant findings of any specific demographic characteristic having a greater impact on perceived burnout.

Recommendations were made relating to the creation of formal principal networks as a means of professional development to reduce burnout.

The outcomes of this study furthered the research on principal burnout. Based on the findings, there continues to be a strong need for effective professional development for principals in order to reduce principal burnout. Furthermore, issues on how to retain younger principals were also revealed. Further studies addressing either topic are warranted.

A PRELIMINARY EXAMINATION OF THE IMPACT OF A STRUCTURED PRINCIPAL
NETWORK ON PRINCIPAL BURNOUT

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

by

Denise Artus Tillery

November, 2012

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NETWORK ON PRINCIPAL BURNOUT

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ACKNOWLEDGEMENTS

I wish to thank many individuals who contributed to the many opportunities that led to this “bucket list” item. The belief instilled in me by my parents at an early age to be the best in all that I do and I can accomplish anything are lifelong values that led to this work. Although living through the questioning from my dad, “Your grade of a 95% is great but why didn’t you get 100%” was not always welcomed, I appreciate both of those values now and thank both my mom and dad.

Similarly, I appreciate Dr. Joe Peel and Dr. Del Burns for their belief in me as an instructional leader resulting in providing me the opportunity to further my education to this level. I owe my sincere appreciation to both of these individuals.

My committee members, Dr. Marjorie Ringler, Dr. David Rivera, Dr. William Grobe and Dr. Kermit Buckner’s desire for excellence, guidance and motivation throughout each phase of this process were appreciated greatly.

My greatest debt of gratitude is to those who fit all of these categories – be the best, believing in me, desire for excellence and continuous support. They believed in me, encouraged me to do my best and were constant cheerleaders – my family. My husband Mark and daughters, Kaitlyn and Courtney have made many sacrifices throughout this process and for this I am forever grateful.

This opportunity has been a tremendous gift to me. However, I hope the greatest gift is to Kaitlyn and Courtney, as well as, the many others that I have served throughout this process. I hope I have given them a lifelong gift by modeling continuous learning, perseverance, rebounding from failures leading to overall success.

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CHAPTER 1: INTRODUCTION

Research over the last 25 years has concluded that burnout is a psychological syndrome in response to chronic stressors associated with an individual's occupation (Maslach, Schaufeli, & Leiter, 2001). Freudenberger (1980) defined burnout as a chronic state of fatigue or frustration brought about by devotion to a cause, way of life or relationship that failed to produce the expected reward that a person has been working towards over a period of time. Human service workers, particularly educators, experience a greater risk of burnout (Burke, Greenglass, & Schwarzer, 1996; Freudenberger, 1975). Similarly, Maslach and Jackson (1986), authors of the Maslach Burnout Inventory (MBI), defined burnout as "feelings of low personal accomplishment, and strong feelings of emotional exhaustion and depersonalization." In 1993 Maslach concluded burnout to be a "psychological syndrome of emotional exhaustion, depersonalization and a feeling of reduced professional accomplishment that can occur among individuals working with other people in some capacity" (Langballe, Falkum, Innstrand, & Aasland, 2006). According to Hillhouse, Adler and Walters (2000) characteristics of burnout are thoughts of helplessness, hopelessness and entrapment along with negative attitudes towards self, work and life itself.

Burnout is a highly significant phenomenon in education. Many studies have been conducted on the burnout levels of teachers. There is limited research on burnout among principals (Friedman, 1995; Sari, 2004; Whitaker, 1995; Whitehead, 2000). From 1900 to the 1990s, 61 new academic and social programs were added to the list of school responsibilities (Vollmer, 2000). Programs range from health and nutrition in the early 1900s to vocational education, consumer education, drivers education, consumer, drug, character education and computer education. This change of programs has increased the responsibilities of school

principals. Two studies in 1989 and 1998 compared the profiles of principals at that time. In 1988 principals supervised 29 staff members, worked 11 months and worked 45 hours a week with 6 additional hours devoted to school related activities. Whereas, principals in 1998 worked year round, supervised 44 staff members and worked 50 hours a week with 8 additional hours devoted to school related activities (Doud, 1989; Doud & Keller, 1998). The continual addition of programs may be attributed to the increased burnout rates of principals.

Consequently, the educational reform movement has significantly impacted the responsibilities of principals, serving as a catalyst for redefining the principal's role (Barth, 1984; Barth, 2001; Bottoms & O'Neill, 2001; Duke, 2008; Lashway, 2003; Lyons & Algozzine, 2006). The continued emphasis on reform and accountability of school administrators make the job less attractive to those certified to enter the position. Furthermore, turnover rates of practicing principals have been steadily increasing. Although not all current vacancies can be attributed to burnout the changing role creates a sense of inadequacy causing a desire to assume different roles (Barty, Thomson, Blackmore, & Sachs, 2005; Cusick, 2003; Cushing, Kerrins, & Johnstone, 2003; Lashway, 2003; McCreight, 2001; Mitgang, 2008; Papa & Baxter, 2005).

Statement of the Problem

In a culture of accountability, schools need accomplished leaders to take the reins, perhaps, more than ever before experienced principals are leaving the profession. In addition, educators certified to enter the position are reluctant to leave the classroom to enter administration. Public school systems are approaching a national crisis. The shortage of principals in the United States has caused concern nationwide (National Association of Secondary School Principals [NASSP], 2000). In 1998, the National Association of Elementary School Principals conducted a study of elementary and middle school principals. They found that

the 42% turnover rate that existed during the ten years prior to 1998 was likely to continue into the next decade. High school turnover rates are the highest. Elementary school principal turnover rates increased the most by 5.5% (Fuller, Orr, & Young, 2008). Similarly, Fuller et al. (2008) found results that mirror the national study conducted by NAESP. After analyzing data drawn from Texas educational files they found principal turnover rate to be highest at the high school level. Sixty-one percent of high school principals vacated their position between 2004 and 2007. The greatest increase in principal turnover was among elementary principals. Their rate of turnover increased 5.5% during this same time period. From 1995-1998 the turnover rate of elementary principals was 42.3%. This rate increased to 47.8% in 2004-2007. In addition, Fuller et al. (2008) in their study of Texas principals found the minimum retention rate to be approximately 3 years with 52% of principals leaving during that time period. Results were similar in a study of Illinois principals conducted by DeAngelis and White (2011). They focused on principal and school level data from state and national sources from 2001-2008. Turnover rates for all principals were significantly higher between 2001 and 2008 than during an earlier study analyzing data from 1987 to 2001. In 1987, 86% of principals remained at their schools. This decreased to seventy-nine percent by 2001. Significant decreases in retention were evident beginning in 2003. Retention rates of the two prior years were 81% and 83%, respectively. In 2003 rates dropped to 76.3%. Retention rates remained in the seventies throughout the duration of this study. These decreased retention rates may reflect the increased emphasis placed on accountability during this period causing an increase in burnout. Principals leaving their position may have accepted a new position at a different school, at central office or within a different system. However, these exits can also be attributed to early retirement and burnout (Lashway, 2003).

Adding to the problem of principals leaving the position is the problem of recruitment of qualified principals. In early 2000, approximately 50% of all school districts nationally reported difficulty attracting qualified applicants to fill these positions (Cusick, 2003). Furthermore, The Bureau of Labor Statistics estimated a 10% increase in educational administration jobs between 2001 and 2008. High turnover rates, decreasing numbers of applicants applying for vacant administrator positions and an increased number of positions signals a call to seek reasons for principal burnout when burnout is defined as a sense of low personal accomplishment, and strong feelings of emotional exhaustion and depersonalization (Maslach & Jackson, 1986).

Researchers have identified reasons why certified applicants are not interested in becoming school administrators and why current principals are leaving the profession. Few studies have been conducted to determine if turnover rates are associated with burnout (Barty et al., 2005; Cushing et al., 2003; Cusick, 2003; McCreight, 2001; Mitgang, 2008; Papa & Baxter, 2005). Five compelling reasons for burnout and decreased number of qualified individuals applying for principal positions are consistent. Regardless of size of study, location or type of study these five reasons were: the role takes too much time, the salary is not much more than a veteran teacher especially when extra time at work is taken into consideration, principals are held accountable for things outside their direct control, there is little or no support from central office, the lack of respect for profession. Individually, each reason is substantial enough to cause a sense of burnout. The experience of just one of these reasons for burnout is enough to sway a practicing principal to leave the profession. When all five reasons are examined it affirms that the principal role is becoming less desirable.

The effect of principals is considered second only to that of teachers in facilitating student learning (Leithwood, Louis, Anderson, & Wahlstrom, 2009; Marzano, Waters, &

McNulty, 2005). The role of the principal has become so complex that superintendents evaluating principals and principals themselves report a sense of inadequacy. Public Agenda's (Public Agenda for the Wallace Foundation, 2008) study of 853 superintendents, 59% did not feel their principals had effective leadership skills, and 71% were not happy with principal's communication of vision and mission. Similarly, in a study of 105 California superintendents, more than 65% listed poor interpersonal skills as a reason principals failed at their jobs (Hertling, 2001). In another study of principals, the thirteen highest rated perceived obstacles facing principals were identified. These obstacles included: deficits in leadership skill and knowledge, namely in areas of time management, organization, problem solving, decision making, budgeting, plant management, curriculum and instruction (Leithwood & Montgomery, 1984). The increased demands on principals and the identification of perceived skill deficits are factors to be examined when determining reasons for increased principal burnout. These two factors can be examined when considering ways to reduce burnout. Principal networks may serve as a method to reduce burnout as they support leadership development of principals.

Formal principal networks bring together administrators of different schools and districts for the purpose of reaching the common goal of enhanced professional performance (Daresh & Playko, 1992, pp. 161-162). Programs differ somewhat in structure, but share common features: collaborative settings, regular meetings, focus on leader questions of practice, and reflective activities (Brill, 2008; Chapman, 2005; Donaldson, 2008; Intrator & Scribner, 2008).

Purpose of the Study

Although there are many studies pertaining to reasons for burnout there are few studies that examine effective practices school systems may implement in order to reduce burnout among veteran principals. In addition, there is minimal research on effective professional

development opportunities to meet the needs of veteran principals. In a study conducted by Public Agenda for Wallace Foundation in 2007, “principals overall feel that leadership programs in education are out of touch with current realities”. Very few had positive comments about traditional training opportunities.

Darling-Hammond, LaPointe, Meyerson, Orr and Cohen (2007) reported in their study, *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*, that research is limited on effective in-service professional development. They identified a growing consensus that ongoing leadership support should combine theory and practice, scaffolded learning experiences guided by experienced mentors, opportunities for reflection and peer networking.

The purpose of this study is to explore the relationship between formal network participation and reduced principal burnout. The researcher will determine if participation in a structured principal network has a positive impact on principals to reduce burnout.

The sample population for this research project will be selected from a national organization, School Leaders Network (SLN). The SLN was established in 2006 to support principals in meeting the increased demands of their role as the focus on student achievement has increased. Networks are guided by SLN-trained facilitators, to assist members on the technical and adaptive challenges of leadership to improve student learning. Members of all networks participate in discussion of critical issues, continuous learning on a topic determined by the group and informal networking. Currently there are 23 networks representing 6 states totaling approximately 250 members. Members represent a wide range of experiences and cultural/ethnic backgrounds.

Research Questions

All members of a School Leaders Network will be asked to complete an electronic version of the Maslach Burnout Inventory (MBI). The MBI survey consists of 22 questions measuring burnout in three distinct constructs. The constructs are: emotional exhaustion, personal accomplishment and depersonalization. Participants will also be asked to provide additional demographic information to allow this researcher to compare amount of time as a network participant with burnout rates. This researcher will also look at the impact of network participation based on education level, gender, age, years as a principal, level of school, size of school, and type of school. Responses from the entire survey will assist this researcher to address the research questions and determine the impact of network participation on reducing perceived burnout of practicing principals. In addition, the researcher will examine each construct of the MBI survey to determine if the impact of network participation is greater on a specific construct.

Overarching Questions

1. To what extent does being a member of School Leaders Network reduce principals' levels of burnout?
2. How do demographics influence perception of burnout?

Research Question #1

To address overarching question Research Question #1 the following research questions will be investigated:

Research question 1a: As measured by the Maslach Burnout Inventory-E (MBI-E) to what extent does network participation result in a lower perception of burnout?

Research Question 1b: As measured by the MBI-E to what extent does network participation lower one's perception of emotional exhaustion?

Research Question 1c: As measured by the MBI-E to what extent does network participation lower one's perception of depersonalization?

Research Question 1d: As measured by the MBI-E to what extent does network participation raise one's sense of personal accomplishment?

Research Question #2

To address overarching question Research Question #2 the following research question will be investigated:

Research Question 2a: To what extent do demographics influence the overall score as measure on the MBI-E? The following demographics will be analyzed: education level; gender; age; years as a principal; level of school; size of school; type of school.

Significance of the Study

As the role of the principal continues to evolve and stressors are identified it is imperative for school systems to explore strategies to reduce principal burnout. The findings from this study may inform local, state and national policymakers as they prepare to address the most recent educational reform document: A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act of 2010. A goal of this reform initiative is for every school to be led by a great leader. Educational leaders and politicians could find the results beneficial as they identify professional development models to decrease principal burnout. *Race to the Top* (United States Department of Education, 2009) funding guidelines emphasize getting more talented principals into schools. Results of this study may be helpful as states create a plan to develop and retain effective principals. Results of this study will contribute to the limited body of research on principal networks and their impact on reduced rates of burnout.

Limitations of the Study

Limitations of the study include:

- Only one network model is being researched. It is a model that replicates National School Leaders Network model implemented in 23 networks representing 6 states currently.
- Sample size will be limited to participants from one network model. It will be a national study representing 6 states (Texas, Hawaii, California, New York, Massachusetts and District of Columbia).
- Surveys will be distributed to current practicing principals which eliminates those that have experienced burnout and left the profession. The study will be completed by individuals ranging from 1 year experience or less to 25+ years experience.
- Since respondents will be completing the inventory individually on their own time it is possible for misinterpretation or various interpretations of a statement. However, frequency of administration of the survey prior to this usage has provided opportunities for the developers to clarify statements.
- Assigning values to principals' perceptions of burnout are feelings that may be impacted by events occurring at the time of the survey being administered. Perceptions have a significant impact on an individual's reality that reality may or may not be accurate.

Methodology

The nature of this study is a mixed method comparison study of all national network members. The researcher will use this approach because of the advantages of using this method. Specific advantages are: the availability of an instrument and ease in accessing many participants

over a large area. All network members will receive an electronic survey, Maslach Burnout Inventory (MBI) for Educators measuring potential reasons for burnout (see Appendix B). The MBI developed by Maslach and Jackson in 1986 has been used to measure the dimensions of educators' burnout. "In studies of burnout the MBI is almost the only instrument used to measure whether and to what degree workers suffer from burnout. The MBI is not only the most widely used instrument to measure burnout it is also accepted internationally" (Tomic & Tomic, 2008). The MBI consists of 22 items forming three constructs: emotional exhaustion, personal accomplishment and depersonalization. The frequency scale ranges from 1 (very mild) to 6 (major, very strong). The emotional exhaustion consists of nine of the 22 items which describe feelings of being emotionally exhausted. Depersonalization construct consists of 5 of the 22 items describing feelings of impersonal responses to co-workers. The third construct, personal accomplishment subscale consists of 8 of the 22 items describing feelings of competence and success about personal achievements. The higher the mean scores of the emotional exhaustion and depersonalization constructs reveal a greater degree of burnout (Sari, 2004). This particular inventory was selected for this study due to its ease in completion, relevance to the study as all reasons of burnout are embodied in the three constructs of this instrument and validity of the survey. This instrument addresses the complex nature of a school administrator's role. It has been used by a variety of researchers, in similar studies, representing several countries since its creation in 1986 (Friedman, 1995; Sari 2004; Tomic & Tomic, 2008; Whitaker, 1995). Additionally, reliability coefficients for each construct were similar and acceptable degrees of internal reliability, test-retest reliability had a small range from 0.53 to 0.89 between each construct and were significant beyond the 0.001 level which are sufficient for research purposes (see Appendix C).

With the addition of demographic questions this study will analyze overall burnout for all network members, as well as, compare burnout among a variety of subgroups, specifically: education level, gender, age, years as a principal, level of school, size of school, and type of school (see Appendix A). Finally, the researcher will identify the impact of longevity as a network participant on perceived burnout.

Operational Definitions

For the purpose of this study the following items are defined as:

Burnout – a psychological syndrome in response to chronic stressors associated with an individual’s occupation (Maslach et al., 2001).

Networks – a group of 12-15 principals engaged in monthly meetings lasting from 3-4 hours with an agenda consisting of time for support, discussion of critical issues and continuous learning. Agendas are created by participants (Neale & Roy, 2009).

Veteran principal – a principal with more than 5 years experience

Organization of Dissertation

The purpose of Chapter 1 was to share the purpose of the study and to provide an overview of the next four chapters which comprise this study. Chapter 2 of this study will provide a synthesis of the literature with four prevalent themes. The four themes are: (1) burnout in all service occupations; (2) research of the Maslach Burnout Inventory; (3) educational leader burnout; and (4) principal professional development opportunities, specifically structured networks, to reduce burnout among principals. Chapter 3 presents the research design and methodology for the study. The design is quantitative as participants will complete a survey. Chapter 4 will provide the evidence collected for this study. Finally, Chapter 5 consists of conclusions, recommendations, implications and areas for further study.

CHAPTER 2: REVIEW OF LITERATURE

The review of literature is divided into four main sections to address the purpose of this study. The purpose of this study is to determine if participation in a structured principal network has a positive impact on reducing principal burnout. The first section reviews variables that affect burnout including individual worker characteristics. The second section reviews research on the Maslach Burnout Inventory, the instrument that will be used in this study, specifically, the Maslach Burnout Inventory for Educators. The third section of this review addresses education leaders' burnout. The final section of the literature review includes research of professional development opportunities, specifically structured networks, for practicing principals to reduce burnout.

Research over the last 25 years has concluded that burnout is a psychological syndrome in response to chronic stressors associated with an individual's occupation (Maslach et al., 2001). Freudenberger (1980) defined burnout as a chronic state of fatigue or frustration brought about by devotion to a cause, way of life or relationship that failed to produce the expected reward that a person has been working towards over a period of time. Human service workers, particularly educators, experience a greater risk of burnout (Burke et al., 1996; Freudenberger, 1975). Similarly, Maslach and Jackson (1986), author of the Maslach Burnout Inventory (MBI), defined burnout as "feelings of low personal accomplishment, and strong feelings of emotional exhaustion and depersonalization". In 1993 Maslach concluded burnout to be a "psychological syndrome of emotional exhaustion, depersonalization and a feeling of reduced professional accomplishment that can occur among individuals working with other people in some capacity" (Langballe et al., 2006). According to Hillhouse et al. (2000) characteristics of burnout are thoughts of helplessness, hopelessness and entrapment along with negative attitudes towards self,

work and life itself. For this study, the definition that will be referred to when burnout is mentioned is a psychological syndrome in response to chronic stressors associated with an individual's occupation (Maslach et al., 2001).

Symptoms of burnout include physical, behavioral and motivational symptoms. Physical symptoms include headaches, nausea, dizziness, nervous tics, muscle pain (Schaufeli & Enzmann, 1998) and physical depletion (Gold, 2001). Chronic fatigue is the most common physical sign of burnout (Schaufeli & Enzmann, 1998). Leiter (2005) also indicated that exhaustion and sleeplessness are common physical symptoms related to burnout. Behavioral symptoms of burnout include hyperactivity, alterations in eating habits (Ifeagwazi, 2006), increased aggression and isolation (Schaufeli & Enzmann, 1998). Motivational symptoms of burnout include a loss of intrinsic motivation such as zeal, enthusiasm, interest and idealism (Schaufeli & Enzmann, 1998). Cherniss (1980) reported that individuals experiencing burnout dread going to work or experience a lack of motivation to complete work related tasks. Subsequently, the burnout process may result in symptoms that result in impaired job performance (Hillhouse et al., 2000; Maslach et al., 2001).

Variables that Affect Burnout

Numerous factors related to the work environment have been associated with burnout among service professionals. Schaufeli and Enzmann (1998) identified four work related burnout factors. These four burnout factors are: job-related stressors, client related stressors, social support and self regulation of work related activities. Job or client related stressors include workload and time pressure, which attribute for 25-42% of the variance associated with burnout, especially emotional exhaustion (Lee & Ashforth, 1996). Role conflict and role ambiguity are two potential stressors with regard to multiple job related tasks (Butler & Constantine, 2005;

Jenero, Flores, & Arias, 2007). Research has indicated that both role conflict and role ambiguity are positively correlated with job related tension (Brief & Aldag, 1976; Lambie, 2007; Thompson & Powers, 1983). Other job demands such as hours worked per week, the amount of direct contact with clients, size of population serving and the severity of clients are positively related to burnout (Gibson, McGrath, & Reid, 1989; Maslach & Jackson, 1986). Gomez and Michaelis (1995) indicated that human service providers who spend time interacting with clients report a lower rate of burnout when compared with those involved in bureaucratic activities. Job overload exists when the employee feels there is too much work to realistically accomplish given existing time and resources (Wilkerson & Bellini, 2006). Hours worked per week correlate with and predict personal accomplishment, emotional exhaustion and depersonalization (Rosenberg & Pace, 2006).

The latter two factors identified by Schaufeli and Enzmann, social support and self regulation fall into the realm of resources. A lack of social support, particularly from supervisors has been related to burnout. In a study of burnout conducted by Lee and Ashforth (1996), support from supervisors explained 14% of the variance of emotional exhaustion, 6% of depersonalization and 2% of personal accomplishment. The amount of variance due to perceived support from co-workers was 5%, 5% and 2% respectively. Thus, support from supervisors impacts burnout rates, particularly emotional exhaustion. Research suggests that burnout among service professionals resulted from a loss of enthusiasm from the supervisor (Cherniss, 1980; Freudenberger, 1975). The relationship of the employee and the work environment is correlated to burnout. When the demands of the job, exceeds the capacity of the individual to meet them or when employees' efforts are not rewarded, burnout is likely to occur (Maslach, 2003).

Individual Worker Characteristics that Affect Burnout

Burnout research began in human services and health care professions in which the core of the job was the relationship between the provider and the client. This interpersonal context focused attention on the provider's emotions. Most of the initial research was descriptive and qualitative in nature based on interviews, case studies and on-site observations. Personal factors such as demographic variables (ie: age, gender and level of education), personality traits and work related attitudes are all related to burnout (Allison, 1997; Combs, Edmondson & Jackson, 2009; Gmelch & Gates, 1998; Maslach et al., 2001; Zapf, Seifert, Schmute, Mertini, & Holtz, 2001). However, these correlations are not as great as those for burnout and job characteristics. This indicates burnout is a function of the environment rather than the individual (Maslach et al., 2001). In other words, job related or environmental stressors are more highly correlated with burnout than the characteristics of the individual.

Education

Some studies have found a relationship between years of education and the rate of burnout among service professionals (Maslach, Schaufeli & Leiter, 2001). Level of education and type of degree earned were predictors for burnout. Employees with more education tend to report higher levels of burnout than less educated employees (Maslach et al., 2001). One theory suggests that individuals with higher levels of education are employed in occupations with more responsibilities and consequently higher levels of stress. Gomez and Michaelis (1995) indicated that service professionals who spend time involved in bureaucratic activities, often employees with greater responsibilities, rather than interacting with clients report a higher rate of burnout. Additionally, employees with higher levels of education have higher career expectations and if these expectations are not met increased levels of distress are experienced (Maslach et al., 2001).

Gender

The relationship between burnout and gender is ambiguous. Some studies indicated rates of burnout are more prevalent among women than men (Maslach & Jackson, 1986; Poulin & Walter, 1993), while other studies dispute these results (Carlson & Mellor, 2004; Dupree & Day, 1995; Rosenberg & Pace, 2006; Van Horn, Schaufeli, Greenglass, & Burke, 1997). The one small but consistent association between gender and burnout is that overall men tend to score higher on depersonalization, whereas, women report slightly higher levels of emotional exhaustion (Maslach, 2003). Gender differences should be considered with caution because they may be associated with gender role stereotyping (ie: more fire fighters are likely to be male, more nurses are likely to be female).

Race

The research on the relationship of race and burnout is also ambiguous. Maslach and Jackson (1986) argued that burnout rates among service professionals could be detected along racial lines. Both Asian Americans and Caucasian Americans have been known to experience comparable levels of burnout while African Americans experience lower rates of burnout (Maslach & Jackson, 1986). Specifically, African Americans experience significantly lower levels of emotional exhaustion and depersonalization when compared to their Caucasian peers (Salyers & Bond, 2001). Schaufeli and Enzmann (1998) indicated that information pertaining to race and burnout are too small to observe consistent trends.

Age

Of the numerous demographic variables related to burnout age is the most predictive (Maslach et al., 2001). A significant negative correlation exists between age of employees and the prevalence of burnout. Younger, less experienced employees report higher levels of burnout

as compared to their coworkers who are over 30 years of age (Maslach et al., 2001; Schaufeli & Enzmann, 1998). Bilge (2006) stated that younger workers experience burnout at a higher rate than do middle aged employees.

Years of Employment

Burnout can be experienced by new employees after being employed for as little as one year (Cherniss, 1980; Freudenberger, 1975). Age is confounded with work experience and employees appear to be at greater risk for burnout earlier in their career (Maslach et al., 2001). For most new professionals there is less autonomy, control and subsequently increases in routine and boredom (Lloyd, King, & Chenoweth, 2002). Gomez and Michaelis (1995) found a negative correlation between emotional exhaustion scores on the Maslach Burnout Inventory – Human Services Survey and length of employment. They indicated that younger less experienced employees are more likely to experience emotional exhaustion. Cherniss (1980) attributed the higher quotient of emotional exhaustion experienced by new employees to their unrealistic high expectations of their clients. Once their expectations become more realistic emotional exhaustion is not experienced to the degree resulting in burnout (Dormann & Zapf, 2004).

Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) developed by Maslach and Jackson in 1986 has been used to measure the dimensions of burnout. Originally Maslach and Jackson used 47 items in the development of the MBI with a sample of health and service workers totaling over 600. A second sampling of 25 items with 420 helping professionals was conducted. Statistical analysis was conducted resulting in the final 3 factor version consisting of 22 items with response categories ranging from a few times a year (1) to every day (6). In studies of burnout the MBI is almost the only instrument used to measure whether and to what degree workers suffer from

burnout. Schaufeli and Enzmann (1998) estimated that the MBI is used in approximately 90% of all studies involving occupational burnout. The MBI is not only the most widely used instrument to measure burnout it is also accepted internationally. It has been used by a variety of researchers, in similar studies, representing several countries since its creation in 1981 (Friedman, 1995; Sari 2004; Tomic & Tomic, 2008; Whitaker, 1995). Although the original 22 item survey was developed for use with human service professionals, thus MBI – HSS, many saw a use for the burnout measure among teachers. In 1986 Maslach and Jackson created the Maslach Burnout Inventory – Educators (MBI-E) by changing the word *recipient* with *student* in the respective items (Worley, Vassar, Wheeler, & Barnes, 2008). This instrument has been used to measure burnout rates of teachers. There have been a small number of studies on burnout among managers, including school principals (Cooper & Kelly, 1993; Whitaker, 1995).

Maslach Burnout Inventory for Educators

The MBI for Educators (Maslach & Jackson, 1986) consists of 22 items forming three constructs: emotional exhaustion, personal accomplishment and depersonalization. The frequency scale ranges from 1 (never) to 6 (every day). The emotional exhaustion consists of nine of the 22 items which describe feelings of being emotionally exhausted. Lee and Ashforth (1996) concluded that emotional exhaustion played a central role in burnout among supervisors in the human service sector. Depersonalization construct consists of 5 of the 22 items describing feelings of impersonal responses to co-workers. The third construct, personal accomplishment subscale consists of 8 of the 22 items describing feelings of competence and success about personal achievements. The higher the mean scores of the emotional exhaustion and depersonalization constructs reveal a greater degree of burnout (Halbesleben & Demerouti, 2005; Sari, 2004). A low degree of burnout is reflected in low scores on emotional exhaustion and

depersonalization and high scores on the personal accomplishment subscale (Demerouti, Bakker, Vardakou, & Kantas, 2003; Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998). Additionally, reliability coefficients measured by Cronbach's alpha procedure were .90 for exhaustion, .90 for depersonalization and .84 for personal accomplishment. Each construct were similar therefore acceptable degrees of internal reliability. Test-retest reliability had a small range from 0.53 to 0.89 between each construct and were significant beyond the 0.001 level which are sufficient for research purposes (Sari, 2004).

The MBI (1986) will be the measurement instrument used for this study. In order to obtain information to examine the various research questions of this study, modifications will be made to the instrument through the organization that holds the reproduction rights to the MBI instrument, Mind Garden. These modifications include an anonymous self report questionnaire containing background and demographic questions. These questions relate to the principal's gender, age, years of experience and school type and level, as well as, years in a School Leaders Network (SLN).

Education Leader Burnout

Burnout is a highly significant phenomenon in education. Many studies have been conducted on the burnout levels of teachers. There is limited research on burnout among principals (Friedman, 1995; Sari, 2004; Whitaker, 1995; Whitehead, 2000). From 1900 to the 1990s, 61 new academic and social programs were added to the list of school responsibilities (Vollmer, 2000). Programs range from health and nutrition in the early 1900s to vocational education, consumer education, drivers education, consumer, drug, character education and computer education. This change of programs has increased the responsibilities of school principals. Two studies in 1989 and 1998 compared the profiles of principals at that time. In

1988 principals supervised 29 staff members, worked 11 months and worked 45 hours a week with 6 additional hours devoted to school related activities. Whereas, principals in 1998 worked year round, supervised 44 staff members and worked 50 hours a week with 8 additional hours devoted to school related activities (Doud, 1989; Doud & Keller, 1998). The continual addition of programs may be attributed to the increased burnout rates of principals.

Longer work hours and increased demands of school principals can be attributed to reform initiatives that contribute to a sense of work overload and loss of control. Three significant sources that have informed educational reform efforts are: *The Nation at Risk* (Commission on Excellence in Education, 1983) report, No Child Left Behind (United States Department of Education, 2001) legislation and U.S. Department of Education (2010) Blueprint for Reform Reauthorization of Elementary and Secondary Education Act including Race to the Top. *The Nation at Risk* report began mounting attention to educational leadership in the United States because of the alarming statistics it reported: 13% of 17 year old students in this country were illiterate, 40% of minority students were illiterate, SAT scores were declining and there was a 72% increase in enrollment in remedial college math classes (Jorgensen & Hoffman, 2003).

Effect of Burnout on Organization

Job burnout is one of the most serious problems which an organization has to deal (Golembiewski, Boudreau, Sun, & Luo, 1998; Ronen & Mikulincer, 2009). Burnout can have a serious effect on the overall effectiveness of an organization and numerous studies have demonstrated the negative effects of burnout on the organization and individual employees (Maslach & Leiter, 2008). Burnout affects individuals as well as group and team performance within an organization (Waugh & Judd, 2003). The effects of burnout can lead to high rates of absenteeism, turnover and increased complaints about staff performance (Maslach, 2003).

Principals experiencing high stress levels reduce productivity throughout the school and contribute to a negative work environment (Pahnos, 1990). Understanding and preventing burnout are important to organizations to maintain overall effectiveness.

Principal Stressors

The school principal continues to be the focus of attention with respect to the role he/she plays in the overall success of a school. Research continues to highlight the complexity of the role of the principal (see Table 1). Although instructional leadership is not the sole responsibility of the principal many effective school studies depict principals as having the leading role in instructional school improvement. The effect of the principal on student achievement is second only to teaching (Glanz, Shulman, & Sullivan, 2007), which constitutes to as great as a 10% gain in student achievement over less effective leaders (Waters, Marzano, & McNulty, 2003).

Principals are susceptible to the phenomenon of burnout due to the complex nature of the job. Role conflict, role ambiguity and role overload caused by the pressure to restructure schools in the 1990s appeared to be particular problems for principals (Murphy, 1994; Whitaker, 1995). These reasons may also relate to findings in a report by A Center for the Future of Teaching and Learning Policy Brief in Strengthening Education Leadership in California. Results indicated only 48% of current principals planned to stay in their jobs until they retired and only 22% of secondary principals planned to stay in their jobs until retirement. Key concepts of principal burnout are related to role conflict, intensive workload, role complex tasks, insufficient resources and rewards, isolation and few possibilities for promotion (Friedman, 1995; Whaley & Cox, 2002).

Table 1

Principal Stressors Related to Burnout

	Isolation Relationships Support	Time Overload	Organizational Structure	Resources	Role Ambiguity
Welch, Maiderson, & Tate (1982)	X	X	X		
Borg, Riding & Falzon (1993)	X	X	X	X	
Cooper & Kelly (1993)	X	X	X	X	
Gaziel (1995)	X	X			X
Mackler (1996)	X		X		X
Sarros (1988)	X	X			
Knutton & Mycroft (1986)	X	X	X		
Burke (1988)	X		X		X
Chaplain (1995)	X	X			

Note. (Friedman, 2002).

The identified stressors, role ambiguity, role conflict and role overload, appear to have the same impact on principals' levels of burnout regardless of gender, age or years of experience as an educator as found in a study conducted by Combs et al. (2009) of 228 elementary principals in a southwestern state. A significant relationship between gender and burnout was not present. Similarly, age was not related to burnout. However, older principals did indicate lower or no levels of burnout. Once again, this study did not reveal a significant relationship between years as an educator or years as a principal with levels of burnout. A recommendation of the study included further research of the antecedents of burnout in order to provide support and resources necessary to retain effective principals.

MBI – E Research

In 1995 Whitaker conducted a study with a random sample of K-12 principals in one state to assess the prevalence of burnout. Whitaker used the MBI to measure three constructs of burnout: emotional exhaustion, depersonalization and personal accomplishment. From a total sample of 280 principals, one hundred seven principals responded, of which 54% were elementary, 22% were middle school and 24% were high school principals. While 77% experienced high personal accomplishment 19.6% of the sample scored high in emotional exhaustion and 13.1% scored high in depersonalization. Further research involving interviews with a sample of these participants was conducted to address antecedents of burnout. Responses revealed common themes for why principals might leave the profession. Reasons included increasing demand of the principalship, lack of role clarity, lack of recognition, and decreasing autonomy.

Isaac Friedman conducted a study to develop and validate a measure for school principals' perceived burnout. His study included 821 elementary and secondary Israeli

principals completing a questionnaire with items referring to their feelings about themselves, their environment and their work. Factor analysis revealed three categories for burnout: (a) exhaustion, (b) aloofness, and (c) depreciation. Exhaustion included emotional, cognitive and physical exhaustion whereas aloofness refers to the principal's deterioration of enthusiasm for the job and depreciation refers to the negative feelings for those who work for the principal. Through a sample of 410 participants he identified 3 categories of principal stressors. These three categories were: organization, task and relations. A comparison of principals with varying years of experience showed that organization was the best predicting variable distinguishing between high and low burnout rates. No significant differences were found in this sample between age, gender, nor size of school. Years or experience at current school contributed significantly to exhaustion and depersonalization. Even though the study was in Israel and there were political situations that were different from the USA the results of the study still inform us about burnout since the reasons given for burnout are similar to those given by American principals.

Sari (2008) explored issues of burnout among special school head teachers and teachers in Turkey. Although the purpose of this study was to determine whether there are similar reasons for burnout among teachers and head-teachers, the reasons for head-teacher burnout were similar to findings of other studies. In the quantitative approach of 295 special education teachers and 33 principals responded. The Job Satisfaction Scale and MBI were used to measure job satisfaction and burnout levels. Results indicate a high level of emotional exhaustion regardless of role. Similarly, there were no significant differences between depersonalization as reported by teachers or principals. Personal accomplishment did reveal a significant difference between the two groups. Sari's study did find gender to have an impact on levels of burnout. Female teachers

and principals experienced higher levels of emotional exhaustion than their male counterparts. Male teachers and principals reported higher levels of depersonalization than their female counterparts. No difference existed between male and female principals in regards to personal accomplishment. Turkish principals displayed high levels of depersonalization because of the heavily bureaucratic and autocratic nature of their work conditions. Major sources of stress were workload, low salary, lack of self esteem and lack of in-service training and time pressure. Although sources of stress and reasons for burnout as indicated on the MBI by Turkish head-teachers are similar findings when given to US principals, results may be impacted by cultural differences.

Similarly, although a small study, Izhar Oplatka interviewed six mid career female principals in Israel to find similar findings. Participants experienced a sense of burnout and experienced a sense of job satisfaction. They attributed this to their overall commitment and empathy towards staff and students. All participants emphasized their sense of physical fatigue caused by the role being overwhelming with more responsibility, more tasks to perform and the job becoming harder rather than becoming easier with experience. Participants also expressed a sense of emotional fatigue and a decreased sense of personal accomplishment. “In spite of their fatigue and reduced personal accomplishment, the women principals could describe, to a certain extent, their proactive, innovation-oriented management as well as their positive attitudes towards their staff and students” (Oplatka, 2002) typically not characteristic of someone experiencing burnout. These women found it possible to go on with implementation of innovations and changes in their school despite feelings of burnout.

Although a different purpose, Evers, Tomic and Brouwers (2004) used the MBI-E in a study of 411 randomly selected vocational students in their late teens attending a Regional

Training Centre in the Netherlands and 41 teachers at the same institution to determine if students' perceptions of their teachers' levels of burnout aligned with the teacher's own perception of burnout. Both students and teachers surveys revealed a low level of emotional exhaustion. Significant differences between male and female students were present in regards to emotional exhaustion and depersonalization. Male students and teachers more frequently reported higher scores in both areas emotional exhaustion and depersonalization. Overall, students reported significantly higher levels of depersonalization than their teachers which indicated that students perceived their teachers to be closer to burnout than the teachers themselves. This study is one of few involving students reporting perceived symptoms of burnout among their teachers. Although results of the two sample groups were not similar this practice of students evaluating teachers may be used as a reflective, self examination tool for teachers.

Although principal burnout is prevalent in the United States as well as other countries it can be reduced with the proper strategies. In a study conducted by Ronen and Mikulincer (2009) sampling 393 employees from 49 business organizations burnout was assessed in relation to team cohesiveness. Similar to Sari's (2004) study of special school principals and Tomic and Tomic's study of principals, existential fulfillment or relations with co-workers had an impact on levels of burnout. The greater the existential fulfillment, the less people suffer from burnout. Individuals receiving interactions from team members in times of need promote a sense of security allowing individuals to master their environment report lower levels of burnout. A recommendation from their study was to focus on ways to increase team cohesiveness. A sense of belonging to a supportive group of individuals may reduce principals' sense of isolation and reduce burnout.

Another indicator of personal burnout may be absenteeism. In a study conducted by Schermuly, Schermuly and Meyer in 2011 of 103 vice principals at 103 different primary schools in Germany they found absenteeism and emotional exhaustion were closely related. Emotional exhaustion is one of the three constructs of burnout as defined by Maslach. In addition, emotional exhaustion has shown the highest predictive validity in the education domain (Boles, Dean, Ricks, Short, & Wang, 2000).

Research studies (Evers et al., 2004; Friedman, 1995; Oplatka, 2002; Ronen & Mikulincer, 2009; Sari, 2008; Whitaker, 1995) reveal antecedents of principal burnout. These antecedents are: isolation, work overload, role ambiguity, resources and organizational structure can be categorized into the three constructs of the MBI-E (see Figure 1). These antecedents are aligned with Maslach and Leiter's (2008) comprehensive model of burnout. This model includes six areas of work life that encompass the major organizational antecedents of burnout. These six areas are: workload, control, reward, community, fairness, and values. Burnout rises when there is a greater mismatch between workers and their work environment in terms of these six areas. Awareness of these antecedents can influence staff development resulting in a reduction in principal burnout.

Principal Professional Development

The best way to beat burnout is to take action to prevent it from occurring. Helping individuals feel competent in their role is a system to prevent burnout. Many organizations have utilized a myriad of professional development opportunities ranging from in-service workshops, mentoring, coaching and networks as a means of developing the efficacy of principals (Bell, 1996; Center for Creative Leadership [CCL], 2000; Portner, 2001). Public Agenda's survey of 909 principals cite that 54% believe they would be more effective in their jobs if they had better

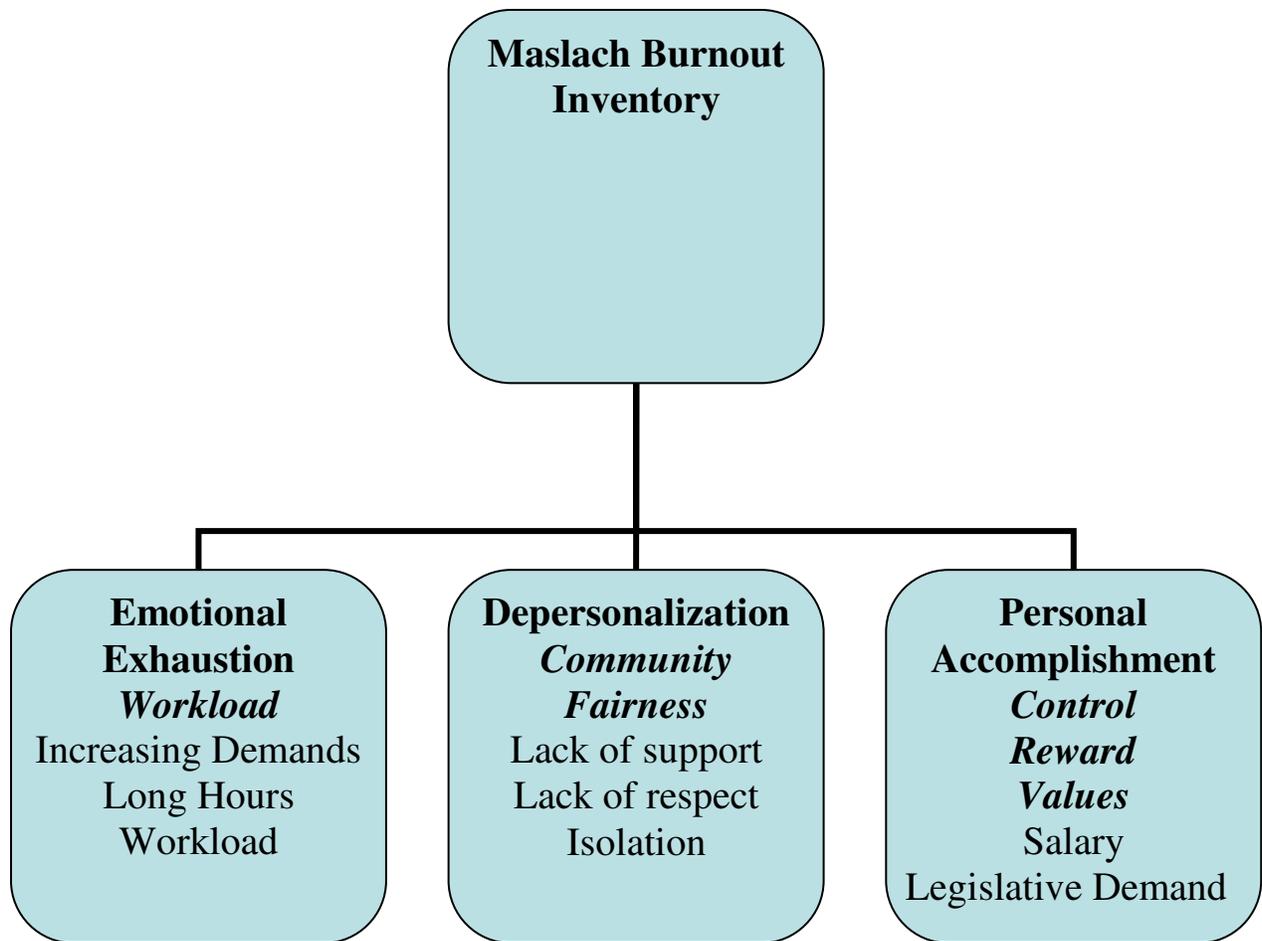


Figure 1. Maslach's three constructs of burnout and stress factors related to burnout.

ongoing professional development experiences (Farkas, Johnson, Duffett, & Foleno, 2001). However, the need for planning to ensure that these programs are directly linked to the standards and goals associated with issues and the context the principal faces is imperative in order to enhance principal effectiveness and reduce burnout rates among principals.

Support and assistance provided to principals once they enter the field is typically in the form of professional development. Professional development is a common strategy to learn skills needed to be an effective principal and address changing standards. Historically, professional development opportunities consisted of university programs, principal academies and district or professional organization led in-service (Hallinger & Wimpelberg, 1991). In Public Agenda report for Wallace Foundation in 2007, “principals overall feel that leadership programs in education are out of touch with current realities”. Very few had positive comments about traditional training opportunities.

Practicing principals most frequently experience in-service through workshops and lectures which they rated as least effective due to the limited amount of participant participation in the creation of goals and agenda (Daresh, 1987). Leithwood, Seashore-Louis, Anderson and Wahlstrom (2004) found investing in the professional development of school leaders without communicating clear goals for improvement had minimal effects on efficacy and student achievement. They also found that although district leaders speak of leadership development for principals few districts have a coherent plan. Only 19.9% of principals strongly agreed that district leaders took a personal interest in their professional development. Only 10.0% and 10.1% respectively, responded “very often” when asked about the frequency of district leaders providing quality professional development focused on instruction and opportunities to work productively with colleagues from other schools. In the 1970’s staff development evaluations

revealed that as few as 10% of the participants implemented what they had learned (Showers & Joyce, 1996). Barth (1986) sums up the effectiveness of professional development in a quote, “many attend, few succumb and fewer learn” due to the lack of follow-up and continued support. Similarly, The Education Research Service found that principals repeatedly wanted to improve their skill. However, professional development activities were lacking (Hertling, 2001). Principals’ call for in-service reform is significant. Public Agenda’s survey of 909 principals cite that 54% believe they would be more effective in their jobs if they had better ongoing professional development experiences (Farkas et al., 2001).

Traditional forms of professional development have not been effective strategies in improve principal efficacy in order to reduce principal burnout. In *Linking Leadership to Student Learning: The Contributions of Leader Efficacy* authors Leithwood and Jantzi (2008) refer to professional development as a means to increase leaders’ efficacy. They argued “developing people includes professional development and much more” (p. 508). Through their study of 96 principals and 2,764 teacher respondents to two surveys, along with student achievement data over 3 years, Leithwood and Jantzi were able to confirm the emphasis on teamwork and professional community to increase leader efficacy resulting in student achievement. Similarly, Darling-Hammond et al. (2007) reported in, *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*, research was limited on effective in-service professional development and there was growing consensus that ongoing leadership support should combine theory and practice, scaffolded learning experiences guided by experienced mentors, opportunities for reflection and peer networking.

Adult Learning

Professional development research has recognized that adult growth and development remains a lifelong process (Brookfield, 1993; Knowles, 1978; Lave & Wenger, 1991; Thies-Sprinthall & Sprinthall, 1987). The characteristics of the adult learning process have included the need to understand the process as a definite, sequential development; a different frame of reference from which to interact or respond; interactions between self, others, and environments; and active roles in determining content/course of growth with an intrinsic motivation (Knowles, 1978; Lave & Wenger, 1991; Thies-Sprinthall & Sprinthall, 1987). Malcolm Knowles (1975) reported adults learn in particular settings different from children. Adult learning requires settings with six distinctive characteristics. In order to be effective for adult learning these settings should include: (1) learners define their learning objectives, (2) learning focus is about issues and skills needed in their current life and experience, (3) learning is focused on analysis of experience, (4) learning is self-directed, (5) there is allowance for differing styles and means of learning, as determined by the learner themselves (Knowles, 1978).

Similar to Knowles, Brookfield (1993) proposed adult learning to be unique and exclusive to the adult learning process. He deems four major areas of adult learning to be: self-directed learning, critical reflection, experiential learning and learning to learn. These are necessary behaviors of the learner in order for learning to occur in a professional development setting. Lave and Wenger explore how learning takes place in groups.

Lave and Wenger (1991) theorize how learning occurs in groups. They theorize cognition to be distributed amongst individuals and socially constructed in the context of relationships. As people who share common learning needs engage in discussion; new identities, knowledge formation, and skills develop. This pattern of learning is not learning *from* talk, but rather

learning *to* talk using new discourse patterns, which in turns creates new cognitive frameworks which influence subsequent behaviors (Lave & Wenger, 1991, p. 93). MacKeracher (1996) states: “Learning is facilitated in learning environments which are free from threat and which provide support for personal change. Learning activities need to include opportunities for testing new behaviors in relative safety, developing mutually trusting relationships, encouraging descriptive feedback, and reducing fear of failure” (MacKeracher, 1996, p. 41). Most similar to recommendations of MacKeracher (1996), Lave and Wenger (1991), Brookfield (1993), Knowles (1978) and Thies-Sprinthall and Sprinthall (1987) are structured principal networks.

Structured Principal Networks

Structured principal networks combine the needs of adult learners and knowledge of how learning occurs in groups to create quality professional development for veteran principals. Structured networks bring together practicing principals of different schools and districts for the purpose of reaching the common goal of enhanced professional performance (Daresh & Playko, 1992, pp. 161-162). Structure of networks of bringing practicing principals together on a regular basis for continued learning addresses two of three reasons for burnout as measured by the MBI, depersonalization and personal accomplishment. There is no evidence, at this time, to support network participation reduces burnout.

Networks differ somewhat in structure, but share common features: collaborative settings, regular meetings, focus on leader questions of practice, and reflective activities (Brill, 2008; Donaldson, 2008; Intrator & Scribner, 2008). Networks create an opportunity to form trusting professional relationships with other practicing principals which reduces the sense to isolation. Chapman (2005) stated, “vital to leadership learning is the interplay of a number of elements: study of the relevant theoretical disciplines and the substantive domains of

professional knowledge and competence: critically reflective practice and engagement in field based learning activities”. Daresh (1987) proposed to combine these academic tasks with collaboration and cooperation with colleagues in a safe, confidential environment. These are common characteristics of structured principal networks found in this research which make the experience of a network more beneficial than attending a one day workshop or the experience of informal networking.

Principals must be given the support to face the challenges of their responsibilities and to renew and reinvigorate their professional performance through professional networks (Chapman, 2005). Principals surveyed by Public Agenda for Wallace Foundation in 2007 reported networks as necessary due to the loneliness of the job and the need to consult with others in similar situations. Common trends that might usefully inform the development of policy and practice across countries include the use of experienced principals as facilitators of the learning of others (Chapman, 2005). Leithwood and Jantzi recommended increasing leader efficacy by putting structures and processes in place that foster collaborative work for school leaders, such as networks. This recommendation comes as a result of recent evidence about the impact of professional learning communities on teacher collaboration and student learning. This culture can be established through professional learning communities specifically designed for principals, such as networks (DuFour & Eaker, 1998; Little & McLaughlin, 1993; Newmann & Wehlage, 1995; Rosenholtz, 1985). Chapman (2005) concurred with these structures of networks as effective leadership learning opportunities. She proposed effective network professional development programs included:

- A clear sense of mission and purpose
- Curriculum coherence

- Instructional strategies related to the nature of the material taught and the learner needs
- Length and time structure: multiple sessions meetings over the year
- Linkage to the mission, beliefs and values of relevant employing authority
- Learning strategies that motivate through thinking, reflection and analysis with a strong component of coaching

Hallinger and Wimpelberg (1991) discussed principal centers in their work, *New Settings and Changing Norms for Principal Development*. Commonalities of principal centers were the administrator involvement in planning and execution of professional development. Such involvement created a sense of professionalism and pride, in addition to providing opportunities for administrators to interact with colleagues on a regular basis which is not a regular function of school administrators. Similarly, LaPointe and Davis (2006) found cohorts created as a pedagogical tool for teaching teamwork, developing a sense of community as learners, developing deep support networks were demonstrated in eight exemplary professional development programs for principals. Likewise, Chapman (2005) promoted the most effective facilitators of leadership learning are principals sharing best practices and wisdom gained from experiences. These facets, increased involvement of administrators in deciding, planning and delivering professional development, ongoing involvement and time to interact with colleagues, are aspects embedded in School Leaders Network.

Twenty-one studies according to Daresh and Playko have sought to identify principal in-service preferences. These were organized into four categories,

Principals want:

- content focused on issues of immediate need for principals

- to determine the goals and evaluation of their learning
- active participation, as opposed to lectures and informational sessions
- ongoing dialogue that continues over extended time (p. 132).

These traits are exemplified in structured principal networks, which explains why networks are preferred by principals (Daresh & Playko, 1992; Intrator & Scribner, 2008). In addition, Educational Research Service reported that “one of the most frequently requested opportunities for professional development was the chance to network with other principals to exchange ideas, evaluate the demands of their jobs and discuss how to implement change at their schools, all of which address the three constructs of the MBI . Principals also placed a high value on follow-up training and training on how to translate ideas about change into practice” (Hertling, 2001).

Structured principal networks were rated as most effective in a study of 190 Ohio principals (Daresh, 1987). Of five types of in-service models examined, traditional, professional association institutes, state education agency institutes, academies and networks, networks had the least number of participants. When these five types of in-service delivery processes were examined for input, two way communication and effectiveness in helping principals carry out their daily work, networks ranked highest in each of these areas. With a range of 1.0 - 4.0, scores were 2.96, 3.34, and 3.06 respectively. Network effectiveness is based on sharing common concerns, problems and potential solutions in periodic meetings based on support and assistance by all members. The opportunity to interact with professional peers was the most popular reason for being involved in a network in Daresh’s 1987 study of 190 Ohio principals which addresses the construct of depersonalization on the MBI.

Enhanced professional performance is the common goal of networking as principals and administrators from varying districts come together (Daresh & Playko, 1992, pp. 161-162).

Network agendas may differ in structure, but share common features: collaborative settings, regular meetings, focus on leader questions of practice, and reflective activities (Brill, 2008; Chapman, 2005; Donaldson, 2008; Intrator & Scribner, 2008). Typically, network participants analyze their assumptions and beliefs about power, authority, and leadership in settings that are non-competitive and confidential (Daresh & Playko, 1992, p. 91; Donaldson, 2008). Similarly to these effective practices of networks, Chapman (2005) encourages the use of experienced principals as facilitators of the learning of others. This practice of continuous learning by the principal enhances the view of schools as learning organizations that, under its principal's leadership is continually learning and improving practices resulting in student success.

Research on the impact of structured principal networks is minimal and nonexistent when looking for the impact participation has on burnout rates. Furthermore, the impact of participating in a principal network to reduce burnout is nonexistent due to the soft data related to network participation. As a result, this review includes literature from program descriptions, dissertations, and unpublished reports of five specific structured principal networks. These networks are: Jefferson Parish Louisiana Principals Instructional Leadership Development Project, Northeast and Islands Regional Educational Laboratory at Brown University (LAB) created PLN – Principal's Leadership Network; The Harvard's Principal Center; Maine School Leaders Network and a national organization, School leaders Network. Jefferson Parish Project was a rather small project and loosely aligned to the research of Chapman (2005) and Daresh and Playko (1992). However, has gleaned some evidence in support of networks.

Jefferson Parish Louisiana Principals Instructional Leadership Development Project

Jefferson Parish Louisiana Principals Instructional Leadership Development Project launched in 1984, comprised of 75% of the principals in Jefferson Parish combined quality staff

development with the creation of networks that conducted school visits in addition to cluster meetings to share ideas, raise issues and gain information. Several noteworthy outcomes became evident, although rather than formal evaluations or hard data, the project relied on “naturalistic” data collection methods. Participating principals commented “Participation has enhanced their morale and stimulated their professional ambitions” (Kline, 1987).

Principal’s Leadership Network

Similar to Jefferson Parish Louisiana Project, the Northeast and Islands Regional Educational Laboratory at Brown University (LAB) created PLN – Principal’s Leadership Network to support practicing principals. PLN established three essential questions to guide the work of networks: How can PLN enhance the capacity of school principals; How can PLN frame and accelerate mentoring opportunities for current and aspiring principals; How can PLN communicate the complexity of the role to the community. In 2002, the group was comprised of 25 principals representing each state and island served by LAB. A similar component as Jefferson Parish is the inclusion of site visits. During these site visits specific issues may be raised and discussed that may lead to building the capacity of the leaders. These initiatives did not collect data to codify their efforts.

Harvard Principals’ Center – Formal Principal Network

Roland Barth began the first Principals’ Center at Harvard in 1981 to offer principals’ options for in-service learning to replenish themselves resulting in enriched experiences for the students in their schools (Barth, 1986). Centers were committed to school improvement from within attempting to create the right conditions for learning. Barth identified these conditions as pre-professional recognition, voluntary attendance, protected settings, maximizing diversity, principal centered programs, principals as resources and array of formats which were embedded

in principal centers. Since inception, Principals' Centers have emerged across the nation and internationally. The design of this network is multi-platformed; ranging from popular summer institutes to small ongoing principal loosely organized networks. Professional development topics are derived from principal input and developed by leading researchers in the field (Barth, 1984, 1986). In addition, there is little evidence that directly relates members' participation in the Center with increased principal retention. The Center "has helped principals by validating, dignifying, respecting and supporting a profession laboring under both diminished public confidence and diminished self confidence feel recognized and important members of society" (Barth, 1986). The Center has supported the evolution of a community of learners. One member commented:

"I find fellowship. The Center provides an opportunity for each of us to air our concerns, share our thoughts, develop ideas and come away enriched by the experience. We begin to realize that no matter which community we represent there is a communality. As a result, I no longer feel isolated."

The Harvard Principal Center addressed the four preferences of professional development based on Daresh and Playko (1992) analysis of twenty-one studies. These preferences were: content focused on immediate issues; participants determine the goal of their learning; consist of active participation and ongoing dialogue that continues over an extended time. The Harvard Principal Center also addressed Chapman's six structures of networks as effective leadership learning opportunities. She proposed effective network professional development programs included: clear sense of mission and purpose; curriculum coherence; instructional strategies related to the nature of the material taught and the learner needs; length and time structure: multiple sessions meetings over the year; linkage to the mission, beliefs and values of relevant

employing authority; learning strategies that motivate through thinking, reflection and analysis with a strong component of coaching. The inclusion of these suggested components of effective professional learning in the Harvard Principal Center helped to create a successful structured principal network.

Similar in purpose and structure as the Harvard Principal Center is the Maine School Leaders Network. The Maine School Leaders Network was established in response to the growing principal deficit in an attempt to support practicing principals. This network is not exclusive to principals but rather is for teacher leaders and principals.

Maine school leaders network. In response to the growing principal deficit Maine's teacher and principal associations, business leaders and university systems joined together to support MSLN. This tightly organized network of teacher leaders and principals in Maine make a two year commitment to improve their leadership through collaborative learning based on coaching, reflection on practice and a community of learners using a model that investigates interpersonal-cognitive-intrapersonal (I-C-I) knowledge domains. Four phases are included in this process. They are: (1) analysis of school's leadership needs and school culture, (2) challenges they face as a leader from an I-C-I perspective, (3) development of a specific learning plan, and (4) a cycle of action research (Donaldson, Bowe, & Marnik, 2004). MSLN groups are comprised of three leaders and a facilitator in a colleague-critique team (CCT). This CCT serves as observers, companions and critical colleagues. Principals also receive the support of a coach and meet regularly with other groups in the region (Donaldson, 2008). Measurement of effectiveness is accomplished with soft data. Participants are asked to revisit 3 essential questions periodically. The questions are: What I think I have learned; what my colleagues have seen me learning; and my impacts on student learning. While there is no direct correlation to

student learning the belief of MSLN is if we keep revisiting these questions there will be a positive impact. This model encourages leaders to take risks to extend their skills and enhance their effectiveness. A greater result is the lasting, supportive relationships that are established among members that support continuous learning for improved practice. Gordon Donaldson, founder of MSLN, has documented these efforts in a book but has yet to be published in peer-reviewed literature.

Although a very structured plan is adhered to during a principal's two year commitment to MSLN, similar to the Harvard Principal Center principals are very much involved in the implementation of the plan. All four principal preferences for professional development as reported by Daresch and Playko (1992) are addressed. Participants set their own goal making the learning timely and relevant. Learning is active and ongoing extending over a period of time making it a successful strategy to support principals. Similar to Harvard Principal Center's there is no quantitative data to support the direct impact of network participation on the three constructs of burnout as defined by Maslach.

Similar to the Harvard Principal Center and Maine School Leaders Network is the national organization of School Leaders Network. School Leaders Network is a national organization currently representing six states. SLN is also a current organization that is advancing the work of networks.

School Leaders Network (SLN)

School Leaders Network (SLN), is a national organization focused on expanding the educational opportunity for all students by transforming school leadership. The SLN model provides structure for principals to work together to solve real problems of practice by engaging in dialog and reflection about leadership issues with colleagues through facilitator led

collaboration. Through this work, participating principals build their knowledge, skills, commitment, courage, personal and professional attributes to become innovative and inspired leaders to improve schools and student achievement. The ultimate goal of School Leaders Networks is, “SLN accelerates the learning of leaders, transforming schools in under-resourced communities into effective communities of practice where all children graduate with college-ready skills” (Neale & Roy, 2009).

SLN began their work in 2007 and grew quickly to 35 networks across the nation within the next two years. SLN serves heterogeneous groups of 15-18 principals who span primarily public K-12 principalships. Unlike the prior two networks, SLN does not limit the number of years a principal participates. SLN understands the complexity of a principal’s role and has created a forum that encourages meetings to occur after hours at a restaurant or university, once a month, to create the cognitive distance needed for genuine problem solving and reflection. Networks are managed and facilitated by practicing principals who are regularly trained facilitators (Neiner, 2007).

National School Leaders Network (NSLN) was established to renew, support and sustain school leaders in their efforts to increase student achievement (Intrator & Scribner, 2008). Their research represents data from 29 diverse cohorts, of 12-15 principals and one or two facilitators, from across the country. Eighty-seven percent of principals described NSLN as “having a positive impact on their satisfaction as principal” (Intrator & Scribner, 2008). In addition, “100% of principals who responded said that the NSLN experience had helped them be a better leader” in addition to 100% of principals in their first three years described NSLN as “crucial to their development”. Ninety eight percent of principals describe the experience as a place where they can experience a sense of collegiality, confidentiality and trust. These findings all support the

claim of networks aiding in the retention of principals. One principal responding to an NSLN survey described her membership in the cohort as rejuvenating and being “motivated to continue this very difficult work” (Intrator & Scribner, 2008). “This group has come to be a source of hope and camaraderie and renewal of purpose”. We remind each other why we do this work and renew our strength, courage and excitement for it”.

In addition, 97% of principals whom participated in the survey indicated school achievement scores as staying the same, marginally higher, higher or significantly higher. Over 20 principals suggested this could indirectly be linked to being more confident and energized as a school leader.

Data collected from a quality control assessment using external researchers revealed overwhelmingly positive results. Two-hundred principals, currently involved in a network, participated in the study. Results include: 93% of participants felt their school climate had improved, and over 83% were able to describe evidence of school improvements that happened as a result of SLN learning (Intrator & Scribner, 2008). Participating principals also show gains in student achievement data of network members compared to non-network members also revealed positive results. Network members students’ English scores were 5 percentage points higher and 8 percentage points higher in Math than non-participating principal peers (Intrator & Scribner, 2008).

Recent results of New York City Schools reveal K -8 principals who have participated in SLN for at least three years school results based on average achievement scores were 5 percentage points higher in English Language Arts and 8 points higher in math than schools that did not participate in SLN. Similarly, high schools led by SLN member principals experienced an 85% pass rate on the NYS Regents in 2008-2009 which was a 25 point increase from 2007 -

2008. From 2006-2007 until 2008-2009, NYC high poverty schools led by SLN member principals increased English Language Arts scores by 46 percentage points from 42% to 88% and Math scores by 31 percentage points from 65% to 87%. In addition, in 2008-2009 84% of school led by principals participating in SLN received an A on their school progress report, compared to only 29% receiving an A in 2007-2008 (Retrieved from www.connectleadsucceed.org).

In 2008, SLN's director, Elizabeth Neale, identified that groups take the first year of collaborative time together building rapport, trust and relationships before the deeper analysis of practice becomes possible. Initial conversations are often "safe" with topics that are non-threatening for the participants. Once groups have developed the trust a more structured system of analysis should be used to engage targeted leadership skill improvement (Neale & Roy, 2009). Their plan was to use an eight step approach as principals and facilitators began their third year of working together.

1. Develop a common problem of practice shared by the group
2. Engage in research about the problem
3. Analyze school level data from all participants
4. Examine school level practice using videos for the purpose of developing rubrics to measure instruction in a systemic way
5. Discuss one leader's leadership challenge regarding the focus problem
6. Conduct a school visit using Instructional Rounds protocol (City, Elmore, Fairman, & Teitel, 2009; Elmore, 2007)
7. Collaborative action planning
8. Celebration (Neale & Roy, 2009)

The new approach attempted to provide tighter organization towards systematic learning (Neale & Roy, 2009). Following this model, “over 97% of SLN members describe the program as the most or among the most useful and meaningful professional development experience they have had in their career” (Neale & Roy, 2009).

Although research is nonexistent to support network participation having a positive impact on reducing principal burnout, when the recommended structures are implemented in a network setting the major constructs to decrease burnout as determined by Maslach are addressed (see Figure 2). Experiencing a sense of burnout has a negative impact on the well being of the principal and the recipients for whom he/she serves: the students. In order to raise student achievement principals must be provided professional development opportunities to address these three constructs: emotional exhaustion, depersonalization and personal accomplishment. The literature reviewed indicates structured principal networks may be a viable method of professional development to help reduce burnout.

Summary

Having examined the evolving role of the principal during the last 3 decades due to a call for reform and the results of this call it is clear as to why principals are leaving the profession at rapid rates. Increased demands, time, salary, isolation, lack of respect and support and being accountable for issues beyond their control are reasons principals for principal burnout. All of these reasons are addressed in the three constructs of burnout as defined by Maslach. Maslach’s MBI survey for Educators analyzes each construct: emotional exhaustion, depersonalization and personal accomplishment individually. When policy makers and district leaders are searching for methods to help decrease burnout rates it appears structured principal networks address the needs of principals in order to reduce burnout. However, there is no codifiable data to support this at

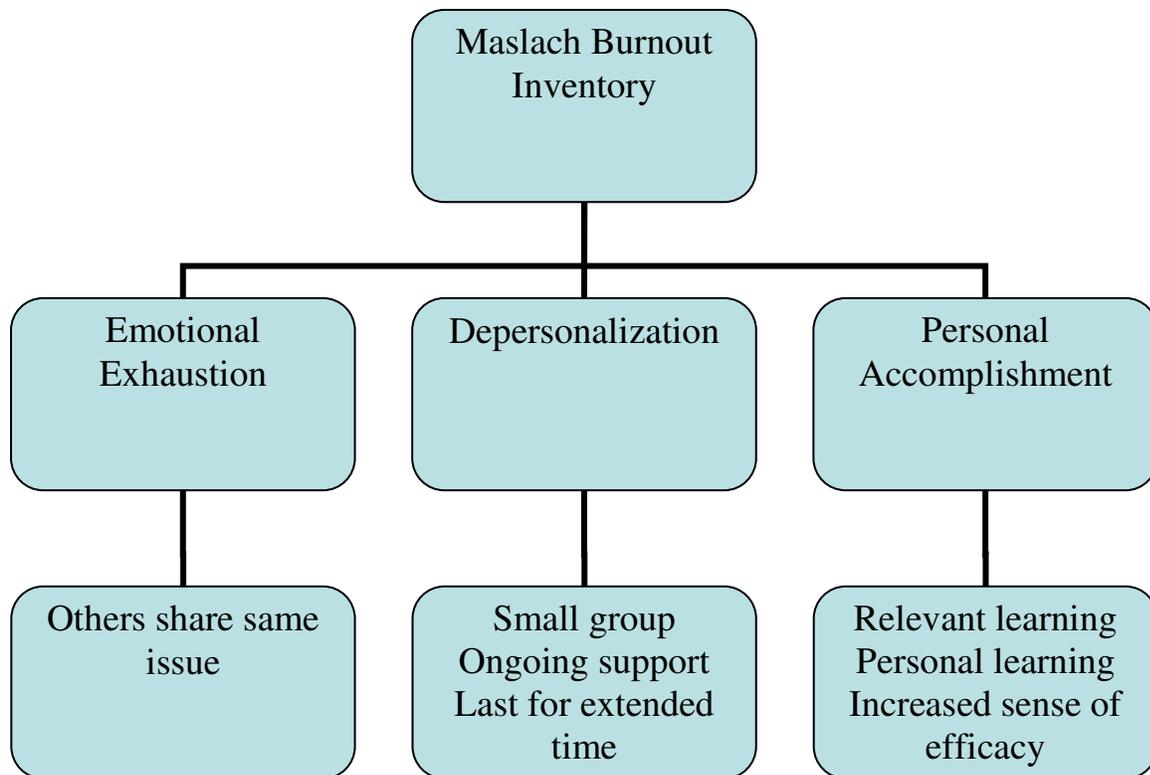


Figure 2. Principal networks addressing constructs of burnout.

this time. Chapter 3 will identify the method to be used in order to determine the impact network participation has on decreasing the perception of burnout of practicing principals. A description of the sample group, method of research and how the research data will be analyzed will be explained in Chapter 3.

CHAPTER 3: METHODOLOGY

Strategies that promote a sense of efficacy were explored to assist practicing principals experience an increased sense of efficacy in order to reduce these alarming rates for burnout. Structured principal networks, although no qualitative data is available at this time, may be a viable method to reduce the perception of burnout as measured by the three constructs of the MBI. These constructs are: emotional exhaustion, depersonalization and personal accomplishment. The emotional exhaustion construct assesses feelings of being emotionally overextended and exhausted by one's work. The depersonalization construct, measures an impersonal response towards those to whom an individual provides service. The final construct is personal accomplishment. This construct assesses feelings of competence and achievement within one's work. The purpose of this study was to explore the relationship between formal network participation and reduced principal burnout. The researcher attempted to determine if participation in a structured principal network had a positive impact on principals to reduce burnout.

This researcher conducted a survey of structured network members to address the two overarching questions. These questions were:

Overarching Questions

1. To what extent does being a member of School Leaders Network reduce principals' levels of burnout?
2. How do demographics influence perception of burnout?

Research Question #1

To address overarching question Research Question #1 the following research questions were investigated:

Research question 1a: As measured by the Maslach Burnout Inventory-E (MBI-E) to what extent does network participation result in a lower perception of burnout?

Research Question 1b: As measured by the MBI-E to what extent does network participation lower one's perception of emotional exhaustion?

Research Question 1c: As measured by the MBI-E to what extent does network participation lower one's perception of depersonalization?

Research Question 1d: As measured by the MBI-E to what extent does network participation raise one's sense of personal accomplishment?

Research Question #2

To address Overarching Research Question #2 the following research question was investigated:

Research Question 2a: To what extent do demographics influence the overall score as measured on the MBI-E? The following demographics were analyzed: education level; gender; age; years as a principal; level of school; size of school; type of school.

In the next section, Research Design, the sample group which was involved in this study, the instrument development, data collection procedures and statistical analysis used to address the research questions are identified.

Research Design

Population of Interest

The population of interest was practicing principals that were also members of a structured principal network. For the purpose of this study, structured principal networks are defined as "a group of 12-15 principals engaged in monthly meetings lasting from 3-4 hours with an agenda consisting of time for support, discussion of critical issues and continuous learning. Agendas are created by participants (Neale & Roy, 2009). The specific network being

investigated for this study is the School Leaders Network (SLN). The SLN was established in 2006, by Elizabeth Neale, a nationally recognized educational leader, to support principals in meeting the increased demands of their role as the focus on student achievement has increased. Networks are guided by SLN-trained facilitators, to assist members on the technical and adaptive challenges of leadership to improve student learning. Members of all networks participate in discussion of critical issues, continuous learning on a topic determined by the group and informal networking. Currently there are 23 networks representing 6 states (Hawaii, Texas, California, New York, Massachusetts, and Maryland) totaling approximately 250 members. Members represent a wide range of experiences and cultural/ethnic backgrounds.

In order to obtain a sample of the population of interest the sampling method that was employed for this research project was a self selected convenience sampling of SLN participants. The decision to use a self selected convenience sample, using a networking database, was determined in order to obtain a large amount of information in a relatively short period of time. SLN maintains a database of all network members contact information. The organization agreed to share this information for the purpose of this research study. According to Fowler's Sample Size Table: Confidence Ranges for Variability Due to Sampling this size, approximately 250 surveys, would have an error rate of 7%, meaning 7 out of 100 times the sample mean will differ from the population mean (Creswell, 2005). This is a low sampling error rate.

Sampling Method

Initial conversations with SLN resulted in agreement to survey all network participants. This would have created a sample size of approximately 250 members. However, in an effort to protect their members from too many surveys and to support other research this study was only permitted to involve approximately half of their network members. Convenience sampling of all

SLN members in New York City and Washington, DC constituted the sample population (n=133) for this study. An electronic cover letter and survey link was sent to 133 network participants on July 4, 2012. Dillman's Tailored Design Method was implemented throughout the length of the study to ensure a high response rate. Participants were initially notified of this study by their network facilitator prior to July 1, 2012. From July 4, 2012 through August 11, 2012 all participants received 4 electronic messages from the researcher as a thank you and/or reminder to participate.

Instrument Development

The Maslach Burnout Inventory for Educators [MBI] (Maslach & Jackson, 1986) was the measurement instrument used for this study. The MBI is recognized as the leading measure of burnout. The initial research on the MBI was based on data from the United States and Canada, in addition, subsequent studies have been conducted in countries around the world. There are three versions of the MBI. The original version was designed for professionals in the human services (MBI-HSS). In 1986, there was an adaptation of the original measure to use with educators (MBI-E). The MBI-E items have not changed since the original form, copyright 1986. Currently, the MBI surveys are only available through Mind Garden which is an independent publisher of psychological assessments and instruments. The MBI survey consists of 22 questions with responses recorded on a 7 point Likert type scale identifying 3 constructs for burnout (see Appendix A). The emotional exhaustion construct consists of nine of the 22 items which describe feelings of being emotionally exhausted. Depersonalization construct consists of five of the 22 items attempting to measure an individual's feelings of impersonal responses to co-workers. The third construct, personal accomplishment consists of eight of the 22 items describing feelings of competence and success about personal achievements.

In order to obtain information to examine the various research questions of this study, modifications were made to the instrument through the organization that holds the reproduction rights to the MBI instrument, Mind Garden. The additional component that was added to aid in the analysis of the research questions were 11 multiple choice non-identifying questions providing demographic information and 2 open ended questions (see Appendix B). Information being sought by the demographic questions included: gender, highest degree earned, age, the state in which the network member is a practicing principal, number of years as a principal, the level of school they serve, student enrollment, type of school, number of years as a network member, extent of perceived burnout, contributing factors and if feeling less burned out since network membership.

Qualitative Research

Qualitative data collected by this study provided the researcher with the opportunity to explore participants' perceptions on whether the extent of perceived burnout feeling was less since network membership. This qualitative data attempted to determine participants' perceptions of any specific factors that contributed to a feeling of reduced burnout. Using the two open-ended questions in the survey: explain why you feel less burned out since becoming and SLN member and what are the possible reasons for your perceived burnout, data were gathered and analyzed providing useful information to the study. These data provided descriptive information, verified participants' perceptions, and indicated change in participants' level of burnout. Utilizing a mixed-method approach that includes quantitative and qualitative data analysis from asking relevant open-ended questions related to the research problem may provide insight to the study of the research questions (Merriam, 2001). In this study, a reliable and valid

survey instrument, MBI-E, and the addition of demographic and open-ended questions to the instrument.

Responses from these demographic questions allowed this researcher to examine and infer if burnout is more prevalent in specific subgroups within the networking collective. Responses to these questions also allowed this researcher to determine if individuals with higher burnout scores in a particular construct as measured by the MBI were involved in a network for a shorter period of time than colleagues with a lower burnout score. The open ended questions provided additional insight on the reasons why an individual was experiencing perceived burnout and in what manner SLN was beneficial to them.

All three components of the revised survey, demographic multiple choice questions, open ended questions and the MBI-E survey, addressed the research questions in determining if networks are an effective method of professional development to reduce burnout. Modifying the instrument aided in determining which construct of the MBI survey is most prevalent in driving burnout, which construct network participation addresses most directly or if there are other factors external to the instrument driving the feeling of burnout among all respondents.

Data Collection Procedures

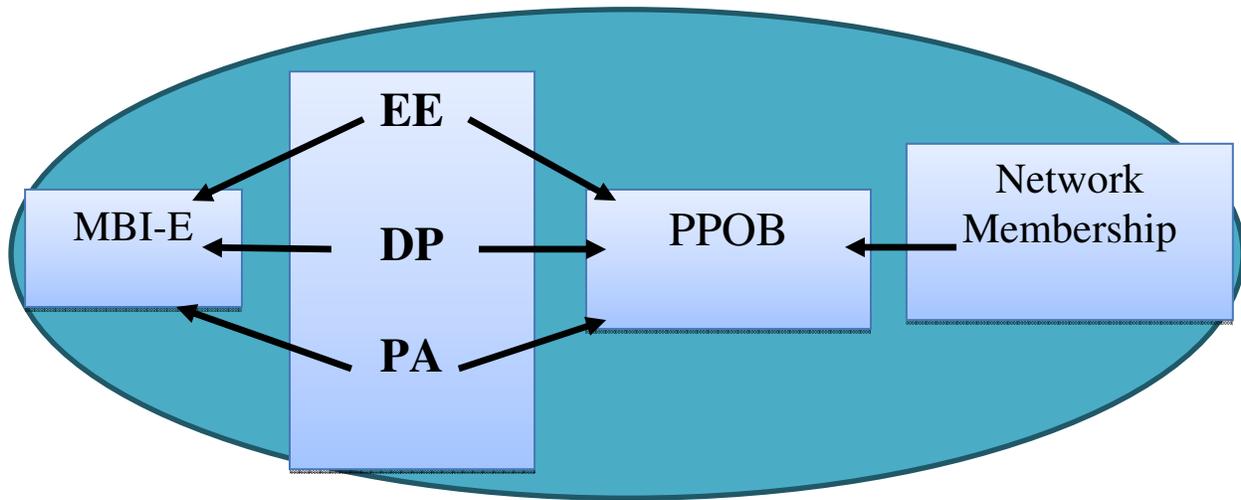
Convenience sampling of all SLN members in New York City (n=64) and Washington, DC (n=69) constituted the sample population for this study. The primary method of communication and data collection was via e-mail. Prior to participants receiving the online survey the researcher participated in a conference call with all network facilitators explaining this research project. Network facilitators were then provided an electronic message to share with their network members in anticipation of the electronic invite. Dillman's Tailored Design Method to increase survey response rates recommends five contacts with participants throughout

the survey period (Dillman, 2000). This method was implemented for this research project. The first contact was a pre-notice letter to inform the recipients they will be receiving this survey. Each SLN facilitator received a script to share with all network members approximately a month prior to receiving the survey. This script emphasized the level of confidentiality associated with their participation in the study, appreciation for their participation in the study, information about the researcher conducting the study, the purpose of the study and the estimated amount of time it will take each participant to complete the survey. At that time network members also had the opportunity to remove their email address from the database if they choose not to participate. All members chose to participate. The second contact was an electronic cover letter explaining the purpose of this study, method of study and detailed explanation of how the results will be used. Embedded in the cover letter was the link to the survey. All responses were anonymous. All data was automatically coded and entered. Two weeks after the initial availability of the survey an electronic email was sent to all participants to serve as a thank you for those that had responded and a reminder to those that had not completed the survey yet. The fourth contact was made at the beginning of the fourth week the survey is available. A letter with the survey link embedded was sent to all participants since all surveys were anonymous. All participants received this to serve as a final reminder. At the close of the survey window 40 SLN members had participated in the survey. Approximately eight weeks after the survey window opened an email was sent to each network facilitator to communicate appreciation with their network members.

Several processes were implemented to promote confidentiality of the data and results. The researcher ensured participants' confidentiality through adherence to research protocols. No data was shared with principals' supervisors. During the process of collecting data, principal information was locked and secured.

Theoretical Framework Formation

This researcher used a mixed method comparison study to analyze quantitative and qualitative data collected. A variety of statistical methods were conducted to address each of the overarching questions and research questions for this study. Components of the theoretical framework identified in Figure 3 address each overarching questions and subsequent questions. The first component of the framework addresses the impact of emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA) on the participants overall MBI-E quotient to address the research question seeking to identify the construct that impacts burnout the greatest. Secondly, each construct was analyzed in comparison to participants' personal perception of burnout which was one of the additional questions added to the survey. Personal perception of burnout was then compared to overall MBI-E quotients to identify the relationship of personal perception and actual ratings of burnout. Finally, each demographic question, including length of time in a network was compared to overall burnout quotient to attempt to address Research Questions 1a and 2a. Responses from these demographic questions allowed this researcher to examine and infer if burnout is more prevalent in specific subgroups within the networking collective. Responses to these questions also allowed this researcher to determine if individuals with higher burnout scores in a particular construct as measured by the MBI were involved in a network for a shorter period of time than colleagues with a lower burnout score. The open ended questions provided additional insight on the reasons why an individual was experiencing perceived burnout and in what manner SLN was beneficial to them.



MBI-E – Quotient on MBI-E survey
EE – Emotional Exhaustion
DP – Depersonalization
PA – Personal Accomplishment
PPOB – Personal Perception of Burnout

Figure 3. Theoretical framework for statistical analysis.

Statistical Analysis

Means

The MBI-E survey elicited responses in the form of a Likert type scale and coded similarly. Mean scores and standard deviations were determined for each item of the 22 items of the survey as well as for each construct – emotional exhaustion, depersonalization and personal accomplishment. In addition to identifying the mean and standard deviation of each individual item of the MBI-E, composite values were also calculated for each construct in order to determine the average score across the set of questions specific to each construct. Results of this study included responses from only 40 survey participants, therefore, composite values aided in determining the significance of the correlation of each construct. These composite values for each construct, emotional exhaustion, depersonalization and personal accomplishment were appropriate for this research study since responses to multiple items of the MBI-E are combined to provide a reliable and valid measure of the broader construct of burnout.

In addition to analyzing the mean and composite values, this researcher also analyzed the qualitative data provided by respondents. Respondents were asked to indicate if they felt less burned out since becoming a network member to please indicate their reasoning. Participants provided written responses to describe their perceptions of burnout since becoming a network member. The researcher identified common comments or words that would help address the research question. According to Merriam (2001), a researcher must adopt some system for coding and cataloging the documents, and it helped to start with basic descriptive categories early in the coding. A coding system was developed that rated key words that described the MBI constructs in two categories: high level of burnout comments= 1, and low levels of burnout comments=2.

Alpha Reliability

The Maslach Burnout Inventory (MBI) is one of the most widely used instruments to determine what degree workers suffer from burnout. It is widely used to measure burnout nationally and internationally (Tomic & Tomic, 2008). Two large sample groups (n=1316 for frequency, n=1789 for intensity) were used to estimate the internal consistency of the Maslach Burnout Inventory using Cronbach's alpha. The reliability coefficient for each construct of the survey was similar indicating reliability of the instrument as seen in Table 2. Exhaustion subscale was measured by a scale consisting of 9 items. Reliability score was 0.90 indicating this the most reliable sub-scale of the MBI. Depersonalization subscale was measured by a 7 item scale and the reliability estimate was 0.79. Personal accomplishment reliability was comprised of a 6 item scale resulting in a reliability estimate of 0.84. Reliability of the entire scale's scores was 0.91. Data on test-retest reliability (n=53) ranged from 0.53 to 0.89 making them significant beyond the 0.001 level. Scores among each construct are processed so that a high score on exhaustion and depersonalization would indicate high levels of perceived burnout. A high score on the personal accomplishment construct would not indicate a high level of perceived burnout. A high overall score indicates a high level of perceived burnout (Maslach & Jackson, 1981).

Recoding of Data

To address Overarching Question #1 and the subsequent research questions statistical ranges were utilized to identify degrees of burnout as low, medium or high for each participant as determined by the scoring guidelines provided by Maslach and Jackson (1986). Table 3 identifies determined ranges of score totals for each construct (Maslach & Jackson, 1986). When an individual obtains high scores in emotional exhaustion and depersonalization and low scores in personal accomplishment they are considered to have a high degree of burnout. Individuals

Table 2

MBI Reliability

MBI	# of Questions	Cronbach's Alpha
Emotional Exhaustion	9	.90
Depersonalization	7	.79
Personal Accomplishment	6	.84

Table 3

MBI-I Established Range Scores for Each Construct

	Low	Moderate	High
Emotional Exhaustion	0-16	17-26	27+
Depersonalization	0-8	9-13	14+
Personal Accomplishment	37+	31-36	0-30

with an average degree of burnout are reflected with average scores in all three constructs. A low degree of burnout is reflected in low scores in emotional exhaustion and depersonalization and high scores on personal accomplishment.

Correlations

To examine the impact of each construct, individually, on the overall MBI-E quotient, the Pearson r was calculated to establish the strength of the relationship between the two data sets, MBI-E quotient and the quotient for each construct. An effect size may fall within a 0-1 range where a score closer to 0 indicates no effect and 1 indicates a significant effect.

Similarly, this researcher examined the impact of network membership on the overall degree of burnout as measured by the MBI-E. The Pearson r was calculated to establish the strength between the two data sets, MBI-E quotient and the amount of time as a network member.

Furthermore, this researcher examined the impact of all three constructs on the overall personal perception of burnout (PPOB). The Pearson r was calculated to establish the strength between these data sets, PPOB and emotional exhaustion, depersonalization and personal accomplishment.

Cluster Analysis

To address Overarching Question #2 and subsequent research questions cluster analysis was used as an exploratory statistical technique. In a cluster analysis clusters are created by identifying groups of individuals that are similar but different from individuals in other groups (Field, 2009). Each cluster identified is a group of relatively homogeneous cases. This process assisted in identifying individuals with similar degrees of burnout.

Items in each cluster are similar in some ways to each other and dissimilar to those in other clusters. Cluster analysis makes no distinction between dependent and independent variables. Since this was a small data set k means clustering was used. In this method k represents the number of groups. Using predetermined number of clusters (5, 4 and 3), as done in a k means clustering, three cluster solution was found to be the most appropriate for this research study (Field, 2009). The clusters were determined based on each construct, MBI-e quotient, length of time as an SLN member and personal perception of burnout. Based on these criteria 3 clusters were formed. Cluster 1, participants experiencing low degrees of burnout, consisted of 17 cases. Cluster 2, participants experiencing medium degrees of burnout, consisted of 16 cases. Cluster 3, participants experiencing high degrees of burnout, consisted of 7 cases.

Discriminant Analysis

A discriminant analysis was also conducted to determine the predictability of cluster group membership and to identify the percentage of correct classification within each cluster (Field, 2009). This process helped to confirm the group membership within each cluster.

Kappa Coefficient

Kappa coefficient was identified to validate prediction within each cluster. Kappa ranges in value from -1 to +1. A value of a 1 kappa indicates perfect prediction. Values that are less than 0 indicate poorer than chance level prediction (Field, 2009).

Qualitative Data Analysis

Descriptive data analysis was utilized to identify the key descriptors written by respondents to the two open ended questions. Words and phrases were coded to identify

perception of low levels of burnout and high levels of burnout. Frequency of each of the coded themes and key words were tallied.

Summary

Chapter 3 was a discussion of the method and instrument used in this study. A mixed method comparison study with descriptive methods of data collection was employed. One set of data was the analysis of the MBI-E survey. This provided descriptive, cluster analysis, and correlations statistics of the perceptions of participants of the levels of overall burnout and the analysis by three different construct within burnout (EE, DP and PA). Mixed methodology included the MBI-E analysis, analysis by demographic data, and responses to open ended questions.

Chapter 4 covers the results of the MBI-E surveys and statistical analysis. Results are reported of the overall perception of burnout and by different constructs. Cluster analysis will help determine whether the levels of burnout vary by gender, age, highest degree earned, experience, size of school, type of school and level of school.

CHAPTER 4: RESULTS OF THE STUDY

This chapter presented the results of the study. The study utilized a survey to collect information on the perceived levels of burnout among practicing principals who were also members of a structured network, specifically School Leaders Network. In this chapter, an analysis of the patterns from the survey and an analysis of the relationships among survey results were presented.

Purpose of the Study

Although there are many studies pertaining to reasons for burnout there are few studies that examine effective practices school systems may implement in order to reduce burnout among principals. In addition, there is minimal research on effective professional development opportunities to meet the needs of principals. In a study conducted by Public Agenda for Wallace Foundation in 2007, “principals overall feel that leadership programs in education are out of touch with current realities”. Very few had positive comments about traditional training opportunities.

The purpose of this study was to explore the relationship between formal network participation and reduced principal burnout. Specifically this study attempted to determine whether the SLN network reduced one of the three constructs that contribute to burnout, emotional exhaustion, depersonalization or personal accomplishment, greater than another. The researcher attempted to determine if participation in a structured principal network had a positive impact on principals to reduce burnout.

Research Questions

This study sought to answer the following research questions:

Overarching Questions

1. To what extent does being a member of School Leaders Network reduce principals' levels of burnout?
2. How do demographics influence perception of burnout?

Research Question #1

To address overarching question Research Question #1 the following research questions were investigated:

Research question 1a: As measured by the Maslach Burnout Inventory-E (MBI-E) to what extent does network participation result in a lower perception of burnout?

Research Question 1b: As measured by the MBI-E to what extent does network participation lower one's perception of emotional exhaustion?

Research Question 1c: As measured by the MBI-E to what extent does network participation lower one's perception of depersonalization?

Research Question 1d: As measured by the MBI-E to what extent does network participation raise one's sense of personal accomplishment?

Research Question #2

To address overarching question Research Question #2 the following research question was investigated:

Research Question 2a: To what extent do demographics influence the overall score as measure on the MBI-E? The following demographics will be analyzed: education level; gender; age; years as a principal; level of school; size of school; type of school.

In order to address the research questions, it was necessary to make sense of the survey results. The survey results were discussed first and research questions were discussed next.

Overview of Methodology

The sample population for this research project was selected from a national organization, School Leaders Network (SLN). The SLN was established in 2006, by a nationally recognized educational leader, Elizabeth Neale, to support principals in meeting the increased demands of their role as the focus on student achievement has increased. Networks were guided by SLN-trained facilitators, to assist members on the technical and adaptive challenges of leadership to improve student learning. Members of all networks participated in discussion of critical issues, continuous learning on a topic determined by the group and informal networking. At the time of the study there were 23 networks representing 6 states totaling approximately 250 members. Members represent a wide range of experiences and cultural/ethnic background. The nature of this study was a mixed method comparison study of national network members in Washington, D.C and New York City. All participating network members received an electronic survey, Maslach Burnout Inventory (MBI) for Educators measuring degree of burnout. The MBI developed by Maslach and Jackson in 1986 has been used to measure the dimensions of educators' burnout. "In studies of burnout the MBI is almost the only instrument used to measure whether and to what degree workers suffer from burnout. The MBI is not only the most widely used instrument to measure burnout it is also accepted internationally" (Tomic & Tomic, 2008). The MBI consists of 22 items forming three constructs: emotional exhaustion, personal accomplishment and depersonalization. The frequency scale ranges from 1 (never) to 6 (every day). The emotional exhaustion consists of nine of the 22 items which describe feelings of being emotionally exhausted. Specific questions measuring emotional exhaustion are: 1, 2, 3, 6, 8, 13, 14, 16, 20. Depersonalization construct consists of 5 of the 22 items describing feelings of impersonal responses to co-workers. These are questions: 5, 10, 11, 15, 22. The third construct,

personal accomplishment subscale consists of 8 of the 22 items describing feelings of competence and success about personal achievements. Questions addressing personal accomplishment are: 4, 7, 9, 12, 17, 18, 19, 21. The higher the mean scores of the emotional exhaustion and depersonalization constructs reveal a greater degree of burnout (Sari, 2004). This particular inventory was selected for this study due to its ease in completion, relevance to the study as all reasons of burnout are embodied in the three constructs of this instrument and validity of the survey. This instrument addresses the complex nature of a school administrator's role. It has been used by a variety of researchers, in similar studies, representing several countries since its creation in 1986 (Friedman, 1995; Sari 2004; Tomic & Tomic, 2008; Whitaker, 1995). Additionally, reliability coefficients for each construct were similar and acceptable degrees of internal reliability, test-retest reliability had a small range from 0.53 to 0.89 between each construct and were significant beyond the 0.001 level which are sufficient for research purposes (Sari, 2004).

With the addition of demographic questions this study was able to analyze overall burnout for all network members, as well as, compare burnout among a variety of subgroups, specifically: education level, gender, age, years as a principal, level of school, size of school, and type of school. Finally, the researcher was able to identify the impact of longevity as a network participant on perceived burnout.

The two open ended questions asked participants to identify possible reasons for their perceived feeling of burnout. Some choices were provided as well as an opportunity for them to add additional reasons. The provided choices included: change of school, change of superintendent, change of program at school or other in which they were able to indicate other reasons. The second open ended questions asked participants to indicate why they did/did not

feel less burned out since becoming a network member. Responses to this question provided additional support to the importance of networks, even in areas that are not easily measured.

Findings and Results

The survey was deployed electronically on July 4, 2012 to 133 School Leaders Network members, representing networks in Washington, DC (n=69) and New York City (n=64). After two weeks of being live 13 members had completed the survey. On July 18, 2012 all members received a reminder/thank you from this researcher. In addition, 2 network facilitators from networks in NYC sent an electronic message to their network members encouraging them to participate. At this point I was informed by SLN's Program Director that one network in Washington, DC had lost funding and was no longer established. Membership of this network was 10 members. This decreased the total sample of this survey from 133 possible participants to 123 possible participants. On July 20, 2012, the response rate increased 100% with 26 members completing the survey after this second reminder. A final electronic reminder and extension was sent on August 1, 2012. Response rate increased significantly with a total of 40 members completing the survey by the close of the survey on August 11, 2012. Four members were unable to be reached due to retirement and resignation. Therefore the overall participation rate was 33.6% when the 10 members of the nonexistent network and the 4 members that were not reachable are taken into account (see Appendix E).

Demographic Characteristics of the Sampled Population

Table 4 provides a detailed description of the SLN members who participated in the study (n=40). The participants of this study were 85% female and 15% male. Of the 40 participants 16 participants indicated being in the age range of 20 – 30 years old, comprising 40% of

Table 4

Demographic Characteristics of the Participating SLN Principals

Characteristic	Frequency	Percentage
Gender		
Male	6	15
Female	34	85
Age		
20-30	16	40
31-40	12	30
41-50	9	22.5
51-60	3	7.5
City		
New York City	21	52.5
Washington, DC	19	47.5
Type of School		
Public	36	90
Charter	4	10
Level of School		
Pre-K/K-2	2	5
Pre-K/K-5	11	27.5
Pre-K/K-6	14	35
6-8	4	10
6-9	1	2.5
9-12	7	17.5
10-12	1	2.5
Highest Degree Earned		
Masters	38	95
Doctorate	2	5
Experience as Principal		
1-5	17	42.5
6-10	19	47.5
11+	4	10

Table 4 (*continued*)

Enrollment		
1-499	24	60
500-999	14	35
1000+	2	5
Years as a Network Member		
0-2	35	87.5
3-5	3	7.5
6+	2	5
Extent of Perceived Burnout		
No extent	10	25
Little extent	9	22.5
Some extent	19	47.5
Great extent	2	5
Burnout Since SLN		
Less	25	62.5
Not less	15	37.5

participants. The age range with the least representation was the group of principals in the age range of 50 – 60 years old. This group comprised 7.5% of the sample group. Participants represented two large urban areas. Each geographic location had similar representation. Twenty one principals from New York City (NYC) participated in the survey comprising 52.5% of the sample. Thirty six participants, or 90%, were principals of public schools. The remaining 10% of participants were principals of charter schools. The majority of participants were principals of elementary schools (35%). The least represented groups were principals of schools with grades 6-9 (2.5%) and 10-12 (2.5%). All participants had obtained either a Masters Degree or a Doctoral Degree. Thirty eight participants (95%) had earned a Masters Degree. The majority of participating principals (47.5%) indicated they have been a principal for 6-10 years. Principals with 1-5 years had similar representation (42.5%) of the sample group. Student enrollment of 1 - 499 students was the highest represented group for this survey (60%). Only two respondents or 5% were principals of schools with 1000 or more students. Thirty five survey participants (87.5%) indicated they have been SLN members for 0 – 2 years. Only 2 participants (5%) of the sample had been members for 6 or more years. Nineteen participants (47.5%) of the sample reported some extent of burnout. Only 2 participants indicated they experience a great extent of burnout. Survey participants were asked to indicate if they felt less of a sense of burnout since becoming a network member. Twenty five participants (62.5%) of the sample reported they feel less burned out since becoming a network member. Reasons for responses include: “SLN is instrumental in supporting varied needs of principals”; “has forced me to refocus on stopping to reflect”; “provides a net of support that works. I feel less isolated.”; “peer support”; “opportunity to vent and collaborate with colleagues”; “way to share and learn’ and “group listens and assists with problems”.

Description of the Data Set

Means

All participants completed each of the 22 items of the Maslach Burnout Inventory of Educators. Responses were recorded on a 7 point Likert scale. Answers ranged from (0) never to (6) every day. Descriptive statistics were employed in order to obtain an overall view of the data provided by the sample population. The descriptive statistics used in this research study were frequencies, means, and standard deviations. Table 5 gives the mean and standard deviation for each of the 22 items by construct for the entire group and for each MBI construct.

The composite values for each construct are provided as seen in Table 5. Composite values were calculated for each construct in order to determine the average score across the set of questions specific to each construct. The overall mean for all 22 items of the survey was 2.97 and the standard deviation was 1.92.

In addition to the statistical data, this researcher also analyzed the qualitative data for each construct. Thirty eight of the 40 participants provided responses indicating why they felt less burned out since being a network member. Examples of these responses include: "I have acquired a lot of useful information from colleagues that I can begin to incorporate to help me redirect my stress on the job" and "In a network you feel a little better, but honestly the work is still there once you leave the session and it has to get done. Five responses did not align to a specific construct of burnout. Examples of these responses included: "I have been burned out for 2 years"; "This is my first year as a principal so I am not burned out"; and "No difference". The remaining 33 comments addressed at least one specific construct of the MBI-E.

Emotional Exhaustion construct consisted of 9 questions. Those questions were 1, 2, 3, 6, 8, 13, 14, 16, 20 of the MBI-E Survey. Questions in this construct address feelings of emotional

exhaustion, workers feel they are no longer able to give of themselves. A higher score in this area indicates a higher degree of burnout. The overall composite score for this construct was 21.8 which was the second highest composite score. This composite score of 21.8 is in the moderate range of burnout as indicated by the scoring guidelines of the MBI-E (Maslach & Jackson, 1986). The overall mean for the Emotional Exhaustion construct for all participants was 2.42 with a standard deviation of 1.32. Survey item #2 had the greatest mean (3.45) within the Emotional Exhaustion construct. Emotional exhaustion composite values were high for this group however, considerably lower than MBI-E scores provided by Maslach and Jackson (1986). Furthermore, 5 of the qualitative comments specifically addressed the emotional exhaustion construct. Examples of these comments were: “I have acquired a lot of useful information from colleagues that I can begin to incorporate to help me redirect my stress on the job” and “In a network you feel a little better, but honestly the work is still there once you leave the session and it has to get done.

The Depersonalization construct consists of 5 questions. Those questions are 5, 10, 11, 15, 22 of the MBI-E Survey. Questions in this construct reflect negative or cynical attitudes about those with which the participant works. A high score in this area indicates a higher degree of burnout. The composite value for this construct was 3.65 which was the lowest composite value of the three constructs based on this sample group. This composite value of 3.65 is in the low range for burnout as indicated by the scoring guidelines of the MBI-E (Maslach & Jackson, 1986). The overall mean for the Depersonalization construct for all participants was .7300 with a standard deviation of .89620. Survey item #11 had the highest mean score of 1.25. Although participants in this research study are experiencing depersonalization, the composite mean score is considerably lower than the score provided by Maslach and Jackson (1986). Furthermore,

Table 5

Mean, Standard Deviation and Composite Values by Construct

	<i>M</i>	<i>SD</i>
Emotional Exhaustion	2.42	1.32
1. Emotionally drained	3.22	1.67
2. Used up	3.45	1.75
3. Fatigued	2.45	1.87
6. Strained	1.60	1.70
8. Burned out	2.42	1.72
13. Frustrated	2.82	1.76
16. Stress	1.25	1.54
20. End of my rope	1.40	1.66
Composite Values for Emotional Exhaustion	21.80	11.93
Depersonalization	.73	.89
5. Impersonal	.27	.71
10. Callous	1.17	1.53
11. Hardening me	1.25	1.67
15. Do not care	.20	.68
22. Blame	.75	1.29
Composite Values for Depersonalization	3.65	4.48
Personal Accomplishment	5.0	.79
4. Easily understand	4.5	1.97
7. Deal effectively	5.15	1.29
9. Positively influencing	5.35	1.44
12. Energetic	4.35	1.70
17. Relaxed atmosphere	5.25	1.23
18. Exhilarated	5.37	1.21
19. Worthwhile	5.25	1.05
21. Calm	4.77	1.59
Composite Values for Depersonalization	40.0	6.39
Complete MBI	2.97	1.92
Composite Values for MBI	65.40	14.46

network members' comments as to why they feel less burned out since becoming a network member strongly relate to this construct. Twenty five of the thirty eight comments specifically addressed reducing the feeling of isolation and ability to network and collaborate. Specific comments included: "I feel supported in the network. It helps me deal with the pressures of urban leadership"; "Group that listens and assists with solutions"; "Opportunity to dialog and create partnerships with colleagues in addressing common issues" and "SLN gives me an opportunity to discuss my problems and vent and collaborate with colleagues to come up with viable solutions".

The Personal Accomplishment construct consists of 8 questions. Those questions are 4, 7, 9, 12, 17, 18, 19, 21 of the MBI-E Survey. Questions in this construct reflect reduced perception of self achievement or dissatisfaction with personal accomplishments. A higher score in this area indicates a lesser degree of burnout. The composite value was the highest for this construct with an overall score of 40.0. This composite value of 40.0 is in the low range for burnout as indicated by the scoring guidelines of the MBI-E. The overall mean for the Personal Accomplishment construct for all participants was 5.0 with a standard deviation of .79. Survey item #18 had the highest mean score (5.37) within this construct. Higher scores in this construct indicate less of a feeling of burnout. The composite value for this construct was considerably higher than those provided by Maslach and Jackson (1986). Furthermore, qualitative results indicated network membership has some impact on personal accomplishment. Three of the comments provided addressed this construct. Examples of the comments include: "Right now, I feel prepared for the job I have"; "SLN has been instrumental in supporting the varied needs of the principal for example, SLN has provided strategies around time management and the restructuring of your school for success" and "The support afforded us in these areas has enabled us to become more

productive and successful leaders. This network in particular has forced me to refocus on stopping to reflect and meet my own needs as opposed to consistently running forward and being pulled by every change that is thrown at me.”

The overall composite values for this sample group indicate a low level of perceived burnout since all composite values were in the low or moderate range. Furthermore, emotional exhaustion was in the moderate range and depersonalization was in the low range. High scores in both of these constructs indicate higher degrees of burnout. Personal accomplishment which is viewed opposite of the previous two constructs was also in the range indicating low degree of burnout.

Table 6 indicates individuals that were network members for 3-5 years have the highest mean score for Emotional Exhaustion and Depersonalization and the lowest mean score for Personal Accomplishment. This profile is indicative of a person with a high degree of burnout. In contrast, SLN members for more than 6 years report the lowest mean score for Emotional Exhaustion and Depersonalization, indicating a lower level of burnout.

Alpha Reliability

In order to examine the survey instrument’s reliability, Cronbach’s coefficient alpha (Green & Salkind, 2005) was calculated and examined using the Statistical Package for the Social Sciences (SPSS Version 20.0). Cronbach’s alpha measures the consistency of the construct being measured, in this case burnout (Field, 2009). Results can be seen in Table 7. Three constructs comprised 22 items for the sample of 40 participants who responded. All constructs met the minimum Cronbach’s (Green & Salkind, 2005) coefficient alpha reliability of 0.70. The reliability for the entire MBI-E instrument for this study was .786. Individual

Table 6

Mean and Standard Deviation for Each Construct and Years as a SLN Member

	Network Membership	Mean Score	N
EE	0-2	2.3016	35
	3-5	4.0741	3
	6+	2.0556	2
DP	0-2	.6514	35
	3-5	1.8000	3
	6+	.5000	2
PA	0-2	5.0429	35
	3-5	4.6667	3
	6+	4.7500	2

Table 7

Cronbach's Alpha Reliability

Constructs and Variables	Type	Items		α
		Number	Score range	
Overall	Likert	22	0 to 132	$\alpha = .754$
Emotional Exhaustion	Likert	9	0 to 54	$\alpha = .905$
Depersonalization	Likert	5	0 to 30	$\alpha = .789$
Personal Accomplishment	Likert	8	0 to 48	$\alpha = .714$

constructs were also analyzed. Reliability of Emotional Exhaustion was .905. Depersonalization value was .789. Personal accomplishment had a reliability score of .714 when the Cronbach's coefficient alpha was run for this survey. Demographic characteristics were not included in the reliability testing.

Recoding of the Data

Table 8 identifies the degree of burnout for each participant based on the total scores for each construct of the MBI-E. Twenty five respondents demonstrated a low degree of burnout as measured by the MBI-E as compared to 11 respondents and 4 respondents demonstrated moderate and high degree of burnout, respectively, as measured by the MBI-E. Two respondents, Participant A and Participant B had been network members for 6 or more years and both fell in the low degree of burnout group.

Correlations

The MBI-E Pearson correlation coefficient was identified to determine the results on a specific construct on the overall degree of burnout as measured by the MBI-E. When the MBI was the dependent variable the beta coefficients for each construct were: .89 for emotional exhaustion; .69 for depersonalization and .10 for personal accomplishment. Calculating the correlation established an effect size that fell within a 0 – 1 range with 0 indicating no effect and 1 indicating a perfect effect. The correlation coefficient represents the strength and direction of this relationship at the $p = .05$ level. Results support the research that there is a positive relationship between all constructs of the MBI-E and burnout with the most significant being emotional exhaustion. A complete Pearson correlation coefficient matrix can be seen in Table 9.

Pearson r correlation coefficient was also conducted to determine the impact of network membership on the MBI-E score. One of the additional questions added to the survey by this

Table 8

MBI-E Construct Total for Each Participant

Participant	EE	DP	PA	Burnout Level
A	6	4	31	Low
B	31	1	45	Low
C	9	0	46	Low
D	50	11	37	High
E	44	6	43	High
F	44	23	34	High
G	19	5	44	Low
H	22	3	45	Low
I	31	2	44	Mod
J	12	0	42	Low
K	17	0	36	Low
L	30	2	31	Mod
M	16	2	37	Low
N	13	1	43	Low
O	35	9	36	Mod
P	21	6	36	Mod
Q	20	3	40	Low
R	22	6	41	Low
S	20	0	24	Mod
T	36	7	41	Mod
U	24	5	38	Low
V	15	3	46	Low
W	15	0	48	Low
X	13	1	44	Low
Y	34	7	39	Mod
Z	18	0	47	Low
AA	14	0	47	Low
BB	20	4	20	Mod
CC	6	1	46	Low
DD	4	0	48	Low
EE	33	1	31	Mod
FF	6	0	42	Low
GG	21	2	44	Low
HH	13	1	42	Low
II	12	4	45	Low
JJ	36	1	41	Mod
KK	19	1	42	Low
LL	23	10	40	Mod

Table 8 (continued)

MM	22	3	42	Low
NN	41	11	31	High

Note. EE –High-27+; Moderate-17-26; Low-0-16. DP-High-14+; Moderate-9-13; Low-0-8. PA-High-0-30; Moderate-31-36; Low-37+. *Interpreted in opposite direction of EE and DP.

Table 9

Pearson Correlation Coefficients for Constructs and MBI-E Quotient

	MBI	EE	DP	PA
MBI	1	.89	.69	.10
EE	.89	1	.63	-.29
DP	.69	.63	1	-.31
PA	.10	-.29	-.31	1

researcher how long respondents have been a network member. The Pearson r correlation coefficient was a .095.

Furthermore, Pearson r was conducted to identify the relationship between all three constructs, emotional exhaustion, depersonalization and personal accomplishment and overall personal perception of burnout, moving to the right of the theoretical framework. Of the additional questions this researcher added to the survey participants were asked to indicate the extent of burnout they were experiencing in their current role. There were four answer choices. These choices were: no extent; little extent; some extent; and great extent. The Pearson r coefficients were .517, .334 and -.245 respectively as seen in Table 10.

Cluster Analysis

Cluster analysis was conducted as an exploratory statistical technique to address Overarching Question #2. Each cluster identified was a group of relatively homogeneous cases. Items in each cluster were similar in some ways to each other and dissimilar to those in other clusters. Cluster analysis makes no distinction between dependent and independent variables. Initially, Ward's method of hierarchal clustering was conducted to determine the appropriate number of clusters. This method was conducted using a five, four, three and two cluster solution. Then k -means clustering was run where k represented the number of clusters desired. The desired number of clusters was 3. The data file was examined for outliers prior to using this method since k -means is very sensitive to outliers. This research study did not have any data that would be considered an outlier. All data was used for the k -mean cluster analysis. This method of cluster analysis involves deciding on a set number of clusters to extract. Objects are then moved around between clusters so as to make objects within a cluster as similar as possible and objects between clusters as different as possible. A three cluster solution was chosen. Two of the

Table 10

Pearson Correlation Coefficients for Constructs and PPOB

	EE	DP	PA	Extent of Burnout
EE	1	.63	-.29	.517
DP	.638	1	-.31	.334
PA	-.29	-.31	1	-.245
Extent of Burnout	.517	.334	-.245	1

constructs, emotional exhaustion and depersonalization, had a significant relationship with the overall MBI quotient. However, personal accomplishment, personal perceived burnout and length of time as an SLN member were not significant. The sizes of the three clusters were 17 for cluster 1, 16 for cluster 2, and 7 for cluster 3. The overall ANOVA of the constructs of the MBI can be seen in Table 11.

A complete cluster profile identifying cluster means about the constructs of the proposed MBI-E is displayed in Table 12. The cluster profiling focused on the distinct differences between the constructs of the MBI (EE, DP, PA), the overall quotient on the MBI, participants personal perceived burnout and length of time as an SLN member. Cluster 1, low degree of burnout cluster, had a total of 17 cases and displayed means of 11.88, 1.51, 39.41, 52.88, 1.12 and .12 respectively. All results for this cluster were the lowest of the three except for the overall result for personal accomplishment which was the second highest of the three clusters. Cluster two (16 cases), had all mid range results except for personal accomplishment which was the highest for this cluster. Results were 23.88, 2.81, 41.81, 68.50, 1.25, .19, respectively. This was the medium burnout group. The third cluster identified had a total of 7 cases and had the highest means for all areas except personal accomplishment, which was the lowest of the three clusters. Based on the significance of the differences between groups, Cluster 1 was identified as low burnout rate, Cluster 2 was identified as medium burnout rate, and Cluster 3 was identified as high burnout rate.

A cluster analysis was run on 40 cases, each responding to items on demographics (gender; age, state in which a participant was a principal, length of time as a principal, size of school, level of school, type of school, highest degree earned), on their perceived personal

Table 11

Analysis of Variance Table Examining the Cluster Differences about the Constructs of the

Proposed MBI

Construct	<i>df</i>	F	Significance
Emotional Exhaustion	37	67.421	.000
Depersonalization	37	21.271	.000
Personal Accomplishment	37	1.372	.266
MBI	37	86.059	.000
Extent of Burnout	37	2.579	.089
Network Member	37	.277	.760

Note. n = 40. *p* = .05.

Table 12

Mean Values of the Constructs of the Proposed MBI by Cluster Grouping{ TC "22. Mean values of the constructs of the proposed Modified Model of Planned Behavior by cluster grouping" \fD \ "1" }

Construct	1 Low	2 Medium	3 High
Emotional Exhaustion	11.88	23.88	41.14
Depersonalization	1.51	2.81	10.57
Personal Accomplishment	39.41	41.81	37.29
MBI	52.88	68.50	89.00
Extent of Burnout	1.12	1.25	2.00
Network Membership	.12	.19	.29

Note. n = 40. * = significant difference between cluster groupings at the $p = .05$ level.

burnout. A hierarchical cluster analysis using Ward's method produced three clusters, between which the variables were significantly different in the main. The third cluster was high burnout characterized by participants with high emotional exhaustion and depersonalization values. The first cluster was essentially low burnout characterized by participants with low emotional exhaustion and depersonalization values and high personal accomplishment.

A cross-tabulation was also conducted to examine the demographic characteristics that made up each of the clusters identified. Of the sample group, only 7 participants demonstrated a high degree of burnout. Five of these participants were female and 2 were male. Of the 38 participants reporting a Master's degree was the highest degree earned, six of them were in cluster 3 which indicated a high degree of burnout. Participants aged 20 years old – 40 years old compiled 47% of cluster 1, 81% of cluster 2 and 100% of cluster 3. All participants of the high burnout cluster are 40 years old or younger. Principals with 6-10 years experience is the largest group within cluster three, 71%. It is also the largest group within cluster 1 comprising 59% of that cluster. Grade level of school seemed to impact cluster 2 the most. Sixty – three percent of cluster 3 principals lead a school with grades from 6-9 whereas, principals of the same level school comprised only 35% of cluster 1 and 43% of cluster 3. The demographic characteristics of the cluster groupings can be seen in Table 13.

Discriminant Analysis

A discriminant analysis was conducted to determine the predictability of cluster group membership. The predictability of cluster 1 and 2 were 100% and cluster 3 was 85% (see Table 14). This test indicated that the predictability among the clusters was strong since all cases lie on the diagonal. Cluster 1 and 2, the low burnout and medium burnout clusters lie on the diagonal, whereas, cluster 3 does not. The percentage of cases on the diagonal represents the percentage of

Table 13

Demographic Characteristics of the Principal Participants by Cluster Grouping

	Low	Cluster Medium	High
Gender			
Female	16	13	5
Male	1	3	2
Highest Degree Earned			
Doctorate	1	0	1
Masters	16	16	6
Age			
20-30	4	9	3
31-40	4	4	4
41-50	7	2	0
51-60	2	1	0
State			
New York	9	6	6
District of Columbia	8	10	1
Number of Years as Principal			
1-5	5	10	2
6-10	10	4	5
11+	2	2	0
Grade Levels of School			
PreK/K-2	0	2	0
PreK/K-5	6	3	2
PreK/K-6	5	6	3
6-8	1	3	0
6-9	0	1	0
9-12	4	1	2
10-12	1	0	0
Student Enrollment			
1-499	10	10	4
500-999	6	6	2
1000+	1	0	1

Table 13 (continued)

Type of School			
Public	17	12	7
Charter	0	4	0

Note. n(cluster 1) = 17. n(cluster 2) = 16. n(cluster 3) = 7.

Table 14

SPSS Output of the Discriminant Analysis Classification of Cluster Results

		Predicted Group Membership			Total	Missing
Cluster		Cluster 1	Cluster 2	Cluster 3		
Original - Count	1	17	0	0	17	0
	2	0	16	0	16	0
	3	0	1	6	7	0
%	1	100	0	0	100	
	2	0	100	0	100	
	3	0	14.3	85.7	100	
Cross-Validated Count	1	17	0	0	17	0
	2	0	16	0	16	0
	3	0	1	6	7	0
%	1	100	0	0	100	
	2	0	100	0	100	
	3	0	14.3	85.7	100	

Note. n=40.

correct classifications. Therefore, 100% of the classifications for Cluster 1 and Cluster 2 are correct and only 85.7% of cluster 3 classifications are correct.

Kappa Coefficient

This researcher also computed a kappa coefficient as seen in Table 15. Predicted cluster membership was .96 accurate. Kappa ranges in value from -1 to +1. A value of a 1 kappa indicates perfect prediction. Values that are less than 0 indicate poorer than chance level prediction. In order to take into account chance agreement, this researcher computed a kappa coefficient and obtained a value of .96, a high prediction value – almost perfect prediction.

Summary

The purpose of this study was to determine the impact of participation in a structured principal network (SLN) on principal burnout. The study used the MBI survey. Survey questions were categorized into three constructs. These constructs were emotional exhaustion, depersonalization and personal accomplishment. In addition, the researcher added 10 multiple choice demographic questions and 2 open ended questions.

The data for the study were analyzed in several ways. First, the demographic responses were examined. Next, an analysis of the relationships between each construct and the overall MBI quotient was conducted. Then the relationship between each construct and the personal perception of burnout was analyzed. Finally, the relationship between the reported personal perception of burnout and the overall MBI quotient was analyzed. The analysis of these relationships was used to address the research questions the research questions.

The analysis of relationships was conducted through a series of cluster analysis. To address the first research question identifying the extent to which being a member of SLN reduces burnout was addressed by 4 subsequent questions. Each of these questions addressed the

Table 15

Results of the Cross Tabulations Kappa Analysis

	Value	Asymp. Std. Error	Approx. T	Approximate Significance
Measure of agreement Kappa	.960	.039	8.128	.000
N of valid cases	40			

impact of length of time in a network reducing the perception of burnout and individual constructs reducing perception of burnout. There was not a significant relationship between network membership and reduced perception of burnout, nor overall MBI quotient. However, results of each construct support and add to the existing body of research supporting the MBI. Participants reported high emotional exhaustion and depersonalization and lower means in the construct of personal accomplishment.

The second research question reviewed the influence of demographics on perceived burnout. The relationships of each of the constructs of burnout, as well as, the overall combined MBI quotients, were analyzed. Furthermore, through cluster analysis each demographic characteristic was correlated to each construct. There were no significant relationships in any particular demographic group.

The next chapter provides conclusions based on these results. Chapter 5 will also offer the implications for educational leaders, researchers, and policy makers.

CHAPTER 5: CONCLUSION

Overview

This study examined the effects of membership in a formal principal network, specifically School Leaders Network (SLN), on perceived levels of burnout. The study examined members' perceived level of burnout as measured on the Maslach Burnout Inventory - Educators. The study was completed using survey data from network participants in New York City and Washington, DC. Participants were asked to complete 11 survey questions revealing demographic information, 2 open ended questions and the MBI-E which consisted of 22 questions. Results were used to note trends between groups. Although network studies exist for some formal networks, no other studies had been performed on the impact of membership in School Leaders Network on perceived principal burnout.

Findings and Discussion

Analysis of Data

The initial step in the analysis of data was to explore the survey results using descriptive statistics. A series of mean values were calculated. What follows is an explanation of the findings.

The participants of this study were 85% female and 15% male. Of the 40 participants 16 participants indicated being in the age range of 20 – 30 years old, comprising 40% of participants. The age range with the least representation was the group of principals in the age range of 50 – 60 years old. This group comprised 7.5% of the sample group. Participants represented two large urban areas. Each geographic location had similar representation. Twenty one principals from New York City (NYC) participated in the survey comprising 52.5% of the sample. Thirty six participants, or 90%, are principals of public schools. The remaining 10% of

participants were principals of charter schools. The majority of participants were principals of elementary schools (35%). The least represented groups were principals of schools with grades 6-9 (2.5%) and 10-12 (2.5%). All participants had obtained either a Masters Degree or a Doctoral Degree. Thirty eight participants (95%) had earned a Masters Degree. The majority of participating principals (47.5%) indicated they have been a principal for 6-10 years. Principals with 1-5 years had similar representation (42.5%) of the sample group. Student enrollment of 1 - 499 students was the highest represented group for this survey (60%). Only two respondents or 5% were principals of schools with 1000 or more students. Thirty five survey participants (87.5%) indicated they have been SLN members for 0 – 2 years. Only 2 participants (5%) of the sample have been members for 6 or more years. Nineteen participants (47.5%) of the sample reported some extent of burnout. Only 2 participants indicated they experience a great extent of burnout. Survey participants were asked to indicate if they felt less of a sense of burnout since becoming a network member. Twenty five participants (62.5%) of the sample reported they feel less burned out since becoming a network member. Reasons for responses include: “SLN is instrumental in supporting varied needs of principals”; “has forced me to refocus on stopping to reflect”; “provides a net of support that works. I feel less isolated.”; “peer support”; “opportunity to vent and collaborate with colleagues”; “way to share and learn’ and “group listens and assists with problems”.

Research Question 1

In order to address Overarching Question 1 four additional subsequent questions were addressed. The first question addressed the time a participant spent in a network and their MBI quotient. Five of the forty respondents had been network members for 3 or more years. Of these five principals, their emotional exhaustion mean scores ranged from .7 to 4.6 which was much

lower than the established MBI-E mean score for this construct. The mean score for emotional exhaustion based on Maslach et al. (1986) was 21.25. All members of this research study had considerably lower emotional exhaustion mean scores, 2.42, than the suggested mean score based on MBI-E means. Members of this research study are demonstrating emotional exhaustion, however at a much lower rate indicating a lesser degree of burnout.

The depersonalization construct mean scores ranged for all members ranged from .2 to 1.25 which were also significantly lower than the mean score of 11.00 as indicated by the MBI-E for this construct. Although, principals in this study are experiencing some symptoms of depersonalization their overall mean, .73, is low, indicating a lesser degree of burnout.

Personal accomplishment construct mean scores ranged from 4.5 to 5.37 which were also well below the MBI-E mean score of 33.54 for this construct. Higher scores in this construct indicate lesser degrees of burnout. Members of this research study had low scores in this construct which indicate a greater degree of burnout.

The second subsequent question addressed network participation and one construct of the MBI, specifically emotional exhaustion. A high score in this construct also indicates a greater level of burnout. Once again, five principals of the 40 total participants had been members for more than 3 years. The mean values for the emotional exhaustion construct had the greatest range. The range was 4.9 with scores ranging from 0.7 to 5.6. The combined mean score for principals that have been in a network 3-5 years was 4.0741. This was the highest mean score of the three groups of network membership, 0-2 years, 3-5 years and 6+ years. Principals in a network for 5+ years reported the lowest overall mean score for emotional exhaustion which was 2.0556. Based on the MBI-E suggested mean scores for emotional exhaustion and the scores obtained by participants in this research project for the same construct, network membership

does have an impact on overall burnout, specifically emotional exhaustion since mean scores for this construct are considerably lower than the MBI-E mean scores for emotional exhaustion.

The third subsequent question addressed network participation and another construct of the MBI, specifically depersonalization. Five principals of the total 40 participants had been members for more than 3 years. The mean values for the depersonalization construct ranged from 0.2 to 2.2. The combined mean score for principals that had been in a network for 3-5 years was 1.8. A high score in this construct also indicated a greater level of burnout. Principals in a network for 5+ years reported the lowest overall mean score for depersonalization, which was .5000. Since means scores were well below the proposed mean score of 11.00 for depersonalization as proposed by Maslach and Jackson (1986) network membership may have an impact on depersonalization in reducing burnout.

The fourth subsequent question addressed network participation and another construct of the MBI, specifically personal accomplishment. Five principals of the total 40 participants had been members for more than 3 years. The mean values for the personal accomplishment construct was much tighter. The range was 1.7 with scores ranging from 3.9 to 5.6. The combined mean score for principals that had been in a network for 3-5 years was 4.6667 which was the lowest among the three groups of length of network membership. A low score in this construct indicates a greater level of burnout. Principals in a network for 5+ years reported the second lowest overall mean score for depersonalization which was 4.7500. Since means scores were well below those proposed by Maslach and Jackson (1986) of 33.54 network membership does not increase the personal accomplishment construct therefore does not help to reduce burnout in this one construct. However, the longer a participant was a network member, the

greater their personal accomplishment mean score was which may indicate a correlation with time in a network and feelings of personal accomplishment.

The mean values of each construct for members with more than 3 years as a network member indicate that SLN membership may have positive impact on overall burnout, indicated by lower scores in the constructs of emotional exhaustion (4.07) and depersonalization (1.8). Even though scores in the personal accomplishment construct were considerably lower than the overall mean the longer a research study participant was a network member the greater the mean score for this construct. Research surrounding the MBI-E indicates the emotional exhaustion construct is the most influential of overall burnout (Lee & Ashforth, 1993). The higher the mean scores of the emotional exhaustion and depersonalization constructs reveal a greater degree of burnout (Halbesleben & Demerouti, 2005; Sari, 2004). A low degree of burnout is reflected in low scores on emotional exhaustion and depersonalization and high scores on the personal accomplishment subscale (Demerouti et al., 2003; Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998). Participants in this research study had very low mean scores in both of these constructs, therefore, network membership did have an impact on reducing burnout.

All mean scores of each construct for principals in a network, regardless of longevity, were well below those indicated by Maslach et al. (2001). Additionally, Pearson r correlation coefficient for each construct and the overall MBI-E quotient indicated a positive relationship. Simply analyzing the mean scores of each construct and the Pearson r correlation coefficient indicating the relationship of the constructs on MBI-E quotient one could conclude network membership does have a positive impact on reducing principal burnout. Furthermore, qualitative comments support this conclusion that networks do have an impact on reducing principal burnout. Comments in favor of networks are aligned with those stated in Chapter 2 which

Darling-Hammond et al. (2007) identified as necessary components of adult professional development opportunities. Essential components included: growing consensus that ongoing leadership support should combine theory and practice, scaffolded learning experiences guided by experienced mentors, opportunities for reflection and peer networking. Similarly, Chapman (2005) identified components for effective professional development opportunities. These include: clear sense of mission and purpose, relevance, multiple sessions over the year and time for reflection. All components proposed by Chapman and Darling-Hammond et al. (2007) are embedded in formal principal networks, specifically SLN, which may account for the reduced degree of burnout among research participants. However, in contrast, when the correlation coefficient was calculated for the impact of SLN membership on MBI-E the Pearson r value was .095 which indicates almost no relationship. Overall, although one statistical method did not reveal a positive relationship between network membership and reducing burnout, individual constructs and network membership demonstrate a positive correlation and qualitative comments support the conclusion that network membership does have a positive impact on reducing principal burnout for this research study group.

SLN is having such a positive impact on its members due to the careful training of facilitators and crafting of a relevant and meaningful agenda structure. All facilitators attend a multi-day training 3 times a year. Topics for these sessions include adult learning and problems of practice. Facilitators also have an opportunity to learn from other facilitators at these retreat style trainings. Facilitators originally helped craft the structure for network meeting agendas. A typical SLN meeting lasts 3-4 hours after a full day at school. Principals arrive at the restaurant at 4:00 p.m. and network with each other for 30 minutes. This time allows for networking as well as recognizing members may a reason to be running a few minutes late. At 4:30 p.m. or 30

minutes into the agenda, depending on the start time, the meeting officially begins with a check-in. All members participate in the check-in procedure by responding to 3 questions pertaining to a hope/desire and emotion. Questions address what participants hope to accomplish as a learner during the session and a feeling, typically how they are feeling about being in attendance. This process allows all members to become focused on this meeting and leave the experiences of the day behind them. The next portion of the meeting consists of a protocol to address an issue that one member is experiencing and needs some assistance with. The first three segments of an SLN meeting address the emotional exhaustion and depersonalization construct. The final component is the piece that sets structured networks apart of simply networking. It is the time for continuous learning by combining theory and practice. This is an experience that principals rarely have privilege of participating in unless it is pertaining to a management item or they have chosen to enroll in a degree program. This portion of the network meeting builds principals' knowledge base on a topic they have requested, increasing their effectiveness, resulting in increased personal achievement. This structure encompasses at least 3 hours including a meal or appetizers.

Although a network meeting is a 3 hour commitment in addition to the traditional 8-12 hour workday for principals this is a structure that is beneficial to principals as well as extremely beneficial to school systems. Principals are supporting each other and learning with each other. The impact of the network meeting continues its resourcefulness beyond the meeting time itself as network members strengthen their relationships with each other and call on each other in between meeting times.

The benefits of a structured principal network for practicing principals and school systems are of extreme value and need to be considered. School systems can recruit possible

principals to serve as facilitators. A common structure of the meeting agenda can be established at the district level and then each meeting can establish its own personality as the members determine the problem of practice they would like to explore and as they address the critical issues of the network members. Principal networks are a great opportunity for principals to be active members of a professional learning team.

Research Question 2

In order to address Overarching Question 2 seven additional areas were analyzed. These areas were: highest degree earned, gender, age, years as a principal, level of school, size of school, and type of school.

The first area explored was the impact of the highest degree earned by participants of this research study on burnout. Research by Maslach (2001) and Michaelis and Gomez (1995) indicated individuals with higher degrees often experienced greater degrees of burnout due to their role being more political and bureaucratic. That conclusion cannot be made with this research study group since only two research study participants had earned a degree higher than a Master's degree. The only conclusion that can be made is that once individuals become principals, few seek a higher degree. The reduced number of principals seeking degrees higher than a Master's degree may be indicative of the emotional exhaustion practicing principals experience. As indicated by the research, work overload and time are common stressors identified as reasons for educator burnout. The inability to further their education may also impact a principal's feelings of personal accomplishment as they may have a desire to continue their education but due to time constraints and work load are simply not able. In addition, this stagnant level of continuous learning negatively impacts a sense of personal accomplishment as

principals remain at status quo. This indicates a greater need for principal networks as a means of continuous learning.

The second area explored was the impact of gender on burnout. Of the forty participants in this research study 34 were female. Cluster 1 was comprised of 16 females, Cluster 2 had 15 females and 5 females were in Cluster 3. Cluster 1, had the highest number of females and the lowest mean value for emotional exhaustion, depersonalization, and personal accomplishment. They also had the lowest MBI quotient and lowest perceived level of burnout. Males were represented most in Cluster 2, however, this was only 3 males. Evidence from this research study does not reveal a significant relationship between gender and degree of burnout which supports the research of Maslach and Jackson (1986), Poulin and Walter (1993), Dupree and Day (1995), Rosenberg and Pace (2006), Carlson and Mellor (2004). Their research indicated gender is not a significant predictor of burnout.

The third area explored was the impact of age on burnout. Of the forty participants in this research study 28 were 40 years old or younger. Cluster 1 was comprised of 8 participants 40 years old or younger, Cluster 2 had 13 participants 40 years old or younger and 7 participants 40 years old or younger were in Cluster 3. Cluster 3, the high cluster, had 100% of its members 40 years old or younger. Two participants of this research study indicated they were 51-60 years old. Both of these members were in Cluster 1 which is the low cluster. Evidence from this research study does not reveal a significant relationship between age and degree of burnout, however, does support previous research by Maslach (2003) and Bilge (2006) in which age appeared to be the best indicator of burnout. Younger, less experienced employees reported higher levels of burnout as compared to their coworkers. Participants in this research study under the age of 40 years old appeared to experience a greater degree of burnout than their peers age 40

and above. As Lloyd, King and Chenoweth's (2002), Maslach et al.'s (2001) and Dormann and Zapf's (2004) research found this may be attributed to unrealistic expectations. Many individuals approach the principalship because they were effective teachers. However, the roles are very different. Even the difference between assistant principal and principal are very different. Many individuals rush into the principalship at a young age as a means of increasing their salary and not fully understanding the entirety of the role therefore experiencing a greater degree of burnout.

The fourth area explored was impact of years as a principal on burnout. Of the forty participants in this research study 17 had been a principal for 1-5 years. The most represented group were those principals in the position for 6-10 years. This group had 19 members. Only 4 participants indicated being a principal for 11 years or more. Evidence from this research study does support the research of Lloyd et al. (2002) and Dormann and Zapf (2004). Principals with less experience, 5-10 years, indicated greater degrees of burnout due to the loss of autonomy, loss of control and unrealistic expectations. New principals may experience frustration over the expectations of the principalship. These expectations are ones that can only be experienced once in the role. As educators enter the administration arena at younger ages, after just a few years of teaching, the limited experiences with staff members and parents can hinder the effectiveness as a school principal. Once again, this gives credence to the call for structured principal networks so principals can learn from each other and hopefully prior to experiencing an issue for themselves. This gives them an opportunity to build their repertoire of skills to be better prepared for a variety of situations, building their personal accomplishment.

The next area explored was the impact of student enrollment on burnout. Sixty percent of participants in this research study are principals of schools with 499 or fewer students. Fourteen

participants are principals of schools with student enrollment ranging from 500-999. Only 2 participants indicated leading a school with more than 1000 students. Principals of schools with a student enrollment with less than 500 students were equally dispersed among all clusters. Fifty eight percent of Cluster 1 was comprised of principals of schools with less than 500 students. Similarly, 62% and 57% comprised Cluster 2 and Cluster 3, respectively. Therefore, it does not appear that student enrollment has a significant impacts principal burnout. This may be attributed to the fact that the role of the principal is complex regardless of the number of students. The student enrollment may complicate the role to some degree it often increases the staff to support the larger school size. The variables that effect principal burnout such as isolation, lack of respect, salary, and legislative demands are universal stressors regardless of size of school. This is support for networks being appropriate forms of professional development for all principals.

Overall, evidence from this research study does not reveal a significant relationship between highest degree earned, gender, student enrollment type of school and degree of burnout. These findings support the research of Michealis and Gomez (1995) and Maslach (2001) stating degree earned and gender have minimal significance on burnout. Results also support the work of Lloyd et al. (2002), Maslach et al. (2001), and Dormann and Zapf (2004) since age and years of experience seem to have the greatest impact on burnout. In an effort to find more insight to the research questions the qualitative data will be analyzed.

Qualitative Data Analysis

The two open ended questions provided additional insight on the reasons why an individual was experiencing perceived burnout and in what manner SLN was beneficial to them. Although the size of this research study was small, findings supported burnout research, particularly, in regards to the MBI. Thirty eight of the forty research study participants shared

insight addressing the impact of their network experience on their own perception of feeling less burned out after being part of a network. Some responses were:

“I have acquired a lot of useful information from colleagues that I can begin to incorporate to help me redirect my stress on the job”,

“I feel more supported but still facing the issues of burn out daily”

“The time at my meetings allows me to vent, and develop my capacity as a leader. It truly helps me feel less alone in my work”

“I can't say I feel burned out...however, being part of a network is useful”

“Safe environment to voice concerns and get advice”

“The time at my meetings allows me to vent, and develop my capacity as a leader. It truly helps me”

“SLN has been instrumental in supporting the varied needs of the principal”

“This network in particular has forced me to refocus on stopping to reflect and meet my own needs as a principal”

“The network provides a "net of support" that works. I feel less isolated and more willing to engage”

“The opportunity to network and talk to other principals has been informative and uplifting”

“The network has been beneficial for getting new strategies and having an open forum for discussion”

In Chapter 2 reasons for principal burnout were identified. These reasons were: workload, increasing demand, long hours, lack of support, lack of respect, isolation, reward, and salary (Welch, Maiderson, & Tate, 1982; Borg, Riding, & Falzon, 1993; Burke, 1988; Chaplain, 1995; Cooper & Kelly, 1993; Gaziel, 1995; Knutton & Mycroft, 1986; Mackler, 1996; Sarros, 1988). Twenty five of the comments specifically addressed depersonalization clearly negating feelings of isolation and lack of support/respect. Five comments specifically addressed emotional exhaustion negating feelings of work overload. Network membership addresses the lack of

support as members gain support from one another as noted above in these qualitative statements. Additionally, network membership reduces the sense of isolation. Members indicated their appreciation for time together at the meetings and the opportunity to build relationships increasing their circle of colleagues to call when needing assistance. One of the most important outcomes of a structured principal network is the building of relationships with colleagues and establishing a network of professionals to call on when in need of assistance with an issue.

The analysis of the qualitative data helps to solidify the data that supports structured principal networks as professional learning opportunity to reduce principal burnout. Principal networks address all three components of burnout: emotional exhaustion, depersonalization and personal accomplishment. These constructs are addressed in the purposeful structure of the network agenda, allowing time for networking, discussion of critical issues and continued learning around a problem of practice. In addition, SLN agendas adhere to the recommended components of adult learning opportunities as recommended by Chapman (2005). Network agendas allow for networking and collaborating, are relevant, are created by members and meet on a regular basis. Valuing the knowledge base of burnout and the structures for effective professional learning, such as SLN has done, creates an effective experience for all members, one which needs to be implemented in more school systems.

Limitations of the Study

There were limitations to this study. First, this research was highly dependent on the acquisition of a group of principals that were also members of a structured principal network, specifically School Leaders Network (SLN). Although the organization operates networks in seven states in an effort to protect their members, only network participants in two geographic regions were permitted to participate in the study. Because of this, the pool of principals was

limited. There was a clear limitation in this study in that there were only 40 respondents. However, the added demographic data provided additional insight.

This researcher obtained a 33% response rate since 40 SLN members of a possible 119 members completed the survey. If the survey was deployed at a different time of year instead of summer vacation a higher response rate may have been obtained. A greater response rate would have added to the depth of this study. Some demographic characteristics were predominantly one sided. For example, 90% of respondents were principals of public schools, 85% were females and 95% of respondents' highest degree earned was a Masters degree. A greater response rate would have created a more diverse sample group.

In addition, School Leaders Network would only allow the survey to be deployed once the school year ended. This researcher chose to deploy the survey on July 1, 2012. Many principals surveyed were on vacation during this time, which may have impacted their perceived level of burnout. If the survey was deployed during the school year results may have varied tremendously. A substantial portion of this research was built around principal responses to a survey with no way to verify the validity of the responses. Therefore, the possibility exists that respondents may have misrepresented their beliefs via their responses.

SLN membership is optional. Therefore, this convenient sampling group is representative of principals seeking additional professional development for themselves as a school leader. This type of leader, one who seeks continuous improvement opportunities, may elicit similar responses.

Additionally, SLN is a relatively new structured principal network, established in 2007 and revisited its mission in 2010. Due to the limited time in existence all members are relatively new to this type of experience. Long term benefits may not have been recognized due to the

limited time in existence. Only 2 participants have been members for 6+ years. Majority of participants have been members 0-2 years (35).

Implications and Recommendations

Implications

Although all statistical analyses do not reveal a significant correlation between network membership and reducing principal burnout there is quantitative and qualitative data that support the positive impact of network membership on reducing burnout. This research supports the need for formal professional development networks for practicing principals. Structured principal networks as a means of professional development can be a low cost high return for school systems. Facilitators may receive a small stipend and there may be minimal copying costs but those are the only incurred costs which are nominal for a monthly 3-4 hour professional learning opportunity. Analyses of qualitative and quantitative results of this survey reveal that networks address the two constructs that are the greatest predictors of burnout: emotional exhaustion and depersonalization. These constructs specifically deal with increasing demands, long hours, workload, lack of support and isolation.

In addition, SLN networks structure the network meetings around the research of Chapman (2005), DuFour and Eaker (1998), Brill (2008), Donaldson (2008) and Intrator and Scribner (2008). Networks are a positive professional development opportunity. Networks create a collaborative culture among members, have regular meetings, focus on leaders' questions of practice therefore the content is relevant to their work and they include reflective activities.

When professional development is relevant to members' learning members self efficacy increases resulting in reduced degrees of burnout. Networks provide a formal structure to channel professional development which is consistent with the research on adult learning.

Network members can select the topic a relevant topic study for the network. As suggested by Chapman (2005) effective network professional development programs included the following topics of study:

- A clear sense of mission and purpose
- Curriculum coherence
- Instructional strategies related to the nature of the material taught and the learner needs
- Length and time structure: multiple sessions meetings over the year
- Linkage to the mission, beliefs and values of relevant employing authority
- Learning strategies that motivate through thinking, reflection and analysis with a strong component of coaching

Currently, SLN incorporates each of these suggested criteria for effective professional development into their network design. The multiple meetings over the course of the year is critical for continued support, establishing relationships with peers and continuous learning. Members look forward to meeting on a monthly basis to learn and reflect on their practice with colleagues. One of the most important outcomes of a structured principal network is the building of relationships with colleagues. These relationships continue outside of the network meeting itself. Members establish a pipeline of peers that can offer support and/or advice between network meetings.

Structured principal networks need to be carefully examined by all school systems, particularly those experiencing high rates of principal turnover. When recommended structures are implemented in a network setting the major constructs to decrease burnout as determined by Maslach are addressed (see Figure 4). Furthermore, formal networks incorporate many of the

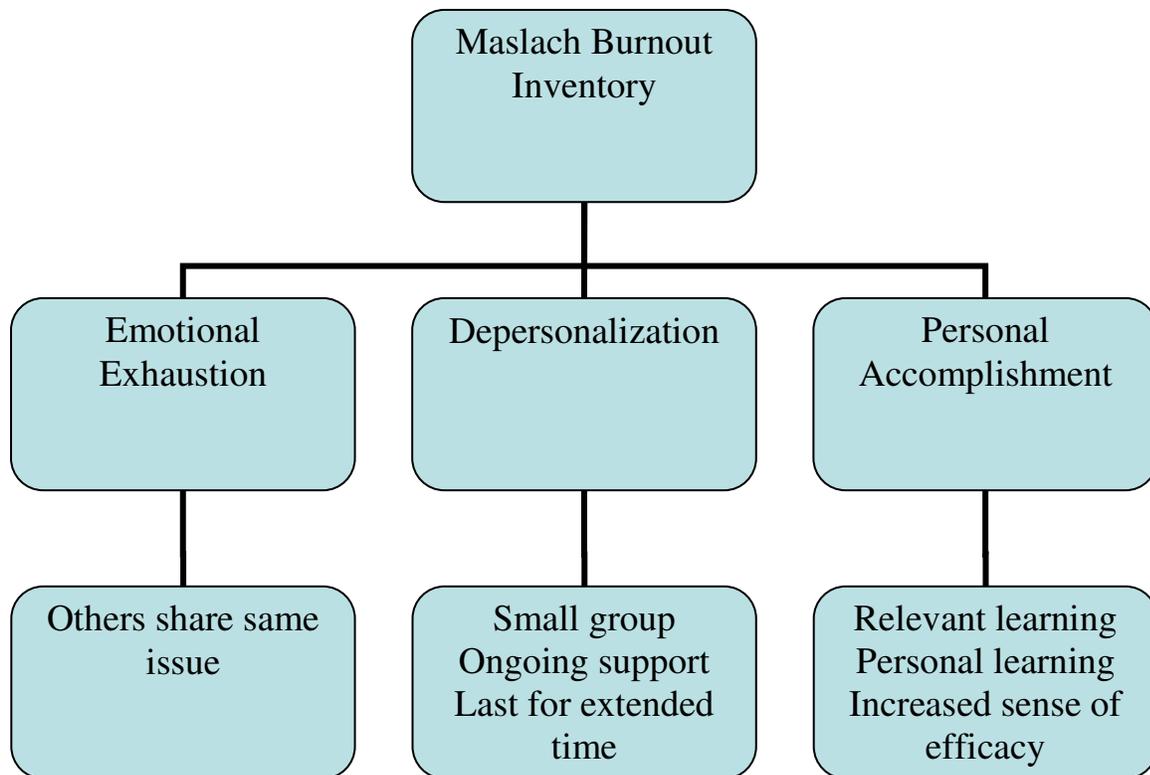


Figure 4. Principal networks addressing constructs of burnout.

proposed components for effective adult professional development such as self directed, experiential learning, relevant and reflective (Brookfield, 1993; Knowles, 1978). Networks are a highly effective, low cost, continuous professional development opportunity all principals should have the opportunity to be a part of in order to reduce burnout.

Future Studies

Principals in networks for more than 5 years reported lowest emotional exhaustion and lowest depersonalization which indicates a lower level of burnout. Extended time in a network may need to be explored. Clearly, these individuals have been in the principalship for more than 6 years as well which may have some significance on lesser degrees of burnout since the research indicated, burnout is experienced in the earlier years of a career due to unrealistic expectations and the learning curve (Dormann & Zapf, 2004). Additional research may include a comparison study measuring degrees of burnout of veteran principals not in network with veteran principals that are members of a network.

Additionally, 21 of the 28 participants that are in the age range from 20-40 years old are in Cluster 2 or 3. Further research may be conducted to determine other life events that may impact feelings of burnout during this age span. Future research studies can explore the relationship between principals within this age range (20-40 years old) and their first principalship. This may reveal burnout is experienced earlier in one's career, therefore, creating a greater need for support, such as a structured principal network, during the early years of a principalship. Additionally, as baby boomers are retiring at alarming rates principals in this age range of 20 – 40 years old are filling these vacant positions indicating a greater need of supports such as principal networks to reduce burnout.

Further research may also include the examination of the components of a structured network meeting to determine if the meeting consists of the identified components of professional development for adult learners as stated in Chapter 2. Knowles (1978) identified six distinctive characteristics for effective adult learning these characteristics include: (1) learners define their learning objectives, (2) learning focus is about issues and skills needed in their current life and experience, (3) learning is focused on analysis of experience, (4) learning is self directed, (5) there is allowance for differing styles, and (6) means of learning as determined by the learners themselves. Similarly, Brookfield (1999) deemed four major areas of adult learning to be self directed, critical reflection, experiential learning and learning to learn. Research may include identifying the most effective components which can then be embedded in all professional development opportunities for principals.

Summary

Principal retention continues to be a problem within the United States. Many factors have been identified to be the cause of burnout. For example, isolation, relations, lack of support, time it take to do the job, overload, limited resources, role ambiguity and organizational structures. Many of these factors are addressed in the three constructs of the MBI-E. These constructs are: emotional exhaustion, depersonalization and personal accomplishment. Although, network membership does not reveal a significant impact on reducing principal burnout, principals involved in a network for a longer period of time, had more experience as a principal and were older than 40 years old indicated feeling less burned out. In addition, individual comments regarding the impact of a network are indicative of the value of the experience in helping to reduce burnout. Considering there are limited professional learning opportunities for principals

that include continuous learning and the positive qualitative and quantitative data from this survey principal networks should exist in all school systems.

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APPENDIX A: ADDITIONAL QUESTIONS ADDED TO SURVEY

- 1) Gender:
Male Female

- 2) Highest degree of education obtained:
Doctorate Masters Bachelors

- 3) Age
20-30 31-40 41-50 51-60 61+

- 4) State in which you are a practicing principal?
HAI NY DC

- 5) Number of years you have been a principal?
1-5 6-10 11 or more

- 6) What grade levels does your current school span?
PreK/K-2 PreK/K-5 PreK/K-6 6-8 6-9 6-12 9-12 10-12

- 7) What is your approximate student enrollment?
1-499 500-999 1000 or more

- 8) What type of school is your current school?
Public Private Charter Other_____

- 9) How many years have you been a network member?
0-2 3-5 6 or more

- 10) To what extent are you experiencing burnout in your current position?
No extent Little extent Some extent Great extent

- 11) What might be some contributing factors for your sense of burnout? (select all that apply)
Personal Change of school Change of Superintendent

Change of program at your school Other

- 12) Are you feeling less burned out since you have been a member of a network?
Yes No
Please explain your reasons for your response.

APPENDIX B: SAMPLE OF MASLACH BURNOUT INVENTORY FOR EDUCATORS

For use by denise tillery only. Received from Mind Garden, Inc. on November 25, 2011

MBI-Educators Survey

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often
0-6

Statements:

1. _____ I feel emotionally drained from my work.
2. _____ I feel used up at the end of the workday.
3. _____ I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____ I can easily understand how my students feel about things.
5. _____ I feel I treat some students as if they were impersonal objects.
6. _____ Working with people all day is really a strain for me.
7. _____ I deal very effectively with the problems of my students.
8. _____ I feel burned out from my work.
9. _____ I feel I'm positively influencing other people's lives through my work.
10. _____ I've become more callous toward people since I took this job.
11. _____ I worry that this job is hardening me emotionally.
12. _____ I feel very energetic.
13. _____ I feel frustrated by my job.
14. _____ I feel I'm working too hard on my job.
15. _____ I don't really care what happens to some students.
16. _____ Working with people directly puts too much stress on me.
17. _____ I can easily create a relaxed atmosphere with my students.
18. _____ I feel exhilarated after working closely with my students.
19. _____ I have accomplished many worthwhile things in this job.
20. _____ I feel like I'm at the end of my rope.
21. _____ In my work, I deal with emotional problems very calmly.
22. _____ I feel students blame me for some of their problems.

(Administrative use only)

EE: _____ cat: _____ DP: _____ cat: _____ PA: _____ cat: _____

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**APPENDIX C: INTERCORRELATIONS BETWEEN MBI
SUBSCALES**

For use by denise tillery only. Received from Mind Garden, Inc. on November 25, 2011



APPENDIX B

*Intercorrelations Between
MBI Subscales*

	<u>Emotional Exhaustion</u>	<u>Depersonalization</u>
Depersonalization	.52	
Personal Accomplishment	-.22	-.26

Note: See Table 1 for occupations represented in samples.

APPENDIX D: LETTER TO SURVEY PARTICIPANTS

Dear SLN Members:

I am a doctoral student at East Carolina University in the Educational Leadership Department and have previously been a School Leaders Network Facilitator. The opportunity to support and learn with colleagues on a regular basis was extremely valuable. For that reason, I have chosen to complete my doctoral dissertation study on the impact of structured principal networks, specifically School Leaders Network. **I am asking you to take part in my research study entitled, “A Preliminary Examination of the Impact of a Structured Principal Network on Principal Burnout”.**

The purpose of this research is to add to the body of research on principal burnout and effective strategies that may decrease burnout rates. By doing this research, I hope to learn: To what extent does being a member of School Leaders Network reduce principals’ levels of burnout and how do demographics influence perception of burnout.

You are being invited to take part in this research because of your membership in School Leaders Network. The amount of time it will take you to complete this anonymous study is approximately 10 minutes.

The online survey consists of a total of 34 questions which I am asking that you complete **as soon as possible but no later than August 3, 2012.** The first section consists of nine multiple choice questions which will provide demographic information, specifically, gender, years as a principal, level of education, age range, type of school, level of school, size of school, state in which you are a principal, years as a network member. Three additional multiple choice questions address your perceived level of burnout and possible causes. The final 22 questions will be the Maslach Burnout Inventory with responses given based on a 6 point Likert scale. Completing the survey should not exceed 10 minutes. All responses will be anonymous. Information will be reported by groups, rather than individually. Participants’ identity will not be able to be determined from this research.

To access the survey please click on the link: <http://www.mindgarden.com/rsvp/10050> Use the email address to which this message was sent. If you have a technical problem, please contact Mind Garden, Inc. at <http://www.mindgarden.com/forms/contactform.php>

Your participation in this research is entirely voluntary. However, your participation will be extremely valuable to add to the minimal research on principal burnout and more importantly on the positive impact of networks.

Thank you in advance for your participation in this work and more importantly thank you for your desire for continuous improvement for yourself as an instructional leader to offer all students a high quality learning experience. If you have any questions, please email tilleryd08@ecu.edu.

Sincerely,
Denise Tillery

APPENDIX E: SURVEY RESULTS

Participant	Gender	Degree	Age	State	Principal Experience	Grade Level	Student Enrollment	School Type	Yrs. As SLN Member	Extent of Burnout	Less burned out since SLN member
1	1	1	3	1	2	2	1	0	2	1	1
2	1	1	2	1	1	1	1	0	2	2	1
3	1	1	2	1	1	1	1	0	1	2	1
4	0	1	2	1	1	2	2	0	0	2	0
5	1	1	2	1	1	6	0	0	0	2	1
6	0	1	1	1	0	6	0	0	0	2	0
7	1	1	1	1	0	1	1	0	1	0	1
8	1	1	2	1	0	3	1	0	0	1	0
9	1	1	2	1	1	1	0	0	0	2	0
10	1	1	2	1	0	6	0	0	0	0	1
11	1	1	3	1	1	6	0	0	0	2	1
12	1	1	1	1	0	6	0	0	0	3	0
13	1	1	1	1	0	6	1	0	0	2	0
14	1	1	3	1	1	1	1	0	0	2	0
15	1	1	1	1	0	1	0	0	0	2	0
16	1	1	4	1	1	1	1	0	0	2	1
17	1	1	1`	1	0	3	0	0	0	1	0
18	0	1	2	1	1	2	0	0	0	2	1
19	0	1	3	1	1	6	2	0	0	2	0
20	1	1	1	1	1	2	1	0	0	2	0

21	1	1	1	2	0	2	0	0	0	2	0	0
22	0	1	1	2	0	2	0	0	0	2	0	0
23	1	1	4	2	2	3	0	2	0	0	0	1
24	1	1	1	2	0	1	1	0	0	1	0	0
25	1	0	2	2	1	2	0	0	0	0	1	0
26	1	1	1	2	0	2	1	0	0	0	0	0
27	1	1	2	2	1	2	0	0	0	0	1	0
28	1	1	4	2	1	2	0	0	0	0	0	1
29	1	1	2	2	1	1	0	0	0	0	1	1
30	1	1	3	2	0	2	0	0	0	0	0	0
31	1	1	3	2	2	0	1	0	0	0	1	1
32	1	1	3	2	1	2	0	0	0	1	0	0
33	1	1	3	2	1	0	0	0	0	0	1	1
34	1	0	3	2	2	7	0	0	0	0	1	1
35	1	1	1	2	1	1	0	0	0	0	1	0
36	1	1	1	2	0	2	0	0	0	1	0	0
37	1	1	1	2	0	4	1	2	0	0	0	0
38	0	1	1	2	0	3	0	2	0	0	1	0
39	1	1	1	2	0	2	0	2	0	0	0	0
40	1	1	2	1	1	1	1	0	2	0	0	0

Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
A	1	1	1	5	1	1	4	1	5	1	1	1	1	0	0	0	5	5	5	0	1	1
B	5	6	5	5	0	1	6	4	6	0	0	5	3	6	0	1	6	6	5	0	6	1
C	3	1	1	6	0	1	6	1	6	0	0	5	1	1	0	0	6	6	5	0	6	0
D	5	6	5	6	1	6	5	5	4	4	6	4	6	6	0	6	4	5	4	5	5	0
E	6	5	6	6	0	4	6	5	6	3	3	3	5	5	0	3	5	6	6	5	5	0
F	5	5	5	5	3	5	5	5	4	6	6	0	6	6	3	2	5	6	3	5	6	5
G	3	3	1	6	0	5	6	1	6	2	3	5	2	1	0	2	6	6	6	1	3	0
H	4	5	1	6	0	1	5	2	6	1	0	5	3	3	0	2	6	6	6	1	5	2
I	5	5	4	5	0	1	6	3	5	1	1	5	4	6	0	0	6	6	6	3	5	0
J	2	3	1	5	0	0	5	1	6	0	0	5	3	2	0	0	5	6	5	0	5	0
K	0	5	6	6	0	0	6	5	0	0	0	1	1	0	0	0	6	6	6	0	6	0
L	4	5	4	4	0	1	4	5	6	0	0	1	1	5	1	1	5	1	4	4	6	1
M	1	1	1	1	0	0	0	0	6	0	0	6	6	1	1	6	6	6	6	0	6	1
N	2	1	0	5	0	0	6	0	6	0	0	5	5	5	0	0	5	5	5	0	6	1
O	5	4	2	6	3	5	3	4	5	1	1	2	2	5	0	4	5	5	5	4	5	4
P	5	3	2	5	1	1	5	3	5	1	1	5	5	1	0	0	4	5	6	1	1	3
Q	2	3	1	1	0	0	6	1	6	0	0	5	5	6	0	2	5	5	6	0	6	3
R	4	2	1	6	0	1	5	2	5	1	1	6	6	4	0	1	5	5	5	1	4	4
S	2	4	1	2	0	0	2	2	4	0	0	6	6	1	0	1	2	2	2	3	4	0
T	5	5	5	6	0	1	5	5	5	3	3	4	4	5	0	3	5	6	5	3	5	1

Responses to MBI-E

U	2	2	5	6	0	4	6	2	3	2	3	5	2	3	0	3	6	6	3	1	3	0
V	2	5	1	6	0	1	6	1	6	2	1	5	2	1	0	1	6	6	5	1	6	0
W	6	5	1	6	0	1	6	1	6	0	0	6	0	1	0	0	6	6	6	0	6	0
X	3	0	0	5	0	0	6	3	5	0	1	5	3	2	0	0	6	6	6	2	5	0
Y	5	3	4	5	0	3	6	4	5	3	4	4	6	6	0	2	5	4	5	1	5	0
Z	4	4	3	5	0	0	6	3	6	0	0	6	3	1	0	0	6	6	6	0	6	0
AA	1	3	1	6	0	1	6	1	6	0	0	5	2	5	0	0	6	6	6	0	6	0
BB	3	5	3	0	0	1	3	1	6	3	1	0	1	3	0	1	0	4	6	2	1	0
CC	1	1	0	5	0	1	6	0	6	1	0	5	1	1	0	1	6	6	6	0	6	0
DD	1	0	0	6	0	0	6	0	6	0	0	6	0	3	0	0	6	6	6	0	6	0
EE	5	5	4	0	1	3	6	5	6	0	0	3	5	4	0	1	6	6	3	1	1	0
FF	1	1	1	0	0	0	6	1	6	0	0	6	1	1	0	0	6	6	6	0	6	0
GG	3	5	2	6	0	2	6	2	5	1	1	5	3	3	0	1	5	5	6	0	6	0
HH	1	2	1	0	0	1	6	1	6	0	1	6	1	6	0	0	6	6	6	0	6	0
II	2	3	0	5	0	1	5	1	6	2	1	5	3	0	0	1	6	6	6	1	6	1
JJ	5	5	3	5	0	3	5	4	6	0	1	3	5	6	0	1	6	6	6	4	4	0
KK	3	4	4	4	0	1	5	1	5	0	1	5	3	2	0	0	6	6	6	1	5	0
LL	3	3	3	3	0	0	5	3	6	3	3	5	4	4	3	0	6	6	6	3	3	1
MM	4	3	3	5	1	3	5	3	6	1	1	5	3	2	0	1	5	6	5	0	5	0
NN	5	6	5	5	0	4	4	5	5	5	5	5	5	5	0	3	3	2	4	3	3	1

APPENDIX F: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

EAST CAROLINA UNIVERSITY

University & Medical Center Institutional Review Board Office

4N-70 Brody Medical Sciences Building · Mail Stop 682

600 Moye Boulevard · Greenville, NC 27834

Office **252-744-2914** · Fax **252-744-2284** · www.ecu.edu/irb

Notification of Exempt Certification

From: Social/Behavioral IRB

To: Denise Tillery

CC: Marjorie Ringler

Date: 5/22/2012

UMCIRB 12-000669

Re: A Preliminary Examination of the Impact of a Structured Principal Network on
Principal Burnout

I am pleased to inform you that your research submission has been certified as exempt on 5/22/2012. This study is eligible for Exempt Certification under category #2.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418

IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418 IRB00004973

East Carolina U IRB #4 (Behavioral/SS Summer) IORG0000418