

CHAPTER 3: METHODOLOGY

This chapter contains a description of the methodology including restatement of the purpose and research questions, instrumentation, data collection and management, reliability, and analysis.

Purpose of the Study

The purpose of this study was to examine the opinions, beliefs, and attitudes, including perceived value, that practicing administrators have towards mentoring. For the purposes of this study, an administrator included principals, assistant principals, males, females, novice (three years or less experience) and experienced (more than three years experience), elementary, middle, and high school. This study examined administrators' opinions on the value and need for mentoring, mentor programs, and type or types of mentoring, if any, that is needed for their position.

Instrumentation

A survey was designed (see Appendix B) to gather data based on the proposed research questions. No survey currently exists to measure the proposed research questions. The survey was designed to measure each respondent's opinions, beliefs, and attitudes, including perceived value, towards administrative mentoring. The survey was formatted using a variety of Likert-type scales. No identifying information, including name, was asked for on the survey and all clarifying information (gender, ethnicity, etc.) was part of the actual survey. The goal of this survey was a 100% response rate.

The first step to creating a Likert-type scale survey was the generation of an item pool. The item pool was created by "writing items and/or culling statements from various sources (e.g., literature, mass media, people's utterances) concerning the referent in question (Pedhazur

& Schmelkin, 1991, p.122.) Response sets, or “agreement with items regardless of their content” (Pedhazur & Schmelkin, p.122) is minimized by including favorable and unfavorable statements.

The survey was reviewed by a panel of experts (committee members), modified accordingly, and then was administered to a screening sample (15 people) comprised of subjects similar (principals and assistant principals) to those who ultimately received the survey for this study. Pedhazur & Schmelkin (1991) indicate that “although originally Likert used a 5-point scale (i.e., strongly approve, approve, undecided, disapprove, strongly disapprove), various numbers of response alternatives...are used in such scales” (p.124).

In this study, the survey instrument included only a 4-point scale. The four scales were strongly disagree, disagree, agree, and strongly agree; very important, important, somewhat important, and little/no importance; and very helpful, helpful, somewhat helpful, and little/no help. The choice of undecided or neutral was eliminated in order to force the subjects to choose a response. The response rate of the screening/pilot sample was 100%. The responses of this screening sample were analyzed and items were modified accordingly. In the initial purpose statement wording was added that administrators includes principals and assistant principals for this study, question 12 gave an example of 'superior position', question 15 deleted the word discussion, to questions 46 'total school management' was added, to question 47 a statement was added about if you have been mentored to tell about that experience, there was a misnumbering at the end of 56,57,56 that was corrected, questions 48-58 were reordered, question 56 and 57 were changed from 'been' to 'served as'. The participants in the screening sample were excluded from the final pool of respondents for the official online survey. The survey was designed to take no more than 10 minutes of time. For the screening sample, the average time was 9.2 minutes.

Data Collection and Management

The population for this study was limited to practicing K-12 public school principals and assistant principals in the state of Virginia. A current list of principals in all public schools in the state of Virginia was located on the Virginia Department of Education website. The comprehensive list included name of school division, name of school, address, and phone number. The list did not include e-mail addresses for principals or any contact information for assistant principals. Assistant principal contact information was obtained by individually searching each school within each division to determine this information. Finally, an internet search was conducted in each school division website in an attempt to find office e-mail addresses for principals and assistant principals.

Once the final population was known, the names of all principals and assistant principals were arranged alphabetically by division. This was done to avoid any order concerns and possibly an overabundance of either principals or assistant principals from one area/division in the final sample. The total population size was 3,818 administrators. A sample size of 519 was determined by using a confidence level of 95% and a confidence interval of 4. Systemic sampling was used to obtain a random, representative sample. Systemic sampling is the “process of sampling in which, following a random start, every k th element is selected into the sample. The division of population size by sample size yields k ” (Pedhazur & Schmelkin, 1991, p.330). The population size of 3,818 was divided by 519, sample size, to yield 7.3 or every 7th element. Following a random start, every 7th administrator was selected.

The randomly selected sample of Virginia public school principals and assistant principals were initially contacted via post card (see Appendix C) to introduce them to the study and to verify e-mail addresses. The post card gave the participants an opportunity to contact the

researcher to correct an email address. There were 26 emails received to correct addresses.

Three people indicated that school division permission was needed for participation. A response to these people indicated there would be an option to decline participation if they so chose for this reason.

The participants were sent an email message on May 12, 2006 (see Appendix D). The email was a letter that included a link to participate and a link to decline participation in the online survey. Of the 519 emails sent, 46 were returned with incorrect addresses. Phone calls were made in order to get the accurate email address. Accurate email addresses were obtained for all 46 participants and were corrected on the survey website. These 46 participants remained in the non-respondent category at that time. A second email was sent to all non-respondents, including those with a newly corrected email address, on May 21, 2006 (see Appendix E) seeking participation a second time. The final deadline for respondents to complete the survey was May 31, 2006. In June, a final email was sent to all respondents (see Appendix F) thanking them again for participation and providing them a link to view the survey results.

Research Questions

There were ten research questions for this study. They were:

1. What are the opinions, beliefs, and attitudes, including perceived value, practicing administrators have towards mentoring for their job assignment?
2. Is there a statistically significant difference between men and women with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?

3. Is there a statistically significant difference between novice and experienced administrators with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
4. Is there a statistically significant difference between Principals and Assistant Principals with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
5. Is there a statistically significant difference between administrators at various levels-elementary, middle, and high- with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
6. Is there a statistically significant difference between administrators of different ethnic backgrounds with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
7. Is there a statistically significant difference between administrators who have and have not received formal mentoring with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
8. Is there a statistically significant difference between administrators who have and have not received informal mentoring with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?
9. Is there a statistically significant difference between administrators who have and have not served as a formal mentor with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?

10. Is there a statistically significant difference between administrators who have and have not served as an informal mentor with regards to their opinions, beliefs, and attitudes, including perceived value, towards mentoring for their job assignment?

Reliability

The internal consistency of a survey instrument is measured by Cronbach's alpha. Reliability scores can range from 0.00 to 1.00. According to Nunnally (1978), a reliability score of .70 or higher for instruments of basic research is considered acceptable. If important decisions about the fate of individuals were reliant on test scores, a reliability of .90 or .95 would be needed. For the purposes of this study, a score of .70 or higher was considered reliable. The measurements of reliability for each section of the survey are reflected in Table 1.

Table 1

Reliability of the Instrument

Category	Number of Questions	Cronbach's Coefficient
Entire Instrument	46	.8744
Section A	5	.7398
Section B	13	.5030
Section Ca	11	.8863
Section Cb	7	.8817
Section Cc	10	.8804

Note. Section A = The Value of and Need for Mentoring. Section B = Components of Mentor Programs. Section Ca = Type of Mentoring Needed-Instruction. Section Cb = Type of Mentoring Needed-Community. Section Cc = Type of Mentoring Needed-Management.

Analysis

All data submitted and obtained via the random, online survey was coded, entered, and analyzed using SPSS software. The survey sought general responses; therefore all questions and statements on the survey were relevant to each research question.

The purpose of the first research question was to obtain a general summary of all respondents with regards to their opinions, beliefs, and attitudes, including perceived value, of mentoring. Descriptive statistics were analyzed and summarized for research question number one to provide a general overview of all administrators' responses. A scale was done for each section of the survey.

The purpose of research questions two through ten was to determine if a statistically significant difference exists in responses from various comparative groups. For each of these questions, an Analysis of Variance (ANOVA) test of statistical calculation determined the statistical significance (difference), if any, that existed between the comparative groups. Significance level was determined at $alpha < .05$. ANOVA is an analysis that illustrates contrasts with one independent categorical variable (Pedhazur & Schmelkin, 1991). Determining contrasts between various groups was the purpose of research questions two through ten and therefore the reason ANOVA was chosen for these analyses.

The specific population, data, and results are discussed in Chapter Four: Results of the Study.