The Effects of Engagement in an Internship on Readiness for School Leadership

Patricia Ann Gaudreau

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Educational Leadership and Policy Studies

David J. Parks, Chair
Susan G. Magliaro
James L. Sellers
Larry J. Weber

December 5, 2008
Blacksburg, Virginia

Keywords: Principal, Internship, Engagement, School Leadership, Field Experience, Assessment

Copyright 2008, Patricia Ann Gaudreau
The Effects of Engagement in an Internship on Readiness for School Leadership

Patricia Ann Gaudreau

(ABSTRACT)

In the national endeavor to reform education, there is no question of the importance of preparing quality principals. A preparatory internship provides opportunity to learn and practice school-based leadership. This research provided evidence leading to a better understanding of how engagement during an internship relates to the readiness for school leadership. In addition, evidence was gathered on how the conditions of the internship affect the level of engagement.

The population in this study was all participants in the National Association of Secondary School Principals’ Assessment Centers between 2001 and 2006. Assessment center scores in 10 areas of performance were used as a measure of the readiness for school leadership for of the participants. Summated Likert scales were used to measure engagement and two of the four conditions of a quality internship: quality of the field supervision and relevance of the internship to the job of principal. Summated scales were used to measure the remaining two conditions of a quality internship: previous work-related experience and institutional support for the internship.

A path model of the relationships among the variables was hypothesized. The direct effects of the variables believed to explain a quality internship were calculated with a series of multiple regressions for each path to the engagement variable. The direct effect of engagement on readiness for school leadership was calculated with a multiple regression. Indirect effects were calculated for the paths between the conditions of a quality internship, engagement, and readiness for school leadership. None of the hypothesized indirect path effects were large enough to be considered important. The relevance of the internship had a strong effect on engagement. The quality of the field supervision had a moderate effect on engagement. No other direct effects were found between the conditions of the internship and engagement in the internship.
# TABLE OF CONTENTS

## CHAPTER I: THE PROBLEM

- Context of the Study ........................................................................................................... 1
- Problem Statement ................................................................................................................ 4
- A Theory of How Engagement in Internships Affects Readiness for School Leadership .... 5
- Purpose of the Study ............................................................................................................ 7
- Research Questions ............................................................................................................. 7
- Literature Related to the Theory .......................................................................................... 8
  - Definitions of Variables ................................................................................................. 9
  - Dependent Variable: Readiness for School Leadership .................................................. 11
  - Intervening Variable: Engagement in Internships .......................................................... 14
    - Engagement in the Internship and Readiness for School Leadership .......................... 15
  - Independent Variables and their Relationships with Engagement in the Internship and Readiness to Lead .................................................. 19
    - Relevance of the Internship and Engagement in the Internship ................................. 19
    - Relevance of the Internship and Readiness to Lead .................................................... 21
    - Institutional Support for the Internship and Engagement in the Internship ............... 23
    - Quality of Field Supervision and Engagement in the Internship ............................... 24
    - Previous Work-Related Experience and Engagement ................................................. 26

## CHAPTER 2: METHODOLOGY

- Population ......................................................................................................................... 28
- Participants ......................................................................................................................... 28
- Development and Validation of the Questionnaire .................................................................. 31
  - Validation of the Scales for Measuring the Exogenous and Endogenous Variables .......... 31
The Development, Validation, and Scoring of the Scale for Measuring Engagement in the Internship ................................................................. 33
Development of the Scale for Measuring Engagement in the Internship .. 33
Validation and Scoring of the Scale for Engagement in Internship ........ 35
Development of the Scale for Measuring the Quality of Field Supervision ................................................................. 36
Validation and Scoring of the Scale for Measuring the Quality of Field Supervision ................................................................. 38
Development, Validation, and Scoring of the Scale for Measuring Institutional Support for the Internship ................................................................. 40
Development, Validation, and Scoring of the Scale for Measuring Relevance of the Internship to the Job of the Principal ......................... 41
Development and Scoring of the Scale for Previous Work-related Experience ........................................................................................................ 43
Development of the Scale for Readiness for School Leadership .......... 43
Validation of the Scale for Readiness for School Leadership ............... 44
Scoring of the of Readiness for School Leadership Scale ................... 45
Construction and Piloting of the Questionnaire .................................. 47
Principal Components Analysis for Readiness for School Leadership Scale ........................................................................................................ 49
Reliability of the Scales in the Questionnaire ........................................ 49
Methods of Analysis .................................................................................. 50
CHAPTER 3: RESULTS .................................................................................. 52
Descriptive Statistics for Independent Variables ........................................ 52
Descriptive Statistics for the Dependent Variable .................................... 59
Correlations Between Independent and Dependent Variables ................ 63
Direct Relationships in the Path Model ........................................................ 64
Indirect Relationships in the Path Model .................................................... 69
<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Section Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19</td>
<td>Component Matrix for Items Measuring Readiness for School Leadership</td>
</tr>
<tr>
<td>20</td>
<td>Number of Valid Responses, the Mean, Cronbach’s Alpha (α), and Number of Items for</td>
</tr>
<tr>
<td></td>
<td>Each Scale</td>
</tr>
<tr>
<td>21</td>
<td>Descriptive Statistics for Participation in the Internship N=63</td>
</tr>
<tr>
<td>22</td>
<td>Descriptive Data for Relevance of the Internship to the Job of Principal Score,</td>
</tr>
<tr>
<td></td>
<td>N=63</td>
</tr>
<tr>
<td>23</td>
<td>Descriptive Statistics for Items in the Relevance of the Internship to the Job of</td>
</tr>
<tr>
<td></td>
<td>Principal Scale</td>
</tr>
<tr>
<td>24</td>
<td>Descriptive Data for Institutional Support for the Internship Score, N=63</td>
</tr>
<tr>
<td>25</td>
<td>Descriptive Statistics for Items in the Institutional Support for the Internship</td>
</tr>
<tr>
<td>26</td>
<td>Responses to Item: I Had a Site Supervisor During my Field Experience, N=63</td>
</tr>
<tr>
<td>27</td>
<td>Descriptive Data for Quality of Field Supervision Score, N=63</td>
</tr>
<tr>
<td>28</td>
<td>Descriptive Statistics for Items in the Quality of the Field Supervision Scale</td>
</tr>
<tr>
<td>29</td>
<td>Descriptive Data for Previous Work-related Experience, N=6</td>
</tr>
<tr>
<td>30</td>
<td>Descriptive Data for Engagement in the Internship Score, N=63</td>
</tr>
<tr>
<td>31</td>
<td>Descriptive Statistics for Items in the Engagement in the Internship Scale</td>
</tr>
<tr>
<td>32</td>
<td>Descriptive Data for Readiness for School Leadership Score, N=63</td>
</tr>
<tr>
<td>33</td>
<td>Descriptive Statistics for Items in the Readiness for School Leadership Scale</td>
</tr>
<tr>
<td>34</td>
<td>Pearson Correlation Coefficients Among the Variables</td>
</tr>
<tr>
<td>35</td>
<td>Model Summary for Regression of Engagement in the Internship on Exogenous Variables</td>
</tr>
<tr>
<td>36</td>
<td>Analysis of Variance (ANOVA) Table for Regression of Engagement in the Internship</td>
</tr>
<tr>
<td></td>
<td>on Exogenous Variables</td>
</tr>
<tr>
<td>37</td>
<td>Coefficients Table for Regression of Engagement in the Internship on Exogenous</td>
</tr>
<tr>
<td></td>
<td>Variables</td>
</tr>
<tr>
<td>38</td>
<td>Model Summary for Regression of Readiness to Lead on Engagement in the Internship</td>
</tr>
<tr>
<td></td>
<td>and Exogenous Variables</td>
</tr>
<tr>
<td>39</td>
<td>Analysis of Variance (ANOVA) Table for Regression of Readiness to Lead on</td>
</tr>
<tr>
<td></td>
<td>Engagement in the Internship and Exogenous Variables</td>
</tr>
<tr>
<td>40</td>
<td>Coefficients Table for Regression of Readiness to Lead on Engagement in the</td>
</tr>
<tr>
<td></td>
<td>Internship and Exogenous Variables</td>
</tr>
</tbody>
</table>
41 Summary of Standardized Direct Effects Regression Coefficients in the Path Model

42 Indirect Effects of Variables on Readiness for School Leadership

43 Total Effects of Variables on Readiness for School Leadership
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conceptual model of relationships among level of engagement in an internship, selected conditions and the readiness for school leadership</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Theory explaining engagement in the internship and readiness for school leadership</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Diagram of theoretical relationships among the components of engagement, learning and motivation, and leadership performance</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Path diagram for all variables</td>
<td>51</td>
</tr>
<tr>
<td>5</td>
<td>Path diagram for over-identified model. Values are standardized regression coefficients (betas)</td>
<td>72</td>
</tr>
</tbody>
</table>
CHAPTER I: THE PROBLEM

Professional internships are extensively applied in training programs for medical, technical, and social science fields. The internship is an apprenticeship for aspirants to acquire job-embedded learning through problem solving and coaching (National Staff Development Council, 2000). Internships have both transitional and transformational functions (Ball & Cohen, 1999). Nearly all current principals have been trained through educational administration programs within schools of education (Levine, 2005). In a survey of these programs, Skalski, et al., (1987) reported that 87% of 252 randomly sampled universities had an internship, indicating the commonality of this practice among preparation programs.

Recently, Arthur Levine (2005) declared the field of educational administration to be unsuccessful and clinical experiences to be inadequate, particularly in the area of mentoring. However, internships for aspiring school leaders vary widely in their quality and structure (Fleenor, 2001). Placements can be full- or part-time, continuous or discontinuous. Some preparation programs assign interns to a school to simply experience the setting. Other internships connect classroom instruction to clinical practice by incorporating real-life assignments such as developing schedules, analyzing school data, or writing parent communications. Research is needed to consider which, if any, aspects of the internship are valuable for the development of school leaders.

While many different field experiences may be part of an internship, a more precise definition is needed for this research. That definition is: Administrative internships are temporary job placements, field projects, apprenticeships, and other field-based experiences in educational settings that provide practice in the skills of leading, administering, or managing a school or other educational unit.

In this chapter the context in which the administrative internship exists is described. A statement of the problem is next, followed by the purpose of this research and the guiding questions. A theory of how engagement in internships affects readiness for school leadership is presented and followed by a review of the literature as it relates to the theory.

Context of the Study

For decades, numerous publications have pointed to the need for reform in school management. “A Nation at Risk” compared the mediocrity of school performance with an act of
war (National Commission for Excellence in Education, 1983). In 1987, a blue-ribbon panel sponsored by the University Council for Educational Administration (UCEA) prepared the report “Leaders for America’s Schools” (University Council for Educational Administration, 1988). The panel claimed that preparation programs were irrelevant in addressing job demands and called for clinical experiences for the aspiring school leader. A study sponsored by the Wallace Foundation (Farkas, Johnson, & Duffett, with Foley, 2003) randomly sampled 3,400 K-12 principals nationwide. Of the 925 respondents, 69% rated their traditional university preparation program as “out of touch with the realities of what it takes to run today’s schools” (p. 39).

Critics of administrative preparation programs identify strong internships as essential for the successful preparation of principals (American Association of Colleges for Teacher Education, 2001; Farkas et al. 2003; Fordham Institute, 2003; Fry, Bottoms, & O'Neill, 2005; Institute for Educational Leadership, 2000; Jackson & Kelley, 2002; Levine, 2005; Mitgang, 2003). The Southern Regional Educational Board (SREB) made the following call-to-action for states seeking to improve the quality of internships: (a) ensure that state guidelines for internships are based on research for effective school leadership, (b) develop a valid and reliable performance evaluation system, (c) provide comprehensive training to all mentor principals, and (d) require preparation programs to show evidence of alignment to the guidelines (Fry et al., 2005).

Mid-continent Research for Education and Learning (McREL) (Waters & Grubb, 2004; Waters, Marzano, & McNulty, 2003) provided similar recommendations to those of SREB (Fry et al., 2005) for policymakers: (a) verify that licensure programs address the research-based practices correlated with student achievement, (b) ensure that programs are taught by those with deep understanding of standards and research-based practices for educational administrators, (c) commit resources to develop rigorous programs, (d) use assessment tools that provide feedback for professional improvement, and (e) create methods to influence, support, and amplify new policy to bring pressure upon those program providers resistant to change.

The need for increased quality in preparation programs is driving new collaborations among school districts, university departments, and private providers (LeTendre & Roberts, 2005). Hale and Moorman (2003) highlighted over a dozen promising programs in the United States. A consistent feature found in each program is the field experience. These programs originate from four distinct sources: (a) inside colleges of education; (b) university-based, but
outside colleges of education; (c) school districts in partnership with other organizations; and (d) non-traditional providers from private organizations to professional organizations. Examples from each of the four sources follow.

The University of Kentucky formed the Principal Excellence Program (PEP) to shift preparation from a management focus to that of instructional leadership (Browne-Ferrigno, 2004). Working collaboratively within two rural counties, cadres of principals, administrator-certified teachers, and faculty from the University of Kentucky conduct action research focused on existing problems in schools. Candidates, with the support of the research team, implement instructional leadership strategies to address student achievement. The program has a continuous field experience and exemplifies a successful effort from within a college of education.

New York City Public Schools and the Baruch College provide an example of a university-based program that developed outside a school of education. Stein and Gewirtzman (2003) described an endeavor between New York City school districts and the Baruch College School of Public Affairs. The partnership grew after repeated attempts to create an instructional leadership focus with faculty members inside the School of Education failed. The failure prompted a new partnership with different faculty from the same institution. The program became the New York City Leadership Academy and has received recognition for excellence in leadership development (Leadership Excellence, 2007).

Some school districts have ceased to rely on higher education programs to prepare their school leaders (Hale & Moorman, 2003). Professional development programs designed by education experts were employed to fill the preparation gaps for sitting principals. The Institute for Educational Leadership (IEL) trains teams of administrators to mentor principals in their own school districts (Timpane & May, 2005). School districts pay for this training program as well as for the use of a consultant to assist teams on site over a two-year period.

The Big Picture Company is an example of a private sponsor of administrative preparation (U.S. Department of Education, 2004). Their Principal Residency Network (PRN) program provided certification while addressing the issues found in particular districts. Most privately sponsored programs find it necessary to make arrangements for certification through colleges or universities, but the PRN is finding approval directly from state departments of education. PRN serves schools in eight states by providing a structured program of learning throughout a 12-month site-based residency under the guidance of a mentor (Littky & Schen,

As school districts invest more resources in the development of their new and aspiring principals, preparation program providers may be held to a high level of accountability for the contributions of their programs to principal competency. Concern over the effectiveness of traditional preparation programs and the emphasis on fresh ideas were the context for this research on engagement in internships.

Problem Statement

The problem centers on the perceived lack of quality in traditional programs and the need to create, recognize, and support those that prepare quality principals (Young & Creighton, 2002). If critics are correct in identifying the internship as a key feature of a successful preparation, then more research is needed to examine why some programs with internships are successful in producing school leaders that are ready for the job and why some are not. For this research, the internship is defined as a temporary job placement, field project, apprenticeship, or other field-based experience in an educational setting that provides practice in the skills of leading, administering, or managing a school or other educational unit.

The quality of a traditional preparation program has been historically affirmed through accreditation and evaluation processes. There were over 300 leadership preparation programs approved by the National Council for Accreditation of Teacher Education in 2008 and 171 were nationally recognized by the Educational Leadership Constituent Council (National Council for Accreditation of Teacher Education, 2008). The criticism against traditional school leadership programs may promote the closure of these programs without understanding why some are successful and some are not.

The field experience is an integrated or capstone event where theory should meet practice. Developing quality in the internship portion of preparation resonates across entire programs of preparation, where students can learn and then apply relevant knowledge, skills, and dispositions. Empirical studies covering the clinical aspects of preparation programs are slim. Only five such articles were published in the top four refereed journals in school administration from 1990 to 2004 (Murphy & Vriesenga, 2004).

Research designed to inform a quality internship must objectively measure the performance of program completers. The performance of new school leaders provides evidence
of the effectiveness of the program. Much of the research on the quality of school leaders depends upon surveys to establish the presence of leadership competencies. Surveys directed at coworkers may be biased by personal relationships between the observers and the new school leader. In addition, sporadic opportunity to observe specific behaviors affects the accurate measurement of new principal strengths and weaknesses.

A measure of school leadership readiness should be used to compare the performance of groups with certain internship practices to those without. One strategy for measuring competency in future administrators is the School Leaders Licensure Assessment developed by the Educational Testing Service (2006). While the test provides a validated measure of entry-level skills for principals, the results of this assessment and the preparation program details of the asseesees are not available to researchers at this time.

The limited research on effective program components could lead to unwarranted change in areas that were successful in developing school leaders. Additionally, research utilizing a strong measure of readiness for school leadership is needed to address the problem of employing best practices. Finally, components of a quality internship must be hypothesized to compare their effectiveness. This research addresses these problems by utilizing an available performance assessment of school leadership readiness and by comparing the results of that assessment to a variety of internship components.

A Theory of How Engagement in Internships Affects Readiness for School Leadership

Researchers and commentators in the fields of educational leadership and training have pointed to the importance of field experiences in learning a profession. Schön (1983) discussed the validity of knowledge gained through technical application of theory in a work environment. Borko and Putnam (1996) described the apprenticeship of observation in the field as playing a powerful role in shaping knowledge, skills, and beliefs. The National Research Council (2000) identified field-based learning as fundamental in the preparation of students to become adaptable to new problems and settings.

Jones, Valdez, Nowakowski, and Rasmussen (1994) identified a number of indicators for meaningful, engaged learning. Tasks are authentic and multidisciplinary, providing challenge to the learner. Problems are solved creatively and collaboratively. The design and evaluation of problem-based learning experiences involves both student and teacher. The teacher acts as a
coach or mentor and students interact with their mentors and peers in the co-construction of knowledge. They point to reflection as an essential indicator for the student to be an engaged cognitive apprentice. Increasing the likelihood of finding these indicators in an internship may require attention to the imposed conditions.

A number of conditions of an internship may affect the engagement of interns in their field experience. These conditions include (a) the relevance of the internship tasks to the job of principal, (b) the quality of the field supervision and mentoring, and (c) the time and materials provided by the institution to support the student in the field. Such conditions either promote or detract from the engagement of the aspiring principal in the essential aspects of school leadership, resulting in greater or lesser readiness to take responsibility for the leadership and management of a school.

Moreover, the conditions present in an internship affect the motivation of interns to learn. High levels of motivation lead to intensive and extensive engagement (Pintrich & DeGroot, 1990). Thus, motivated interns are more likely to become engaged in their field experience and are more likely to learn more. The National Research Council (2000) identified student motivation as key to the transfer of learning into everyday environments. An internship that is strongly relevant to the job of principal, that offers quality supervision and mentoring, and provides adequate time and materials may motivate students to learn more about school leadership.

Based on the literature (J. Daresh, 1988; National Research Council, 2000; Pintrich & DeGroot, 1990; Prestine & LeGrand, 1991; Skinner & Belmont, 1993; Zusho, Pintrich, & Goppola, 2003), the components related to the internship that are believed to be most relevant to a person’s readiness for school leadership are conceptualized in Figure 1. As shown in the figure, the quality of the internship does not explain all the variation in readiness for school leadership, but the quality of the internship influences readiness to lead because that quality, in part, determines the opportunities to practice and learn school-based leadership. Further, the quality of the internship is influenced by conditions known to maximize learning of initial leadership and management skills. The level of engagement in the internship is theorized to be influenced by the quality of the internship and may be related to the conditions of the internship.


Figure 1. Conceptual model of relationships among level of engagement in an internship, selected conditions, and the readiness for school leadership.

Purpose of the Study

The intent of this study was to identify specific conditions of quality within an internship and how these conditions affect both the level of the engagement of interns in their field experiences and their readiness for school leadership. In addition, the relationship between measures of engagement and readiness for school leadership were studied.

By conducting research on the relationships between conditions of internships and engagement of aspiring principals in those internships, the quality of internships may be improved. The findings may assist school districts, schools of education, policymakers, and other stakeholders in the design of high quality internships. Schools that are led by principals who were motivated by an engaging internship may be better equipped at the outset of their careers to meet the needs of the students, staff, and communities they serve.

Research Questions

The following questions guided the research:

- How do the following conditions of the internship relate to the level of engagement and to the readiness of candidates for school leadership?
1. Relevance of the internship to the job of principal.
2. Institutional support for the internship.
3. Quality of the field supervision.
4. Previous work-related experience.

- How does engagement during an internship relate to readiness for school leadership?

Literature Related to the Theory

The evidence examined in this section is the basis for the selection of the components in the theory. Studies from within the field of leadership preparation are presented as well as some that were selected for their relevance from outside the field. The studies are presented in support of the theory in Figure 2. The theory is an explanation for the variance in engagement in an internship and the readiness of candidates to lead schools.

Literature was selected from leading peer-reviewed school administration journals. A research analysis sponsored by the University Council for Educational Administration (Murphy & Vriesenga, 2004) was reviewed for empirical studies related to the internship. Of the 56 empirical studies on principal preparation, nine were selected for having titles or purpose statements with the key words internship, field experience, mentor, program evaluation, beginning principal, or field-based. Bibliographies from these studies were reviewed for the same key words. While many references included the key words, none were empirical and none were included in this literature review. Literature listed in the research analysis ranged from 1975 to 2002.

The search strategy for finding more recent empirical research was to use the key words internship, field, experiential, clinical, engagement, learning, assessment, readiness, education, administration, leadership, principal, mentor, and preparation individually and in combination. The databases ERIC, Ingenta, PsycINFO and Education Research Complete were accessed. Hits on individual keywords were upwards of a thousand, but were narrowed by combining other keywords and selecting a date field to range from the year 2000 to the present. Only empirical research was chosen, adding an additional nine studies. Literature describing the relationships among the selected conditions of an internship, engagement, and readiness for school leadership are presented next.
Figure 2. Theory explaining engagement in the internship and readiness for school leadership.

Definitions of Variables

Table 1 contains constitutive and operational definitions for each variable. The table is aligned with the theory in Figure 2. The item numbers of the questions on the questionnaire were incorporated into the operational definitions. The questionnaire is in Appendix A.

An internship is a temporary job placement, field project, apprenticeship, or other field-based experience in educational settings that provide practice in the skills of leading, administering, or managing a school or other educational unit.
Table 1
Constitutive and Operational Definitions of Variables in the Theory of Internship Engagement and Readiness to Lead

<table>
<thead>
<tr>
<th>Variable</th>
<th>Constitutive definition</th>
<th>Operational definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness for school leadership</td>
<td>The assessed leadership strengths of a new or aspiring school principal.</td>
<td>The mean of the ratings on the skill rating overview from the National Association of Secondary School Principals Assessment Center. The mean score for questionnaire items 6-15.</td>
</tr>
<tr>
<td>Engagement in the internship</td>
<td>The depth of candidate involvement with the internship in terms of essential learning, meaningful contribution, clarity of purpose, and sense of satisfaction.</td>
<td>The mean score for questionnaire items 20-29.</td>
</tr>
<tr>
<td>Previous work-related experience</td>
<td>Work experience in teaching and administration.</td>
<td>The total number of years of experience in teaching and administration. The sum of questionnaire items 2-5.</td>
</tr>
<tr>
<td>Relevance of the internship to the job of principal</td>
<td>The degree to which the internship provides preparation for the job of principal in terms of assignments, planning, job skills, and theory-to-practice.</td>
<td>The mean score for questionnaire items 30-35.</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Constitutive definition</th>
<th>Operational definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional support for the internship.</td>
<td>The provisions made by an institution for release time, work space, and compensation during the internship.</td>
<td>The mean score for questionnaire items 16-19.</td>
</tr>
<tr>
<td>Quality of field supervision</td>
<td>The ability and qualifications of the mentor to provide reflective direction, to interact with the student, and to demonstrate competent leadership.</td>
<td>The mean score for questionnaire items 37 – 44.</td>
</tr>
</tbody>
</table>

Note. Items related to each operational definition are in Appendix A.

Dependent Variable: Readiness for School Leadership

Readiness for school leadership is a concept that includes the knowledge, skills, and dispositions needed to begin building a foundation for school improvement. The knowledge, skills and dispositions are those identified by organizations, agencies, and researchers (Interstate School Leaders Licensure Consortium, 1996; National Association of Secondary School Principals, 2002; Thomas B. Fordham Foundation, 2003; Waters et al., 2003). The Interstate School Leaders Licensure Consortium (1996) recommended that a leader possess a vision for learning, the ability to manage resources, a collaborative style, integrity, and political savvy. The Consortium’s standards are woven throughout the assessment of readiness to lead used in this study. The level of readiness was assessed in an Assessment Center setting and included measures of educational leadership, problem solving, communication, and developing self and others. Each measure is on a continuous scale as shown in Appendix B. The mean of the assessed scores was used to represent the strength of the assessee’s readiness to lead.

The individual results from the National Association of Secondary School Principals (NASSP) leadership assessment, “Selecting and Developing the 21st Century School Principal” (National Association of Secondary School Principals, 2005) were used as the measure for readiness for school leadership. In the NASSP assessment, situational behavior is used to measure leadership skills. The situations include individual and collegial opportunities to solve
problems, analyze data, prioritize tasks, and communicate on a number of school-related events. Integrated simulations involving written, oral, and interactive responses were used. NASSP works with providers of school leadership programs and school divisions to set up centers, train assessors, and provide coaching and ongoing support. The skills and their definitions are in Table 2.

The assessment is administered through NASSP Assessment Centers in over 20 states and is designed to provide educational organizations with a diagnostic tool to determine the presence and strength of leadership skills. The assessment has been evaluated for predictive validity, and findings demonstrate the scores on the assessment correlate with successful school leadership (International Task Force on Assessment Center Guidelines, 2000).

Table 2

<table>
<thead>
<tr>
<th>Assessment Center Domains, Skills, and Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Educational leadership</td>
</tr>
<tr>
<td>Teamwork</td>
</tr>
<tr>
<td>Sensitivity</td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Skill dimension</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results orientation</td>
<td>Assuming responsibility. Recognizing when a decision is required. Taking prompt action as issues emerge. Resolving short-term issues while balancing them against long-term objectives.</td>
<td></td>
</tr>
<tr>
<td>Organizational ability</td>
<td>Planning and scheduling one’s own and the work of others so that resources are used appropriately. Scheduling flow of activities; establishing procedures to monitor projects. Practicing time and task management; knowing what to delegate and to whom.</td>
<td></td>
</tr>
<tr>
<td>Oral communication</td>
<td>Clearly communicating. Making clear oral presentations that are easy to understand.</td>
<td></td>
</tr>
<tr>
<td>Written communication</td>
<td>Expressing ideas clearly in writing; demonstrating technical proficiency. Writing appropriately for different audiences.</td>
<td></td>
</tr>
<tr>
<td>Development of others</td>
<td>Teaching, coaching, and helping others. Providing candid and specific feedback based on observations and data.</td>
<td></td>
</tr>
<tr>
<td>Understanding own strengths and weaknesses</td>
<td>Identifying personal strengths and weaknesses. Taking responsibility for improvement by actively pursuing developmental activities. Striving for continuous learning.</td>
<td></td>
</tr>
</tbody>
</table>

Intervening Variable: Engagement in Internship

Student engagement has been used as one measure of the quality and effectiveness of institutions of higher education. George Kuh (2001a), director for the National Survey of Student Engagement (NSSE) presented engagement as having two components: behavioral and emotional. The behavioral component is the use of institutional resources by students to promote learning. Student feelings about the quality of his or her educational experience constitute the emotional component. He finds institutions with greater student engagement to be of higher quality and more educationally effective than those with less student engagement (Kuh, 2001b).

Kuh (2003) believed the premise that engagement leads to learning to be “deceptively simple and self-evident” (p. 25). He pointed out that while certain research-based practices such as prompt feedback lead to greater engagement, the practices are not a direct measure of learning. Engagement is an essential indicator of effective educational practice which may lead to the acquisition of skills and competencies needed for post-college success.

Zusho et al., (2003) described three behavioral categories that indicate motivation to learn: level of engagement, quality of engagement, and level of performance. Their social cognitive model for learning incorporates three motivational variables: (a) self efficacy, (b) student beliefs about the value of a course, and (c) the performance goals of the student. They see prior knowledge and contextual factors as forces that influence student engagement in learning tasks and achievement.

Motivational research has shown that engagement stems from a student belief that a task is important or worthwhile. Linnenbrink and Pintrich (2003) described learning and achievement as stemming from self-efficacy and being manifested through behavioral engagement, cognitive engagement, and motivational engagement. Behavioral engagement is observed as effort, persistence, and seeking help to enhance learning. Cognitive engagement is thinking deeply about content and what is known and not known. Motivational engagement is comprised of the positive feelings of interest, value, and attitude. The components of engagement and their theoretical relationship to program quality and leadership performance are in Figure 3.

Descriptions of student engagement can include motivation and cognitive processing. Skinner and Belmont (1993) pointed out that when students initiate action, show intense effort, and select tasks that go beyond their current competencies they are motivated to engage in school. Pintrich and DeGroot (1990) viewed student engagement as motivated behavior.
manifested as persistence in difficult tasks and the use of meta-cognitive strategies to guide learning. For this research, engagement is defined as behavior, cognition, and motivation leading to effort, deep thinking, and positive feeling toward the internship.

Engagement in internships requires a deep involvement in the process of learning. Engaged students experience clarity of purpose, make meaningful contributions toward that purpose, sense the importance of what they are learning, and experience satisfaction from the internship. They are motivated to do their best when learning conditions provide a positive learning environment. To be deeply engaged in an internship, a student must be interested in the work, learn from participation in the work, and value the work as important to successful school leadership.

Figure 3. Diagram of theoretical relationships among the components of engagement, learning and motivation, and leadership performance.

Engagement in the internship and readiness for school leadership. In this section, two studies are presented. The relationship between employee engagement and outcomes important to school districts is discussed first (Coffman & Gonzalez-Molina, 2002). In the second study, high-performing principals were reported as believing that portions of their internships were vital to their preparation for school leadership (Petzko, 2004).
Daresh and Playko (1991) discussed the absence of theory to guide research on internships. They pointed out that theory from business-related fields could be used to inform studies of the developmental experiences of interns. A theory was found from the business field that focuses on the relationship between productivity and worker engagement (Coffman & Gonzalez-Molina, 2002). The hypothesis that higher levels of employee engagement in work would increase profit and productivity led the Gallup organization to develop an instrument for measuring engagement in the workplace (Gopal, 2005).

Gallup researchers (Coffman & Gonzalez-Molina, 2002) conducted a meta-analysis of 68 studies of employee engagement involving 308,987 employee responses from within 23 different industries. One of the industries was education. Within education, 1,497 employees from 186 schools were part of the sample. The two hypotheses guiding the meta-analysis were: (a) Engagement will have “positive average correlations with outcomes of customer satisfaction, productivity, profitability, employee retention, and employee safety” (p. 268), and (b) correlations between engagement and outcomes will generalize across organizations in all 23 types of business units, including schools. The unit of analysis is the business unit. Of the 10,885 business units, education was represented by 186 units (1.7%).

The instrument used to measure engagement was entitled Q12 for 12 key expectations of worker engagement (Thackray, 2001). These 12 expectations were grouped into four dimensions of engagement in the workplace (see Table 3). The expectations were validated for use in businesses and schools by hosting hundreds of focus groups and by conducting interviews with thousands of workers representing most industries, including education. The structured interviews included the use of a measure of managerial talent to provide evidence of the relationship between employee engagement and job performance (Coffman & Gonzalez-Molina, 2002). The expectations were stated as questions for the final instrument.

Table 3

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace conditions</td>
<td>1. Do you know what is expected of you at work?</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities to contribute and be rewarded</td>
<td>2. Do you have the materials and equipment you need to do your work right?</td>
</tr>
<tr>
<td></td>
<td>3. At work, do you have the opportunity to do what you do best every day?</td>
</tr>
<tr>
<td></td>
<td>4. In the last seven days, have you received recognition or praise for doing good work?</td>
</tr>
<tr>
<td></td>
<td>5. Does your supervisor, or someone at work, seem to care about you as a person?</td>
</tr>
<tr>
<td></td>
<td>6. Is there someone at work who encourages your development?</td>
</tr>
<tr>
<td>Sense of belonging</td>
<td>7. At work, do your opinions seem to count?</td>
</tr>
<tr>
<td></td>
<td>8. Does the mission of your company make you feel your job is important?</td>
</tr>
<tr>
<td></td>
<td>9. Are your associates (fellow employees) committed to doing quality work?</td>
</tr>
<tr>
<td></td>
<td>10. Do you have a best friend at work?</td>
</tr>
<tr>
<td>Opportunities for professional growth</td>
<td>11. In the last six months, has someone at work talked to you about your progress?</td>
</tr>
<tr>
<td></td>
<td>12. In the last year, have you had opportunities at work to learn and grow?</td>
</tr>
</tbody>
</table>

For the hypothesis that engagement will have positive average correlations with outcomes of customer satisfaction, profitability, employee productivity, employee retention, and employee safety, composite values were calculated for engagement and performance outcomes. The correlation between engagement and composite performance were reported as positive and generalizable, $r = .23$. If an engaged employee is positively correlated with higher productivity and profitability, then it is plausible that an intern, engaged in the practice of leadership, may have greater readiness to lead a school toward increased productivity and profitability.
Relationships between engagement and outcomes across different organizations were reported as following the hypothesized direction. Only a small percentage (.02%) of the business units included in the meta-analysis were schools, but 90 percent of the effects studied for each item in the engagement scale met generalizability standards. The total Q12 instrument has an average Cronbach’s alpha of .91 at the business-unit level, indicating that the items were a reliable measure of workplace engagement for all types of business units. These findings support the premise that there is a relationship between engaged school employees and positive outcomes for schools. Therefore, an engaged intern may be expected to have a greater degree of readiness for leading a school to successful outcomes.

The next study (Valentine, Clark, Hackmann, & Petzko, 2002) provides evidence that internships in preparation programs are valued more for their potential than is realized in practice. Engagement encompasses learning, motivation, and the value one places on his or her learning experience (Kuh, 2001a; Zusho et al., 2003). The findings from the following study illustrate a gap between principals who believe that an internship is essential to preparing for leadership and the value of their own internship experience.

The National Association of Secondary School Principals (NASSP) sponsored a national study to compare the recommendations of two groups of principals to improve principal preparation programs. The first group was a random sample of middle school principals (Valentine et al., 2002). The second group was purposefully selected from the first after undergoing a screening process to identify highly successful principals (Petzko, 2004).

Of the first group of randomly sampled principals, thirty-five percent of those surveyed felt that the internship was an essential component of preparation programs. Only 29% of those that felt internships were essential believed that their own internship was of great value. This finding demonstrates that many principals believe an internship is an important part of preparing to lead a school but recognize that their own internship experience was lacking. A key component for an engaged learner is that they value a learning experience (Kuh, 2001a; Zusho et al., 2003). This finding may point to the importance of engaging interns in practices that support their leadership readiness.

Of the selected sample of highly successful principals, 49% of them felt that internships were an essential component and 35% of them believed their own internship was of great value. These data indicate that high performing principals were more likely to greatly value their
internships than a randomly selected group of principals. This finding supports the premise that the value one places on an internship experience may contribute to greater levels of performance as a principal.

**Independent Variables and their Relationships with Engagement in the Internship and Readiness to Lead**

The independent variables in this theory are conditions that are expected to affect the engagement in an internship. These conditions are (a) previous work-related experience, (b) institutional support for the internship, (c) relevance of the internship to the job of principal, and (d) quality of field supervision. Conditions expected to affect the engagement in an internship were derived from the literature which is presented in this section.

The relationships between conditions of the internship and the intervening and dependent variables are depicted in Figure 2. Scales were developed for each of the four conditions. A description of the development of these scales is in Chapter 2. In this section, the literature contributing to the selection of each defining condition of the internship is reviewed.

**Relevance of the internship and engagement in the internship.** Two dimensions of engagement are contribution and sense of belonging. An engaging internship allows participation in important work and the development of competencies needed for site-based contributions. To maximize the relevancy of the internship, areas of vital competency should be a focus for the intern. Four studies were found that identified the skills and practices essential for principals’ readiness for school leadership. Collectively, the results are evidence of the knowledge, skills, and dispositions needed for on-the-job success. The definition of relevance of the internship to the job of principal in Table 1 was developed from the findings of these studies.

One of the four studies addresses differences between topics in coursework in leadership preparation programs and specific topics relevant to school-based leadership (Daresh, Gantner, Dunlap, & Hvizdak, 2000). In another study, principals’ most time-consuming practices were compared with the content of their preparation program with implications for internships (Thompson & Legler, 2003). Another study identifies differences in the job skills important to practitioners and those valued by university faculty (Bratlein, 1993). The last study included in this section is a meta-analysis of studies of leadership practices linked to student achievement (Waters, Marzano, & McNulty, 2003). This set of studies indicates that internships designed to
engage participants in the real work of school leaders provide more of the knowledge, skills, and dispositions needed to be ready for leadership.

Deep engagement in any area of study leads to high levels of learning (National Research Council, 2000). It is practical for aspiring school leaders to learn the knowledge, skills, and dispositions that are highly relevant to the job of principal. Researchers have shown that topics found to be relevant to the job of principal do not translate effectively into practice when presented as traditional coursework (Fry et al., 2005; Hale & Moorman, 2003; Levine, 2005; Marshak, 2003; Mitgang, 2003; National Staff Development Council, 2000; Scribner & Bredeson, 1997; Thomas B. Fordham Foundation, 2003; University Council for Educational Administration, 1988). A field experience that engages participants in learning relevant knowledge, practicing essential skills, and internalizing valued dispositions may be more likely to produce successful school leaders.

The Delphi technique was used to study the curricular components that should be included in an effective principal preparation program (Daresh et al., 2000). The sample was 60 principals who were nominated and then reviewed against criteria to determine if they were “experts.” Data collected from these experts were used to create the Principal Preparation Program Survey, which was mailed to 306 principals and assistant principals in a single large metropolitan area.

Survey participants were asked to rate items on a 5-point Likert scale ranging from irrelevant to extremely critical (Daresh et al., 2000). The response rate was 82%. Factor analysis resulted in the extraction of six categories of knowledge and skills needed to be effective in the respondents’ current leadership positions that were not adequately addressed in the preparation program. The categories were labeled; technical skills influenced by human relations, technical skills influenced by legal mandates, creating the inviting culture, building community, ethics in practice, and understanding relationships. The two factors explaining the greatest amount of variance in the items were: (a) technical skills influenced by human relations (30.5%), and (b) technical skills influenced by legal mandates (7.7%). The other categories included building community and understanding relationships.

These data show that technical skills associated with human relations and legal mandates were highly relevant to principals. Daresh et al. (2000), concluded that while university programs typically include personnel and law courses, participation in these classes does not translate into
the development of skills needed by principals in their practice. Through an engaging internship, the topics of human relations and legal mandates may translate into practice more effectively.

Relevance of the internship and readiness to lead. A relevant field experience is vital for school leadership readiness. A job analysis was conducted to find out if principals were prepared to perform the standard work of school administrators. The North Central Regional Educational Laboratory (NCREL) sampled principals from its 10-state region (Thompson & Legler, 2003). A stratified, random sample of over 13,000 principals from 3,400 urban, rural, suburban, and small-town schools was taken. Usable returns were received from 33% of the schools. The instrument administered to the sample was designed to find which responsibilities were most time-consuming for the principals and to report on the extent to which principal preparation programs equipped them for these responsibilities.

Another questionnaire was sent to the department chairs of several Midwest schools of education to assess whether their preparation programs included the principals’ most time consuming responsibilities in their curriculum. Responses confirmed that many important aspects of principals’ work—communication with parents, communication with media, issues of school climate and morale, fundraising, student remediation, special education case conferences, safety planning, and data analysis—were areas of weakness in their preparation programs (Thompson & Legler, 2003).

A focus group consisting of principals, state association executives, and higher education practitioners was subsequently convened to dialogue about possible policy directions (Thompson & Legler, 2003). Their recommendations included: (a) increase the amount of practicum required of principals in training, (b) integrate the technology that principals use in educational management into the practicum experiences, and (c) provide instruction in the fundamentals of standardized testing, disaggregation of data, and the improvement of student learning. An internship that is designed to meet the most relevant and time-consuming aspects of the job of the principal may increase readiness to lead.

The following study supports the idea of designing internships around vital competencies to increase readiness to lead schools. An eight-year study was conducted to examine the vital competency areas found in internships that were relevant to the school systems in which interns were placed (Bratlein, 1993). Procedures involved asking the interns, the field supervisors, and the university supervisor to identify the top two competencies for interns to learn. Over the eight-
year period, the data were arranged into four two-dimensional scattergrams depicting domains of student interest and competencies. The vertical axis represented career importance and the horizontal axis represented skill level. The two domains ranked most important were (a) supervision of instructional program, and (b) selection, development, communication with, and evaluation of staff personnel. Two domains that were not reported as priorities by school system employees but were emphasized in internships are (a) school organization, and (b) school-community relations.

Bratlein (1993) suggested regular reviews of the missions, goals and methodologies utilized in internships. Bratlein noted that student perceptions of their own strengths and weaknesses can be shortsighted and inaccurate, therefore bringing experienced administrators into the identification and assessment of intern competencies is important.

One specific area that is highly relevant to the job of principal is to increase student achievement. The Mid-Continent Research for Education and Learning Lab (McREL) conducted a meta-analysis of research findings to determine which leadership responsibilities, functions, and practices of principals affected student achievement and which should take primacy (Waters, et al., 2003). The researchers examined over 5,000 studies and selected 69 for their rigor. The selected studies represented samples of 1.4 million students and approximately 14,000 teachers in 2,802 schools.

There were three major findings. First, the average effect size, expressed as a correlation, between leadership and student achievement was reported to be $r = .25$, or for every one standard deviation of leadership improvement there is a 10 percentile point gain in student achievement on a norm-referenced standardized test (Waters et al., 2003). Second, 21 leadership responsibilities were found to have statistically significant relationships with student achievement. The third finding was that some leadership behaviors have a marginal or negative impact on achievement. The researchers posited that leaders must understand the magnitude of the change they are leading to select the leadership practices that will have a positive influence. They also noted that failure to select the correct practices for the magnitude of change can lead to a negative effect on student achievement.

Researchers later identified some leadership responsibilities and practices that affected student achievement more than others (Waters & Grubb, 2004). The implication here is that those explaining the most variance in student achievement should be emphasized in the
internship. These responsibilities and practices are: (a) awareness of the details and undercurrents in the running of the school and using this information to address current and potential problems (avg $r = .33$), (b) insuring that faculty and staff are aware of the most current theories and practices and making the discussion of these a regular aspect of the school’s culture (avg $r = .32$), (c) actively challenging the status quo (avg $r = .30$), (d) involving teachers in the design and implementation of important decisions and policies (avg $r = .30$), (e) fostering shared beliefs and a sense of community and cooperation (avg $r = .29$), (f) advocating for the school to all stakeholders (avg $r = .28$), and (g) monitoring the effectiveness of school practices and their impact on student learning (avg $r = .28$) (Waters et al., 2003). These practices, identified and developed during internships, can be expected to increase an intern’s engagement and strengthen a new school leader’s readiness to lead.

Institutional support for the internship and engagement in the internship. Education reformers recommend that aspiring school administrators spend increased time in field experiences (Fordham Institute, 2003; Fry et al., 2005; Institute for Educational Leadership, 2000; Mitgang, 2003). In a study sponsored by the National Council of Professors of Educational Administration (NCPEA), a 35-question national survey was electronically submitted to approximately 70 university department chairs to find the range of mentoring practices and their reported strengths and weaknesses (Wilmore & Bratlien, 2005). The response rate was 61% and included universities of diverse size, Carnegie ratings, and missions in 22 states. The lack of a full-time internship was cited as the most significant barrier to quality in mentoring by 67% of the respondents. Just under half of the programs were supported with some school district release time for intern activities. More than half had no institutional support in the form of financial compensation or release time.

The commitment needed to participate in an internship involves more than desire on the part of the student. Most often, aspiring school leaders are employed as educators, and school districts may not be willing to release employees from job responsibilities, forcing the intern to complete the internship around the regular work day. Fleenor, (2001) studied variables influencing the quality of principal internships and found that when interns must make time for the internship above and beyond their regular job demands, the quality diminishes.

Students unwilling or unable to add internship hours to their workday may choose to resign or take a leave of absence from employment to pursue coursework and related field
experiences (Fleenor, 2001). Consequences for this option may include a loss of income or position. Lack of institutional support for internships may decrease engagement by decreasing the time available to participate in learning activities that occur during work hours. Decreased opportunities and decreased engagement may affect the quality of learning and consequently, the readiness of the intern for school leadership.

**Quality of field supervision and engagement in the internship.** The quality of field supervision can affect the depth of engagement in the internship. An effective mentor communicates expert thinking on professional problems as they occur within professional practice. A number of authors have focused on some of the cognitive differences between experts and novices (Borko & Putnam, 1996; Grogan & Andrews, 2002; Schön, 1983). Expert thinking is reflected in the ways that school leaders go about evaluating teachers, prioritizing daily tasks, exuding confidence internally and externally, and exercising leadership within the larger organization. High quality supervision provides an intern with expert examples of leadership that are communicated implicitly and explicitly. Three studies were found in the literature that demonstrate the importance of quality field supervision.

The intent of this study was to identify specific conditions of quality within an internship and how these conditions affected both the level of the engagement of interns in their field experiences and their readiness for school leadership. These conditions, expressed as independent variables include the quality of the field supervision. No research was found to describe relationships between the quality of field supervision in an administrative internship and engagement however, a study examining the effects of the quality of field supervision and first-year teacher’s engagement in an induction program was available (Thompson, Paek, Goe, & Ponte, 2004a).

There were three aspects of quality for field supervision described in the study – mentor support, mentor availability, and rapport between the mentor and mentee. Rapport was measured with items on a questionnaire used to evaluate the impact of a mentor support system for California teachers. The items in this measure of the quality of field supervision were selected from other studies of teacher induction programs, teacher attitudes, and teacher efficacy (Thompson, Paek, Goe, & Ponte, 2004b). Staff members of the California Commission on Teacher Credentialing were consulted to ensure that the items in the questionnaire were aligned with the constructs to be measured. The engagement questionnaire went out to a population of
1,125 third-year teachers across 107 California school districts as the main study instrument. A sub-sample of 64 survey respondents was interviewed by phone to determine if the engagement scores from the questionnaire matched the level of engagement reported by the mentee. The phone survey resulted in confirmation of the validity of the survey ($r^2=.474$).

The researchers found that differences in the quality of mentor interaction with the new teachers explained a considerable portion of variability in engagement in this teacher induction program (Thompson et al., 2004a). A two-way contingency table analysis was conducted to evaluate the relationship. The results were significant: $\chi^2 (3, N=44) = 13.946, p \leq .01$, Cramér’s $V = .56$. The Cramér’s $V$ suggests a strong relationship between the quality of mentor interaction and the level of engagement in the induction program. The variability in mentor interaction was attributed to program-level differences in such matters as ease and frequency of access to mentors, and the training and monitoring of mentors. In turn, the variation in the quality of mentor interaction has a significant effect on engagement.

In another study, a widespread hands-off approach toward preparing mentors to work with interns was found to pose a threat to engagement in the internship. In their study of educational leadership programs associated with National Council of Professors of Educational Administration members, Wilmore and Bratlien (2005) reported that seventy-one percent of the responding department chairs cited a lack of quality or dedication on the part of mentors. No formal mentor training was reported by 60% of the respondents. Mentor training, when offered, ranged from informal to specific and most often took the form of an internship handbook. Seventy-five percent of the department chairs reported that school systems assumed responsibility for intern guidance.

Selecting mentor principals based on job performance alone may not be sufficient to ensure high quality field supervision. The National Research Council (2000) concluded, “Though experts know their disciplines thoroughly, this does not guarantee that they are able to teach others” (p. 31). The Florida Council on Educational Management (FCEM) defined the qualities of both successful and unsuccessful mentors. Finding an objective, research-based method for selecting mentor principals was the catalyst for this study. Researchers wanted to know, “To what degree can successful mentoring behavior be predicted from scores on principal competencies?” (Geismar, Morris, & Lieberman, 2000, p. 237).
A Delphi-like panel of experts was used to reach consensus on 24 behavioral indicators of good mentoring. These indicators were combined with leadership competencies already identified in the local evaluation for school administrators. The subsequent instrument was mailed to all the principals in one Florida county. Canonical correlation was used to determine the multivariate overlap between competency clusters and trait clusters (Geismer, Morris, & Lieberman, 2000, p. 241). Three clusters were found to have significant overlap, indicating a high degree of predictability of mentor behavior from related principal competencies (adj. $R^2 = .61$ to $.88$). The overlapping competencies and traits were grouped into prediction models with accuracies that were significantly greater than would have been expected by chance ($p \leq .005$). The prediction models identified characteristics of both good mentors and poor mentors.

The prediction model presented by Geismar et al. (2000) that most accurately classified poor mentors consisted of three leadership competencies: strong cognitive skills, good organizational ability, and the ability to enhance quality (adj. $r^2 = .89$). This means that poor mentors often were smart, organized, and good at school improvement. Good mentors were most accurately classified as purposeful and able to provide direction (adj. $r^2 = .86$), indicating they could communicate where they were going with school improvement and knew how they were going to get there. These results indicate that good principals were not always good mentors. Mentors exhibiting some competencies needed for successful school leadership were not always well-suited to promote those competencies in others. Assigning students to mentors who are purposeful and directive can result in deeply engaging learning experiences that may translate into greater readiness for school leadership.

Previous work-related experience and engagement. Psychologist and researcher Donald Schön (1983) recognized the tacit knowledge practitioners bring to the uncertainty of professional practice. As one gains experience, meaningful patterns of information are formed and guide the expert in making sense of his or her environment. Novices are just developing this knowledge base and consequently do not notice these patterns of information in their daily practice, impacting their ability to solve problems efficiently. Experienced practitioners are able to flexibly retrieve important aspects of their knowledge with little attentional effort. Professional knowledge develops with experience and enhances the ability to successfully deal with new situations. Interns with experience in both teaching and administrative work can draw
on their past successes and failures to enhance their engagement in the internship and their performance on tasks assigned in the internship.

A relationship between previous experience as an educator and engagement in an internship is supported in the literature through inference. Thompson et al., (2004a) investigated the relationship between the level of engagement in an induction program for new teachers and their reported years of teaching experience. The researchers found that years of classroom experience were associated with engagement in the induction program. The researchers posited that teacher experience had a significant relationship with engagement in the induction program for two reasons: (a) experienced educators spend less time on the issues that novices struggle with, allowing them more time to focus on program opportunities, and (b) experienced educators are developmentally ready to focus on their own professional growth (Thompson, et al., 2004a).

With respect to engagement in an internship, an aspiring principal bringing previous professional experience into the internship may be better equipped to focus on the opportunities for growth inherent in the internship.

The literature described in this section provides no direct evidence that engagement in an internship will lead to greater readiness for school leadership. From the literature in can be inferred that engagement can lead to greater levels of performance (Coffman & Gonzalez-Molina, 2002; Kuh, 2001a; Petzko, 2004). The literature provides inferred evidence that the relevance of the internship to the job of principal may be related to readiness for school leadership (Bratlein, 1993; J. C. Daresh et al., 2000; Thompson & Legler, 2003; Waters et al., 2003). The evidence from the literature that supports the relationship between institutional support for the internship and engagement in the internship is light, but plausible (Fleenor, 2001; Wilmore & Bratlien, 2005). The relationship between quality of the field supervision and engagement can be inferred from the literature (Geismar et al., 2000; Thompson et al., 2004a). Finally, evidence that work-related experience may be related to engagement in an internship must be inferred (Thompson et al., 2004a). The theory depicted in Fig. 2 is untested in the literature but may provide a basis for examining internship practices through the lens of intern engagement.
CHAPTER 2: METHODOLOGY

Methods for identifying the population and sample, instrument development, and data collection procedures are described in this chapter. To test the theory explaining variation in readiness for school leadership, a population of NASSP Assessment Center clients was selected to provide a measure of leadership readiness. An instrument was designed to measure all concepts in the theory except leadership readiness. Path analysis was used to examine the relationships asserted in the theory.

Population

All 2,242 clients participating in NASSP Assessment Centers across the United States within the last five years were the target population for this study. In July 2006, there were 20 centers in the United States. The centers varied in size and years of operation (see Table 4). Each center assessed from 5 to 150 new and aspiring principals each year. Most centers were under 5 years old. The objectives for the centers were (a) to fill personnel selection needs, (b) to enhance the professional development of assessees, and (c) to assess the leadership potential of entry-level leaders (NASSP, 2005). Knowledge, skills, and attitudes were assessed through five simulations which were based on an analysis of the work of principals.

The accessible population consisted of all clients who had directors willing and able to facilitate contact. An introduction to the research was emailed to each center director using contact information obtained from Richard A. Flanary, Director for Professional Development Services, NASSP. The initial inquiry to center directors yielded 220 assessees, with several centers agreeing to add their assessees to the sample once they were able to check their records for contact information. A follow up of non-responding center directors was conducted using the process outlined by Dillman (2000). The follow-up consisted of a written inquiry via email and a subsequent phone call to address the delays and concerns of the center directors. The follow-up inquiry added 120 additional accessible clients. Reasons for excluding members of the target population from the accessible population are listed in Table 4.

Participants

Subjects were recruited by working through the assessment center directors. The participants were contacted by their center director with the email invitation found in Appendix C. A follow-up email was sent to center directors as a reminder and to ascertain the total number
of participants receiving the invitation. Of the 340 invited clients, 63 filled out the questionnaire and 44 who had internships were the participants in the study. The rate of participation was 12%.

Table 4
Assessment Center Information, Number Assessed, Number Invited to Participate, and Number of Participants in the Study by Center

<table>
<thead>
<tr>
<th>Assessment Center</th>
<th>Total assessed (target population)</th>
<th>Total invited (accessible population)</th>
<th>Years of operation</th>
<th>If excluded, reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Carolina University, NC</td>
<td>300</td>
<td>0</td>
<td>10</td>
<td>Students were assessed prior to their internship experience.</td>
</tr>
<tr>
<td>Association of Washington School Principals, WA</td>
<td>140</td>
<td>140</td>
<td>4</td>
<td>Center is a pre-program evaluation to identify and select development projects.</td>
</tr>
<tr>
<td>Clarion University of Pennsylvania, PA</td>
<td>0</td>
<td></td>
<td></td>
<td>Center discontinued.</td>
</tr>
<tr>
<td>Kansas City Missouri School District, KS</td>
<td>0</td>
<td></td>
<td></td>
<td>Center discontinued.</td>
</tr>
<tr>
<td>North Dakota LEAD Center, ND</td>
<td>600</td>
<td>0</td>
<td>15</td>
<td>No field experience is required in program.</td>
</tr>
<tr>
<td>Education Service Center, Region 20, TX</td>
<td>650</td>
<td>0</td>
<td>10+</td>
<td>Client privacy concerns</td>
</tr>
<tr>
<td>Institute for Public Administration, DE</td>
<td>0</td>
<td>7</td>
<td></td>
<td>No response</td>
</tr>
<tr>
<td>Slippery Rock University of PA</td>
<td>24</td>
<td>0</td>
<td>5</td>
<td>Assessment is customized</td>
</tr>
</tbody>
</table>

29
<table>
<thead>
<tr>
<th>Assessment Center</th>
<th>Total assessed (target population)</th>
<th>Total invited (accessible population)</th>
<th>Years of operation</th>
<th>If excluded, reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Cloud State University, MN</td>
<td>75</td>
<td>0</td>
<td>5</td>
<td>Unwilling to contact assessees</td>
</tr>
<tr>
<td>Wake Leadership Academy, NC</td>
<td>0</td>
<td>0</td>
<td></td>
<td>Professional development for assistant principals only.</td>
</tr>
<tr>
<td>Milwaukee Public Schools, WI</td>
<td>185</td>
<td>0</td>
<td>10</td>
<td>No internships</td>
</tr>
<tr>
<td>Arizona School Administrators, AZ</td>
<td>0</td>
<td>0</td>
<td></td>
<td>No longer operational</td>
</tr>
<tr>
<td>Knox County Schools, TN</td>
<td>0</td>
<td>0</td>
<td></td>
<td>No response</td>
</tr>
<tr>
<td>Western Virginia Public Education Consortium, VA</td>
<td>13</td>
<td>0</td>
<td>3</td>
<td>Clients will participate by piloting the questionnaire.</td>
</tr>
<tr>
<td>Shippensburg State University, PA</td>
<td>0</td>
<td>0</td>
<td></td>
<td>PA candidates for the principalship now take a PRAXIS exam.</td>
</tr>
<tr>
<td>Tri-College University, ND</td>
<td>80</td>
<td>80</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Technology in Education/Midwest</td>
<td>120</td>
<td>120</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Table 4 (continued)

<table>
<thead>
<tr>
<th>Assessment Center</th>
<th>Total assessed (target population)</th>
<th>Total invited (accessible population)</th>
<th>Years of operation</th>
<th>If excluded, reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals Center of Hampton Roads, VA</td>
<td>0</td>
<td></td>
<td>No response</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>2242</td>
<td>340</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Development and Validation of the Questionnaire

A questionnaire was developed by the researcher for the collection of data on the exogenous and endogenous variables excluding the measure for leadership readiness. The construction, validation, and scoring of each measure are presented in this chapter. The variable readiness for school leadership was a composite score calculated with data reported to the population prior to becoming a participant in this study. Therefore, this measure is described as a separate instrument.

Validation of the Scales for Measuring the Exogenous and Endogenous Variables

Content validity is shown by collecting evidence that the content of the items represent the construct (Gall, Gall, & Borg, 2003). A questionnaire was prepared with 53 proposed items. The construct of readiness to lead had 10 items, engagement in the internship had 9 items, institutional support for the internship had 10 items, relevance of the internship had 7 items, and quality of field supervision had 12 items. The construct of previous experience had 4 items. The remaining item on the questionnaire ascertained that the participant did have an internship prior to completing an Assessment center.

A content validation instrument was prepared by the researcher (see Appendix D). The instrument contained domain definitions and response areas for matching items to domains, assessing the strength of association of items with domains, and assessing the clarity of items. The 38 items covering the constructs of engagement, institutional support, relevance, and quality of field supervision were arranged randomly on the instrument.

During August of 2006, the content validation instrument was sent through email to 12 purposefully selected experienced principals and supervisors employed in a Virginia school.
division. A hardcopy of the instrument was sent through the mail one week later as a follow up.
Five responders completed the content validation instrument, suggested revisions, and provided
general feedback on the instrument.

The percentage for each item placed in the correct domain was calculated. Items with a
minimum of 80% correct domain placement were accepted for possible inclusion in the
instrument. Means and standard deviations for each item were computed for the level of
association and clarity responses. Items with a mean of 3.5 or higher on the four-point
association scale and a 2.5 or higher on a three-point scale for clarity were accepted for possible
inclusion in the measurement scales. Items with lower means were edited or moved as
recommended by the reviewers and evaluated in a follow-up validation instrument. The number
of revised items for each domain is presented in the Table 5.

Table 5
Summary of Results from First Content Validation of the Measures of Exogenous and
Endogenous Variables

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of items validated</th>
<th>Number of items recommended for revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement in the internship</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Institutional support for the</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>internship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevance of the internship to the</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>job of principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentor quality</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

During September of 2006, the revised content validation instrument was sent through
email to 7 purposefully selected experienced principals and supervisors employed in a Virginia
school division. A hardcopy of the instrument was sent through the mail at the same time for the
convenience of the respondents and to serve as a reminder. Four responders completed the
content validation instrument.

The percentage for each item placed in the correct domain was calculated. Items with a
minimum of 80% correct domain placement were accepted for possible inclusion in the
instrument. Means and standard deviations for each item were computed for the level of
association and clarity responses. Items with a mean of 3.5 or higher on the four-point association scale and a 2.5 or higher on a three-point scale for clarity were accepted for inclusion in the measurement scales. Items with lower means were dropped. The numbers of revised items for each variable are presented in the Table 6.

Table 6

Summary of Results from Second Content Validation of the Measures of Exogenous and Endogenous Variables

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of items validated</th>
<th>Number of items deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement in the internship</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Institutional support for the internship</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Relevance of the internship to the job of principal</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Mentor quality</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

The Development, Validation, and Scoring of the Scale for Measuring Engagement in the Internship

The scale for measuring engagement in the internship was based on the Q12 instrument described in the previous chapter (Coffman & Gonzalez-Molina, 2002). Because the scale was originally developed for the workplace, it was not a perfect fit for an internship. In order to create a valid scale that was a better match to the characteristics of an internship, some items were rephrased or deleted while other items were added to the original 12 questions. The process for developing, validating, and scoring a scale for measuring engagement in the internship is described in this section.

Development of the Scale for Measuring Engagement in the Internship

The measure for engagement in the internship was developed from information gathered from the literature and from items on the Q12 engagement instrument (Coffman & Gonzalez-Molina, 2002). Items from the Q12 were re-written to match the setting of an internship in a preparation program (see Table 7). Other items in the engagement scale were developed and added in response to the literature on the behavioral, emotional, and cognitive attitudes of engaged students (see Table 7). Validation of the original Q12 instrument has been described.
however, the validity of the new instrument developed to measure the engagement of candidates in the internship could not be inferred from the validity studies by Gallup (Gall et al., 2003). Additional measures of validity were applied.

Table 7
Revisions, Omissions, and Additions to the Q12 Questions

<table>
<thead>
<tr>
<th>Item number</th>
<th>Original item</th>
<th>Revised item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you know what is expected of you at work?</td>
<td>I knew what was expected of me during my internship.</td>
</tr>
<tr>
<td>2</td>
<td>Do you have the materials and equipment you need to do your work right?</td>
<td>I had the materials and equipment I needed for my internship.</td>
</tr>
<tr>
<td>3</td>
<td>At work, do you have the opportunity to do what you do best every day?</td>
<td>Omitted</td>
</tr>
<tr>
<td>4</td>
<td>In the last seven days, have you received recognition or praise for doing good work?</td>
<td>During the internship, I received recognition or praise for doing good work.</td>
</tr>
<tr>
<td>5</td>
<td>Does your supervisor, or someone at work, seem to care about you as a person?</td>
<td>My supervisor, or someone at the field experience site, seemed to care about me.</td>
</tr>
<tr>
<td>6</td>
<td>Is there someone at work who encourages your development?</td>
<td>Someone encouraged my development during my internship.</td>
</tr>
<tr>
<td>7</td>
<td>At work, do your opinions seem to count?</td>
<td>Omitted</td>
</tr>
<tr>
<td>8</td>
<td>Does the mission of your company make you feel your job is important?</td>
<td>Omitted</td>
</tr>
<tr>
<td>9</td>
<td>Are your associates (fellow employees) committed to doing quality work?</td>
<td>Omitted</td>
</tr>
<tr>
<td>10</td>
<td>Do you have a best friend at work?</td>
<td>Omitted</td>
</tr>
<tr>
<td>11</td>
<td>In the last six months, has someone at work talked to you about your progress?</td>
<td>Omitted</td>
</tr>
</tbody>
</table>
Table 7 (continued)

<table>
<thead>
<tr>
<th>Item number</th>
<th>Original item</th>
<th>Revised item</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>In the last year, have you had opportunities at work to learn and grow?</td>
<td>I had opportunities to learn and grow during my internship</td>
</tr>
<tr>
<td>13</td>
<td>I enjoyed my internship.</td>
<td>I enjoyed my internship.</td>
</tr>
<tr>
<td>14</td>
<td>I looked forward to my internship.</td>
<td>I looked forward to my internship.</td>
</tr>
<tr>
<td>15</td>
<td>I worked more hours than were required during my internship.</td>
<td>I worked more hours than were required during my internship.</td>
</tr>
</tbody>
</table>


Validation and Scoring of the Scale for Engagement in Internship

The results of the content validation for the nine engagement items are in Appendix E. Items from other domains that met placement criteria for the engagement domain were added. Items not meeting the validation criteria were revised or omitted from the instrument. The final ten items for the engagement domain are in Table 8. The mean response to the ten items is the measure for engagement in the internship.
### Table 8

**Final Items for Measuring Engagement in the Internship Following Content Validation**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Item</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>The depth of student involvement with the internship in terms of essential learning, meaningful contribution, clarity of purpose, and sense of satisfaction.</td>
<td>1. I enjoyed my internship.</td>
<td>Continuous scale</td>
</tr>
<tr>
<td></td>
<td>2. I looked forward to my internship.</td>
<td>4-Strongly agree</td>
</tr>
<tr>
<td></td>
<td>3. I often worked extra hours on field-based activities.</td>
<td>3-Somewhat agree</td>
</tr>
<tr>
<td></td>
<td>4. I had opportunities to learn during my internship.</td>
<td>2-Somewhat disagree</td>
</tr>
<tr>
<td></td>
<td>5. I felt my work was appreciated during the internship.</td>
<td>1-Strongly disagree</td>
</tr>
<tr>
<td></td>
<td>6. People at the internship site seemed to care about me.</td>
<td>0 – I prefer not to answer this question</td>
</tr>
<tr>
<td></td>
<td>7. I knew the purpose of my internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. I developed new competencies during the internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. I sought out information to enhance my understanding throughout my internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. I put a great deal of effort into my internship.</td>
<td></td>
</tr>
</tbody>
</table>

**Development of the Scale for Measuring the Quality of Field Supervision**

The initial 12 items for the measure of the quality of field supervision were developed by the researcher and based on the literature. Seven items were derived from the study of teacher engagement in an induction program (Thompson et al., 2004a). These items were thought to be relevant to this study because of the role similarities between an in-service teacher mentor and an administrative intern mentor. Revisions were needed in wording to accommodate the change in roles and to maintain the parallel structure of items throughout the instrument. These revisions are in Table 9.
<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Was your support provider located in the same school as you?</td>
<td>I could reach my site supervisor whenever I needed to.</td>
</tr>
<tr>
<td>2.</td>
<td>To what degree did you trust your support provider to share questions and difficulties in your teaching?</td>
<td>I felt I could discuss any question with my site supervisor.</td>
</tr>
<tr>
<td>3.</td>
<td>At your formal meetings with your support provider, how much time did you typically spend together?</td>
<td>I met at least once a week with my site supervisor.</td>
</tr>
<tr>
<td>4.</td>
<td>To your knowledge, did your support provider undergo CFASST training?</td>
<td>To the best of my knowledge, my site supervisor was trained for the role.</td>
</tr>
<tr>
<td>5.</td>
<td>How much time did your support provider spend helping you with emotional support, logistical support, instructional support, and support for managing student behavior?</td>
<td>I trusted my site supervisor to help with any difficulties I had during my internship.</td>
</tr>
<tr>
<td>6.</td>
<td>As part of your BTSA experience, did you use the formative assessment system?</td>
<td>My site supervisor was very aware and supportive of my internship requirements.</td>
</tr>
<tr>
<td>7.</td>
<td>How much time did your support provider spend helping you with subject-matter support?</td>
<td>My site supervisor helped me to reflect on my administrative practice.</td>
</tr>
</tbody>
</table>

Table 10

*Items Included in Content Validation for Measuring Quality of Field Supervision*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I could reach my site supervisor whenever I needed to.</td>
</tr>
<tr>
<td>2.</td>
<td>I felt I could discuss any question with my site supervisor.</td>
</tr>
<tr>
<td>3.</td>
<td>I met at least once a week with my site supervisor.</td>
</tr>
<tr>
<td>4.</td>
<td>To the best of my knowledge, my site supervisor was trained for the role.</td>
</tr>
<tr>
<td>5.</td>
<td>My site supervisor was very aware and supportive of my internship requirements.</td>
</tr>
<tr>
<td>6.</td>
<td>My site supervisor helped me to reflect on my administrative practice.</td>
</tr>
<tr>
<td>7.</td>
<td>I would rate the overall quality of my site supervisor ___ on a scale of 1-4.</td>
</tr>
<tr>
<td>8.</td>
<td>I trusted my site supervisor to help with any difficulties I had during my internship.</td>
</tr>
<tr>
<td>9.</td>
<td>My site supervisor had enough administrative experience to guide me during my internship.</td>
</tr>
<tr>
<td>10.</td>
<td>My site supervisor demonstrated many of the competencies a principal needs to have.</td>
</tr>
<tr>
<td>11.</td>
<td>My site supervisor helped me to establish and articulate goals for my development as an administrator.</td>
</tr>
<tr>
<td>12.</td>
<td>Someone talked to me about my progress during the internship.</td>
</tr>
</tbody>
</table>

*Validation and Scoring of the Scale for Measuring the Quality of Field Supervision*

Twelve items on the quality of field supervision were randomly listed in the questionnaire for the first round of content validation. Four items were eliminated using the validation criteria (see Appendix E). Two items were modified for clarity. The remaining six items were not in need of modification and are in Table 11. The mean response to the eight items is the measure of the quality of field supervision.
Table 11

**Final Items for Measuring the Quality of Field Supervision Following Content Validation**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Item</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ability and qualifications of the mentor to provide reflective direction, to interact with the student, and to demonstrate competent leadership. (8 items)</td>
<td>1. I felt I could discuss any question with my site supervisor.</td>
<td>4-Strongly agree</td>
</tr>
<tr>
<td></td>
<td>2. I met regularly with my site supervisor.</td>
<td>3-Somewhat agree</td>
</tr>
<tr>
<td></td>
<td>3. To the best of my knowledge, my site supervisor was trained for the role.</td>
<td>2-Somewhat disagree</td>
</tr>
<tr>
<td></td>
<td>4. My site supervisor helped me to reflect on my administrative practice.</td>
<td>1-Strongly disagree</td>
</tr>
<tr>
<td></td>
<td>5. I would give my site supervisor the highest possible quality rating.</td>
<td>0 – I prefer not to answer this question</td>
</tr>
<tr>
<td></td>
<td>6. I trusted my site supervisor to help with any difficulties I had during my internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. My site supervisor had enough administrative experience to guide me during my internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. My site supervisor demonstrated many of the competencies a principal needs to have.</td>
<td></td>
</tr>
</tbody>
</table>
Development, Validation, and Scoring of the Scale for Measuring Institutional Support for the Internship

Ten items for measuring institutional support for the internship were developed by the researcher and based on the literature (see Table 12). Item validity was checked through the content-validation process. The items were randomly listed in the first round of content validation. Four items were eliminated using the validation criteria (see Appendix E). Three additional items were eliminated for their redundancy with item number eight, release time. One item was modified and moved into this domain from the engagement domain after finding a 100% respondent match. Two of the remaining items were modified based on respondent suggestions to strengthen association and clarity. The final four items for institutional support are in Table 13. The total number of yes responses to the four items is the measure for Institutional support for the internship.

Table 12

<table>
<thead>
<tr>
<th>Items Included in the Content Validation for Measuring Institutional Support for the Internship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My internship hours took place during non-teaching time.</td>
</tr>
<tr>
<td>2. My internship hours took place during normal work hours.</td>
</tr>
<tr>
<td>3. My internship hours took place in the summer.</td>
</tr>
<tr>
<td>4. I was provided with substitutes during my internship.</td>
</tr>
<tr>
<td>5. I was paid for my internship time.</td>
</tr>
<tr>
<td>6. I was able to adjust my assigned work to address the needs I encountered while at the internship site.</td>
</tr>
<tr>
<td>7. I received the same pay during my internship.</td>
</tr>
<tr>
<td>8. I received release time from my regular job during my internship.</td>
</tr>
<tr>
<td>9. My internship was full time.</td>
</tr>
<tr>
<td>10. I received sabbatical leave during my internship.</td>
</tr>
</tbody>
</table>
### Table 13

**Final Items for Measuring Institutional Support for the Internship Following Content Validation**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Item</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisions made by an institution in conjunction with employment responsibilities for release time, work space, and compensation during the internship. (4 items)</td>
<td>1. I was paid for my internship time.</td>
<td>2-Yes</td>
</tr>
<tr>
<td></td>
<td>2. I received release time from my regular job during my internship.</td>
<td>1-No</td>
</tr>
<tr>
<td></td>
<td>3. The materials and equipment I needed were provided during my internship.</td>
<td>0 – I prefer not to answer this question</td>
</tr>
<tr>
<td></td>
<td>4. My employer provided me with a full-time internship.</td>
<td></td>
</tr>
</tbody>
</table>

**Development, Validation, and Scoring of the Scale for Measuring Relevance of the Internship to the Job of the Principal**

Seven items for measuring relevance of the internship to the job of the principal were developed by the researcher and based on the literature (see Table 14). Item validity was checked through the content-validation process. Items were randomly listed in the first round of content validation. Two items were eliminated using the validation criteria (see Appendix E). The six remaining items for measuring the relevance of the internship to the job of the principal are in Table 15. The mean response to the six items is the measure of relevance of the internship to the job of the principal.
Table 14

*Items Included in the Content Validation for Measuring Relevance of the Internship to the Job of Principal*

1. I completed assigned internship tasks that helped prepare me for administrative responsibilities.
2. The integration of theory into practice was emphasized during the internship.
3. The assignments I completed during my internship were relevant to the work of a principal.
4. My internship helped prepare me for the assessment center.
5. My administrative internship was valuable in the development of my professional skills.
6. I was involved in planning my internship.
7. My internship helped me to better understand the responsibilities of a principal.

Table 15

*Final Items for Measuring the Relevance of the Internship to the Job of the Principal Following Content Validation*

<table>
<thead>
<tr>
<th>Definition</th>
<th>Item</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>The degree to which the</td>
<td>1. The integration of theory into practice was emphasized during the</td>
<td>4-Strongly agree</td>
</tr>
<tr>
<td>internship provided</td>
<td>internship.</td>
<td>3-Somewhat agree</td>
</tr>
<tr>
<td>preparation for the job of</td>
<td>2. The assignments I completed during my internship were relevant to</td>
<td>2-Somewhat disagree</td>
</tr>
<tr>
<td>the principal in terms of</td>
<td>the work of a principal.</td>
<td>1-Strongly disagree</td>
</tr>
<tr>
<td>assignments, planning, job</td>
<td>3. My internship helped to prepare me for the assessment center.</td>
<td>0 – I prefer not to answer this question</td>
</tr>
<tr>
<td>skills, and theory-to-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6 items)</td>
<td>4. My administrative internship was valuable in the development of my</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. My internship helped me to better understand the responsibilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. My ideas were an important part of planning my internship.</td>
<td></td>
</tr>
</tbody>
</table>
Development and Scoring of the Scale for Previous Work-related Experience

Four items are in the measure of previous work-related experience. They are in Table 16. The total for the four items is the measure of previous work-related experience. The score is the total number of years reported by the respondent.

Table 16

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous work-related</td>
<td>1. How many years of K-5 teaching experience did you have prior to</td>
<td>Number of years rounded to nearest .5</td>
</tr>
<tr>
<td>related experience.</td>
<td>participation in the Principal Assessment Center?</td>
<td>0 – I prefer not to answer this question</td>
</tr>
<tr>
<td>(4 items)</td>
<td>2. How many years of 6-8 teaching experience did you have prior to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>participation in the Principal Assessment Center?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. How many years of 9-12 teaching experience did you have prior to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>participation in the Principal Assessment Center?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. How many years of experience did you have as a full-time administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>prior to participation in the Principal Assessment Center?</td>
<td></td>
</tr>
</tbody>
</table>

Development of the Scale for Readiness for School Leadership

Selecting and Developing the 21st Century Principal is a performance-based assessment of leadership skills developed through the National Association of Secondary School Principals Association (NASSP). The 10 skill dimensions are defined in Table 2. The leadership skills were extracted from a nation-wide job analysis for principals commissioned to Applied Research, Inc. The job analysis consisted of interviews with principals, assistant principals, superintendents,
community leaders, school board members, parents, and college professors (NASSP, 2004). No data from the job analysis were available.

Validation of the Scale for Readiness for School Leadership

Applied Research, Inc. developed a preliminary list of skill dimensions by utilizing 21 domains developed by the National Policy Board for Educational Administration (1993) and the six standards developed by the Interstate School Leaders Licensure Consortium (1996). The preliminary list of dimensions was then modified following a review by 100 experts on assessment and the principalship across 23 states. Performance tasks were developed to accompany each of the skill dimensions.

Content validity was studied by assessing the extent to which the performance tasks simulated important skills of a working principal (Schmitt, Meritt, Fitzgerald, & Noe, 1982). A group of experienced principals and assessors were selected to evaluate the necessity of the assessment center skills for the performance of each skill dimension. The group also judged the adequacy of the exercises to provide the data necessary to evaluate the skill level of the participant. All of the skill dimensions were judged to be essential to the job of principal. The exercises were judged as providing information necessary to evaluate skill level.

A nation-wide job analysis was the basis for assessing the criterion-based validity of the performance assessments in the assessment center. If candidates rated highly in the assessment center are also rated highly in subsequent job performance, then criterion-based validity is established (Schmitt et al., 1982). Nine major job dimensions and 20 related tasks per dimension were identified in the analysis. Interviews were conducted to develop criterion measures and performance effectiveness measures. During the interviews, 361 anecdotes of job behavior, called “critical incidents,” were collected. The anecdotes described especially good and especially poor job performances. A wide variety of school administrators were asked to indicate the degree to which each incident is seen as positive or negative. Those items judged in consensus were used to develop 15 behaviorally-anchored rating scales to cover all nine functional areas of the principalship.

The criterion-related scales were used to rate assessment center candidates who were administrators. Each scale was anchored at the top, middle, and bottom by the “critical incidents” collected from the interviews. Four rater groups were used to obtain ratings on 44 persons who had been candidates in an assessment center, including those who had been promoted and those
who had not. The rater groups consisted of teachers, support staff, supervisors, and self. Intercorrelations of the ratings within the four rater groups on each of the 15 rating scales were reported as “generally low but positive” (Schmitt et al., 1982, p. 141). Intercorrelations among rater groups for each performance dimension were reported as “generally between .30 and .75” (Schmitt et al., 1982, p. 142).

The most significant correlations were found within rater groups and between performance dimensions that were particularly observable by a rater group. For example, support staff in a cafeteria may observe the teamwork skill dimension but not be able to observe results orientation easily. Self-ratings tended to be lower than ratings from all other rater groups. Each of the rater groups tended to rank candidates similarly. In situations where different groups could easily observe a particular candidate trait, the ratings were also similar. The researchers explained this phenomenon as reasonable and positive due to the different roles principals must adopt as they relate to different groups of people. The correlations of the instrument were strongest within rater groups and weakest between the groups.

The interdimensional relationships of the assessment were studied by examining intercorrelations among six different assessors for the 176 candidates they rated. Relatively low intercorrelations indicate whether the skill dimension scores provide unique information (Schmitt et al., 1982). Ratings and placement recommendations for each of the skill dimensions (problem analysis, judgment, decisiveness, leadership, sensitivity, educational values, stress tolerance, oral communication, written communication, organizational ability, range of interests, and personal motivation) were compared. The skill dimensions showed moderate intercorrelations ranging from .30 to .50 indicating that the dimensions were measuring unique properties.

Scoring of the of Readiness for School Leadership Scale

Assessment-center measures focus on the skill dimensions of educational leadership, resolving complex problems, communication skills, and developing self and others. Performance indicators within these dimensions were evaluated by a team of assessors trained in specific protocols for triangulating and reporting the scores. The scoring rubrics have been tested on more than 15,000 participants (NASSP, 2002). Inter-rater reliability was measured by examining assessor agreement on the skill level of candidates. Ratings from the trained assessors were all highly reliable, greater than .90 (Schmitt et al., 1982). The final scoring report includes a
continuous scale with five skill categories for each measure: (a) derailer, (b) noticeable problem area, (c) development zone, (d) competency, and (e) strength.

A scale was designed by the researcher to allow for reporting assessment center results on the questionnaire. When an assessee receives a final report, the result is a set of graphic scales with a horizontal bar depicting placement on each of the scales (see Appendix B). The bar can fit fully into one category, or be placed to partially fit up to two adjacent categories. The five categories can be selected individually or in combination to reflect the actual placement of the bar. The terminology is defined in Table 17. Each category and straddled category was given a numeric value (see Table 17).

Table 17
Assessment Center Skill Levels, Definitions, and Score Values

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td>Area of strength that significantly contributes to performance</td>
<td>8</td>
</tr>
<tr>
<td>Between strength and competency</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Competency</td>
<td>Area of strength that enhances performance</td>
<td>6</td>
</tr>
<tr>
<td>Between competency and development zone</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Development zone</td>
<td>Area of strength, but some segments of the skill could be strengthened</td>
<td>4</td>
</tr>
<tr>
<td>Between development zone and noticeable problem area</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Noticeable problem area</td>
<td>Area of strength that enhances performance</td>
<td>2</td>
</tr>
<tr>
<td>Between noticeable problem area and derailer</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Derailer</td>
<td>Little skill was demonstrated</td>
<td>0</td>
</tr>
</tbody>
</table>
The items on the questionnaire for recording assessment center ratings are in Table 18. Each item was measured on a continuous scale and scored according to the numerical values in Table 17. Respondents selected one descriptor from the scale of five categories or two adjacent descriptors depending on where the shaded bar fell on their final report. This process was repeated for each of the 10 assessed areas. The mean of the scores assigned to the 10 items was the measure of readiness for school leadership.

Table 18

**Items for Recording Assessment Center Ratings**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Assigned</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness for school leadership (10 items)</td>
<td>My skill rating for (insert 1-10) was:</td>
<td>(please select all that apply)</td>
<td></td>
</tr>
<tr>
<td>1. Setting instructional direction</td>
<td></td>
<td>8</td>
<td>Strength</td>
</tr>
<tr>
<td>2. Teamwork</td>
<td></td>
<td>6</td>
<td>Competency</td>
</tr>
<tr>
<td>3. Sensitivity</td>
<td></td>
<td>4</td>
<td>Development Zone</td>
</tr>
<tr>
<td>4. Judgment</td>
<td></td>
<td>2</td>
<td>Noticeable Problem Area</td>
</tr>
<tr>
<td>5. Results orientation</td>
<td></td>
<td>0</td>
<td>Derailer</td>
</tr>
<tr>
<td>6. Organizational ability</td>
<td></td>
<td>Missing</td>
<td>I prefer not to answer this data question</td>
</tr>
<tr>
<td>7. Oral communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Written communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Development of others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Understanding own strengths &amp; weaknesses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Construction and Piloting of the Questionnaire**

A yes-no scale was utilized for questions 1, 16, 17, 18, 19, and 36 (see Appendix A). The number of years rounded to the nearest ½ year was utilized for questions 2-5. Categorical responses were utilized for questions 6-15. A four-point Likert-type scale was utilized for
questions 20-35 and 37-44: 1=Strongly Disagree, 2=Disagree, 3=Agree, and 4=Strongly Agree, which avoids neutrality (see Appendix A). The “I don’t know” response is only added when the question is based on information that the respondent might not be aware of and was coded as missing. Participants had the option of not answering any item on the questionnaire. Items not answered were coded as missing. A consistent order of strong to weak responses and the use of common, relative language for the four choices were based on the Total Design Method (Dillman, 2000).

Each item on the questionnaire had an option to not answer, which strengthened implied consent and reduced the possibility of blank responses. A web-based format survey.vt.edu was employed. Participants used the on-line link provided them in the invitational letter. The technology allows for simple, non-branching applications that can be accessed with a unique link. Colors and fonts were selected for readability.

To assess the readability and general comprehension of the questionnaire, a pilot was administered. An invitation to participate in the pilot was sent to 13 candidates who were assessed between March and June 2006 at a newly opened assessment center in Southwest Virginia (see Appendix F). Seven of the candidates responded. Three of the seven indicated that they did not complete their internship within a year of the assessment and were eliminated from the pilot group. The remaining four completed the questionnaire and reported no problems or suggestions for improvement. Respondents were given the option of providing a phone number to the researcher. Follow-up phone calls to three respondents confirmed that they did not have any suggestions to improve understanding or readability of the questionnaire.

The finding that 42% of the pilot group did not complete their internship within a year of the assessment prompted follow-up calls to each of the participating assessment center directors to ascertain if any of their assessees were likely to have participated in the assessment within a year of completing an internship. Overwhelmingly, directors reported that most candidates had been in administrative positions for multiple years prior to the assessment. The restriction was dropped from the questionnaire to include more of the population. Questions pertaining to prior teaching and administrative experience were added. A letter of invitation was sent to the directors to forward to their assessees (see Appendix C). A total of 63 people responded to the questionnaire.
Principal Components Analysis for Readiness for School Leadership Scale

Principal components analysis is a factor analysis that identifies components based on correlations among items. As seen in Table 19, only one component was extracted for the variable readiness for school leadership. This unitary component suggests a “halo effect” in scoring during an assessment center where individuals scoring high in one category of the assessment center tended to score high in all categories. This tendency results in high correlations between items. The halo effect was first empirically supported by Edward Thorndike in his study of soldiers rated by their commanding officers (Thorndike, 1920). Loadings for the school leadership scale are in Table 19.

Table 19
Component Matrix for Items Measuring Readiness for School Leadership

<table>
<thead>
<tr>
<th>Item</th>
<th>Item loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting Instruction Direction</td>
<td>.717</td>
</tr>
<tr>
<td>Teamwork</td>
<td>.743</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>.764</td>
</tr>
<tr>
<td>Judgment</td>
<td>.633</td>
</tr>
<tr>
<td>Results</td>
<td>.656</td>
</tr>
<tr>
<td>Organization</td>
<td>.663</td>
</tr>
<tr>
<td>Oral</td>
<td>.739</td>
</tr>
<tr>
<td>Written</td>
<td>.676</td>
</tr>
<tr>
<td>Develops Others</td>
<td>.727</td>
</tr>
<tr>
<td>Understands Self</td>
<td>.557</td>
</tr>
</tbody>
</table>

Reliability of the Scales in the Questionnaire

The reliability of three of the scales—relevance of the internship to the job of principal, quality of field supervision, engagement in the internship—was assessed with Cronbach’s alpha. Variation in responses in the questionnaire should be due to the differences in the respondents rather than differences in interpretation of the question. Reliability coefficients were calculated from the data for each of the following scales: engagement in the internship, quality of field
supervision, and relevance of the internship to the job of principal. The number of items, the
mean, and the Cronbach’s alpha (α) are in Table 20 for each scale.

Table 20

Number of Valid Responses, the Mean, Cronbach’s Alpha (α), and Number of Items for Each Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement in the internship</td>
<td>42</td>
<td>3.78</td>
<td>.84</td>
<td>10</td>
</tr>
<tr>
<td>Quality of field supervision</td>
<td>44</td>
<td>3.39</td>
<td>.89</td>
<td>8</td>
</tr>
<tr>
<td>Relevance of internship to the job of principal</td>
<td>44</td>
<td>3.35</td>
<td>.90</td>
<td>6</td>
</tr>
</tbody>
</table>

As seen in Table 20, all variables have an alpha greater than .80. However, the low N contributes to the questionable reliability of the results. Institutional support and the years of experience were summated variables and therefore not included in the reliability calculations.

Methods of Analysis

The Statistical Package for the Social Sciences (SPSS) version 16.0 was used for all calculations. Descriptive statistics were calculated for all variables. Statistics for continuous variables were means, standard deviations, minimums, and maximums. Statistics for categorical variables were frequencies and percentages. Inferential statistics were used to assess the relationships described in the theory.

A path analysis was used to test the fit of the correlation matrix against the theoretical model (see Figure 4). Path analysis was introduced by Sewall Wright in 1934 as a means to analyze the direct and indirect effects of variables that were hypothesized to have causal relationships (Denis & Legerski, 2003). The path analysis does not prove causal effects, it is used to compare the pattern of correlations found in a set of data to a set of relationships proposed in a theory. In this study, the correlation coefficients found in the data collected from the responding principals were compared to the relationships proposed in the theory of leadership readiness presented in Figure 4.
Figure 4. Path diagram for all variables.
CHAPTER 3: RESULTS

The results obtained from the data are presented in this chapter. Descriptive statistics for each variable are presented in Tables 21-33. Two multiple regression analyses were conducted to identify the direct and indirect path coefficients. Findings were reported for each of the variables hypothesized to have direct or indirect effects on engagement or readiness for school leadership. An analysis of the path model is presented based on the findings.

Descriptive Statistics for Independent Variables

Of the 63 respondents to the questionnaire, approximately 70% experienced an internship for school leadership prior to participating in the assessment center. Personal communication with the center directors confirmed that many assessees were selected by their school divisions for NASSP Assessment Centers without experiencing an internship. Other candidates take part in the assessment center as part of their graduate program prior to experiencing an internship.

Eighteen respondents answered no to having an internship and 17 of those provided their assessment center scores. Five of the 18 went on to provide responses to the other questions, presumably because they had an internship, but it took place after the assessment center. All those answering no to having an internship prior to the assessment center were excluded from the calculations. For each question, the missing data and the responses are reported in tables 21-34.

Table 21
Descriptive Statistics for Participation in the Internship, N=63

<table>
<thead>
<tr>
<th>Participation in internship</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative internship prior to participation in the Principal Assessment Center.</td>
<td>Yes</td>
<td>44</td>
<td>69.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>18</td>
<td>28.6</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Relevance of the internship to the job of principal had a mean score of 3.35 indicating that most of the respondents found their internship to be highly relevant. The mean scores for each item in the scale were above 3.0. Low standard deviations for these variables indicate little variation from the mean score. The item, my field experience helped me to better understand the
responsibilities of a principal, has the highest standard deviation of .84 indicating a wider spread of responses than found in the other items.

Table 22

*Descriptive Data for Relevance of the Internship to the Job of Principal, N=63*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>44</td>
<td>69.9</td>
<td>3.35</td>
<td>.63</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>30.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>1.00-1.99</th>
<th></th>
<th>2.00-2.49</th>
<th></th>
<th>2.50-2.99</th>
<th></th>
<th>3.00-3.49</th>
<th></th>
<th>3.50-3.99</th>
<th></th>
<th>4.00</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td>4</td>
<td>9.0</td>
<td>2</td>
<td>4.6</td>
<td>12</td>
<td>27.3</td>
<td>18</td>
<td>40.9</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 23

*Descriptive Statistics for Items in the Relevance of the Internship to the Job of Principal Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>My field experience helped prepare me for the assessment center.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.20</td>
<td>.77</td>
</tr>
<tr>
<td>The assignments I completed during my field experience were relevant to the work of a principal.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.52</td>
<td>.76</td>
</tr>
<tr>
<td>My field experience helped me to better understand the responsibilities of a principal.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.36</td>
<td>.84</td>
</tr>
<tr>
<td>The integration of theory and practice was emphasized during the field experience.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.11</td>
<td>.78</td>
</tr>
</tbody>
</table>
Table 23 (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>My ideas were an important part of planning my field experience.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.30</td>
<td>.77</td>
</tr>
<tr>
<td>My administrative field experience was valuable in the development of my professional skills.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.59</td>
<td>.73</td>
</tr>
</tbody>
</table>

Institutional support for field experience time had a mean score of 2.4 indicating that most respondents were able to count two of the support items in the scale. Less than 30% of the respondents were paid for their time. Well over half received release time for their field experience. More than 10% reported a lack of materials and support. These data may indicate the high level of personal commitment needed to complete an internship.

Table 24

Descriptive Data for Institutional Support for the Internship Score, N=63

<table>
<thead>
<tr>
<th>Summative scores</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>44</td>
<td>69.9</td>
<td>2.36</td>
<td>1.1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>30.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 25

Descriptive Statistics for Items in the Institutional Support for the Internship Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>My employer provided me with a full-time internship experience.</td>
<td>21</td>
<td>47.7</td>
<td>23</td>
<td>52.3</td>
</tr>
</tbody>
</table>
Table 25 (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was paid for my internship time.</td>
<td>13</td>
<td>29.5</td>
<td>31</td>
<td>70.5</td>
</tr>
<tr>
<td>I received release time from my regular job during my internship.</td>
<td>31</td>
<td>70.5</td>
<td>13</td>
<td>29.5</td>
</tr>
<tr>
<td>The materials and equipment I needed were provided during my internship.</td>
<td>39</td>
<td>88.6</td>
<td>5</td>
<td>11.4</td>
</tr>
</tbody>
</table>

All 44 respondents had a supervisor during their internship. The quality of field supervision was high (M=3.4). Low standard deviation indicates little variation from the mean score. All but two of the items in the scale show a full range of responses indicating some variation.

Table 26

Responses to Item: I Had a Site Supervisor during my Field Experience, N=63

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

44                  100

Table 27

Descriptive Data for Quality of Field Supervision, N=63

<table>
<thead>
<tr>
<th>Mean scores</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>44</td>
<td>69.9</td>
<td>3.38</td>
<td>.63</td>
<td>1.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>30.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.50-1.99   2   4.5
2.00-2.49   4   9.1
2.50-2.99   2   4.5
3.00-3.49   10  22.7
3.50-3.99   17  38.6
Mean scores | N | % | M | SD | Min | Max
---|---|---|---|---|---|---
4.00 | 9 | 20.5 | | | | |
Total | 44 | 100.0 | | | | |

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would give my site supervisor the highest possible quality rating.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.25</td>
<td>.87</td>
</tr>
<tr>
<td>I felt I could discuss any question with my site supervisor.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.50</td>
<td>.88</td>
</tr>
<tr>
<td>I trusted my site supervisor to help with any difficulties I had during my internship.</td>
<td>43</td>
<td>1</td>
<td>4</td>
<td>3.44</td>
<td>.88</td>
</tr>
<tr>
<td>My site supervisor had enough administrative experience to guide me during my internship.</td>
<td>44</td>
<td>2</td>
<td>4</td>
<td>3.84</td>
<td>.43</td>
</tr>
<tr>
<td>My site supervisor demonstrated many of the competencies a principal needs to have.</td>
<td>43</td>
<td>2</td>
<td>4</td>
<td>3.51</td>
<td>.67</td>
</tr>
<tr>
<td>I met regularly with my site supervisor.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.32</td>
<td>.93</td>
</tr>
<tr>
<td>My site supervisor helped me to reflect on my administrative practice.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.16</td>
<td>.86</td>
</tr>
<tr>
<td>To the best of my knowledge, my site supervisor was trained for the role.</td>
<td>43</td>
<td>1</td>
<td>4</td>
<td>3.05</td>
<td>.98</td>
</tr>
</tbody>
</table>

Table 28

*Descriptive Statistics for Items in the Quality of Field Supervision Scale*

The independent variable showing the widest variation was previous work-related experience. The upper range value of 32 years indicates a wide range of teaching experience. A total of 27.3% of the respondents reported no administrative experience.
Table 29

*Descriptive Data for Previous Work-related Experience, N=63*

<table>
<thead>
<tr>
<th>Years experience</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of teaching experience prior to participation in the Principal Assessment Center.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5-5</td>
<td>9</td>
<td>20.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5-10</td>
<td>18</td>
<td>40.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.5-15</td>
<td>8</td>
<td>18.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.5-25</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.5-32</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td>10.57</td>
<td>6.8</td>
<td>2</td>
<td>32</td>
</tr>
</tbody>
</table>

| Years of experience as a full-time administrator prior to participation in the Principal Assessment Center. |     |     |      |     |     |     |
|                                                               | 44  | 100.0| 1.63 | 1.8 | 0   | 6   |
| 0-2                                                          | 33  | 75.0 |      |     |     |     |
| 2.5-5                                                        | 9   | 20.5 |      |     |     |     |
| 5.5-6                                                        | 2   | 4.5  |      |     |     |     |
| Total                                                        | 44  | 100.0|      |     |     |     |

Engagement scores reflect a high mean of 3.77 with a very small standard deviation of .31 indicating a strong tendency to feel positive about the internship. The item with the most variability was *I had opportunities to learn during my internship* with a standard deviation of .68. Most respondents reported that they often worked extra hours put a great deal of effort into the internship.
Table 30

*Descriptive Data for Engagement in the Internship Score, N=63*

<table>
<thead>
<tr>
<th>Mean scores</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>44</td>
<td>69.9</td>
<td>3.77</td>
<td>.31</td>
<td>2.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>30.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Score Range</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.50-2.99</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.00-3.49</td>
<td>5</td>
<td>11.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.50-3.99</td>
<td>18</td>
<td>40.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>20</td>
<td>45.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 31

*Descriptive Statistics for Items in the Engagement in the Internship Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed my internship.</td>
<td>44</td>
<td>2</td>
<td>4</td>
<td>3.66</td>
<td>.57</td>
</tr>
<tr>
<td>I looked forward to my internship.</td>
<td>43</td>
<td>2</td>
<td>4</td>
<td>3.81</td>
<td>.45</td>
</tr>
<tr>
<td>I often worked extra hours on field-based activities.</td>
<td>44</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.21</td>
</tr>
<tr>
<td>I had opportunities to learn during my internship.</td>
<td>44</td>
<td>1</td>
<td>4</td>
<td>3.66</td>
<td>.68</td>
</tr>
<tr>
<td>I felt my work was appreciated during the internship.</td>
<td>44</td>
<td>2</td>
<td>4</td>
<td>3.68</td>
<td>.60</td>
</tr>
<tr>
<td>People at the internship site seemed to care about me.</td>
<td>44</td>
<td>2</td>
<td>4</td>
<td>3.70</td>
<td>.51</td>
</tr>
<tr>
<td>I knew the purpose of my internship.</td>
<td>43</td>
<td>3</td>
<td>4</td>
<td>3.84</td>
<td>.37</td>
</tr>
<tr>
<td>I developed new competencies during the internship.</td>
<td>44</td>
<td>2</td>
<td>4</td>
<td>3.68</td>
<td>.56</td>
</tr>
<tr>
<td>I sought out information to enhance my understanding throughout my internship.</td>
<td>44</td>
<td>3</td>
<td>4</td>
<td>3.84</td>
<td>.37</td>
</tr>
</tbody>
</table>
Table 31 (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>$N$</th>
<th>Min</th>
<th>Max</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I put a great deal of effort into my internship.</td>
<td>44</td>
<td>3</td>
<td>4</td>
<td>3.91</td>
<td>.29</td>
</tr>
</tbody>
</table>

Descriptive Statistics for the Dependent Variable

Readiness for school leadership had a mean score of 5.9 on an eight-point scale. The high mean may indicate a halo effect, where individuals scoring high in one category of the assessment center tended to score high in all categories. This results in a high mean score with little deviation from the mean. However, given that the population for this study consists of individuals with an active interest in school leadership and not a random sample from a general population, the higher mean score was logical.

Table 32

Descriptive Data for Readiness for School Leadership Score, $N=44$

<table>
<thead>
<tr>
<th>Mean scores</th>
<th>$N$</th>
<th>%</th>
<th>$M$</th>
<th>$SD$</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>44</td>
<td>69.9</td>
<td>5.86</td>
<td>.93</td>
<td>4.0</td>
<td>7.6</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>30.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0-4.9</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0-5.9</td>
<td>19</td>
<td>43.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0-6.9</td>
<td>13</td>
<td>29.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0-7.9</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 33

Descriptive Statistics for Items in the Readiness for School Leadership Scale

<table>
<thead>
<tr>
<th>Assessment center skill dimension</th>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
<th>Valid N</th>
<th>Missing</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>0</td>
<td>5.48</td>
<td>1.4</td>
<td>2</td>
</tr>
<tr>
<td>instructional direction</td>
<td>2</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>13</td>
<td>29.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>9.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>20</td>
<td>45.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>5</td>
<td>11.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>43</td>
<td>1</td>
<td>6.12</td>
<td>1.4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>9</td>
<td>20.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>19</td>
<td>43.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>12</td>
<td>27.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>0</td>
<td>5.91</td>
<td>1.5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>11</td>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>11.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>16</td>
<td>36.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>11</td>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 33 (continued)

<table>
<thead>
<tr>
<th>Assessment center skill dimension</th>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
<th>Valid</th>
<th>Missing</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judgment</td>
<td></td>
<td></td>
<td></td>
<td>43</td>
<td>1</td>
<td>5.67</td>
<td>1.2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>20.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>59.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>9.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>0</td>
<td>5.48</td>
<td>1.4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>orientation</td>
<td>3</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>29.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>45.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td></td>
<td></td>
<td>43</td>
<td>1</td>
<td>5.77</td>
<td>1.5</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>ability</td>
<td>4</td>
<td>14</td>
<td>31.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>34.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>22.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 33 *(continued)*

<table>
<thead>
<tr>
<th>Assessment center skill dimension</th>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
<th>Valid N</th>
<th>Missing</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral communication</td>
<td>4</td>
<td>3</td>
<td>6.8</td>
<td></td>
<td></td>
<td>6.70</td>
<td>1.3</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td>4.5</td>
<td>43.2</td>
<td>2</td>
<td>43.2</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>19</td>
<td>43.2</td>
<td></td>
<td></td>
<td>43.2</td>
<td>2.3</td>
<td>43.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td>2.3</td>
<td>43.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>19</td>
<td>43.2</td>
<td></td>
<td></td>
<td>43.2</td>
<td>2.3</td>
<td>43.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td>6.70</td>
<td>1.3</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Written communication</td>
<td>4</td>
<td>5</td>
<td>11.4</td>
<td></td>
<td></td>
<td>6.27</td>
<td>1.2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td>4.5</td>
<td>54.5</td>
<td>4.5</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>24</td>
<td>54.5</td>
<td></td>
<td></td>
<td>54.5</td>
<td>4.5</td>
<td>54.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td>4.5</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>11</td>
<td>25.0</td>
<td></td>
<td></td>
<td>25.0</td>
<td>4.5</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td>6.27</td>
<td>1.2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Development of others</td>
<td>2</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>4.5</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>15</td>
<td>34.1</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>13</td>
<td>29.5</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>5</td>
<td>11.4</td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td>5.07</td>
<td>1.5</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 33 (continued)

<table>
<thead>
<tr>
<th>Assessment center skill dimension</th>
<th>Response</th>
<th>Frequency</th>
<th>N</th>
<th>Missing</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>43</td>
<td>1</td>
<td>6.19</td>
<td>1.4</td>
<td>2</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>own strengths</td>
<td>2</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and weaknesses</td>
<td>4</td>
<td>6</td>
<td>13.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>21</td>
<td>47.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>11</td>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correlations Between Independent and Dependent Variables

Pearson correlation coefficients were calculated for the relationships among the 6 variables. There were 4 significant correlations found among the independent and dependent variables. The correlation matrix is in Table 34. The engagement variable shared significant relationships with three other variables. While correlations do not suggest causal relationships, it can be interpreted that when an individual was engaged in their internship, they were also likely to experience institutional support, an internship relevant to the job of principal and high quality supervision.

Engagement in the internship was highly correlated with relevance of the internship to the job of principal ($r = .730$, $r^2 = .53$, $p = .00$). This finding suggests that an internship that was viewed as relevant to the needs of the student was likely to be an engaging learning experience. Engagement in the internship and institutional support were moderately correlated ($r = .353$, $r^2 = .12$, $p = .019$) suggesting that school districts that invest tangible resources in their internship programs create more positive learning experiences for their interns.

The engagement variable was moderately correlated with quality of the field supervision ($r = .428$, $r^2 = .18$, $p = .004$). This finding was indicative of the key role of the mentor for an aspiring school leader. Interestingly, quality of the field supervision was not highly correlated...
with relevance of the internship to the job of principal, possibly because the development of a relevant internship is not reliant upon the mentor, but comes from the structure of the program. This hypothesis is supported by the correlation between institutional support for the internship and relevance ($r = .364, r^2 = .13, p = .015$). This relationship may point to the role of the school division in providing a relevant experience.

Table 34

*Pearson Correlation Coefficients Among the Variables, N=44*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Readiness to lead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Engagement in the internship</td>
<td>.212</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Relevance of the internship to the job of principal</td>
<td>.266</td>
<td>.730**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Quality of field supervision</td>
<td>.153</td>
<td>.428**</td>
<td>.209</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Institutional support for the internship</td>
<td>.273</td>
<td>.353**</td>
<td>.364*</td>
<td>.267</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Previous work-related experience</td>
<td>.188</td>
<td>.173</td>
<td>.000</td>
<td>.089</td>
<td>-.105</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .05.

**p ≤ .01.

Direct Relationships in the Path Model

A multiple regression analysis was conducted to calculate the direct effects of quality of field supervision, relevance of the internship to the job of principal, institutional support for the internship, and previous work-related experience on engagement in the internship. The linear combination of variables was significantly related to engagement, $r^2 = .64, p = .000$ (see Tables 35-37). The equation for the multiple regression model follows where $b$ is the unstandardized regression coefficient and $e$ is error.
Equation 1: Engagement in the internship = 2.138 (Constant) + .321 (Relevance of the internship to the job of principal) + .017 (Institutional support for the internship) + .128 (Quality of field supervision) + .007 (Previous work-related experience) + error.

Table 35

Model Summary for Regression of Engagement in the Internship on Exogenous Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.798&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.637</td>
<td>.600</td>
<td>.19673</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (exogenous variables): (Constant), previous work-related experience, quality of field supervision, relevance of the internship to the job of principal, and institutional support for the internship.

Table 36

Analysis of Variance (ANOVA) Table for Regression of Engagement in the Internship on Exogenous Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>$df$</th>
<th>Mean square</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.647</td>
<td>4</td>
<td>.662</td>
<td>17.102</td>
<td>.000&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>1.509</td>
<td>39</td>
<td>.039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.157</td>
<td>43</td>
<td>.039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictor variables used in the ANOVA can be found in Table 37.

<sup>b</sup> Dependent variable: engagement in the internship.
Table 37

**Coefficients Table for Regression of Engagement in the Internship on Exogenous Variables**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Std. error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.138</td>
<td>.212</td>
</tr>
<tr>
<td>Quality of field supervision</td>
<td>.128</td>
<td>.050</td>
</tr>
<tr>
<td>Relevance of the internship to the job of principal</td>
<td>.321</td>
<td>.051</td>
</tr>
<tr>
<td>Institutional support for the internship</td>
<td>.017</td>
<td>.030</td>
</tr>
<tr>
<td>Previous work-related experience</td>
<td>.007</td>
<td>.004</td>
</tr>
</tbody>
</table>

In the second multiple regression analysis, the direct effects of engagement in the internship, quality of field supervision, relevance of the internship to the job of principal, institutional support for the internship, and previous work-related experience were calculated on readiness to lead. The linear combination of variables was not significantly related to readiness to lead, $r^2 = .159, p = .235$ (see Tables 38-40). The equation for the multiple regression model follows where $b$ is the unstandardized regression coefficient and $e$ is error.

Equation 2: Readiness for school leadership = 4.865 (Constant) - .396 (Engagement in the internship) + .390 (Relevance of the internship to the job of principal) + .188 (Institutional support for the internship) + .107 (Quality of field supervision) + .031 (Previous work-related experience) + error.
Table 38  
*Model Summary for Regression of Readiness to Lead on Engagement in the Internship and Exogenous Variables*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>.398a</td>
<td>.159</td>
<td>.048</td>
<td>.90788</td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), engagement in the internship, quality of field supervision, relevance of the internship to the job of principal, institutional support for the internship, and previous work-related experience.*

Table 39  
*Analysis of Variance (ANOVA) Table for Regression of Readiness to Lead on Engagement in the Internship and Exogenous Variables*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.904</td>
<td>5</td>
<td>1.181</td>
<td>1.432</td>
<td>.235ab</td>
</tr>
<tr>
<td>Residual</td>
<td>31.321</td>
<td>38</td>
<td>.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37.225</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Predictor variables used in the ANOVA can be found in Table 40.
bDependent variable: readiness to lead.*

Table 40  
*Coefficients Table for Regression of Readiness to Lead on Engagement in the Internship and Exogenous Variables*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Std. error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>4.865</td>
<td>1.859</td>
</tr>
<tr>
<td>Engagement in the internship</td>
<td>-.396</td>
<td>.739</td>
</tr>
</tbody>
</table>
The purpose of this study was to test the theoretical model of variables contributing to an internship that develops readiness to lead a school. The model for readiness for school leadership is depicted in Figure 4. Path analysis was used to estimate the direct and indirect effects of the variables in the model. The path coefficients for all direct effects were calculated using a series of multiple regression equations. The indirect effects were calculated by multiplying the direct effect coefficients along a particular path in the model. Standardized regression coefficients (betas) were reported as the path coefficients showing direct effects of the variables in the path model. These coefficients represent the change in standard deviation in the indicated dependent variable each time that there is a change of one standard deviation in the independent variable. The path coefficients for relationships between the variables are in Table 41.

Table 41
Summary of Standardized Direct Effects Regression Coefficients in the Path Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Readiness for school leadership</th>
<th>Engagement in the internship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement in the internship</td>
<td>-.132</td>
<td></td>
</tr>
<tr>
<td>Quality of field supervision</td>
<td>.073</td>
<td>.261*</td>
</tr>
<tr>
<td>Relevance of the internship to the job of principal</td>
<td>.265</td>
<td>.653**</td>
</tr>
</tbody>
</table>
Table 41 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Readiness for school leadership</th>
<th>Engagement in the internship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional support for the internship</td>
<td>.227</td>
<td>.062</td>
</tr>
<tr>
<td>Previous work-related experience</td>
<td>.229</td>
<td>.156</td>
</tr>
</tbody>
</table>

*p<.05  **p<.01

Indirect Effects in the Path Model

Indirect effects of the independent variables (relevance, institutional support, quality of supervision, and previous experience) were calculated on readiness for school leadership through engagement in the internship. Indirect effects were calculated by multiplying the direct effect coefficients in a path (Pedhazur, 1997). The paths and effects are recorded in Table 42. All were small and negative. They were not of sufficient size to be considered important in explaining the variance in readiness to lead.

Table 42

<table>
<thead>
<tr>
<th>Path</th>
<th>Indirect effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance→Engagement in internship→Readiness</td>
<td>-.087</td>
</tr>
<tr>
<td>Institutional support→Engagement in internship→Readiness</td>
<td>-.009</td>
</tr>
<tr>
<td>Quality of Supervision→Engagement in internship→Readiness</td>
<td>-.035</td>
</tr>
<tr>
<td>Previous exp→Engagement in internship→Readiness</td>
<td>-.021</td>
</tr>
</tbody>
</table>

Total Effects in the Path Model

Total effects are calculated by summing the direct and indirect effects from exogenous variables to readiness to lead. The total effects of each exogenous variable on readiness to lead are in Table 43. The total effect is the combination of direct and indirect effects. In this case, for each increase of one standard deviation in the exogenous variable (relevance, institutional support, quality of supervision, or previous work-related experience) there will be an increase in the amount of the total effect in Table 43 on the readiness of principal candidates to lead.
Because of the negative effect of engagement in the internship on readiness to lead, these coefficients were reduced. Poor measurement of the engagement variable may be responsible for this negative effect and needs further exploration.

Table 43
Total Effects of Variables on Readiness for School Leadership

<table>
<thead>
<tr>
<th>Path</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance → Engagement in internship → Readiness</td>
<td>.178</td>
</tr>
<tr>
<td>Institutional support → Engagement in internship → Readiness</td>
<td>.218</td>
</tr>
<tr>
<td>Quality of Supervision → Engagement in internship → Readiness</td>
<td>.038</td>
</tr>
<tr>
<td>Previous exp → Engagement in internship → Readiness</td>
<td>.208</td>
</tr>
</tbody>
</table>

Analysis of the Path Model

Chi-square was used to test the direct effects of the model. Analysis of Moment Structures (AMOS) software was used for the calculation. The results of the chi-square test were $\chi^2 (6, \ N = 44) = 11.1$, $p \leq .01$. The null hypothesis was that there are no significant differences between the just-identified and over-identified (theoretical) models. A just-identified model has direct paths among all variables in the model. In an over-identified model, only the theoretical paths are included. There were significant differences among the relationships in the over-identified (theoretical) and just-identified models. The null hypothesis was rejected. This indicates a poor fit between the data in the over-identified (theoretical) model. A poor fit can result from important variables being left out of the model or too little correlation between the variables. The over-identified model is in Figure 5.

The data collected for this research did not support the theory. There were no significant direct effects on the dependent variable readiness to lead. This may be due to the small sample size, error in the measurement of variables, or an incomplete or inaccurate specification of the model. This finding is indicative of a lack of relationships between the exogenous variables and readiness to lead and between engagement in the internship and readiness to lead as measured by the scores on assessment center activities. The lack of significant direct effects of the four exogenous variables on readiness to lead through engagement in the internship provide further support for the assertion that the level of engagement in an internship does not contribute to higher scores on the assessment center activities.
There were two significant direct effects in the model. The first was between relevance of the internship to the job of principal and engagement in the internship. The second was between quality of field supervision and engagement in the internship. These same relationships were found to be significant using the Pearson correlation coefficients (see Table 34). These findings indicate some possible areas for further study. A discussion of recommendations for practice and limitations of the study are discussed in the final chapter.
Figure 5. Path diagram for over-identified model. Values are standardized regression coefficients (betas). *p<.05. **p<.01.
CHAPTER 4
SUMMARY, DISCUSSION, LIMITATIONS OF THE STUDY, SUGGESTIONS FOR FURTHER RESEARCH, RECOMMENDATIONS FOR PRACTICE, AND REFLECTION

To summarize, there were two questions addressed in this research. The first was, How does engagement during an internship relate to the readiness for school leadership? Readiness for school leadership was the dependent variable which was measured using individual results from the National Association of Secondary School Principals Assessment Center. Sixty-three people from three states responded to the questionnaire, and 44 had completed an internship prior to participating in an assessment center. These 44 were the participants in this study. Readiness for school leadership was regressed on engagement in the internship and four exogenous variables. There was no relationship between engagement in an internship and readiness for school leadership. The assertion that an engagement in an internship would affect readiness to lead is not supported by the data in this study.

The second question is, What conditions of the internship affect the level of engagement in an internship or readiness of candidates for school leadership? Internship conditions were measured with four variables: relevance of the internship to the job of principal, institutional support for the internship, quality of field supervision, and previous work-related experience. Regression of the engagement in the internship on the four internship conditions showed two significant relationships. Relevance of the internship has a strong relationship to engagement ($\beta = .653, p \leq .01$). Quality of field supervision had a moderate relationship to engagement ($\beta = .261, p \leq .05$). No other relationships were found between the conditions of the internship and engagement in the internship or readiness to lead.

Data from the four conditions of the internship and engagement in the internship were analyzed through a path model to assess their direct and indirect effects on the dependent variable, readiness for school leadership. The model did not fit the data.

Discussion

The review of literature led to the assumption that learning to be a school leader is best accomplished through a relevant field experience (Thompson & Legler, 2003). The data from this research supports the value of a relevant field experience and of quality field supervision to the level of engagement of candidates in internships. It is not surprising that the data do not
support the relationship of an engaging internship to readiness for school leadership. The theory supporting this relationship is tenuous. There is no necessary connection between the level of engagement in an internship and a candidate’s readiness for school leadership. The activities in which the candidate engaged during the internship may not have been related to the activities that he or she was asked to perform in the assessment center. And, the data in this study were not sufficient to measure the connections between the two. If one is to expect a connection between the level of engagement in an internship and the level of readiness for school leadership, the activities of the internship must have some relevance to the measures of readiness. The problem is one of research design, not theory building. The theory may well hold true if adequate measures are taken of engagement and readiness to lead. A study with measures of the nature of the internship activities designed to achieve the readiness characteristics expected in the assessment measures would stand a much better chance of finding the asserted relationships in the theory. In the present study, the nature of the activities in which interns engaged is unknown.

The intercorrelations among the assessment center measures may indicate a halo effect where a strong showing on one measure may predispose the assessor to continue with high marks on other measures. Another possibility is that the process of reaching consensus between multiple assessors may cause a regression to the mean and may eliminate extremely high and low scores on the measures. Yet another possibility is that the assesses all have a strong interest in school leadership prior to participating in an assessment center. This pre-existing focus on leadership may create high mean scores on the measures as shown in the data.

The literature review led to the hypothesis that high-quality mentoring contributes to an engaging learning experience (Thompson et al., 2004a). The data support the relationship between the quality of mentoring and engagement \( (r = .43, p = .00, r^2 = .19) \). A mentor having a strong working relationship with an intern is likely to engage the intern in the work of the mentor. Although the relationship between mentoring and engagement is evident, that combination did not translate into a change in readiness for school leadership.

There were strong recommendations in the literature to increase the support for the internship (Fry et al., 2005; Institute for Educational Leadership, 2000; Mitgang, 2003). The multivariate findings of this research showed no significant direct or indirect effects of institutional support for the internship on either engagement in the internship or readiness to lead. However, two significant bivariate correlations between institutional support and other
variables were found: institutional support and engagement in the internship ($r(42) = .35, p \leq .02, r^2 = .12$) and institutional support and relevance of the internship to the job of principal ($r(42) = .36, p = .02, r^2 = .13$). These correlations indicate potential conditions that may affect the quality of the internship candidates may experience. These conditions are worth further study.

Institutional support, relevance of internship experiences, and the quality of field supervision all have intuitive, if not theoretical and empirical, credence in high quality internships.

It was hypothesized that the more previous work-related experience held by an intern, the greater the engagement in the internship and the greater the readiness of the candidate to lead. While the literature indicates a connection between experience and job performance in education (Schön, 1983; Thompson, Paek, Goe, & Ponte, 2004c), the results of this research show no relationship between teaching and administrative experience and engagement in the internship or between previous teaching and administrative experience and readiness to lead.

Limitations of the Study

The most important limitation of the study is the sample. Results from a return of only 44 participants from a pool of over 2000 are not generalizable to the population. Further, there were assessment centers in 14 states, but only three participated in the study. In some cases, this was due to when the assessment center was administered. When the assessment center took place prior to the internship, no effects of the internship could be examined in this research.

This research is limited by the use of the NASSP assessment center as the measure of readiness for school leadership. The data from this measure is characterized by a high mean score $M = 5.9, SD = .93$ (possible scale range 0-8). This might stem from the possibility that respondents with low assessment scores chose not to answer the questionnaire. Capturing the entire population of assessment centers would provide more meaningful data.

Another limitation of this research is the wide range of field experiences within the population. In personal discussions with assessment center directors, it was reported that some assessees were placed for a semester as an assistant principal as their field experience. In contrast, there were other programs requiring only part-time field experiences with little attached responsibility for leadership. Collecting descriptive data about characteristics of an internship would expand the research.
Suggestions for Further Research

This study inspires many suggestions for further research. First of all, it is important to continue the study of internships and their effects on readiness to lead. While the literature contains some research on the characteristics of a quality internship, there is a lack of evidence on the effects of the internship on leadership. The value of implementing best practices in an internship should be tied to the performance of school leaders. One way to accomplish this is to compare assessment center results (readiness to lead) for those not completing an internship to those having completed an internship. If differences in readiness to lead were found, this would be evidence supporting the efficacy of the internship as a preparation tool. A related suggestion is to study how an individual learns to be a leader. Research is needed to clarify the learning experiences that are significantly linked to best leadership practices and to look for characteristics that effectively engage learners in those experiences. It would be interesting to investigate how effective school leaders learn their practice and to compare that with current leadership development programs.

Another suggestion is to look closely at the role of engagement in preparation generally and the development of school leaders. The literature already makes strong connections between engagement and learning (Kuh, 2003; Linnenbrink & Pintrich, 2003; Pintrich & DeGroot, 1990; Skinner & Belmont, 1993), but it is possible that learning to be a school leader is different from learning other skills. Discovering if an engaged learner can be a more effective school leader will enhance the field of preparing educational administrators.

In light of a trend in states to provide alternative licensure paths for school leaders (Kufel, 2007), it is important to research the effects of previous work-related experiences on successful school leadership. It is plausible that certain kinds of work experiences are related to readiness for school leadership.

Finally, research is needed to provide a good measure of readiness to lead. Being able to predict the effectiveness of a school leader would save considerable time and frustration in hiring school principals and other school leaders. For example, a combination of the assessment center measures and the School Leaders Licensure Assessment might provide a valid measure of leadership readiness.
Recommendations for Practice

The findings of this research are applicable to the development of internships for school leaders. Engagement is closely linked to learning, (Pintrich & DeGroot, 1990; Prestine & LeGrand, 1991) making this a desirable characteristic of an internship. Correlations between engagement in the internship and the quality of field supervision and the relevance of the internship to the job of principal inspires a recommendation that preparation program developers attend to these characteristics in the design of internships.

The highest significant correlation coefficient is between relevance of the internship to the job of principal and engagement \[ r(42) = .73, \ p = .00, \ r^2 = .53 \]. An internship that is designed to be highly relevant to the work of a principal will be likely to engage the intern in learning. The significant direct effect \( \beta = .653, \ p \leq .01 \) found between these variables supports the recommendation to use research defining the job of the principalship (Waters & Grubb, 2004; Wilmore & Bratlien, 2005) to identify appropriate activities for an intern. The involvement of the intern can vary from observation to active leadership depending on the nature of the work, but active engagement in the most relevant work of a principal is recommended.

The next recommendation is to maximize the support provided by school divisions to allow for an internship with sufficient school-day time and resources for the intern to have relevant learning experiences. Support for the internship was moderately correlated with engagement \[ r(42) = .35, \ p = .02, \ r^2 = .12 \]. When promising school leaders are placed in positions that allow them to interact with the staff and students of a school during all phases of the principal’s work day, their internship may be more engaging. Examples of this level of support have been provided throughout this research. Although the relationship between internship variables and leadership readiness is yet to be determined, if that relationship can be verified, the return on the investment of internship time may well be recouped by hiring new school leaders that have the requisite knowledge, skills, and dispositions to be successful.

The next recommended practice is to provide high quality supervision for interns in the field. A good mentor scaffolds the learning process by creating learning experiences and good working relationships between the mentor and the intern. The items used in the scale for this variable included easy access to the supervisor, frequent conversations, and a trusting relationship. In addition, the supervisor should be trained in meeting the requirements of the internship as well as helping the intern to reflect on his or her practice. The correlation between
the quality of mentoring and engagement is significant \( r(42) = .43, p = .00, r^2 = .19 \) which supports the importance of the supervisor in providing an engaging learning experience for the intern. The significant direct effect between the quality of the field supervision and engagement in the internship (\( \beta = .261, p \leq .05 \)) supports the hypothesis that a good mentor can influence the level of engagement for an intern.

Institutional support was correlated with relevance of the internship to the job of principal \( r(42) = .36, p = 02, r^2 = .13 \). The researcher recommends maximizing the support provided to an intern through both time and attention to the field supervisor. By maximizing the learning experience of the intern, the probability of increasing the engagement of the intern in relevant experiences is increased. Although this study did not demonstrate a relationship between institutional support and readiness to lead, it does not mean that such a relationship does not exist. Intuitively, however, that relationship should hold. It will take additional research to verify its existence.

Reflections

The preparation of school leaders is an important consideration. As accountability grows for student performance, the competence of school leaders is increasingly under scrutiny. The internship is a natural learning environment that allows the participant to learn from the realities of leadership in a school setting prior to becoming accountable for it.

As school leadership and school performance come under greater scrutiny, so does a greater willingness to try different approaches to training school leaders. New programs that serve both educators and those from outside the field of education will need to have an internship component that will allow necessary knowledge, skills, and dispositions to develop prior to taking the helm of a school.

One change I would have made to the questionnaire is to have added the question, “Did you have an internship after participating in an assessment center?” This would have allowed me to know for certain if the 18 people answering “no” to having an internship prior to the assessment center were responding in error or if they indeed had an internship after their assessment. As it was, five of the eighteen “no” responses entered valid data for their internship; however, their data were not included in the regression models.

I am encouraged by the results of this study in identifying relationships between engagement in an internship and the relevance of the internship to the job of principal. If an
internship is to become a common denominator for training school leaders with various backgrounds, then increased engagement has the potential for maximizing learning. Seeking out those activities that are highly relevant to the job of principal is promising work.

Another encouraging result is the relationship between engagement in an internship and the quality of field supervision. As an educator, the model of learning through coaching and reflection is appealing. This research strengthens my commitment to the ideal of high quality instruction for learners of all ages. I hope that greater attention is given to supporting and training those school leaders that are placed in a position to guide newcomers through the difficult and sometimes unpredictable situations that occur in schools.

I was disappointed by the lack of findings in the path model contributing to readiness for school leadership. I had hoped that this work would contribute more to the understanding of school leadership preparation, but I believe that the theory is still worth developing. It would be gratifying to see best practices of an internship emerge from the intuitive to the empirical.
References


http://www.ets.org/portal/site/ets/menuitem.22f30af61d34e9c39a77b13bc3921509/?vgnextoid=0fdec197a484f4010VgnVCM10000022f95190RCRD


Mitgang, L. D. (2003). Beyond the pipeline: Getting the principals we need, where they are needed most. *ED482826.*


Principal Field Experience Questionnaire

The following questionnaire is related to field experiences in school leadership. This research is being conducted to improve the preparation of school administrators.

This questionnaire is anonymous. You have the option of skipping any question you prefer not to answer. Your name is not associated with your responses in any way. Data from the questionnaire will remain secure in a locked office and destroyed within one year of completing the research. If requested, you may receive a copy of the findings.

The benefit of participating in this study is the contribution made to understanding best practices for the development of new school leaders.

We anticipate this survey will take 20 minutes to complete.

Please keep in mind the following definition of an internship as you respond to the items: Administrative internships are temporary job placements, field projects, apprenticeships, and other field-based experiences in educational settings that provide practice in the skills of leading, administering, or managing a school or other educational unit.

1. **Did you have an administrative internship prior to participation in the Principal Assessment Center?**
   - [ ] Yes
   - [ ] No

2. **How many years of K-5 teaching experience did you have prior to participation in the Principal Assessment Center?**
   Number of years rounded to nearest .5

3. **How many years of 6-8 teaching experience did you have prior to participation in the Principal Assessment Center?**
4. **How many years of 9-12 teaching experience did you have prior to participation in the Principal Assessment Center?**

   Number of years rounded to nearest .5

5. **How many years of experience did you have as a full-time administrator prior to participation in the Principal Assessment Center?**

   Number of years rounded to nearest .5

Please take a moment to locate the Skill Rating Overview from the first few pages of your assessment final report. These pages show shaded bars under each of the following headings: Educational Leadership, Resolving Complex Problems, Communication Skills, and Developing Self & Others. There are typically two pages covering the overview.

For your next ten responses, select the skill rating depicted on your assessment results. If your results straddle two rating categories, please select both.

6. **My skill rating for "Setting Instructional Direction" was:** (please select all that apply)

   - [ ] Strength
   - [ ] Competency
   - [ ] Development Zone
   - [ ] Noticeable Problem Area
   - [ ] Derailer
   - [ ] I prefer not to answer this question

7. **My skill rating for "Teamwork" was:** (please select all that apply)

   - [ ] Strength
8. **My skill rating for "Sensitivity" was: (please select all that apply)**
   - [ ] Strength
   - [ ] Competency
   - [ ] Development Zone
   - [ ] Noticeable Problem Area
   - [ ] Derailer
   - [ ] I prefer not to answer this question

9. **My skill rating for "Judgment" was: (please select all that apply)**
   - [ ] Strength
   - [ ] Competency
   - [ ] Development Zone
   - [ ] Noticeable Problem Area
   - [ ] Derailer
   - [ ] I prefer not to answer this question

10. **My skill rating for "Results Orientation" was: (please select all that apply)**
   - [ ] Strength
   - [ ] Competency
   - [ ] Development Zone
   - [ ] Noticeable Problem Area
11. **My skill rating for "Organizational Ability" was: (please select all that apply)**

- Strength
- Competency
- Development Zone
- Noticeable Problem Area
- Derailer
- I prefer not to answer this question

12. **My skill rating for "Oral Communication" was: (please select all that apply)**

- Strength
- Competency
- Development Zone
- Noticeable Problem Area
- Derailer
- I prefer not to answer this question

13. **My skill rating for "Written Communication" was: (please select all that apply)**

- Strength
- Competency
- Development Zone
- Noticeable Problem Area
- Derailer
- I prefer not to answer this question
14. **My skill rating for "Development of Others" was: (please select all that apply)**

- ☐ Strength
- ☐ Competency
- ☐ Development Zone
- ☐ Noticeable Problem Area
- ☐ Derailer
- ☐ I prefer not to answer this question

15. **My skill rating for "Understanding Own Strengths & Weaknesses" was: (please select all that apply)**

- ☐ Strength
- ☐ Competency
- ☐ Development Zone
- ☐ Noticeable Problem Area
- ☐ Derailer
- ☐ I prefer not to answer this question

If you did not have an internship experience, please stop here and submit the survey by clicking the "Submit" button at the end of this form.

Please indicate your agreement with the following statements.

16. **My employer provided me with a full-time internship experience.**

- ☐ Yes
- ☐ No
- ☐ I prefer not to answer this question

17. **I was paid for my internship time.**

- ☐ Yes
- ☐ No
18. **I received release time from my regular job during my internship.**
   - Yes
   - No
   - I prefer not to answer this question

19. **The materials and equipment I needed were provided during my internship.**
   - Yes
   - No
   - I prefer not to answer this question

20. **I had opportunities to learn during my internship.**
   - Strongly Agree
   - Somewhat Agree
   - Somewhat Disagree
   - Strongly Disagree
   - I prefer not to answer this question

21. **I enjoyed my internship.**
   - Strongly Agree
   - Somewhat Agree
   - Somewhat Disagree
   - Strongly Disagree
   - I prefer not to answer this question

22. **I looked forward to my internship.**
   - Strongly Agree
23. **People at the internship site seemed to care about me.**
- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

24. **I felt my work was appreciated during the internship.**
- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

25. **I often worked extra hours on internship activities.**
- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

26. **I knew the purpose of my internship.**
27. **I developed new competencies during my internship.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question

28. **I sought out information to enhance my understanding throughout my internship.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question.

29. **I put a great deal of effort into my internship.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question.
30. **My internship helped prepare me for the Assessment Center.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question.

31. **The assignments I completed during my internship were relevant to the work of a principal.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question.

32. **My internship helped me to better understand the responsibilities of a principal.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

33. **The integration of theory and practice was emphasized during my internship.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
34. **My ideas were an important part of planning my internship.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

35. **My internship was valuable in the development of my professional skills.**

- [ ] Strongly Agree
- [ ] Somewhat Agree
- [ ] Somewhat Disagree
- [ ] Strongly Disagree
- [ ] I prefer not to answer this question

The following questions relate to your site supervisor during your internship.

The site supervisor is the person you were guided by while putting in internship hours. Other labels for this role might include mentor, coach, advisor, or other support provider.

It is possible that you had multiple site supervisors during your placements. If there were differences between your supervisors, choose the response that describes the supervisor with whom you spent the most time.

36. **I had a site supervisor during my internship.**

- [ ] Yes
- [ ] No
If you did not have a site supervisor, please stop here and submit the survey by clicking the "Submit" button at the end of the form.

37. **I would give my site supervisor the highest possible quality rating.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question

38. **I felt I could discuss any question with my site supervisor.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question.

39. **I trusted my site supervisor to help with any difficulties I had during my internship.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
   - [ ] I prefer not to answer this question.

40. **My site supervisor had enough administrative experience to guide me during my internship.**
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
41. My site supervisor demonstrated many of the competencies a principal needs to have.

☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ I prefer not to answer this question.

42. I met regularly with my site supervisor.

☐ Strongly Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ I prefer not to answer this question.

43. My site supervisor helped me to reflect on my administrative practice.

☐ Strongly Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ Somewhat Agree
☐ I prefer not to answer this question.

44. To the best of my knowledge, my site supervisor was trained for the role in my internship.
☐ Strongly Agree
☐ Somewhat Agree
☐ Somewhat Disagree
☐ Strongly Disagree
☐ I prefer not to answer this question.
APPENDIX B
SKILL RATING OVERVIEW SAMPLE

**SKILL RATING OVERVIEW**
for
Ima Sample
November 2, 2001

<table>
<thead>
<tr>
<th>EDUCATIONAL LEADERSHIP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setting Instructional Direction:</strong> Implementing strategies for improving teaching and learning including putting programs and improvement efforts into action. Developing a vision and establishing clear goals; providing direction in achieving stated goals; encouraging others to contribute to goal achievement; securing commitment to a course of action from individuals and groups.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
<tr>
<td><strong>Teamwork:</strong> Seeking and encouraging involvement of team members. Modeling and encouraging the behaviors that move the group to task completion. Supporting group accomplishment.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
<tr>
<td><strong>Sensitivity:</strong> Perceiving the needs and concerns of others; dealing tactfully with others in emotionally stressful situations or in conflict. Knowing what information to communicate and to whom. Relating to people of varying backgrounds.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESOLVING COMPLEX PROBLEMS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Judgment:</strong> Reaching logical conclusions and making high quality decisions based on available information. Giving priority and caution to significant issues. Seeking out relevant data, facts and impressions. Analyzing and interpreting complex information.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
<tr>
<td><strong>Results Orientation:</strong> Assuming responsibility. Recognizing when a decision is required. Taking prompt action as issues emerge. Resolving short-term issues while balancing them against long-term objectives.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
<tr>
<td><strong>Organizational Ability:</strong> Planning and scheduling one’s own and the work of others so that resources are used appropriately. Scheduling flow of activities; establishing procedures to monitor projects. Practicing time and task management; knowing what to delegate and to whom.</td>
<td></td>
</tr>
<tr>
<td>Derailed</td>
<td>Noticeable Problem Area</td>
</tr>
</tbody>
</table>

An Invitation to Participate in a Survey of School Leaders

You can help make a difference

In the national endeavor to reform education, there is no question of the importance of preparing quality principals. As preparation programs are developed across the nation, research is needed to recognize components that are strongly correlated with leadership competencies. This research adds data-based evidence to how the quality of an internship affects new and aspiring school administrators. You will be contributing to the development of higher-quality preparation programs for future school leaders.

We invite you to participate

To date, there are no other nationally administered performance assessments for new and aspiring school leaders other than NASSP's Selecting and Developing the 21st Century Principal. You are being contacted because of your participation in this assessment.

Confidentiality

Your contribution to this research is entirely confidential. If you volunteer for this study, you will be asked to complete a questionnaire asking for the results from your NASSP Assessment Center Skill Rating Overview and characteristics of your internship. You will have the option of skipping any question you prefer not to answer. No identifying information will be entered into the questionnaire. If requested, you will receive a copy of the findings.

We anticipate that the survey will take 20 minutes to complete. There will be no compensation for participating. Please use this link to access the survey:

https://survey.vt.edu/survey/entry.jsp?id=1150399078607

Questions about the study can be directed to these researchers:

**Patricia Gaudreau**
Doctoral Candidate, Educational Leadership & Policy Studies
Virginia Polytechnic Institute & State University
226 War Memorial Hall
Blacksburg, VA 24061
(540) 231-0969
gaudreau@vt.edu

**David J. Parks**
Professor, School of Education
Virginia Polytechnic Institute & State University
parks@vt.edu

Thank You!
APPENDIX D
CONTENT VALIDATION INSTRUMENT FOR THE QUESTIONNAIRE

Directions: Circle the number of the appropriate response.

Domains
Quality of internships for school leaders as related to:
(1) Engagement in internship (The level of involvement in the internship in terms of professional growth, sense of belonging, contributions, and support from the workplace)
(2) Institutional support for the internship (The number of internship hours and how they were achieved in terms of employment, release time, and compensation)
(3) Relevance of internship to school-level leadership (The degree to which the internship provided preparation for the job of principal in terms of assignments, planning, job skills, and theory-to-practice)
(4) Quality of field supervision (The quality of the mentor in terms of qualifications and interaction with the intern)

Association Ratings: 1 = very weak, 2 = weak, 3 = strong, 4 = very strong

Clarity Ratings: 1 = very unclear, delete; 2 = somewhat clear, revise; and 3 = clear, leave as written.

(For any items you rate as 1 or 2 for clarity or association, please write your suggestions for improvement directly on this page.)

<table>
<thead>
<tr>
<th>Questionnaire statements</th>
<th>Domain</th>
<th>Association</th>
<th>Clarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I completed assigned internship tasks that helped prepare me for administrative responsibilities.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>2. I could reach my site supervisor whenever I needed to.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Questionnaire statements</td>
<td>Domain</td>
<td>Association</td>
<td>Clarity</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>3. I felt I could discuss any question with my site supervisor.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>4. I knew what was expected of me during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>5. I met at least once a week with my site supervisor.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>6. To the best of my knowledge, my site supervisor was trained for the role.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>7. The integration of theory into practice was emphasized during the internship</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>8. The assignments I completed during my internship were relevant to the work of a principal.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>9. Someone talked to me about my progress during the internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>10. My internship hours took place during normal work hours.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>11. My supervisor, or someone at the internship site, seemed to care about me.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>12. My site supervisor was very aware and supportive of my internship requirements.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>13. My site supervisor helped me to reflect on my administrative practice.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>14. I enjoyed my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>15. My internship hours took place in the summer.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>16. Someone encouraged my development during the internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>17. My internship hours took place during non-teaching time.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Questionnaire statements</td>
<td>Domain</td>
<td>Association</td>
<td>Clarity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>18. My internship helped to prepare me for the Assessment Center.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>19. I had opportunities to learn and grow during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>20. My administrative internship was valuable in the development of my professional skills.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>21. I would give my site supervisor the highest possible quality rating.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>22. I was provided with substitutes during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>23. I was paid for my internship time.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>24. I was involved in planning my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>25. I was able to adjust my assigned work to address the needs I encountered while at the internship site.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>26. I trusted my site supervisor to help with any difficulties I had during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>27. I received the same pay during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>28. I looked forward to my internships.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>29. I received release time from my regular job during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>30. My site supervisor had enough administrative experience to guide me during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>31. My site supervisor demonstrated many of the competencies a principal needs to have.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>32. My internship was full time.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Questionnaire statements</td>
<td>Domain</td>
<td>Association</td>
<td>Clarity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>33. I worked more hours than were required during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>34. I received sabbatical leave during my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>35. I had the materials and equipment I needed for my internship.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>36. My internship helped me to better understand the responsibilities of a principal.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>37. My site supervisor helped me to establish and articulate goals for my development as an administrator.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
<tr>
<td>38. During the internship, I received recognition or praise for doing good work.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>
APPENDIX E
CONTENT VALIDATION DATA FOR THE MEASURES OF ENGAGEMENT IN INTERNSHIP, INSTITUTIONAL SUPPORT FOR THE INTERNSHIP, RELEVANCE OF INTERNSHIP TO THE JOB OF PRINCIPAL, AND QUALITY OF FIELD SUPERVISION (N=5)

<table>
<thead>
<tr>
<th>Item</th>
<th>Expected Domain</th>
<th>Placement</th>
<th>% Correct</th>
<th>Strength of Association</th>
<th>Clarity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Relevance</td>
<td>60</td>
<td>3.60</td>
<td>.547</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.00</td>
<td>1.00</td>
<td>2.40</td>
</tr>
<tr>
<td>3</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.60</td>
<td>.547</td>
<td>3.00</td>
</tr>
<tr>
<td>4</td>
<td>Engagement</td>
<td>40</td>
<td>3.20</td>
<td>.836</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.40</td>
<td>.894</td>
<td>2.80</td>
</tr>
<tr>
<td>6</td>
<td>Quality of field supervision</td>
<td>100</td>
<td>3.00</td>
<td>.000</td>
<td>2.60</td>
</tr>
<tr>
<td>7</td>
<td>Relevance</td>
<td>80</td>
<td>3.40</td>
<td>.547</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Relevance</td>
<td>100</td>
<td>4.00</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Quality of field supervision</td>
<td>20</td>
<td>3.00</td>
<td>1.22</td>
<td>2.80</td>
</tr>
<tr>
<td>Item</td>
<td>Expected Domain</td>
<td>% Correct Placement</td>
<td>Strength of Association</td>
<td>Clarity</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>-------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>10</td>
<td>Institutional support</td>
<td>60</td>
<td>2.60</td>
<td>1.14</td>
<td>2.00</td>
</tr>
<tr>
<td>11</td>
<td>Engagement</td>
<td>0</td>
<td>3.20</td>
<td>.837</td>
<td>2.20</td>
</tr>
<tr>
<td>12</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.80</td>
<td>.447</td>
<td>2.80</td>
</tr>
<tr>
<td>13</td>
<td>Quality of field supervision</td>
<td>100</td>
<td>3.20</td>
<td>1.30</td>
<td>3.0000</td>
</tr>
<tr>
<td>14</td>
<td>Engagement</td>
<td>100</td>
<td>3.20</td>
<td>.836</td>
<td>2.6000</td>
</tr>
<tr>
<td>15</td>
<td>Institutional support</td>
<td>60</td>
<td>3.00</td>
<td>.707</td>
<td>2.6000</td>
</tr>
<tr>
<td>16</td>
<td>Engagement</td>
<td>20</td>
<td>2.20</td>
<td>.447</td>
<td>1.8000</td>
</tr>
<tr>
<td>17</td>
<td>Institutional support</td>
<td>60</td>
<td>3.60</td>
<td>.894</td>
<td>2.6000</td>
</tr>
<tr>
<td>18</td>
<td>Relevance</td>
<td>100</td>
<td>2.80</td>
<td>.447</td>
<td>2.0000</td>
</tr>
<tr>
<td>19</td>
<td>Engagement</td>
<td>60</td>
<td>3.00</td>
<td>.000</td>
<td>2.6000</td>
</tr>
<tr>
<td>20</td>
<td>Relevance</td>
<td>80</td>
<td>3.80</td>
<td>.447</td>
<td>2.8000</td>
</tr>
<tr>
<td>21</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.60</td>
<td>.547</td>
<td>2.4000</td>
</tr>
<tr>
<td>22</td>
<td>Institutional support</td>
<td>100</td>
<td>3.60</td>
<td>.547</td>
<td>2.8000</td>
</tr>
<tr>
<td>23</td>
<td>Institutional support</td>
<td>100</td>
<td>3.40</td>
<td>.894</td>
<td>2.6000</td>
</tr>
<tr>
<td>24</td>
<td>Relevance</td>
<td>0</td>
<td>3.40</td>
<td>.547</td>
<td>3.0000</td>
</tr>
<tr>
<td>Item</td>
<td>Expected Domain</td>
<td>% Correct Placement</td>
<td>Strength of Association</td>
<td>Clarity</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>-------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>25</td>
<td>Relevance</td>
<td>0</td>
<td>3.400</td>
<td>.547</td>
<td>2.600</td>
</tr>
<tr>
<td>26</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.60</td>
<td>.547</td>
<td>3.000</td>
</tr>
<tr>
<td>27</td>
<td>Institutional support</td>
<td>100</td>
<td>2.60</td>
<td>1.34</td>
<td>1.600</td>
</tr>
<tr>
<td>28</td>
<td>Engagement</td>
<td>100</td>
<td>2.80</td>
<td>.836</td>
<td>2.400</td>
</tr>
<tr>
<td>29</td>
<td>Institutional support</td>
<td>100</td>
<td>3.20</td>
<td>.836</td>
<td>2.600</td>
</tr>
<tr>
<td>30</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.60</td>
<td>.94</td>
<td>2.800</td>
</tr>
<tr>
<td>31</td>
<td>Quality of field supervision</td>
<td>80</td>
<td>3.60</td>
<td>.94</td>
<td>2.800</td>
</tr>
<tr>
<td>32</td>
<td>Institutional support</td>
<td>40</td>
<td>3.00</td>
<td>.000</td>
<td>2.800</td>
</tr>
<tr>
<td>33</td>
<td>Engagement</td>
<td>100</td>
<td>3.20</td>
<td>.836</td>
<td>2.800</td>
</tr>
<tr>
<td>34</td>
<td>Institutional support</td>
<td>100</td>
<td>3.20</td>
<td>.836</td>
<td>2.600</td>
</tr>
<tr>
<td>35</td>
<td>Engagement</td>
<td>40</td>
<td>2.80</td>
<td>.836</td>
<td>2.600</td>
</tr>
<tr>
<td>36</td>
<td>Relevance</td>
<td>100</td>
<td>3.80</td>
<td>.447</td>
<td>3.000</td>
</tr>
<tr>
<td>37</td>
<td>Quality of field supervision</td>
<td>60</td>
<td>3.80</td>
<td>.447</td>
<td>3.000</td>
</tr>
<tr>
<td>38</td>
<td>Engagement</td>
<td>60</td>
<td>3.40</td>
<td>.547</td>
<td>2.600</td>
</tr>
</tbody>
</table>
March 8, 2006

Dear Colleagues,

You are invited to participate in a pilot study. This research adds data-based evidence to how the quality of internships affects new school administrators.

The Assessment Center you are about to participate in will provide objective evidence of the strengths and weaknesses that will impact your work as a principal or assistant principal. I will collect these same results from educators across the nation and compare them to selected internship characteristics.

Information about an individual’s internship experience and assessment results will be collected through an on-line questionnaire that has yet to be tested. Your help is needed to try out the 20-minute questionnaire and provide feedback to the researchers.

If you are willing to provide your email address, I will contact you with a link to the questionnaire for you to complete after you have received your assessment results. You will have the option of skipping any question you prefer not to answer. With your permission, I would like to follow up with a phone call to hear your comments about the process.

Your contribution to this research is entirely confidential. Information regarding participants will remain secure in a locked office and destroyed within one year of completing the study. If requested, you will receive a copy of the findings.

Your support means a great deal!

Patricia Gaudreau  
Doctoral Candidate, Educational Leadership & Policy Studies  
Virginia Polytechnic Institute & State University  
540 231-0669 office  
gaudreau@vt.edu

-----------------------------------------------

I am willing to pilot the questionnaire and provide my email address:

-----------------------------------------------

I am willing to be contacted by the researchers to discuss my experience with the questionnaire and provide my name and phone:

-----------------------------------------------
DATE: March 28, 2006

MEMORANDUM
TO: David J. Parks
Patricia Gaudreau
FROM: Carmen Green

IRB Exempt Approval: “The Effects of Engagement in an Internship on Principal Quality”, IRB # 06-197

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that the research falls within the exempt status. Approval is granted effective as of March 24, 2006.

As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in previously approved human subject research activities to the IRB, including changes to your study forms, procedures and investigators, regardless of how minor. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.

2. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

FWA0000572 (expires 7/20/07)

IRB # is IRB00000667.