JOEL
Journal of Organizational and Educational Leadership

Journal of Organizational & Educational Leadership

Volume 1 | Issue 2 Article 4

May 2016

Comparing the Effect of Two Internship Structures On Supervision Experience and Learning

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INTRODUCTION

In considering the factors that lead to successful schools, there are many variables to consider. The business of school is in fact a complex and interdependent system in which these variables, in varying degrees, influence each other and the academic outcomes of students. One variable of significant interest is the style of school leader.

In their meta-analysis, Robinson, Lloyd, and Rowe (2008) compared two types of school leaders. The first style of school leader studied were *transformational leaders* whose focus included teacher-centered issues such as vision, goal setting, fair and equitable staffing, and teacher autonomy (Hattie, 2015, p 27). The second style of school leader studied were *Instructional leaders* whose focus included student-centered issues such as impact on student learning, instructional issues, and conducting classroom observations. *Instructional leaders* also focused on professional development that enhanced student learning, communicated high academic standards, and created an overall school environment that was conducive to learning (Hattie, 2015, p 27). Robinson, Lloyd, and Rowe (2008) found student achievement was affected more by instructional leaders (overall effect size = .42) than transformational leaders (overall effect size = .11). Thus, school leaders who aim to influence student learning within their school should focus on developing their instructional leadership skills.

The evidence of the importance of instructional leadership and the necessity for recent school leadership graduates to possess these instructional leadership skills creates the need to evaluate how future school leaders are prepared for their role as instructional leaders. Current research has established that a full spectrum of instructional leadership skills must be taught and practiced in leadership preparation programs (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Robinson, Lloyd, & Row, 2008). However, in many leadership programs graduates continue to emerge with strongly developed managerial skills and only minimal exposure to instructional leadership skills. Of particular importance in shaping classroom practice, and as a result, overall student achievement is *instructional supervision*, a very specific element of

instructional leadership. *Instructional supervision* includes a cycle of systemic planning, observation, diagnosis, and renewed planning (DiPaola & Hoy, 2008). As future school leaders, educational leadership students need opportunities during their preparation program to develop and refine their supervision skills. In addition to the exposure of instructional supervision models during their coursework, accrediting organizations (e.g., the Council for the Accreditation of Educator Preparation—CAEP), the National Council for the Accreditation of Teacher Education—NCATE) put a high priority on administrative internships in which educational leadership students may practice different supervision models.

The purpose of this study was to examine two different models of internship and competitively evaluate their effectiveness in influencing interns' experience, beliefs, and knowledge of supervision. The research questions for this study were developed from the literature on supervision of instruction and internships in educational leadership preparation programs. This quasi-experimental study compared the internship experiences, beliefs, and knowledge of two groups of educational leadership students with different supervision assignments: The pre-service teachers group was assigned a pre-service teacher to supervise during the educational leadership internship. The in-service teachers group had an internship that did not include supervising a pre-service teacher; rather it involved supervising teachers at their school.

The following research questions were addressed during this study:

Does the internship structure affect the quality of supervision practiced in the internship?

Does the internship structure affect beliefs about supervision?

Does the internship structure affect knowledge of the supervision process?

REVIEW OF THE LITERATURE

In the area of instructional leadership, school leaders employee both indirect strategies and direct strategies in working with teachers to affect instruction and improve student achievement. Indirect instructional strategies may include establishing a positive learning

culture for students and staff, providing current textbooks and classroom resources, working with the staff to align curriculum to state standards, and scheduling time for the teachers to meet together in professional learning communities. The direct instructional strategies are ongoing processes to build capacity in teachers with the primary goal of improving instruction and student achievement (Pajak, 2000). School leaders must know and implement the most effective instructional supervision models to assist teachers in the process of improving instruction.

For aspiring school leaders, the opportunity to implement effective instructional supervision models is one possible outcome of a well-designed internship experience. Research shows that programs that address the skills needed in supervision during internships seem to better prepare their students for actual leadership positions (Browne-Ferrigno & Muth, 2006). The shift from teaching to supervising is substantial and this transformation of becoming an instructional supervisor requires a change in perspective and educational orientation. A critical feature in changing this orientation is the opportunity to participate in authentic supervision experiences (Browne-Ferrigno & Muth, 2006). A notable finding in regards to authentic supervision experiences is illustrated in this finding from Browne-Ferrigno and Muth (2006):

> The students who assumed positions as quasi-administrators or interns appeared to be more confident and goal orientated toward assuming the principalship than cohort peers who continued to work as teachers. Those engaged in administrative work linked content topics being studied in their coursework to real-world applications, and they often discussed how their mentors addressed problems of practice. They were able to contextualize what was being discussed and to link textbook learning to authentic practice. (p. 475)

The purpose of this study was to examine two different models of internship and competitively evaluate their effectiveness in influencing interns' experience, beliefs, and

knowledge of supervision. Both models of the studied internship aimed to give educational leadership students authentic experiences as instructional supervisors, but with very differently experienced levels of teachers.

Educational Leadership Program Context

The participants in this study were leadership students enrolled in a new educational leadership program that was designed in response to the criticisms leveled against leadership preparation programs (e.g., Levine, 2005). This program focused on instructional leadership, and situated learning in an integrated, problem-based curriculum. Thus, all participants in the study understood the importance of instructional leadership in improving instruction and influencing student learning. However, it is important to realize that the typical internship experience in leadership preparation programs provides only one model in instructional supervision. The interns usually serve their internship in their respective school and their responsibilities in instructional supervision experiences are limited to what their mentor principal will allow. Many teachers are reticent to have an intern observe their teaching and practice instructional supervision skills on them. Thus, even with the best intentions, interns may struggle to practice instruction supervision to the degree necessary to fully develop these skills.

This study was designed to give leadership interns a choice of different internship structures and different instructional supervision experiences. The data in the study (collected from two cohorts in two consecutive years) were used to evaluate the effectiveness of two different internship structures in influencing the interns' experience, beliefs, and knowledge of supervision.

This leadership preparation program required a two-semester internship experience for all interns. Interns participated in the internship after successfully completing eighteen credit hours of classes on the many roles of being a school leader. One third of the credit hours are focused on the role of instructional leadership with a specific emphasis and training in instructional supervision skills. The clinical supervision model was taught as the foundation of

instructional supervision and the leadership students were expected to practice this model with teachers in their respective schools during the class before their internship.

The internship requirements in this program were developed and aligned from the six standards in ISSLC. Interns were expected to participate in activities in each of the six standards. The instructional supervision expectation was taken from Standard 2. It states, "School administrators as educational leaders would need to develop a school culture and instructional program conducive to student learning and staff professional growth" (Council of Chief State School Officers, 2008). To fulfill this requirement of "developing an instructional program conducive to student learning" all the interns were expected to be in classrooms to practice the clinical supervision model with their peer teachers at their respective schools.

The teacher education program and the leadership preparation program at this university worked together to create additional supervision opportunities for leadership interns in a pilot project. The teacher education program hired leadership interns to supervise pre-service teachers in the elementary and secondary schools where the leadership interns worked. Interns were assigned at least one pre-service teacher during the year-long internship. The teacher education program provided training to the leadership interns on their expectations as supervisors. The leadership interns were required to implement several instructional supervision experiences with their assigned pre-service teachers. Interns were expected to use the three phases in the clinical supervision model: pre-observation conference; observation; and the post-observation conference in their instructional supervision of pre-service teachers. All the interns were given the opportunity to participate in the pilot and supervise pre-service teachers.

Instructional leaders must be able to supervise the instruction of new and veteran teachers. Walker and Slear (2011) surveyed 366 middle school teachers and found that the principal's supervision role of setting instructional expectations was the most critical for the new teachers and this supervision role diminished in effectiveness for experienced teachers. The

experienced teachers in the study preferred collaborative input from their supervisors and needed less direct supervision to improve instruction. According to Woolfolk Hoy (2000) pre-service teachers often are confident about their abilities until they actually start teaching in the classroom and then find that they need frequent supervision to improve their instruction. Thus, a crucial difference in the instructional supervision experience for the interns who participated in the pilot study was that interns in the pilot study supervised pre-service teachers rather than veteran teachers.

The purpose of this quasi-experimental study was to evaluate the effect of two different internship structures. One structure involved supervising pre-service teachers, while the other involved supervising only experienced in-service teachers. The interns supervising pre-service teachers will be referred to as the pre-service teachers group and those supervising the experienced in-service teachers will be referred to as the in-service teachers group. Again, it is important to note that interns in both groups were required to participate in instructional supervision.

METHODS

Participants

Participants were 30 graduate students from two cohorts enrolled in the educational leadership program at a Mountain West Regional university. All the participants were in the final year of the principal preparation program, and were in a leadership internship. Participants were assigned to either the pre-service teachers group (N = 13) or the in-service teachers group (N = 17). It is important to note that all the interns were interested in participating in the pre-service teachers group; however, only 13 interns were teaching at schools in which the university had placed pre-service teachers. Thus, it is not the case that those interns with greater interest in supervision (i.e., higher motivation to supervise) were in the pre-service teachers group. The pre-service teachers group included 9 males and 4 females, with 6

elementary teachers and 7 secondary teachers. The in-service teachers group included 10 males and 7 females, with 6 elementary teachers and 11 secondary teachers.

The teacher education office worked with the education leadership program to provide supervision opportunities for educational leadership interns. Interested interns were hired to supervise pre-service teachers in the elementary and secondary schools at their respective schools. Each intern was assigned 1-7 pre-service teachers. Seventeen interns were not assigned pre-service teachers (because no pre-service teachers were being placed by the university at their schools). All interns hired to supervise pre-service teachers received training from the teacher education office regarding expectations of supervisors.

It is important to note that interns in the in-service teachers group were responsible for scheduling supervision experiences with their mentor principal. These supervision experiences included informal observations of fellow teachers and going with the mentor principal when they were performing a formal observation for a summative performance evaluation.

Design

Group was an independent variable in this study. Time was also an independent variable—participants completed the instruments before the internship and then again after the internship. Thus, this was a 2 (Group: pre-service teachers group versus in-service teachers group) x 2 (Time: before versus after) design. The dependent variables included self-reported experience with supervision, beliefs about the importance of supervision, and knowledge of supervision.

Instruments

This study evaluated the effect of the different internship structures on self-reported use of different aspects of supervision during the internship, beliefs about the importance of supervision, and knowledge of the clinical supervision model.

Measuring Aspect of the Clinical Supervision Model. An existing instrument was not available that reflected the content and model of supervision taught in the leadership

preparation program (i.e., Canizaro, 1985; Page, 1994; Sirois & Gable, 1977); therefore, an instrument was created with three scales—one for each component of the supervision process: pre-observation, observation, and post-observation of the clinical supervision model (Cogan, 1973). For the quality of implementation of supervision instrument, participants rated how frequently they had implemented the supervision item in the three scales on a 5-point scale, from 1 (I did not do this) to 5 (I always do this). For the beliefs about the importance of supervision instrument, participants rated how important they believed each item to be in the three scales on a 5-point scale, from 1 (Slightly important) to 5 (Highly important). The items used for these two instruments are briefly described below.

Pre-Observation Scale. This scale was created to measure pre-observation components, and was organized into the following six categories: general (e.g., I know the components of the pre-observation conference); learning objectives (e.g., I have a clear understanding of the learning objectives from the pre-observation conference); resources (e.g., I know the materials, technology, and resources the teacher is planning on using for the lesson); classroom environment (e.g., I know the classroom management system the teacher will use); assessments (e.g., I know what type of assessments and artifacts the teacher will use to determine whether the objectives have been met for the lesson); and focus of observation (e.g., I inquire about the area of focus the teacher wants observed in this specific lesson).

Observation Scale. This scale was created to measure observation components, and was organized into the following five categories: general (e.g., I know the components of the observation phase of supervision); general data collection (e.g., I collect data that are objective and quantifiable during the observation); instructional data collection (e.g., I collect data that addresses the objective of the lesson); student engagement data collection (e.g., I record teacher student interactions to look for patterns of involvement and noninvolvement from students during the lesson); and resources used in lesson (e.g., I identify the resources, materials, and technologies used in the lesson).

Post-Observation Scale. This scale was created to measure post-observation components, and was organized into the following four categories: general (e.g., I have the post-observation within 48 hours of the observation); analyze the observation (e.g., I analyze the data on the specific area of focus that the teacher identified in the pre-observation); plan for conference (e.g., I have identified possible strategies for ongoing growth and professional development opportunities for the teacher); and feedback in the conference (e.g., I facilitate the teacher's self-analysis and reflection based on data).

To establish face validity, after items were created, they were sent to four practicing principals with reputations as instructional leaders for input based on their current experiences in instructional supervision. The principals were instructed to review and compare each item in the survey instrument with their actual instructional supervision experiences. Suggested modifications from the principals were incorporated in the final instrument. These items were used for assessing quality of implementation of supervision and beliefs about importance on supervision.

The internal-consistency was also evaluated for the scales. In the quality of supervision implementation instrument, the pre-observation scale contained 17 items (Cronbach's alpha = .88), the observation scale contained 17 items (Cronbach's alpha = .86), and the post-observation scale contained 18 items (Cronbach's alpha = .88), for a total of 52 items (Cronbach's alpha = .92). Thus, all scales had good reliability. In the beliefs about importance of supervision instrument, the pre-observation scale contained 17 items (Cronbach's alpha = .75), the observation scale contained 17 items (Cronbach's alpha = .85), and the post-observation scale contained 18 items (Cronbach's alpha = .72), for a total of 52 items (Cronbach's alpha = .85). Thus, all scales had acceptable to good reliability.

Knowledge of the clinical supervision model. In addition to completing the aforementioned instruments, interns were asked to list every component they could remember in the three components of the clinical supervision model (i.e., pre-observation, observation, and

post-observation). This information was gathered at the conclusion of their internship experience.

Procedures

The instruments to measure quality of implementation of supervision and beliefs about importance on supervision were distributed to all interns in the beginning of their internship experience and again at the end of the internship. As noted above, for the quality of implementation of supervision instrument, participants were asked to rate the frequency of implementation of each component in the supervision process. Participants also reported the number of supervision experiences in which they had participated at this point in their internship. The specific directions in the instrument given to the participants were:

> The supervision of teacher instruction is challenging for administrators and administrative interns. Supervision has three phases: pre-observation, observation, and post-observation. I have included components from each phase in this survey.
>
> In your internship thus far, how many supervision experiences have you had? Think about your most recent supervision experiences. Select the rating that most reflects how frequently you implemented each component.

Participants, completing the survey at the beginning of their internship experience, were instructed to think of their supervision experiences that had occurred prior to their internship. All participants had been required to practice the supervision model during their required course on instructional supervision.

When completing the beliefs about importance of supervision instrument, participants were asked to rate how important they believed each component was in the supervision process. Participants reflected and rated how important each component in the supervision model was to them. The specific directions in the first survey given to the participants were:

> The supervision of teacher instruction is challenging for administrators and administrative interns. Supervision has three phases: pre-observation, observation,

and post-observation. I have included components from each phase in this survey. I need you to rate how important you believe each component is to your supervision of teacher instruction. Select the rating that reflects how important you see each component.

The knowledge of the clinical supervision model measure was only administered at the conclusion of the internship year. Interns were asked to list the components that they knew in each of the three phases of clinical supervision. The final grades for each intern from the spring supervision class were used to control for initial differences in knowledge (as a covariate in the analysis of covariance).

RESULTS

This study compared the internship experiences, beliefs, and knowledge of two groups of educational leadership students with different supervision assignments: The pre-service teachers group was assigned a pre-service teacher to supervise during the internship. The in-service teachers group had an internship that included supervising in-service teachers.

Quality of Implementation of Supervision

The quality of implementation of supervision instrument included three scales, one for each component of the clinical supervision model: pre-observation; observation; and post-observation. An average score was computed across the items in each scale for each participant; therefore, the data can be interpreted on the same 5-point scale as the individual items, from 1 (I did not do this) to 5 (I always do this). Scores for each scale were analyzed separately using a 2 (pre-service teachers versus in-service teachers) x 2 (before versus after) analysis of variance (ANOVA). The mean frequency of for each scale is reported in Table 1.

Pre-observation scale. The 2 x 2 ANOVA revealed a main effect for Time, $F(1,28) = 8.19$, $MSe = .53$, $p = .008$, *partial eta squared* = .23. There was not a main effect for Group, $F(1,28) = .21$, $MSe = .60$ $p = .65$. The interaction was not significant, $F(1,28) = .17$, $MSe = .53$,

p = .68. As seen in Table 1, the main effect for time was the result of both groups reporting more use of pre-observation practices from before to after.

Observation scale. The 2 x 2 ANOVA revealed a main effect for Time, *F*(1,28) = 9.13, *MSe* = .36, *p* = .005, *partial eta squared* = .25. There was not a main effect for Group, *F*(1,28) = 1.03, *MSe* = .73 *p* = .32. The interaction was also significant, *F*(1,28) = 4.77, *MSe* = .36, *p* = .04, *partial eta squared* = .15. To better understand the significant interaction, follow-up tests of simple effects were conducted.

The tests of simple effects showed that the groups differed before the internship, *F*(1,28) = 5.64, *MSe* = .42, *p* = .03. As seen in Table 1, the frequency of reported observation was less for the pre-service teachers group than for the in-service teachers group. In contrast, by the end of the internship (after), there were no differences in reported quality of observation practices, *F*(1,28) = 0.15, *MSe* = .67, *p* = .71. Comparing the quality of reported observation from before to after showed a significant increase for the pre-service teachers group, *t*(12) = 4.21, *p* = .001; whereas there was no difference from before to after for the in-service teachers group, *t*(16) = 0.52, *p* = .61.

Post-Observation scale. The 2 x 2 ANOVA revealed a marginally significant main effect for Time, *F*(1,28) = 3.45, *MSe* = .57, *p* = .07, *partial eta squared* = .11. There was not a main effect for Group, *F*(1,28) = 0.32, *MSe* = .35 *p* = .57. The interaction was also significant, *F*(1,28) = 4.49, *MSe* = .57, *p* = .04, *partial eta squared* = .14. To better understand the significant interaction, follow-up tests of simple effects were conducted.

The tests of simple effects showed that the groups differed before the internship, *F*(1,28) = 4.45, *MSe* = .42, *p* = .04. As seen in Table 1, the quality of reported observation was less for the pre-service teachers group than for the in-service teachers group. In contrast, by the end of the internship (after), there were no differences in reported quality of post-observation practices, *F*(1,28) = 1.61, *MSe* = .50, *p* = .22. Comparing the quality of reported post-observation from before to after showed a significant increase for the pre-service teachers group, *t*(12) = 3.76, *p* =

.002; whereas there was no difference from before to after for the in-service teachers group, $t(16) = 0.14$, $p = .89$.

These findings are in part consistent with the hypothesis that internship structure would affect the quality of implementation of supervision practice. That is, performance on the observation and post-observation scales appears to have benefitted from the pre-service teachers internship compared to the in-service teachers internship. However, performance on the pre-observation scale was not affected by the internship structure.

Beliefs about the Importance of Supervision Practices

The beliefs about the importance of supervision instrument included three scales that measured each component of the clinical supervision model: pre-observation, observation, and post-observation. For each scale, an average scale score was computed across the items for each participant. Therefore, the mean has the same 5-point scale as the individual items: 1 (Slightly important) to 5 (Highly important). Scores for each scale were analyzed separately using a 2 (pre-service teachers versus in-service teachers) x 2 (before versus after) ANOVA. The mean of for each scale is reported in Table 2.

Pre-observation scale. The 2 x 2 ANOVA revealed there was not a main effect for Time, $F(1,28) = 2.73$, $MSe = .17$, $p = .11$. There was not a main effect for Group, $F(1,28) = .72$, $MSe = .36$ $p = .40$. The interaction was also not significant, $F(1,28) = 1.67$, $MSe = .17$, $p = .21$. As seen in Table 2, the internship structure had little effect on beliefs about pre-observation practice.

Observation scale. The 2 x 2 ANOVA revealed there was not a main effect for Time, $F(1,28) = 1.84$, $MSe = .10$, $p = .19$. There was not a main effect for Group, $F(1,28) = 1.34$, $MSe = .56$ $p = .26$. The interaction was also not significant, $F(1,28) = 2.87$, $MSe = .10$, $p = .10$. Again the internship structure had little effect on beliefs about observation practice.

Post-Observation scale. The 2 x 2 ANOVA revealed there was not a main effect for Time, $F(1,28) = 0.72$, $MSe = .07$, $p = .41$. There was not a main effect for Group, $F(1,28) =$

0.47, *MSe* = .21 *p* = .50. The interaction was not significant, *F*(1,28) = 0.08, *MSe* = .08, *p* = .77. As with the other scales, the internship structure had little effect on beliefs about post-observation practice.

These findings are not consistent with the hypothesis that internship structure would affect beliefs about the importance of supervision practice. That is, internship structure did not affect performance on any of the belief scales.

Knowledge of Supervision Practices

Knowledge of the clinical supervision model was assessed by asking interns to list different aspects of the components of pre-observation, observation, and post-observation. Performance was compared across the two groups separately for each of the different components of the clinical supervision model. Possible differences in prior knowledge of the clinical supervision model were controlled for by using class performance for the module in which supervision was taught as a covariate. That is, a one-way analysis of covariance (ANCOVA) was conducted. It is important to note that knowledge scores were only available for the first group of interns (N = 8 for the pre-service teachers group and N = 10 for the in-service teachers group). Mean test performance (adjusted for initial differences in prior knowledge), by group, for each component, is presented in Table 3.

The ANCOVA showed that knowledge of the pre-observation component of the clinical supervision model was significantly greater for the pre-service teachers group than for the in-service teachers group, *F*(1,15) = 6.71, *MSe* = 3.16, *p* = .02, partial eta squared = .31; whereas, knowledge of the observation component did not differ across groups, *F*(1,15) = 2.37, *MSe* = 3.26, *p* = .14; knowledge of the post-observation component was marginally significantly greater for the pre-service teachers group than for the in-service teachers group, *F*(1,15) = 3.95, *MSe* = 3.48, *p* = .07, partial eta squared = .21.

These results are partially consistent with the hypothesis that internship structure would affect knowledge of the clinical supervision model. The internship structure appears to have

affected knowledge of the pre-observation component of the model, and to a lesser degree knowledge of the post-observation model. However, internship structure did not affect knowledge of the observation component.

DISCUSSION

This quasi-experimental study compared the internship experiences, beliefs, and knowledge of two groups of educational leadership students with different supervision assignments: The pre-service teachers group was assigned a pre-service teacher to supervise during the educational leadership internship. The in-service teachers group had an internship that did not include supervising a pre-service teacher; rather it involved supervising teachers at their school.

Quality of Instructional Supervision

The first research question addressed in this study was: Does the internship structure affect the quality of supervision practiced in the internship? This question is important because leadership interns need to learn and have practice with the instructional supervision process, which involves a cycle of planning, observing, assessing, modifying and renewed planning (DiPaola & Hoy, 2008). Empirical evidence suggests was collected that demonstrated if the internship structure affected the quality of practice leadership interns have in the instructional supervision process. Leadership Interns who participated with the pre-service teachers demonstrated an improved quality of both the observation phase and the post-observation phase of the instructional supervision process.

The lack of difference between the groups in the pre-observation scale may be explained by the differences in the three phases of the clinical supervision model. The pre-observation phase is a conference the supervisor has with a teacher before the actual classroom observation. Even though this is an important phase, it is also the one part of the clinical supervision model that may be compromised due to the additional time needed to meet and discuss a lesson.

Beliefs about the Importance of Instructional Supervision

A second research question for this study was: Does the internship structure affect beliefs about supervision? An investigation of how internship structure affects beliefs about supervision is important because previous research supports the importance of instructional supervision and it suggests that a school leader's main responsibility is to work with teachers on improving classroom instruction (Acheson & Gall, 2010; Stein & Spillane, 2003). School administrator's beliefs about this important component matter because it will influence their overall instructional supervision practices.

Internship structure did not affect beliefs about the importance of aspects of the clinical supervision process. Since both groups had the same information and understanding on the importance of instructional supervision, it may not be a surprise to see that the pre-service teachers group and the in-service teachers group believed instructional supervision was important. At the onset, each group appeared to have had supervision experiences during their coursework that reinforced their beliefs on the importance of instructional supervision. Thus, although on-the-job experience can change a person's perceptions of what is important, the internship did not change interns' beliefs about the importance of supervision. Interns in both groups entered the internship believing supervision is important and completed the internship holding similar beliefs.

Knowledge of Instructional Supervision Process

A final research question in this study was: Does the internship structure affect knowledge of the supervision process? Similar research by Brown-Ferrigno and Muth (2006) demonstrated that internships affect learning progress, but it did not specifically address if the knowledge and use of instructional supervision were affected. This study showed the internship structure affected knowledge of instructional supervision.

Knowledge of the pre-observation and post-observation components of the clinical supervision model were significantly greater for the pre-service teachers group than for in-

service teachers group (although only marginally so for the post-observation scale). The pre-observation results may suggest that the supervision of pre-service teachers requires an additional emphasis in having a thorough pre-observation conference before the observation. The lack of difference on the observation scale reflects that this specific instructional supervision experience for the interns may have been similar, or at least the difference in supervision experience did not affect knowledge of the observation process. In the findings from the first research question it was noted that the pre-service group did not more frequent use of pre-observation activities, but they did have greater knowledge of this aspect of the clinical supervision process. One explanation for this could be that the pre-service leadership interns gained valuable knowledge about how to lead pre-conferences and how to make those conversations meaningful, but did not get to practice their new knowledge enough to improve their performance.

These findings suggest several implications for theory, research, and practice. One consideration in relationship to theory is the connection between the leadership interns' experiences and what Hargreaves and Fullan (2012) label 'professional capital' or the critical elements that create high quality and high performance in a field. Professional capital is developed as a result of three specific kinds of capital: human, social, and decisional. Human capital is about individual talent and possessing the requisite knowledge and skills. According to Hargreaves and Fullan (2012), "Social capital refers to how the quantity and quality of interactions and social relationships among people affects their access to knowledge and information…". Decisional capital is the ability of professionals to make discretionary judgments through experience, practice, and reflection. In the area of human capital, both groups of leadership interns were provided the requisite knowledge and skills to successfully implement the clinical supervision model and were able to develop their individual talent through practicing the process. One idea present in social capital is the finding that groups with purpose are likely to learn more than groups who lack purpose. In the pre-service teachers group, the leadership

interns may have felt more purpose to their work as they were helping influence and mold novice teachers. The in-service teachers group may have been missing this purpose-filled experience because their observations were in addition to the evaluating administrator and not critical for the teacher's growth.

The final component of professional capital, decisional capital, represents the greatest possible differences for the leadership intern groups. Decisional capital is comprised of skills that develop by engaging in experience, practice, and reflection within situations where there are few fixed rules. The pre-service leadership interns were likely placed in multiple situations within the observation and post-observation process where there were few fixed rules, but flexibility in how evidence was collected and interpreted. The pre-service leadership interns were responsible for providing observation feedback to novice teachers, who by the nature and amount of their experiences, are more likely to have instructional issues that need addressed by the observer. One theoretical conclusion that could be drawn is that the pre-service leadership interns had more opportunity to develop their decisional capital skills and thus show greater growth in their professional capital.

Further areas for research emerged as a result of this study. One purpose of the current study was to build upon the existing research on preparing school leaders through internships in instructional supervision and to encourage additional research. The current study was the first step in examining how different internship structures affect the experience, beliefs, and knowledge of aspiring school leaders. It provided empirical evidence that the internship can be structured to support the goals of a program. The study should be done at other sites to attempt to replicate these findings.

The focus of this study was on the effects of the internship on aspiring school leaders. Additional research should focus on the effects of this kind of internship on pre-service teachers. Collecting data from pre-service teachers could provide valuable information for the teacher education program as well as the leadership preparation program that produce the supervisors.

The data in the current study suggests that the internship structure that assigned pre-service teachers to interns reinforced the leadership preparation program's specific objective that interns be skilled and knowledgeable in instructional supervision. Additional objectives could be identified in a leadership preparation program and internship structures could be modified to achieve the program's objective. For instance, if the objective was that interns needed to be highly skilled in building professional learning communities, then the internship structure could be modified to further this goal. Regardless of the objective, designing a study and gathering data to examine the effects of the different internships is crucial to the future of educational preparation programs.

Additionally, these results support the previous research by Browne-Ferrigno and Muth (2006) and Lave and Wegner (1991) that demonstrated how internships affect the understanding of a practice. Browne-Ferrigno and Muth (2006) showed that the knowledge of classroom instruction increased when leadership interns participated in authentic learning experiences. Interns in both groups had authentic experiences, but the pre-service teachers group may have had more supervision experience, which may have increased their knowledge of the supervision process. Further research studies should be conducted that explore the nuances of authentic experiences and methods for increasing the authenticity of internship to better prepare educational leaders.

Implications for the area of practice include possibilities for supporting potential administrator's growth as instructional supervisors and supporting novice teacher's growth through additional instructional supervision experiences. A school system could design a system to support the growth of potential administrators by providing them opportunities to engage in instructional supervision practice with novice teachers in the same schools. The potential administrators could be staff members who have obtained the qualifications to become a school leader, but have not yet made the transition. These potential administrators could be provide instructional supervision to the novice teachers under the guidance of the building

principal. The novice teachers would benefit from the additional instructional supervision cycles and the potential administrator could further develop their skills in the pre-conference, observation, and post-conference phase of the process.

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Table 1. Mean Frequency of Quality of Implementation of Supervision Scales by Group and Time

Group	Time	
	Before	After
Pre-observation Scale		
Pre-service Teachers Group	2.98 (.33)	3.60 (.17)
In-service Teachers Group	2.96 (.22)	3.43 (.19)
Observation Scale		
Pre-service Teachers Group	3.00 (.16)	3.82 (.20)
In-service Teachers Group	3.57 (.18)	3.70 (.23)
Post-observation Scale		
Pre-service Teachers Group	3.50 (.16)	4.28 (.17)
In-service Teachers Group	4.00 (.18)	3.95 (.20)

Note. The standard error of the mean is in parentheses.

Table 2. Mean Beliefs about the Importance of Supervision Scales by Group and Time

Group	Time	
	Before	After
Pre-observation Scale		
Pre-service Teachers Group	3.24 (.12)	3.55 (.16)
In-service Teachers Group	3.51 (.11)	3.54 (.14)
Observation Scale		
Pre-service Teachers Group	3.65 (.14)	3.90 (.17)
In-service Teachers Group	3.56 (.13)	3.53 (.15)
Post-observation Scale		
Pre-service Teachers Group	4.15 (.09)	4.19 (.11)
In-service Teachers Group	4.05 (.08)	4.13 (.10)

Note. The standard error of the mean is in parentheses.

Table 3. Adjusted Mean Knowledge of Supervision by Group

Group	Mean Knowledge
Pre-observation Scale	
Pre-service Teachers Group	6.60 (.63)
In-service Teachers Group	4.42 (.56)
Observation Scale	
Pre-service Teachers Group	6.07 (.64)
In-service Teachers Group	4.75 (.57)
Post-Observation	
Pre-service Teachers Group	6.59 (.66)
In-service Teachers Group	4.83 (.59)

Note. The means are adjusted means—controlling for differences in prior knowledge. The number in parentheses is the standard error of the mean.