

The Impact of Isolation on the Job Satisfaction of New Principals

ABSTRACT: Professional isolation has hampered the quality of the work experience for employees inside and outside public education for decades. This study explores the role that isolation plays in predicting the quality of the work experience among new principals. The analysis tests whether isolation serves as a mediator in the relationship between factors that are known to affect the quality of work life of principals (social support; role ambiguity, role conflict, and role overload; and participation in a structured coaching relationship) and the job satisfaction of new principals. Regression analysis shows that isolation fully mediates the relationship between social support and job satisfaction and partially mediates the relationship between role ambiguity and job satisfaction.

In recent years, many organizations have paid greater attention to professional isolation and the impact that this factor has on the quality of the employee's work experience (e.g., Brook, Sawyer, & Rimm-Kaufman, 2007; Bunnell, 2006). Public schools have followed this trend by taking measures to reduce isolation among teachers (e.g., Cookson, 2005; Garmston, 2007). Both the existing literature and the practices of school districts clearly associate better outcomes with less teacher isolation (e.g., DuFour & Eaker, 1998; Fullan, 2001; McGrail, 2007; Schlechte, Yssel, & Merbler, 2005). In contrast, less attention has been paid to the impact of isolation on principals. Direct treatment of the subject can be found in only a handful of books and professional journal articles (Beaudoin & Taylor, 2004; Norton, 2003; Robbins & Alvey, 2003; Rooney, 2000), which have a tendency to not only frame isolation primarily as an outcome that reflects the quality of the principal's work environment but also make recommendations based

Address correspondence to Scott C. Bauer, PhD, Education Leadership, George Mason University, 4400 University Drive MS4C2, Fairfax, VA 22030. E-mail: sbauer1@gmu.edu.

almost solely on the conclusions of research on teacher isolation (e.g., Beaudoin & Taylor, 2004; Rooney, 2000). The small body of existing literature on principal isolation lacks, for the most part, any direct study of this issue using a systematic research methodology (Beaudoin & Taylor, 2004; Norton, 2003; Painter, 2000; Zoul & Link, 2007). The systematic research studies that do directly address the topic of principal isolation have either assumed it as a negative factor in the life of the principal (e.g., Howard & Mallory, 2008) or only generally established its relationship with principals' perceptions of their own effectiveness (e.g., Dussault & Thibodeau, 1997).

The evolving role of the principal has garnered increased attention from a variety of groups, ranging from parents to policymakers, as it has changed over the years from that of a bureaucrat to an instructional leader who takes responsibility for every facet of the school program (Cuban, 1988; Kochan, Jackson & Duke, 1999). These role changes may accentuate the impact of isolation on the principal, going well beyond anything suggested in the literature on teacher isolation. For instance, the focus on "distributed leadership" and "professional learning communities" emphasizes principals' fostering of professional growth in others through frequent interaction, appropriate task delegation, and collaboration as leadership strategies that improve the overall performance of staff and students (e.g., Camburn, Rowan, & Taylor, 2003; Elmore, 2000; Gronn, 2000, 2003; Spillane, Halverson, & Diamond, 2001). A recent meta-analysis conducted by Robinson, Lloyd, and Rowe (2008) shows that five instructional leadership behaviors have a potent impact on students' learning, including promoting and participating in teacher learning. If the contemporary role of an effective principal involves more numerous and varied social interactions, the degree to which principals feel separated from this enhanced interaction may exacerbate feelings of isolation and may thus have a severe impact on principals' abilities to serve as instructional leaders. Job satisfaction is likely to diminish when principal self-perception of effectiveness is compromised by isolation.

PURPOSE

This study has three purposes: (1) advancing scholarship on the topic of isolation by examining the manner in which it directly predicts job satisfaction for new principals; (2) testing the extent to which isolation mediates the impact of antecedent predictors of the principal's work experience (e.g., coaching, role ambiguity, role overload, role conflict, and social support) on job satisfaction; and (3) establishing, through systematic analysis,

actionable information about the relationship between isolation and the quality of new principals' work experiences. The direction of this article is consistent with researchers and policymakers alike who have paid greater attention in recent years to the increasing number of new principals joining the ranks of school leaders and to the need to support this growing cross section of the public education community (Casavant & Cherkowski, 2001; Daresh, 2004; Hansford & Ehrich, 2006).

SIGNIFICANCE

There are two complementary fears about new principals' transition from teaching into administration: that they will become overwhelmed because of job overload (Howard & Mallory, 2008) and that talented prospective leaders will not apply for such difficult jobs (Mercer, 1996). Focusing on new principals for this work sheds greater light on the needs of this group and may provide a foundation for studying isolation and its impact on the principal over the course of his or her entire career. Although Conley, Shaw, and Glasman (2007) studied the relationships among role stress, relationships to coworkers, and satisfaction of school principals and assistant principals, the relationship between isolation and principal job satisfaction remains unclear.

As we discuss here, there is little explicit theory dealing with how isolation influences the quality of school leaders' work lives, and work that has been done tends to treat isolation as an outcome. But as Conley and Woosley (2000) note, recent research tends to emphasize the fact that the relationships among variables associated with the design of leaders' work and outcomes such as job satisfaction are unlikely to be "simple and direct" (p. 181) but rather mediated by factors associated with the work context. We hypothesize that principal isolation is more than an outcome of the work environment; it influences how principals, particularly new principals, process and respond to factors in their work environment. Consequently, we position isolation as a factor that acts in concert with other variables to affect the quality of principals' work experience, and we test a model to determine if isolation acts as a mediator between the independent variables described here and new principals' satisfaction with their job. This work thus extends the sparse literature on principal isolation by explaining its relationship to job satisfaction and enhancing previous models about how specific independent variables work together through isolation as a mediating factor to contribute to job satisfaction.

In addition to contributions to what is known about new principal isolation, this study has meaning for practitioners. School districts may be aware of factors such as isolation that weaken the performance of new principals,

but they may not be adept at addressing it. To the extent that we can identify factors that contribute to isolation, we will be able to highlight for those who supervise principals one or more means of improving their job satisfaction. In the case of well-performing principals, this means keeping them on the job longer and enhancing their motivation to continue.

RESEARCH QUESTIONS

The research questions for this study focus on investigating the predictive relationship among measures relating to the work experience of new principals, reported levels of isolation, and the job satisfaction they experience. Specifically, we wish to learn whether isolation serves as a mediating factor between influences on job satisfaction and job satisfaction itself. We employ a three-step analytic process (Baron & Kenny, 1986) informed by the following questions:

Research Question 1: What part do role ambiguity, role overload, role conflict, social support, and participation in a formal coaching program play in predicting new principals' sense of isolation?

Research Question 2: What part do role ambiguity, role overload, role conflict, social support, and participation in a formal coaching program play in predicting new principal's perceptions related to job satisfaction?

Research Question 3: Is the influence of the independent variables of role ambiguity, role overload, role conflict, social support, and participation in a formal coaching program on job satisfaction mediated through the independent variable of perceived isolation?

The research questions presented here are informed by the current literature on isolation and a conceptual framework that we have developed to show the dynamics among the variables we have named and further specify. The conceptual framework follows our discussion of the literature supporting our articulation of principal isolation as being influenced by important job characteristics.

REVIEW OF LITERATURE

The existing literature supports the use of role ambiguity, role conflict, role overload, social support, and participation in a coaching program as predictors of the quality of a new principal's work experience. Our hypothesis that isolation serves as a mediator of the relationship between these predictors and the outcome of job satisfaction is supported theoretically by the relevant literature on isolation and the other study variables.

Today, there is very little debate about the fact that isolation has a negative impact on the quality of the work experience of teachers (Cookson, 2005; Garmston, 2007; Hord, 2007; Leithwood, 2006; Schlechte et al., 2005). The literature shows a long history of isolation, stemming primarily from the nature of classrooms and the manner in which they are spatially grouped throughout school buildings (Dreeben, 1973; Glickman, Gordon, & Ross-Gordon, 2004). Teacher isolation—and, by analogy, principal isolation—functions as a complicated variable that influences job satisfaction and is influenced by workplace characteristics.

PRINCIPAL ISOLATION

Isolation has to do with the principal's sense of feeling alone at work. It is less a structural reality than an emotional response to one's experiences as a school leader. Professional isolation is embedded in the legacy of how the principalship developed. The administrative demands of schooling have changed drastically since the days of the one-room schoolhouse. Schools have moved from having no principal to being loosely led by "principal teachers" to having principals that must take full responsibility for all administrative and instructional imperatives of complex organizations (Cuban, 1988). The trend that remains common through all changes in the principalship is the principals' tendency to have sole responsibility for school outcomes and the strong possibility that principals will make many of their key decisions in isolation.

Much of this remains speculative, however, because the literature on the topic of principal isolation continues to be sparse (Beaudoin & Taylor, 2004; Cookson, 2005; Garmston, 2007; Hord, 2007; McGrail, 2007; Robbins & Alvey, 2003; Rooney, 2000; Schlechte et al., 2005). Howard and Mallory's (2008) work supports the inclusion of isolation as a variable that operates in concert with the stress created by principal job expectations in the form of role ambiguity, role overload, and role conflict. Dussault and Thibodeau's (1997) research extends the examination of isolation as a variable that affects outcomes of the quality of the work experience, such as job satisfaction. A more recent study conducted by Izgar (2009) shows that there is a statistical relationship between measures of principal loneliness and depression.

ROLE AMBIGUITY, CONFLICT, AND OVERLOAD

Role ambiguity, conflict, and overload function as organizational attributes that contribute to outcomes reflecting the quality of the work

experience for professionals in a variety of career sectors (Bunnell, 2006; Conley, Muncey, & You, 2006; Leithwood, 2006; Wong, DeSanctis, & Staudenmayer, 2007). These variables also serve as important indicators of the organizational design of schools and, we believe, have particular relevance for the study of new principals. Duke's (1988) research suggests that the relationship between principals' sense of their role and outcomes such as job satisfaction may be complex: On the one hand, participants in his study "appreciated the diversity of tasks, the numerous opportunities to solve complex problems, and the chance to learn more about their own abilities and beliefs" (p. 309); on the other, the sheer variety of tasks was perceived as challenging and fatiguing, and participants expressed considerable confusion about their role. Today, demands on principals to perform as instructional leaders make their work more complex and lead to a much greater likelihood that they will experience role ambiguity or overload on a regular basis, particularly when new to the job (Norton, 2003). Previous studies have shown that role conflict (Eckman, 2004) and ambiguity (Graham & Messner, 1998) affect principals' job satisfaction, and overload is reported to be a particularly potent predictor of job satisfaction for teachers (Leithwood, 2006) and school administrators (Vadella & Willower, 1990). Role ambiguity, conflict, and overload, we hypothesize, are important negative influences on new principals' job satisfaction.

SOCIAL SUPPORT

Research about teachers and professionals in other fields shows that the creation of informal social networks in the workplace that provide support mechanisms (e.g., reassurance of worth and guidance) can reduce stress for individuals who work in contexts and settings that tend to isolate employees (Brook et al., 2007; Marshall, Michaels, & Mulki, 2007; Penn et al., 2005; Taylor & Lee, 2005). Social support in this study represents the extent to which new principals experience guidance and receive resources from other professionals within the work environment. This kind of social support may come from informal networks and formal programs established for the express purpose of helping new principals adjust to the demands of their jobs.

Social support consistently appears in research as an element that improves the quality of the work experience for employees by enhancing the effect of positive organizational and psychological factors on the job and reducing the impact of negative ones (Brook et al., 2007; Marshall et al., 2007). However, it is not a foregone conclusion that social support efforts reduce isolation. Rather, the effect on isolation depends on two factors: first, the nature of the support itself, which could be structured and

formal, less structured and informal, or a combination of the two; second, how social support is perceived and received by the new principal. In the context of this study, *social support* refers primarily to the mechanisms or opportunities in place to promote a sense of connectedness; isolation, in contrast, relates to an emotional or affective state (i.e., feelings of loneliness or connectedness). The existing evidence—coupled with the lack of guidance about the influence these two variables have on specific work outcomes, such as job satisfaction—supports the concept of analyzing social support as a separate and distinct variable from professional isolation and as a predictor of work outcomes for principals.

COACHING

Coaching, in this study, represents the formal structures that an employer puts into place to ensure that an individual has the skills needed to be productive. Employers use coaching programs to reduce negative factors such as job dissatisfaction in the work environment and to improve employee retention (Herrington, Herrington, Kervin, & Ferry, 2006; Hobson, & Sharp, 2005; Mills, Francis, & Bonner, 2007). Because coaching programs tend to be treated as interventions designed to improve the performance of new principals and because participation in such a program is designed to enhance participants' skills and help them build a network of peers from whom they can learn, this study treats this factor as a positive contributor to the quality of their work experience and one that may affect the degree of perceived isolation and the work outcomes identified here.

A critical consideration related to coaching is best expressed as "Coaching for what?" The coaching that a new principal receives could be global in nature, such as working on reading the political environment of the school community, creating school structures that improve functions, or developing a clearer sense of how to engage in collaborative decision making. This kind of coaching could be beneficial to new principals in the long run because it builds their capacity to engage in the more complex and subtle aspects of the job. By the same token, it might be frustrating in the immediate term because it may not help the new principal to get out of the inevitable hot water that comes from being new in a position of major responsibility. The opposite approach might be to coach the new principal on the day-to-day management demands of the job—keeping an appropriate calendar, watching the budget, and meeting teacher evaluation obligations in a timely fashion. The focus or content of the coaching offered is important for understanding its likely effect on job satisfaction.

JOB SATISFACTION

Locke (1976) noted that there have literally been thousands of studies of job satisfaction, tracing back to the period of Frederick Taylor's work on scientific management and fueled later by the growing interest in human relations at work. Hackman and Oldham's (1980) work, among others, connects the degree of job satisfaction experienced by employees in different occupations to work design and factors such as role ambiguity and role conflict. In a synthesis of research findings related to studies of job satisfaction in educational settings, Thompson, McNamara, and Hoyle (1997) show that role ambiguity and role conflict are among the most potent predictors of job satisfaction. More recently, Conley and colleagues (2007) studied the relationships among role definition, relationships to coworkers, and satisfaction of school principals and assistant principals; they found that "attachment to coworkers" was a significant predictor of job satisfaction, even when accounting for the influence of other predictors. Less is known about the relationship between isolation and principal job satisfaction or how isolation may mediate the relationship between (1) factors such as role ambiguity, role conflict, role overload, and social support and (2) satisfaction.

CONCEPTUAL FRAMEWORK

In the framework established for this study, factors associated with the new principals' role definition (ambiguity, conflict, and overload), social support, and coaching all serve as predictors of the quality of the new principal's work experience, by predicting the principal's level of job satisfaction. Isolation for new principals functions as a mediator that predicts satisfaction and affects the manner in which the other variables predict this outcome. Figure 1 provides a visual representation of this framework.

METHOD

PARTICIPANTS AND SETTING

This study utilizes survey data collected from a sample of first-year school principals from across the state of Louisiana. The data set was collected as part of a larger study examining the impact of instructional coaching on new principals. The principals in this study were selected based on their experience level (all of them needed to be new principals)

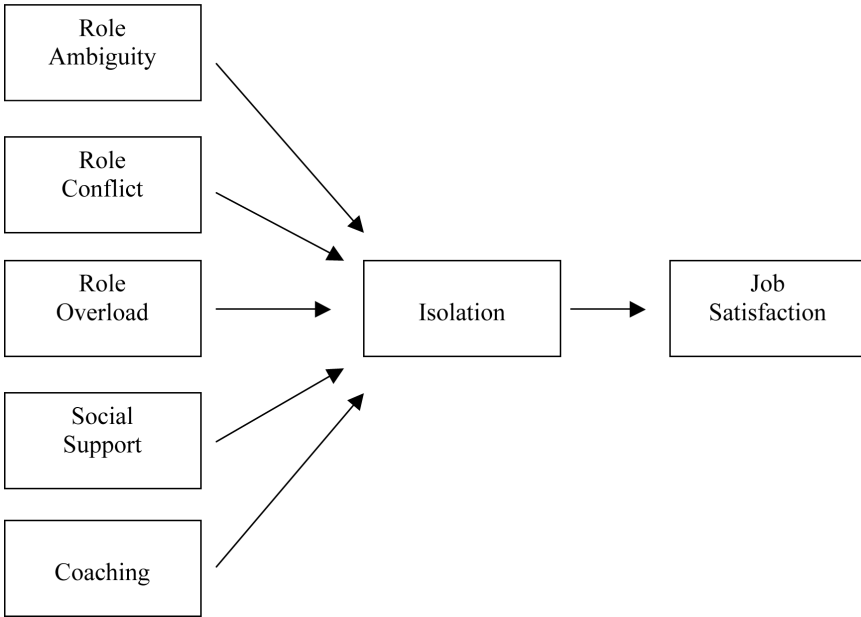


Figure 1. Conceptual framework.

and their willingness to participate in the study as a member of a treatment or comparison group. The treatment group participated in a federally supported grant that involved designing and implementing a highly structured coaching program for new principals, while the comparison group did not. All new principals in the participating school systems were given the opportunity to be a part of the study treatment group. Of 86 of these principals, 82 consented to participate (95% response rate). The comparison group consists of all other new principals across the state of Louisiana, and of the 187 principals who make up the accessible sample from this group, 121 elected to participate (65% response rate). The broader study involved a 3-year, longitudinal design; for the present study, surveys were completed by first-year principals late in the spring of their initial year as a school principal ($n = 203$).

School and principal demographics. The principals serve in a variety of communities, ranging from rural to suburban to urban. Their demographic characteristics represent a range of backgrounds. Male principals number 58 (29% of the sample); female principals include 143 (70%). African American principals number 67 (33%); Hispanic principals, 3 (2%); White/non-Hispanic, 129 (64%); and multiethnic, 2 (1%).

This study utilizes principal data from all levels and from various forms of alternative education. There are 122 (60%) participants who are principals of elementary schools; 36 (18%) serve in middle and junior high schools; 29 (14%) come from high schools; and the remainder (16 or 8%) comes from schools with grade configurations that are combinations of the more traditional categories (e.g., K-12).

MEASURES

Five survey scales and one treatment group designation provide the data for this study. Each scale measures one of the major study variables: role ambiguity, role conflict, role overload, social support, coaching, isolation, and job satisfaction.

Role measures. This study utilizes survey items and techniques first pioneered by Rizzo, House, and Lirtzman (1970) to measure perceptions of role conflict and ambiguity within large organizations (Caldwell & Forney, 1982; Culbreth, Scarborough, Banks-Johnson, & Solomon, 2005). This research utilizes a 17-item instrument based on the measures of Rizzo and colleagues, refined by Bacharach and Aiken (1976), and used in Conley, Bacharach, and Bauer (1989) in school settings. The instrument measures three subcategories within the domain: ambiguity (4 items), conflict (7 items), and overload (6 items). Participants are asked to evaluate each item using a 5-point Likert scale with the response options ranging from *strongly agree* to *strongly disagree*, with 1 representing the lowest, and 5 the highest, degree of role ambiguity, role conflict, or role overload level possible. Higher levels of role ambiguity, conflict, and overload in general are thought to reflect a less desirable work condition for respondents and, thus, a more negative assessment of work life quality.

Questions intended to measure ambiguity focus on aspects of the principal's job that may be confusing or unclear, such as the item "I feel certain about how much authority I have" (an item that would be reverse scored in the four-item scale). Questions intended to measure conflict focus on aspects of the role that may force the participant to deal with competing work conditions or expectations, such as "I receive assignments without the manpower to complete them." Questions intended to measure overload focus on parts of the responsibilities of the principal that may lead to feelings of being overwhelmed, for example, "I seem to have more commitments to overcome than other administrators I know."

Social support. The Social Provisions Scale (Cutrona & Russell, 1987, 1990) has been used by researchers to measure the six social provisions put forth by Weiss (1974). This study uses four provisions selected because

of their theoretical connection to the implementation of the coaching process: reassurance of worth, reliable alliance, guidance, and opportunity for nurturance (Bell, 2006; Varvel et al., 2007). Items selected are worded to provide a balance between positively and negatively stated questions. Participants are asked to read each item and respond with the choice that best reflects their feelings about relationships at work, using a standard 5-point Likert scale with options of *strongly agree* through *strongly disagree*. Examples of positive survey items on the 16-item scale include "There are people I can depend on to help me if I really need it" (reliable alliance) and "There is a trustworthy person I could turn to for advice if I were having a problem" (guidance). Examples of negatively worded items include "Other people do not view me as competent" (reassurance of worth) and "There is no one who relies on me for their well-being" (opportunity for nurturance). This study uses the aggregate scale to measure social support. Responses are scored on a scale of 1 to 5, with 1 representing the lowest, and 5 the highest, social support level possible. In general, higher levels of social support would be associated with a higher-quality work life.

Coaching. The principals in the treatment group were involved in a federally supported research grant that involved the implementation of a highly structured coaching program. The school districts participating in this program hired coaches, usually retired principals, and trained them in a highly structured process that emphasizes the use of coaching as a tool to develop instructional leadership skills in new principals. Under this program, coaches met with protégés at least monthly. New principals were required to participate in regular workshops that focused on specific instructional leadership strategies, and they were required to implement an instructional supervision model employing learning walks and a structured feedback strategy to work with teachers to improve pedagogy. They also attended monthly multidistrict meetings of treatment group participants, designed to give greater networking and problem-solving opportunities to its members.

Data for the treatment and comparison groups have been noted using a dummy variable, with participants in the coaching process scored 1 and members of the comparison group scored 0. Thus, statistical measures of association for this variable reflect the net impact of participation in the treatment.

Isolation. The UCLA Loneliness Scale has been used for nearly 30 years to measure perceptions of isolation for individuals from a variety of backgrounds (Dussault & Thibodeau, 1997; Izgar, 2009; Russell, Cutrona, de la Mora, & Wallace, 1997; Russell, Peplau, & Cutrona, 1980; Russell, Peplau, & Ferguson, 1978). This study utilizes a modified version of the

most recent form of the scale (Russell, 1996). This 10-item scale was modified to adapt it to measuring perceptions of isolation in the work setting. For example, a negatively worded statement from the third version of the UCLA Loneliness Scale reads, "I lack companionship," while the same item for this study reads, "I lack companionship at work." A positively worded statement from the scale, such as "I feel outgoing and friendly," has been modified for this study to read, "At work, I feel outgoing and friendly." Participants respond to items in this scale by choosing from the four options of *never*, *rarely*, *sometimes*, or *often*, scored on a scale of 1 to 4, with 1 representing the lowest, and 4 the highest, isolation level possible. Thus, higher scores on this scale reflect greater perceived isolation, which would typically be associated with a more negative assessment of the quality of work life.

Job satisfaction. Job satisfaction is measured using an adaptation of an instrument developed by Bacharach, Bauer, and Shedd (1988) and Conley and colleagues (1989). Responses to the seven-item scale are made on a 5-point Likert scale. Respondents were asked, "In general, how satisfied are you with each of the following?" (1 = *very dissatisfied*, 5 = *very satisfied*). Sample items include "The progress you are making toward the goals you set out for yourself in your present position?" and "The chance your job gives you to do what you are best at?"

ANALYTIC PROCEDURES

Data for this study were collected using an online survey application that allows participants to visit a secure website and complete and submit all answers directly to the research-collecting institution in electronic form. All principals who served as members of the treatment and comparison groups gave their informed consent before completing and submitting the confidential surveys.

As noted earlier, the research questions for this study focus on clarifying whether isolation serves as a mediating factor between the three role variables (ambiguity, conflict, and overload), social support, and participation in coaching as independent variables and job satisfaction as a dependent measure. Prior literature associates higher levels of role ambiguity, conflict, and overload with lower levels of job satisfaction and higher levels of social support and participation in coaching with higher levels of satisfaction. While some of the existing principal isolation literature tends to treat the factor primarily as an outcome (e.g., Howard & Mallory, 2008), other literature suggests that principal isolation contributes to outcomes that reflect the quality of the work experience (e.g., Dussault & Thibodeau, 1997).

We follow the analytic procedure spelled out by Baron and Kenny (1986) to use regression analysis to determine if isolation mediates the relationship between these independent variables and the outcome of interest—in this case, job satisfaction. As Baron and Kenny suggest, mediation is established if the independent variables affect the mediator (Equation 1), the independent variables affect the outcome of interest (Equation 2), and, finally, the mediator affects the outcomes of interest when controlling for the effects of the independent variables (Equation 3): “If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second” (p. 1177). The following hypotheses flow logically from the analytic approach, supported by the literature and conceptual framework. For Step 1,

H_1 : There will be a statistically significant positive relationship between (1) role ambiguity, role conflict, and role overload and (2) isolation.

H_2 : There will be a statistically significant negative relationship between social support/coaching and isolation.

For Step 2,

H_3 : There will be a statistically significant negative relationship between (1) role ambiguity, role conflict, and role overload and (2) job satisfaction.

H_4 : There will be a statistically significant positive relationship between social support/coaching and satisfaction.

For Step 3,

H_5 : Isolation will emerge as a statistically significant negative predictor of satisfaction, when controlling for the effects of the independent variables.

To reiterate, if these hypotheses are supported, mediation is supported when the effect of the independent variable on the dependent variable is less in the third equation than in the second.

The selection of this analytic strategy—rather than a more robust approach, such as path analysis—is deliberate. As noted earlier, there is a dearth of research on the role of isolation on principals’ work, and the underlying theory relating to the role of isolation is relatively thin. Adopting a confirmatory analytic strategy such as path analysis at this stage of the evolution of principal isolation research might convey that the relationships among variables are more robust than the present state of theory can support. Thus, we opt for using the Baron and Kenny regression technique to test mediation here to emphasize the exploratory nature of this work. While path modeling has some advantages, as Maruyama (1998) suggests,

regression is a logical starting point, and the Baron–Kenny analytic sequence is specifically laid out to inform the kinds of questions we pose.

Statistical significance is reported for each regression model ($p < .05$). To aid in interpretation of findings, following Field's (2009) recommendation and computational formula, an effect size statistic was also computed for each regression statistic to represent practical significance. Specifically, Field recommends converting the t statistic to a Pearson correlation (r) "because it's widely understood" and "frequently used" (p. 332), which we provide on the regression tables that follow (labeled *ES*). To interpret these effect size statistics, we use Cohen's (1988) suggestion that a small effect is represented by a correlation of .10; a medium effect, .30; and a large effect, .50.

LIMITATIONS

While this study yields important analysis and implications for theory building, research, and practice dealing with the work experience of principals, it has several significant limitations. First, the participants for this study come entirely from one U.S. state. This fact may limit the appropriateness of generalizing the results to principals in other states and overseas. Similar research using a national or even international random sample of principals may help verify these results as they apply to principals across the country and the world.

Second, although years have elapsed since Hurricane Katrina, it is nonetheless impossible to know how the difficulties and instability created by that calamity may have affected the professional and personal lives of participants, their school systems, and, hence, their perceptions of factors such as job satisfaction, role definition, and isolation. This factor, too, may limit generalizability.

Finally, the nearly exclusive use of self-reported data in this study will inevitably lead to criticisms about single-source bias (Podaskoff & Organ, 1987; Spector, 2006). However, the nature of most of the variables being used for this study cannot be accurately measured by any method other than self-reporting. Most are perceptual and psychological and could not be "validated" by any reliable external measure. Nevertheless, since this study's models are tested using single data sources, which may inflate some statistics, the results should be interpreted with due caution.

RESULTS

Table 1 shows the descriptive statistics for the study variables. In addition, the table displays Cronbach's alpha for scale measures used in the study as

Table 1. Descriptive Statistics

	<i>n</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's Alpha</i>
Role ambiguity	197	1.00	4.50	2.08	0.62	.74
Role conflict	194	1.14	4.43	2.92	0.70	.83
Role overload	196	1.00	5.00	3.49	0.71	.77
Social support	191	3.00	5.00	4.34	0.44	.84
Job satisfaction	195	1.25	5.00	4.08	0.73	.91
Isolation	197	1.00	3.40	1.75	0.57	.90
Coaching	203	0.00	1.00	0.40	0.49	—

an indicator of the reliability for this sample. A Cronbach's alpha value of less than .60 represents possible reliability problems with the data collected through one of the instruments. The Cronbach's alpha values ranging from .74 to .91 are consistent with previous studies and provide support for the reliability of the data collection instruments utilized for this project.

Descriptive statistics should be considered in the context of the possible score range for each variable. The isolation scale has a score range of 1 to 4; all other scales have a score range of 1 to 5. The descriptive statistics then show that the study participants see themselves as having relatively high levels of social support ($M = 4.34$ on a 5-point scale), moderate levels of role conflict and overload ($M = 2.92$ and 3.49 , respectively), and a slightly lesser degree of role ambiguity ($M = 2.08$). The mean score for job satisfaction is 4.08 , indicating that on balance, respondents report being satisfied. Respondents report relatively low levels of isolation ($M = 1.75$ on a 4-point scale), with scores ranging from a low of 1.00 to a high of 3.40 .

Pearson product-moment correlations for all of the study variables can be found in Table 2. Because of the relatively large sample size in this study, the majority of the correlations are statistically significant. The

Table 2. Zero-Order Correlations for Variables in Regression Analysis

	1	2	3	4	5	6	7
1: Role ambiguity	—						
2: Role conflict	.33	—					
3: Role overload	.32	.64	—				
4: Social support	-.23	-.26	-.12	—			
5: Isolation	.34	.32	.19	-.59	—		
6: Coaching	.02	.10	.12	-.12	.21	—	
7: Job satisfaction	-.39	-.31	-.36	.32	-.43	-.06	—

Note. All zero-order correlations are statistically significant ($p < .05$), with the exception of those in bold ($p > .05$).

number of highly correlated independent variables in this study increases the chances of multicollinearity in regression analyses. Stevens (1996) indicates that the variance inflation factors may be used to gauge the amount of linear association that occurs between a single component and all the other factors in a regression equation and that, in general, a variance inflation factor exceeding 10 indicates a concerning level of multicollinearity among variables. Analysis conducted as a part of this study shows that none of the variance inflation factor values for any independent variable in this study exceed a value of approximately 2; hence, it does not appear that collinearity represents a significant problem for these results.

Results for the Step 1 regression analysis are presented in Table 3. This step involves testing the relationships between the independent variables and the mediator, isolation. It was hypothesized that there will be a statistically significant positive relationship between (1) role ambiguity, role conflict, role overload and (2) isolation and that there will be a statistically significant negative relationship between social support/coaching and isolation. Table 3 shows a statistically significant relationship between all the independent variables together and isolation, $R^2 = .44$, $F(5, 169) = 26.43$, $p < .01$. The estimates of the regression coefficients show that role ambiguity is a statistically significant predictor of isolation in the hypothesized direction ($\beta = .19$, $p < .01$), suggesting that higher levels of ambiguity are associated with greater isolation. Social support serves as the most potent predictor of principal isolation ($\beta = -.51$, $p < .01$), suggesting that greater degrees of social support tend to reduce principal isolation, a finding consistent with expectations. However, participation in the coaching program emerges as a statistically significant predictor ($\beta = .14$, $p < .05$) in an unexpected fashion, suggesting that principals in the coaching program experience moderately greater degrees of perceived isolation. Effect size computations show social support as having a large effect on isolation ($r = -.53$), role ambiguity ($r = .22$), and coaching ($r = .17$) have small to moderate effects. Role overload and conflict fail to emerge as a significant predictor of isolation.

Table 3. Regression Analyses: Independent Variables and Isolation (n = 175)

<i>Dependent Variable: Isolation</i>	<i>B (SE)</i>	<i>β</i>	<i>ES</i>
Role ambiguity	.17 (.06)	.19**	.22
Role conflict	.08 (.06)	.10	.10
Role overload	-.02 (.06)	-.03	.02
Social support	-.66 (.08)	-.51**	.53
Coaching	.16 (.07)	.14*	.17

Note. $R^2 = .44$ ($F = 26.43$, $p < .01$).
 * $p < .05$. ** $p < .01$.

The second step in the analytic process involves regressing job satisfaction on the independent variables, shown in Table 4. It was hypothesized that there will be a statistically significant negative relationship between (1) role ambiguity, role conflict, and role overload and (2) job satisfaction and that there will be a statistically significant positive relationship between social support/coaching and job satisfaction. Results show a statistically significant relationship between all independent variables and satisfaction, $R^2 = .28$, $F(5, 166) = 12.76$, $p < .01$. The estimates of the regression coefficients show that role ambiguity ($\beta = -.26$, $p < .01$) and role overload ($\beta = -.25$, $p < .01$) are statistically significant predictors in the expected direction, inferring that lower degrees of ambiguity and overload lead to greater degrees of satisfaction. Social support also emerges in the expected direction ($\beta = .25$, $p < .01$). Effect size calculations show that role ambiguity ($r = .26$), role overload ($r = .22$), and social support ($r = .26$) each have a small to medium effect on job satisfaction. Role conflict and participation in the coaching program do not emerge as statistically significant predictors.

The final step in the analytic process involves investigation of the relationships between the independent variables and the mediator, taken together, and the dependent variable. Hypothesis 5 stated that we expect isolation to emerge as a statistically significant negative predictor of job satisfaction, even when controlling for the effects of the independent variables. Furthermore, mediation will be established if the effects of the independent variables on the dependent variable are less in these equations than in the preceding one. Table 5 presents these results.

Results show a statistically significant relationship among all the independent variables, isolation, and satisfaction, $R^2 = .31$, $F(6, 165) = 12.45$, $p < .01$. The estimates of the regression coefficients show that isolation ($\beta = -.24$, $p < .01$) emerges as a statistically significant predictor in the expected direction, suggesting that lower degrees of perceived isolation produce greater levels of satisfaction. Social support is no longer a statistically significant predictor ($\beta = .13$), suggesting that isolation serves as a mediator for this variable. Role ambiguity ($\beta = -.21$, $p < .01$) emerges as

Table 4. Regression Analyses: Independent Variables and Job Satisfaction ($n = 172$)

<i>Dependent Variable: Job Satisfaction</i>	<i>B (SE)</i>	<i>β</i>	<i>ES</i>
Role ambiguity	-.32 (.09)	-.26**	.26
Role conflict	.02 (.10)	.02	.01
Role overload	-.27 (.09)	-.25**	.22
Social support	.43 (.12)	.25**	.26
Coaching	-.00 (.10)	.00	.00

Note. $R^2 = .28$ ($F = 12.76$, $p < .01$).

* $p < .05$. ** $p < .01$.

Table 5. Regression Analysis: Independent Variables, Isolation, and Job Satisfaction ($n = 172$)

<i>Dependent Variable: Job Satisfaction</i>	<i>B (SE)</i>	<i>β</i>	<i>ES</i>
Role ambiguity	-.26 (.09)	-.21**	.22
Role conflict	.04 (.10)	-.04	.03
Role overload	-.27 (.09)	-.26**	.23
Social support	.22 (.14)	.13	.12
Coaching	.05 (.10)	.04	.04
Isolation	-.32 (.11)	-.24**	.21

Note. $R^2 = .31$ ($F = 12.45$, $p < .01$).

* $p < .05$. ** $p < .01$.

having a slightly reduced effect on satisfaction, suggesting that isolation may have a mediating effect here, though the statistic remains statistically significant at the $p < .01$ level. In contrast, the impact of role overload ($\beta = -.26$, $p < .01$) does not change when accounting for the role of isolation in predicting job satisfaction, suggesting that isolation plays no part as a mediator between role overload and satisfaction and that overload has a significant impact on job satisfaction. Effect size calculations show that role overload ($r = .23$), ambiguity ($r = .22$), and isolation ($r = .21$) each have a small to medium effect. Overall, then, there is some support for the assertion that isolation serves as a mediator for some, but not all, of the independent variables.

DISCUSSION

As a result of this study's systematic analysis, we wish to present actionable information about the relationship between isolation and job satisfaction for new principals. We have three primary goals for the discussion: First, given the paucity of empirical work on principal isolation, we seek to add to what is known about the role of isolation in predicting an important work outcome, job satisfaction; second, by testing the mediation model, we wish to help elaborate existing theory relating to understanding how isolation affects the work life of principals; last, we offer insights into the practice of enhancing new principals' success.

THE SOCIAL SUPPORT/ISOLATION PUZZLE

Our analysis suggests that role overload and role ambiguity are important contributors to job satisfaction. All else equal, the more intense the degree of role ambiguity and overload, the lower the level of job satisfaction experienced by new principals. These relationships are only slightly

mediated by isolation, if at all. In contrast, social support has a relationship with job satisfaction that appears to be fully mediated by the isolation felt by new principals. The lower the levels of social support experienced by new principals, the more isolated they feel, which in turn lessens the degree of job satisfaction.

The connection between social support and isolation is of central interest here. In the abstract, these constructs would seem to be overlapping; indeed, they are highly correlated ($r = -.59$, $p < .01$) in the sample used for this study. However, as they are operationalized here, social support deals primarily with the mechanisms in place to promote some degree of connectedness (e.g., mentoring programs) on the job and the opportunities available to new principals to connect to others. Isolation, in contrast, has to do with the respondent's feelings of connectedness or loneliness. Social support then seems to be more structural in orientation, while isolation has more to do with the individual's emotional state, which results in part from the degree of social support available. The finding that the relationship between social support and job satisfaction is fully mediated by isolation suggests, then, that mechanisms put in place by school systems to promote social support particularly influence outcomes such as job satisfaction if the new principal's emotional sense of loneliness or connectedness is affected. Put another way, social support structures that serve to lessen the degree of isolation felt by new principals would tend to improve their emotional state and promote job satisfaction.

Coaching or mentoring is one form of social support that is especially prevalent. Among the sample of new principals in this study, however, involvement in a formal coaching program was associated with a somewhat greater sense of isolation (although the effect size related to this impact is small, .17, and the inclusion in coaching does not influence job satisfaction). We speculate that the nature of this unexpected consequence may be embedded in the coaching intervention used in participant schools. Coaches worked with new principals to implement a prescribed program of classroom walk-throughs to reinforce and model specific techniques of instructional supervision. New principals may have perceived this as emphasizing a burdensome task to be completed (an example of role overload, discussed next), as well as emphasizing their evaluative role in relation to the teaching staff. Essentially, what would otherwise be construed as a mechanism to enhance instructional leadership may have been seen more as a managerial burden and one that may have served to isolate principals from teachers. Thus, participation in the coaching model used may affect their general sense of workload and may intensify feelings of being on the "other side of the fence" from former teaching colleagues, thus affecting their sense of separation or isolation.

The job of principal is busy and can be lonely. Role overload is not likely to go away under the intense political pressure faced by schools and districts. More experienced principals, however, may learn to mitigate the effects of role overload through prioritizing tasks, appropriate delegation, and pushing back a bit (on central office, on parents, on teachers) to have obligations removed or reduced. They may also assemble effective social networks that provide the kinds of support they need to mitigate the effects of factors such as role overload, and experience would tend to lessen to some extent the degree of role ambiguity.

DEVELOPING THEORY

We demonstrate in this article that the effects of social support and role ambiguity are either fully or modestly mediated through isolation; that is, when moving in the wrong direction (lower for social support and higher for role ambiguity), they manifest as greater isolation for principals, leading to reduced job satisfaction. This suggests that, for these two independent variables at least, their effects on job satisfaction are best understood as part of a chain reaction. A new model of job satisfaction for new principals acknowledges the role of perceived isolation and would focus on ways of reducing isolation as a means of mitigating the effects of role ambiguity and enhancing the effects of social support.

A more fully specified theory of job satisfaction for new principals has research and practical implications. For future research, a further elaborated model would assist qualitative follow-up to this study to discover how new principals and those who purport to help them adjust to their challenging job perceive the most effective means to reduce isolation. This kind of research would help to uncover areas of ambiguity and uncertainty that currently cloud our understanding of what principals mean when they report factors such as role overload or the fact that social support efforts actually made them feel somewhat more isolated.

This work has implications for subsequent research on the impact of isolation on the quality of school leaders' work experience. First, it would be helpful to extend this work by testing like models on samples from other contexts and to determine if isolation plays a similar role for experienced school leaders and as a mediator for other outcomes of interest. Second, the model tested here can be elaborated by examining the impact of isolation as a mediator for a wider range of constructs associated with principals' work (e.g., decision-making influence, professional development). Third, as confidence in the theoretical model is established, more powerful, confirmatory analytic methods such as structural equation modeling may be used to examine causal models involving isolation.

Future model building and research have the potential to inform practice in meaningful ways. They may help central office administrators to think beyond merely inserting mentoring or coaching programs, focusing them more on what new principals perceive to be helpful. It also has the potential to point the way toward the most important job stress factors so that these can be lessened or eliminated in a manner that reduces isolation and enhances job satisfaction.

IMPROVING NEW PRINCIPAL JOB SATISFACTION

New principals may be better supported if school districts communicate with them regularly and openly about their needs and the degree to which those needs are being met by whatever support the district provides. This kind of dialogue would, in and of itself, constitute greater social support, but it would also focus other means of social support in ways that are most needed. In the process of give-and-take and adaptation to specific needs, new principals would likely feel less isolated, and their job satisfaction would improve.

The strategy we suggest here is consistent with Donaldson's (2006) conclusions that principals are often overwhelmed by managerial demands and need to be refocused on instruction. In a synthesis of research, Robinson and colleagues (2008) provide an avenue for doing so. They observe that one of the most potent leadership behaviors that leads to significant improvements in student learning is "promoting and participating in teacher learning and development" (p. 663). In many schools, though, the reality seems to be that professional learning communities are viewed as something that principals enable for teachers but do not participate in themselves. Participating in teacher learning and development gives way to the managerial demands of the job. Thus, enhancing means for new principals to become involved in teachers' learning—whether one-on-one, through established learning communities, or some combination of the two—may serve to reduce isolation and enhance job satisfaction while attending to the skill-building needs of new leaders. In this way, new principals might enhance the social support they receive from within their own schools.

Stronger networks and more meaningful support from the central office appear likely to reduce new principal isolation and improve job satisfaction. Given the demanding and stressful nature of the principalship, doing so would be no small feat. Knowing that consistent, competent leadership is important to student achievement, reducing new principal isolation and thus improving the probability of stable leadership is a critical investment in school and student success.

A FINAL WORD

Great hopes are often pinned on the individual just entering into the principalship. The new principal has dreams about how to help more students succeed at a higher level and how to work harmoniously with adults to enhance instructional experiences. Likewise, multiple constituents—parents, teachers, students, central office administrators—look to the new principal to right old wrongs and take the school in a more positive direction. All of these hopes and dreams are easily dashed, however, when the new principal becomes isolated from the people and issues with which he or she most wanted to engage. When job satisfaction declines as a result of increased isolation, principal turnover becomes more likely, and the school must go through the process of bringing on a new principal all over again. The concept of isolation provides a target for promising strategies to help schools and districts maintain more consistent and effective leadership.

ACKNOWLEDGMENTS

Data for this study are a subset of the data compiled for U.S. Department of Education Award No. R305E50082, “The Coaching Model: A Collaborative Pilot Program.” We gratefully acknowledge the support of the School Leadership Center of Greater New Orleans, the recipient of the grant, and the U.S. Department of Education, Institute for Educational Sciences, National Center for Education Research. We take sole responsibility for the work presented.

REFERENCES

- Bacharach, S. B., & Aiken, M. (1976). Structural and process constraints on influence in organizations: A level specific analysis. *Administrative Science Quarterly, 21*, 623–642.
- Bacharach, S., Bauer, S., & Shedd, J. (1988). *The learning workplace: The conditions and resources of teaching*. Washington, DC: National Education Association.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Beaudoin, M., & Taylor, M. E. (2004). *Creating a positive school culture: How principals and teachers can solve problems together*. Thousand Oaks, CA: Corwin Press.

- Bell, B. (2006). Wilderness orientation: Exploring the relationship between college preorientation programs and social support. *Journal of Experiential Education, 29*, 145–168.
- Brook, L., Sawyer, E., & Rimm-Kaufman, S. E. (2007). Teacher collaboration in the context of the responsive classroom. *Teachers and Teaching, 13*, 211.
- Bunnell, T. (2006). Managing the role stress of public relations practitioners in international schools. *Educational Management Administration and Leadership, 34*, 385–409.
- Caldwell, W., & Forney, J. (1982). *The relationship of role conflict and ambiguity and perceived organizational characteristics between superintendents and principals*. New York: American Educational Research Association. (ERIC Document Reproduction Service No. ED218770)
- Camburn, E., Rowan, B., & Taylor, J. E. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models. *Educational Evaluation and Policy Analysis, 25*, 347–373.
- Casavant, M. D., & Cherkowski, S. (2001). Effective leadership: Bringing mentoring and creativity to the principalship. *NASSP Bulletin, 85*, 71–81.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Conley, S. C., Bacharach, S. B., & Bauer, S. C. (1989). The school work environment and teacher career dissatisfaction. *Education Administration Quarterly, 25*, 58–81.
- Conley, S., Muncey, D. E., & You, S. (2006) Standards-based evaluation and teacher career satisfaction: A structural equation modeling analysis. *Journal of Personnel Evaluation in Education, 18*, 39–65.
- Conley, S., Shaw, S., & Glasman, N. (2007). Correlates of job and growth satisfaction among secondary school administrators. *Journal of School Leadership, 17*, 54–88.
- Conley, S., & Woosley, S. (2000). Teacher role stress, higher order needs, and work outcomes. *Journal of Educational Administration, 38*(2), 179–201.
- Cookson, P. W. (2005). The challenge of isolation. Professional development—Your first year. *Teaching Pre K–8, 36*, 14.
- Cuban, L. (1988). *The managerial imperative and the practice of leadership in schools*. Albany: SUNY Press.
- Culbreth, J., Scarborough, J., Banks-Johnson, A., & Solomon, S. (2005). Role stress among practicing school counselors. *Counselor Education and Supervision, 45*, 58–71.
- Cutrona, C., & Russell, D. (1987). The provisions of social relationships and adaptation to stress. In W. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 37–67). Greenwich, CT: JAI Press.
- Cutrona, C., & Russell, D. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In I. G. Sarason, B. R. Sarason, & G. Pierce (Eds.), *Social support: An interactional view* (pp. 319–366). New York: Wiley.
- Daresh, J. (2004). Mentoring school leaders: Professional promise or predictable problems? *Educational Administration Quarterly, 40*, 495–517.
- Donaldson, G. (2006). *Cultivating leadership in schools: Connecting people, purpose, and programs* (2nd ed.). New York: Teachers College Press.

- Dreeben, R. (1973). The school as a workplace. In R. M. Travers (Ed.), *Second handbook of research on teaching*. Chicago: Rand McNally.
- DuFour, R. & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Bloomington, IN: National Educational Service.
- Duke, D. (1988). Why principals consider quitting. *Phi Delta Kappan*, 70(4), 308–312.
- Dussault, M., & Thibodeau, S. (1997). Professional isolation and performance at work of school principals. *Journal of School Leadership*, 7, 521–536.
- Eckman, E. (2004). Similarities and differences in role conflict, role commitment, and job satisfaction for female and male high school principals. *Educational Administration Quarterly*, 40, 366–387.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Los Angeles: Sage.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Garmston, R. (2007). Collaborative culture. *Journal of Staff Development*, 28, 55–57.
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2004). *Supervision*. Boston: Pearson.
- Graham, M., & Messner, P. (1998). Principals and job satisfaction. *International Journal of Educational Management*, 12(5), 196–202.
- Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational Management Administration and Leadership*, 28, 317–338.
- Gronn, P. (2003). Distributing and intensifying school leadership. In N. Bennett & L. Anderson (Eds.), *Rethinking educational leadership: Challenging the conventions* (pp. 60–73). London: Sage.
- Hackman, J., & Oldham, G. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hansford, B., & Ehrich, L. C. (2006). The principalship: How significant is mentoring? *Journal of Educational Administration*, 44, 36–52.
- Herrington, A., Herrington, J., Kervin, L., & Ferry, B. (2006). The design of an online community of practice for beginning teachers. *Contemporary Issues in Technology and Teacher Education*, 6, 120–132.
- Hobson, A. J., & Sharp, C. (2005). Head to head: A systematic review of the research evidence on mentoring new head teachers. *School Leadership and Management*, 25, 25–42.
- Hord, S. M. (2007). Learn in community with others. *Journal of Staff Development*, 28, 39–42.
- Howard, M. P., & Mallory, B. J. (2008). Perceptions of isolation among high school principals. *Journal of Women in Education Leadership*, 6, 7–27.
- Izgar, H. (2009). An investigation of depression and loneliness among school principals. *Educational Sciences: Theory and Practice*, 9, 247–258.
- Kochan, F., Jackson, B., & Duke, D. (1999). *Voices from the firing line: A study of educational leaders' perceptions of their job, the challenges they face, and their preparation*. Columbia, MO: UCEA Press.
- Leithwood, K. (2006). *Teacher working conditions that matter: Evidence for change*. Toronto, OR: Elementary Teachers' Federation of Ontario.

- Locke, E. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1349). Chicago: Rand McNally.
- Marshall, G. W., Michaels, C. E., & Mulki, J. P. (2007). Workplace isolation: Exploring the construct and its measurement. *Psychology and Marketing, 24*, 195–223.
- Maruyama, G. (1998). *Basics of structural equation modeling*. Thousand Oaks, CA: Sage.
- McGrail, E. (2007). Laptop technology and pedagogy in the English language arts classroom. *Journal of Technology and Teacher Education, 15*, 59–85.
- Mercer, D. (1996). "Can they walk on water?" Professional isolation and the secondary headteacher. *School Organization, 16*, 165–178.
- Mills, J., Francis, K., & Bonner, A. (2007). The problem of workforce for the social world of Australian rural nurses: A collective action frame analysis. *Journal of Nursing Management, 15*, 721–730.
- Norton, M. (2003). Let's keep our quality school principals on the job. *High School Journal, 86*, 50–56.
- Painter, S. R. (2000). Principals' perceptions of barriers to teacher dismissal. *Journal of Personnel Evaluation in Education, 14*, 253–264.
- Penn, D. L., Simpson, L., Gavin, E., Leggett, S., Wood, L., Hawgood, J., et al. (2005). Development of ACROSSnet: An online system for rural and remote community suicide prevention workers in Queensland, Australia. *Health Informatics Journal, 11*, 275–293.
- Podaskoff, P. M., & Organ, D. W. (1987). Self reports in organizational research: Problems and prospects. *Journal of Management, 12*, 531–544.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*, 150–163.
- Robbins, P., & Alvey, H. B. (2003). *The principal's companion: Strategies and hints to make the job easier*. Thousand Oaks, CA: Corwin Press.
- Robinson, V. M., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership styles. *Educational Administration Quarterly, 44*, 635–674.
- Rooney, J. (2000). Survival skills for the new principal. *Educational Leadership, 58*, 77–78.
- Russell, D. (1996). The UCLA Loneliness Scale (Version 3): Reliability, validity, and actor structure. *Journal of Personality Assessment, 66*, 20–24.
- Russell, D., Cutrona, C. E., de la Mora, A., & Wallace, R. B. (1997). Loneliness and nursing home admission among the rural elderly. *Psychology and Aging, 12*, 574–589.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*, 472–480.
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment, 42*, 290–294.
- Schlechte, J., Yssel, N., & Merbler, J. (2005). Case studies in teacher isolation and alienation. *Preventing School Failure, 50*, 35.

- Spector, P. E. (2006). Method variance as an artifact in self-report affect and perceptions at work: Myth of significant problem? *Journal of Applied Psychology, 72*, 438–444.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher, 30*, 23–28.
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Taylor, R., & Lee, H. (2005). Occupational therapists' perception of usage of information and communication technology (ICT) in western Australia and the association of availability of ICT on recruitment and retention of therapists working in rural areas. *Australian Occupational Therapy Journal, 52*, 51–56.
- Thompson, D., McNamara, J., & Hoyle, J. (1997). Job satisfaction in educational organizations: A synthesis of research findings. *Educational Administration Quarterly, 33*(1), 7–37.
- Vadella, R., & Willower, D. (1990). High school principals discuss their work. *NASSP Bulletin, 74*, 108–118.
- Varvel, S., He, Y., Shannon, J., Tager, D., Bledman, R., Chaichanasakul, A., et al. (2007). Multidimensional threshold effects of social support in firefighters: Is more support invariably better? *Journal of Counseling Psychology, 54*, 458–465.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17–26). Englewood, NJ: Prentice Hall.
- Wong, S., DeSanctis, G., & Staudenmayer, N. (2007). The relationship between task interdependency and role stress: A revisit of the job demands-control model. *Journal of Management Studies, 44*, 284–303.
- Zoul, J., & Link, L. (2007). *Cornerstones of strong schools: Practices for purposeful leadership*. Larchmont, NY: Eye on Education.

Scott C. Bauer is associate professor of education leadership at George Mason University. His research interests involve the application of organizational theory and design to the improvement of schools and the efficacy of various strategies used to develop school leaders at all levels. He is a steering committee member for the Northern Virginia School Leadership Center, a member of the Board of Directors of the School Leadership Center of Greater New Orleans. He is coauthor (with S. David Brazer) of *Using Research to Lead School Improvement: Turning Evidence Into Action*.

S. David Brazer is associate professor and coordinator of the education leadership program. After receiving his PhD from Stanford University in 1988, he pursued a career in high school administration, serving as the principal of Los Altos High School for 6 years. His research interests focus on strategic decision making in educational contexts, how collaboration works in school settings, and the effects of leadership preparation programs on graduates. He is a steering committee member for the Northern Virginia School Leadership Center.