

The Impact of isolation on new principals' persistence: Evidence from a southern US state

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Abstract

Isolation has affected the quality of the work experience for employees in education for decades. This study explores the role that isolation plays in impacting the quality of the work experience among new principals. Building on recent studies, the analysis tests whether isolation serves as a mediator in the relationship between factors that are known to affect the work experience of principals (social support; role ambiguity, role overload; administrative experience; and participation in a structured coaching relationship), as independent variables, and persistence of new principals. We find some support for this mediating effect, and support for the role of isolation as a predictor of persistence.

Keywords

Principals, isolation, persistence, social support

The issue of isolation has been more studied in relation to its impact on teachers than on school leaders (Cookson, 2005; Schlechte et al., 2005). Research into leaders' isolation has attempted to understand its impacts on both their professional and personal lives (Ackerman and Maslin-Ostrowski, 2004; Drago-Severson, 2012). Systematic research that addresses the topic tends to assume isolation as a negative factor in the work lives of principals or only generally established its relationship with principals' perceptions of their own effectiveness (e.g., Dussault and Thibodeau, 1997).

The evolving role of the principal has garnered increased attention as it has changed from that of a manager to an instructional leader that takes responsibility for every facet of the school program (Bauer and Brazer, 2013; Hitt and Tucker, 2016; Robinson et al., 2008). Much of the literature strongly endorses “distributed leadership” as an effective approach that enhances the overall performance of staff and students (e.g., Camburn et al., 2003; Gronn, 2008). This approach emphasizes fostering the professional growth of others through frequent interaction, appropriate task delegation, and collaboration, suggesting that interaction between the principal and his/her fellow educators within the building is vital to the effectiveness of the school. Thus, the impact of

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isolation may extend well beyond its effect on the principal because of its potential to affect the quality of the work environment, student outcomes, and the overall effectiveness of school leadership.

Purpose

There is little existing theory framing the role of isolation in predicting intention to leave, or the possible role isolation plays as a factor that mediates the impact of work-related variables and outcomes. 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 persistence is unlikely to be "simple and direct" (p. 181), but rather mediated by factors associated with the work context. We attempt to fill this void by examining isolation as a possible mediating factor, linking variables reflecting the quality of new principals' work experience and persistence.

In this paper, we examine how role ambiguity, role overload, social support, administrative experience, and involvement in a coaching program affect new principals' isolation, and how these variables influence intention to leave. The study replicates and extends our previous work (Bauer and Brazer, 2010, 2013; Stephenson and Bauer, 2010), firstly, by testing the models using a new sample of first-year principals and, secondly, by examining intention to leave as an indicator of persistence. Specifically, this study intends to answer the following questions.

1. What part do role ambiguity, role overload, social support, participation in a formal coaching program, and administrative experience play in predicting new principals' sense of isolation?
2. What part do role ambiguity, role overload, social support, participation in a formal coaching program, and administrative experience play in predicting new principals' intention to leave?
3. Is the influence of the independent variables of role ambiguity, role overload, social support, participation in a formal coaching program, and administrative experience on intention to leave mediated through perceived isolation?

Review of the literature

Role ambiguity, role overload, social support, coaching, and administrative experience are well established as predictors of the quality of a new principal's work experience. Our hypothesis that isolation is a mediating factor in the relationship between role ambiguity, role overload, social support, coaching, and experience and intention to leave is supported theoretically by the relevant literature on isolation and the other study variables.

Career stages—Why new principals?

Simply put, there is a shortage of qualified principals—not because teachers are not completing preparation programs, but because the challenges of the position outweigh the benefits (Myung et al., 2011). As Barnett et al. (2012) report in their analysis of job realities of assistant principals, career choices are influenced by "role overload and stress, limited contact with students, inadequate funding, fear of failure and public disclosure of mistakes, uncertainty of their own ability to perform the role, and lack of time with family" (p. 97). The job complexities and working in a

high-stakes context may make the job seem impossible (Casavant and Cherkowski, 2001; DiPaola and Tschannen-Moran, 2003).

With all of the perceived negatives, potential administrators engage in a process of weighing incentives versus disincentives, and examine the workload expectations versus the prospects of better professional opportunities and increased salary that results from taking on a principal's position (Howley et al., 2005). As people enter into a new level of school administration, they certainly face long-term challenges as to whether they will remain in their positions. Shoho and Barnett (2010) found that new principals strongly anticipated becoming frustrated with the position and in their study, only a few participants anticipated remaining in their positions longer than 5–10 years. Tekleselassie and Villarreal (2011) discuss that principals must exist in a realm of both managerial and leadership activities, taking on multiple roles, underlined by high expectations and accountability to stakeholders. While principals commonly report a sense of fulfillment that comes from positive influence and successful instructional decisions, the challenges often outweigh these positives, leading to attrition. Thus, researching the associations among factors that may affect persistence of new principals is vital to understanding how to attract and maintain high-quality leaders for increasingly complex organizations.

Role ambiguity, role conflict, and role 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 (Conley et al., 2006; Eisenhauer et al., 1984). 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. Eisenhauer et al. (1984) found that role ambiguity, and to a lesser extent role conflict, were associated with positive attributes of school principals' work lives. Duke's (1988) research suggests that the relationship between principals' sense of their role and outcomes such as persistence may be complex. On the one hand, subjects 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 challenging and fatiguing, and subjects expressed considerable confusion about their role. Today, demands on principals to perform as instructional leaders makes their work more complex and leads 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).

Our prior research (Bauer and Brazer, 2010, 2013; Stephenson and Bauer, 2010) tested the impact of these three role stress variables on isolation and on outcomes such as job satisfaction (Skaalvik and Skaalvik, 2009), efficacy (Federici and Skaalvik, 2012), and burnout (Schermuly et al., 2011). Role ambiguity, role conflict, and job overload, we hypothesized, are important negative influences on new principals' job satisfaction. Our results affirmed the import of role ambiguity and role overload, but role conflict failed to emerge as an important predictor. Hence, we omit this variable from consideration in this paper.

Social support

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 support may come from both informal networks and formal structures established to help 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 both enhancing the effect of positive organizational and psychological factors on the job, and reducing the impact of negative ones (Eisenhauer et al., 1984; Marshall et al., 2007). 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 affective state, that is, feelings of loneliness. The existing evidence, coupled with the lack of guidance about the influence these two variables have on specific work outcomes, supports the concept of analyzing social support as a separate and distinct variable from professional isolation.

Coaching

Mentoring and coaching programs are often used by school systems and their leaders to explicitly support the effectiveness of new administrators (Busch et al., 2005; Goldring et al., 2012). Mentoring uses veteran or retired administrators to serve as role models for administrators, while demonstrating behaviors exemplifying effective leadership. This is a popular strategy worldwide; mentors provide administrators with socialized, reciprocal relationships in which practical insights and creative approaches are shared, and technical expertise is developed (Casavant and Cherkowski, 2001; Daresh, 1986). Coaching is another form of professional development for administrators; coaches are professional experts who have leadership coaching as their primary work (Bloom et al., 2003) and provide a relationship in which the coach is continually monitoring success in the role, giving personalized feedback and collegial support (Daresh, 2007; Goldring et al., 2012).

Coaching, in this study, represents the formal structures that an employer puts in place to ensure an individual has the skills he or she needs 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 et al., 2006; Hobson and Sharp, 2005; Mills et al., 2007). Coaching programs are designed both to enhance participants' skills and to help them build a network of peers from whom they can learn. Hence, this study treats this factor as a positive contributor to the quality of their work experience, and one that may affect both the degree of perceived isolation and the work outcomes identified in this study.

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; it 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 of the administrative and instructional imperatives of complex organizations (Cuban, 1988). What remains common is principals' tendency to have sole responsibility for school outcomes and the strong possibility that they will make many of their key decisions in isolation.

The literature on the topic of principal isolation continues to be sparse (Beaudoin and Taylor, 2004; Cookson, 2005; Garmston, 2007; Hord, 2007; McGrail, 2007; Robbins and Alvey, 2003). 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

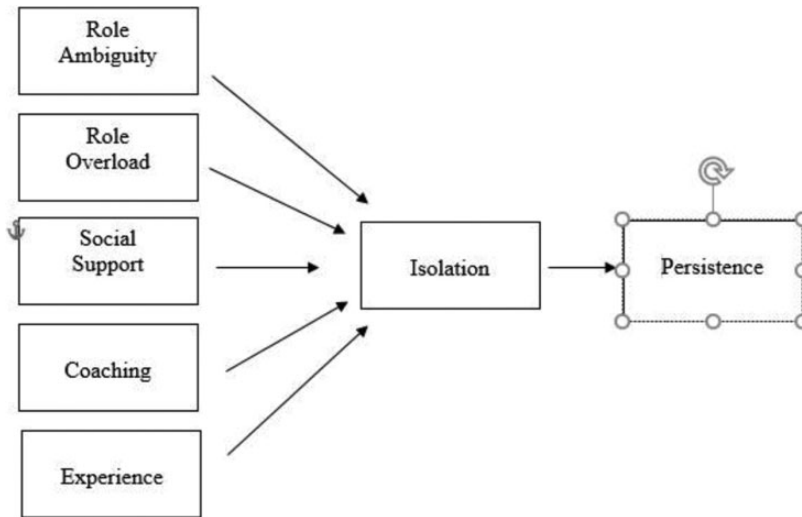


Figure 1. Conceptual framework.

overload, and role conflict. Dussault and Thibideau's (1997) research extends the examination of isolation as a variable that influences 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 link between measures of principal loneliness and depression.

Intention to leave

Federici and Skaalvick (2012) show that job satisfaction is negatively related to school leaders' motivation to leave their position, but various other factors can lead to principals' intention to leave their profession. Farley-Ripple et al. (2012) describe forces that influence a principal to leave the profession, including characteristics of the principal, principal behavior, and environmental conditions. The authors found that push forces that influenced a principal to leave were emotional and physical tolls, which are also related to principal burnout. On the other hand, pull forces that led to principals' persistence were their sense of self-efficacy and/or desire for challenges. These findings are supported by the work of Tschannen-Moran and Gareis (2004), who found that self-efficacy predicts principals' persistence in their role. Depersonalization, or detachment from their role and coworkers, is a dimension of burnout that is closely related to incidences of principal turnover. Whether they are beneficial or challenging, relationships have an influence on principals' intention to leave or persist (Farley-Ripple et al., 2012). As noted earlier, relationships are also a key factor in principals' sense of isolation.

Conceptual framework

For purposes of this study, factors frequently associated with new principals' role (ambiguity and overload), social support, administrative experience, and coaching all serve as predictors of the quality of the new principal's work experience by predicting the principal's intention to leave. Isolation for new principals functions as a mediator that both predicts satisfaction and intention to

leave and influences the manner in which the other variables predict these outcomes. Figure 1 provides a visual representation of this framework.

Methods

Participants and setting

This study utilizes survey data collected from a sample of first-year school principals from across a southern US state. The data set is 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) and their willingness to participate in the study as either a member of a treatment or comparison group. The treatment group participated in a 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; the comparison group represents all other first-year principals in the same state. In total, 164 of an accessible population of 242 first-year principals provided usable surveys, for a 68% overall response rate.

School and principal demographics. The principals serve in demographically different communities ranging from rural to suburban to urban, representative of the state. The demographic characteristics of the individual principals surveyed for this study represent a wide range of backgrounds. Male principals were 28% of the sample, female principals 71% of the total. African-American principals comprise 35% of the total; white/non-Hispanic 61%; and multiethnic/other 3% of participants. The vast majority came to their present job from within their school system: just over a third (38%) last held a position in the same schools; about 50% last worked in a school in the same district; and another 6% held a central office position in the same district prior to becoming a new principal. Just under 13% worked as classroom teachers in their last job, whereas 70% were assistant principals, deans, or administrative assistants in their most recent previous position, with another 12% moving from central office to the principal role.

This study utilizes principal data from all levels and from various forms of alternative education: 100 (61%) participants are principals of elementary schools; 26 (16%) serve in middle and junior high schools; 28 (17%) work in high schools; and the remainder (10 or 6%) come from schools with grade configurations that are combinations of the more traditional categories (e.g., K-8; K-12).

Measures

Role measures. This research utilizes a 17-item instrument based on the measures of Rizzo et al. (1970), refined by Bacharach and Aiken (1976) and used by Conley, Bacharach and Bauer (1989) in school settings. The instrument measures three factors: ambiguity (four items), conflict (seven items), and overload (six items). Role conflict is omitted in this analysis based on empirical evidence from prior studies.

Participants were asked to evaluate each item using a five-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 or role overload. Higher levels of role ambiguity and overload are thought to reflect a less desirable work condition, 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" (reverse scored). Questions intended to measure overload focus on parts of the responsibilities of the principal that may lead to feelings of being overwhelmed, such as the item, "I seem to have more commitments to overcome than other administrators I know."

Social support. The Social Provisions Scale (Cutrona and Russell, 1987, 1990) is used to measure the six social provisions put forth by Weiss (1974) as encompassing social support. 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). Participants are asked to respond using a standard five-point Likert scale with options of "strongly agree," "agree," "neutral," "disagree," and "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. In general, higher levels of social support (higher scores) would be associated with a better quality work life.

Isolation. The UCLA Loneliness Scale is used to measure perceptions of isolation (Dussault and Thibodeau, 1997; Izgar, 2009; Russell et al., 1997). This study utilizes a version of the most recent form of the scale (Russell, 1996) modified to adapt it to measuring perceptions of isolation in the work setting. For example, a negatively worded statement from version 3 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 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," with 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.

Intention to leave (persistence). Turnover is impossible to measure concurrently while a principal is on the job. To overcome this problem, principal intention to leave is used as a proxy for actual turnover data. Research in a variety of fields has utilized the intention to leave to analyze turnover (Johnsrud and Rosser, 2002; Lum et al., 1998). This study uses measures developed by Weisberg (1994) and Moynihan et al. (2000) to measure the likelihood that someone will leave his or her current position. These survey items are scored on a standard five-point Likert scale ranging from "strongly disagree" to "strongly agree." Responses for this iteration of the survey are scored on a scale of 1–5, with higher scores representing the greatest likelihood that a principal would soon leave his/her position. Sample items include, "I have considered leaving education," and "I will probably look for a new job in the next year."

Coaching. The principals in the treatment group were involved in a research grant that involved the implementation of a highly structured coaching program. Under this program, coaches met with protégés at least monthly, new principals participated in regular workshops that focused on specific instructional leadership strategies, and they implemented an instructional supervision model employing learning walks and a structured feedback strategy to work with teachers to

improve pedagogy. A dummy variable is included to signify inclusion in the treatment group, 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.

Administrative experience. As noted earlier, just fewer than 13% of the principals took their current position directly from a teaching job, with no school-level administrative experience. It might be expected that individuals without such experience would find their new role more challenging and, possibly, more isolating, thus impacting job satisfaction and/or intention to leave. Again, we use a dummy variable to account for this, with participants who came directly from teaching scoring "1" and those who had previous administrative experience scoring "0".

Analytic procedures

We follow the analytic procedure spelled out by Baron and Kenny (1986) to determine if isolation mediates the relationship between these independent variables and the outcome of interest, in this case intention to leave. Mediation is established if the independent variables affect the mediator (equation one); the independent variables affect the outcome of interest (equation two); and finally, the mediator affects the outcomes of interest when controlling for the effects of the independent variables (equation three). They specify: "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). Hence, for step one the hypotheses are as follows.

H₁: There will be a statistically significant, positive relationship between role ambiguity, role overload, lack of administrative experience, and isolation.

H₂: There will be a statistically significant, negative relationship between social support and coaching, and isolation.

For step two the hypotheses are as follows.

H₃: There will be a statistically significant, positive relationship between role ambiguity, role overload, and lack of administrative experience, as independent variables, and intention to leave.

H₄: There will be a statistically significant, negative relationship between social support and coaching, as independent variables, and intention to leave.

For step three the hypothesis is as follows.

H₅: Isolation will emerge as a statistically significant, positive predictor of intention to leave, when controlling for the effects of the independent variables.

To reiterate, if hypothesis five is supported, mediation is also supported when the effect of the independent variable(s) on the dependent variable is less in the equation that includes isolation than in the prior equation.

Table 1. Descriptive statistics.

	N	Min.	Max.	Mean	SD	Cronbach's alpha
Role ambiguity	164	1	4.75	1.99	0.6	0.7
Role overload	161	1.33	4.83	3.44	0.7	0.8
Social support	153	3	5	4.29	0.47	0.87
Isolation	153	1	3.5	1.71	0.6	0.89
Intention to Leave	152	1	4	1.96	0.87	0.8
Coaching	164	0	1	0.44	0.5	-
No admin experience	164	0	1	0.13	0.33	-

The selection of this analytic strategy, rather than a more robust approach such as path analysis, is deliberate. As noted earlier, there is a scarcity of research on the role of isolation on principals' work, and the underlying theory 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 body of research can support. Thus, we opt for using the Baron and Kenny regression technique to test mediation here to emphasize the early evolution of this research. While path modeling has some advantages, as Maruyama (1998) suggests, regression is a logical starting point.

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 computed for each regression statistic to represent practical significance. 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 a correlation of .30; and a large effect a correlation of .50.

Limitations

Participants for this study come entirely from one state in the USA. This fact may limit the appropriateness of generalizing the results to principals in other states in the USA and elsewhere. Similar research using a national or international random sample of principals may help verify these results as they apply to principals across the country and the world.

Further, the nearly exclusive use of self-reported data in this study will inevitably lead to criticisms about single-source bias (Podaskoff and Organ, 1987; Spector, 2006). However, the nature of most of the variables being used for this study cannot be accurately measured by any other method than self-reporting. Most of them are perceptual and psychological by nature, 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 and Cronbach's alpha for scale measures as an indicator of the reliability for this sample.

Descriptive statistics show that the study participants see themselves as having relatively high levels of social support (mean = 4.29 on a five-point scale), with no respondent scoring below a "3" on this scale; moderate levels of role overload (mean = 3.44 on a five-point scale); and a lower degree of role ambiguity (mean = 1.99 on a five-point scale). Respondents report relatively low

Table 2. Zero-order correlations for variables in regression analysis.

	v1	v2	v3	v4	v5	v6	v7	v8
v1 Role ambiguity	–							
v2 Role overload	.38**	–						
v3 Social support	-.27**	-.15	–					
v4 Isolation	.36**	.36**	-.50**	–				
v5 Job satisfaction	-.41**	-.31**	.23**	-.43**	–			
v6 Intention to leave	.30**	.34**	-.30**	.42**	-.45**	–		
v7 Coaching	-.03	-.02	.01	.17*	.02	-.06	–	
v8 No admin exp	-.03	-.04	-.12	.19*	-.15	.11	-.05	–

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

Table 3. Regression analyses: independent variables and isolation ($n = 148$).

Variable	B (SE)	β	ES
Dependent variable: isolation			
Role ambiguity	.15 (.07) .5*	.17	
Role overload	.21 (.06)	.25**	.28
Social support	-.54 (.09)	-.42**	.47
Coaching	.25 (.08)	.21**	.26
No admin exp	.29 (.11)	.17*	.21
$R^2 = .42$ ($F = 20.27$, $p < .01$)			

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

levels of isolation (mean = 1.71 on a four-point scale), with scores ranging from a low of 1.00 to a high of 3.50. The mean score for intention to leave was just under “2,” indicating that relatively few first-year principals in the sample plan to leave their jobs.

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 vast majority of the correlations are statistically significant, save for those related to the two dichotomous variables, which may be expected. The number of highly correlated independent variables in this study increases the chances of multi-collinearity in regression analyses. Stevens (1996) indicates that the Variance Inflation Factors (VIFs) may be used to gauge the amount of linear association that occurs between a single component and all of the other factors in a regression equation, and that in general, a VIF that exceeds 10 indicates a concerning level of multi-collinearity between variables. Analysis conducted as a part of this study shows that none of the VIF values for any independent variable in this study exceed a value of approximately two; hence, it does not appear that collinearity represents a significant problem for these results.

Results for the step one regression analysis are presented in Table 3, testing the relationship between the independent variables and the mediator, isolation. Table 3 shows a statistically significant relationship between all of the independent variables together and isolation, $R^2 = .42$, ($F = 20.27$, $p < .01$). The estimates of the regression coefficients show that role ambiguity ($\beta = .15^*$) and role overload ($\beta = .25^{**}$) are statistically significant predictors of isolation in the hypothesized direction, suggesting that higher levels of ambiguity and overload are associated with greater isolation. Similarly, lack of administrative experience emerges as a

Table 4. Regression analysis: independent variables, isolation, and intention to leave (N = 145).

Variable	B (SE)	β	ES
Dependent variable: intention to leave			
Role ambiguity	.20 (.14)	.12	.12
Role overload	.33 (.10)	.26**	.25
Social support	-.39 (.15) -.21**	.21	
Coaching	-.01 (.13)	-.01	.00
No admin exp	.22 (.19)	.09	.10
	$R^2 = .19 (F = 6.74, p < .01)$		
Role ambiguity	.13 (.14)	.08	.08
Role overload	.24 (.10)	.20*	.19
Social support	-.16 (.16) -.09	.08	
Coaching	-.11 (.14)	-.07	.07
No admin exp	.11 (.19)	.04	.05
Isolation	.41 (.14)	.29**	.24
	$R^2 = .24 (F = 8.56, p < .01)$		

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

significant predictor ($\beta = .17^*$). Social support serves as the most potent predictor of principal isolation ($\beta = -.42^{**}$), 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 ($\beta = .21^{**}$) 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 ($r = .47$); role overload ($r = .28$) and coaching ($r = .26$) have small to medium effects; whereas ambiguity ($r = .17$) and lack of administrative experience ($r = .21$) have small effects.

Table 4 displays the regression results for the model related to the dependent variable, intention to leave. Results for the first equation show a statistically significant relationship between all of the independent variables and persistence, $R^2 = .19, (F = 6.74, p < .01)$. The estimates of the regression coefficients show that role overload ($\beta = .26^{**}$) and social support ($\beta = -.21^{**}$) are statistically significant predictors in the expected direction, inferring that greater degrees of overload and lower degrees of social support lead to a greater likelihood of leaving the job. Effect size calculations show that role overload ($r = .25$) and social support ($r = .21$) each have a small to medium effect on job satisfaction.

Results for the second equation show a statistically significant relationship between all of the independent variables and persistence, $R^2 = .24, (F = 8.56, p < .01)$. When isolation is included in the analysis, it emerges as a statistically significant predictor in the expected direction ($\beta = .29^{**}$), suggesting that higher levels of isolation exacerbate intention to leave. The impact of role overload is partially mediated (dropping from $\beta = .26^{**}$ to $.20^*$), and the impact of social support is mediated fully. Effect size calculations show that role overload ($r = .19$) and isolation ($r = .24$) each have a small to medium effect on job satisfaction.

Discussion

Results show that role overload and social support are meaningful predictors of persistence, with the impact of social support fully mediated and the impact of overload partially mediated by

isolation. Importantly, isolation emerges as a statistically meaningful predictor, even when accounting for the effects of the other independent variables.

The connection between social support and isolation is an interesting one. As they are operationalized here social support deals primarily with the mechanisms in place to promote some degree of connectedness 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 loneliness. Social support is 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 intention to leave is fully mediated by isolation suggests, then, that mechanisms put in place by school systems to promote social support particularly influence outcomes such as persistence if the new principal's sense of loneliness is impacted. Put another way, social support structures that serve to lessen the degree of isolation felt by new principals would improve their emotional state and lead to positive outcomes, such as persistence.

The job of principal is demanding; role overload is not likely to go away under the intense pressure faced by school leaders. Principals, however, may learn to mitigate the effects of role overload through prioritizing tasks, appropriate delegation, or having some 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. We might conclude from these analyses that the impact of role overload is mitigated somewhat to the degree that new principals have a sense of connectedness to others, perhaps those they can rely on for advice or to relieve stress.

Theory-building

We demonstrate in this paper that the effects of role overload and social support are either fully or partly mediated through isolation, and that isolation itself is an important predictor of intention to leave. This suggests that their effects on persistence are best understood as part of a chain reaction. These models suggest that a focus on ways of reducing isolation may be a means of mitigating the effects of role overload and enhancing the effects of social support.

A more fully specified theory of persistence for new principals has both research and practical implications. For future research, a further elaborated model informed by qualitative follow-up to this study to discover how new principals and those who purport to help them 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.

This work has implications for subsequent research on the impact of isolation on the quality of school leaders' work experience. Firstly, 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 across various levels of schooling; for experienced school leaders; and as a mediator for other outcomes of interest. Secondly, 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). Thirdly, 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. Fourthly, in continuing studies of isolation it would be helpful to understand the impact (if any) of individual characteristics of leaders such as age, gender, and education on the relationships in various models.

Future model building and research has the potential to inform practice in meaningful ways, as well. It may help central office administrators to think about processes for implementing mentoring or coaching programs, focusing them on what new principals perceive to be helpful. 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.

The strategy we suggest here is consistent with Donaldson's (2006) conclusions that principals are often overwhelmed by managerial demands and need to be re-focused on instruction. Enhancing means for new principals to become involved in teachers' learning—either one-on-one, through established learning communities, or some combination of the two—may serve to reduce isolation while attending to the skill-building needs of new leaders. Stronger networks and meaningful support from the central office may reduce new principal isolation and improve persistence.

It is important, however, to observe that there are a great many unanswered questions left for future work on this topic. For instance, throughout this paper we assume isolation to be a negative factor in new principals' quality of work life. It might be equally true that some principals are attracted to the role precisely because of isolation inherent in the position. If we conceptualize isolation like theorists think about factors such as stress or burnout, each individual may have an inherent capacity to withstand the impact of isolation based on their make-up, past experiences, or personality. How or in what ways this "threshold" effect might inform an inquiry into the role of isolation—and what factors influence this threshold—are critical questions.

Levering (1988) asserts that the quality of work life for any employee is influenced by the individual's relationship to colleagues; the individual's relationship to the job itself; and the individual's relationship to the organization. To this list, we might add the individual's relationship to him/herself based on his/her emotional and psychological characteristics and experiences. Any or all of these relationships almost certainly affect a principal's experience of isolation at work. Knowing that consistent, competent leadership is important to student achievement, understanding the nature of new principal isolation, its sources, and its consequences is a worthwhile investment in school and student success.

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