

Chapter #33

THE EFFECT OF ENTREPRENEURIAL LEADERSHIP ON TEACHER JOB SATISFACTION: THE MEDIATING EFFECT OF PROFESSIONAL DEVELOPMENT, TEACHER-STUDENT RELATIONS AND TEAMWORK

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ABSTRACT

Privatization and decentralization policies in Israel's educational system have spawned entrepreneurial leadership among school principals. We define entrepreneurial leadership as the combination of principals' proactiveness (seeking opportunities for innovations), and school innovativeness (actual innovations). Principals as entrepreneurs must ensure that teachers overcome their resistance to the frequent changes and willingly participate in their implementation. We suggest that this depends on their job satisfaction. The literature indicates that job satisfaction is related to teachers' professional development, good teacher-student interaction, and teamwork. Data were collected from 410 Israeli teachers who completed a questionnaire evaluating their principal and his/her effect on them. We hypothesize that (a) proactiveness and innovativeness will have a positive effect on teachers' job satisfaction; (b) the relationship will be mediated by teachers' professional development, teacher-student relations, and teamwork. The results partially supported our mediation model. We concluded that teachers follow their principal willingly and actively when provided with opportunities for growth and satisfaction.

Keywords: entrepreneurial leadership, professional development, teamwork, teacher-student relations, quantitative research.

1. INTRODUCTION

Privatization and decentralization have brought about increasing competition among schools for recruiting students and made outside funding available to schools (Man, 2010). These have resulted in pressure on school principals to become entrepreneurial leaders (Harel Ben Shahr, 2018) and implement frequent and large-scale innovations.

Entrepreneurship in education consists of finding outside resources for educational activities in the school. It requires traits such as risk-taking, networking abilities, vision, principals' proactivity and school innovation. In this study, we refer only to proactivity and innovation, which are the two main dimensions of entrepreneurship (Eyal & Inbar, 2003). Proactivity means the principal's willingness to initiate new programs in school by introducing opportunities into the institution's organization (Eyal & Inbar, 2003), having teachers discuss and express their opinions, and being able to get the staff to work together (Gupta, MacMillan, & Surie, 2004). Innovation refers to activities actually implemented in the school (Eyal & Inbar, 2003).

Most of the literature on entrepreneurial leadership in education focuses on the aspects of the leadership external to the school. As principals respond to the decentralization and privatization of the schools, it becomes incumbent on them to take on

the role of entrepreneurial leaders and implement new initiatives. As reported in the literature, this situation requires that the principals overcome the teachers' resistance to change (Masry-Herzalah & Dor-Haim, 2021), especially veteran teachers (Snyder, 2017), and gain their motivation and cooperation. The literature goes on to report that this can be achieved by enhancing the teachers' satisfaction with their jobs.

Job satisfaction is both a cognitive (Herzberg, Mausner, & Snyderman, 1959) and affective (Weiss & Cropanzano, 1996) construct. It is both the judgment and the emotion that people have towards their work. It is determined by organizational factors one of which is supportive leadership (Bogler, 2001). Job satisfaction consists of intrinsic rewards such as self-development, quality of relations with students, and interaction with colleagues (Bogler, 2001), as well as extrinsic rewards such as promotion, improved work conditions. The macro dimension is that of outside school factors such as policies that can be either satisfiers or dissatisfiers (Dinham & Scott, 1997).

Thus, we examined the relationship between principals' entrepreneurial leadership and teachers' job satisfaction, mediated by the intrinsic organizational dimension of teachers' professional development, teacher-student relations, and teamwork.

2. THE THEORETICAL MODEL

2.1. Dependent Variable: Job Satisfaction

Theories of job satisfaction consist of cognitive and affective approaches. The cognitive aspect of job satisfaction refers to peoples' evaluation of their work as satisfactory when comparing with their own objectives or with other jobs (Dugguh & Ayaga, 2014) and the content of their job satisfaction (Herzberg et al., 1959). The second approach addresses the affective experience at work and analyzes job satisfaction in terms of emotions (Weiss, 2002). Based on the affective approach, Skaalvik and Skaalvik (2010, 2011), and Aldridge and Fraser (2016) defined teachers' satisfaction as enjoyment of their work. Enjoyment refers to work in general, or to parts of the job that produce job satisfaction (Skaalvik & Skaalvik, 2009). Job satisfaction predicts the decision to continue working in one's current position (Bogler, 2001).

Organizational determinants of job satisfaction include satisfaction with job itself and supervision, role, school type, and different types of rewards. These include extrinsic rewards such as salary, opportunities for advancement, and working conditions, or intrinsic rewards that include three elements: teacher own growth, relationship with students, and interaction with colleagues. Self-growth through professional development that consists of an active learning of new teaching materials, and also opportunities for doing collaborative research (Taylor, Yates, Meyer, & Kinsella, 2011; Wang, Luo, & Zhang, 2019). The quality of interaction with students is the most important determinant of teachers' job satisfaction (Skaalvik & Skaalvik, 2014); this includes classroom discipline, student behavior or misbehavior, and scholastic achievement. Staff collaboration through sharing information (Duyar, Gumus, & Sukru Bellibas, 2013; Skaalvik & Skaalvik, 2015). This relationship was also found among manufacturing workers when given autonomy (Griffin, Patterson, & West, 2001). One of the most studied relationships regarding job satisfaction is the interaction between employees and their supervisors (Bhal & Ansari, 1996). Leadership that is regarded as transformational affects job satisfaction (Braun, Peus, Weisweiler, & Frey, 2013), as does support from principals (Aldridge & Fraser, 2016). These relationships are cross-cultural, and are evident in Israel (Bogler, 2001), Greece (Koutouzis & Malliara, 2017), and Indonesia (Eliyana, Ma'arif, & Muzakki, 2019).

2.2. Independent Variable: Entrepreneurial Leadership

Decentralization and privatization have made private funding available to schools (Man, 2010). As a result, principals have to act as entrepreneurs and bring innovation and change to their schools (Man, 2010; Pihie, Asimiran, & Bagheri, 2014). The literature on entrepreneurial leadership presents two approaches to this concept. The first argues that entrepreneurial leadership is similar to transformational leadership (Eyal & Kark, 2004), or includes elements of it, such as charisma (Nwachukwu, Chladkova, & Zufan, &, 2017). The second maintains that entrepreneurial leadership is a phenomenon distinct from other leadership styles (Chen, 2007; Pihie et al., 2014). It is a hybrid of a leader's ability to combine the skills of communicating and networking with outside agencies in order to build support for their vision (Borasi & Finnigan, 2010) with the skills used inside the school to mobilize teachers' cooperation (Pashiardis & Savvides, 2011). Thus, Pashiardis and Brauckmann-Sajkiewicz (2018) defined a new emerging leadership style that they termed "edupreneurial," which links entrepreneurship with pedagogy to bring innovation. Innovations may range from small-scale innovations (Ensley, Pearce, & Hmieleski, 2006) to radical changes (Eyal & Inbar, 2003; Leffler, 2009), and include programs for teachers, new pedagogical projects for students, new subject matter, and new administrative structures.

Entrepreneurial leadership requires competencies, skills and behaviours (Harrison & Burnard, 2016). These include communication and networking with outside agencies (Borasi & Finnigan, 2010); recognizing and exploiting opportunities, being passionate, flexible, creative (Renko, El Tarabishy, Carsrud, & Brännback, 2015), praising workers, encouraging them, taking risks (Bagheri & Harrison, 2020), implementing innovation and being proactive (De Jong, Parker, Wennekers, & Wu, 2015; Eyal & Inbar, 2003). We follow Eyal and Inbar's (2003) definition of school entrepreneurship as the combination of principals' proactiveness and school innovativeness to test entrepreneurial leadership. Proactiveness means the degree and frequency of principal's active search for new opportunities and sharing it with teachers; innovativeness is defined as the degree and frequency of actual implementation of these opportunities in school.

Studies have established a relationship between entrepreneurial leadership and school-level variables. For example, González-Romá and Hernández (2016) reported that in banks, the number of innovations implemented had a direct positive effect on team performance and job satisfaction. Kongjinda, Niyamabha, Wichitpatcharaporn, Sakulthanasakdi Moore, and Koedsuwan, (2020) examined the relationship between entrepreneurial leadership and school effectiveness in private schools in Thailand and found relationship through the mediation of school culture and teacher OCB which were initiated by the principal. Wibowo and Saptono (2018) indicated that in Malaysia, entrepreneurial leadership affects teachers' innovativeness and creativity (Pihie et al., 2014).

2.3. Mediating Variables

2.3.1. Professional Development

Professional development refers to opportunities and programs to improve teachers' instructional competencies, deal with complex knowledge (Archibald, Coggshall, Croft, & Goe, 2011), and improve collegial collaboration leading to changes in teachers' practices and improvements in student learning (Darling-Hammond, Hylar, & Gardner, 2017). There are numerous models for professional development: in-service teacher training, school-university partnerships, conferences and workshops, teachers' informal exchanges

of knowledge by visiting each other's classrooms, short courses, tutorials, and mentoring (Archibald et al., 2011).

Professional development is a leading method for supporting reforms and increases teachers' use of new technologies (Donnelly, McGarr, & O'Reilly, 2011), and promotes innovative behavior (Thurlings, Evers, & Vermeulen, 2015). It also creates a positive climate and is effective, mainly when principals practiced shared leadership styles (Urlick & Bowers, 2014). These practices are effective in that they allow teachers to influence, control, and direct their own development (Rose, 2020).

2.3.2. Teacher-Student Relations

E. Skinner and Belmont (1993) described teacher-student relations as encompassing teachers' affection for their students, their willingness to devote their resources (help, time, and energy) to them, dependability and involvement, structure, and support for autonomy. Havik and Westergård (2020) documented that teachers' emotional support affected students' engagement, making the latter work harder in class.

Several factors affect the relations between teachers and students. One factor is student behavior. Hamre and Pianta (2001) reported that teachers' perceptions about student behavior affect three important areas of teacher-student relations: conflict, closeness, and dependency. Closeness indicates a positive relationship with students. It motivates teachers to spend extra time and energy to promote children's success. Student dependency also prompts teachers to exert extra effort, particularly with boys. In contrast, conflict leads to teachers' attempts to exclude disruptive children from the classroom (Pianta, 1994). These relations occur more with students who have difficulty learning (Hamre & Pianta, 2001). Additional factors involve gender, with teachers exhibiting closer relationships with girls than boys. Furthermore, high school students reported feeling closer to their homeroom teachers than to their subject teachers (Roorda, Jorgensen, & Koomen, 2019).

Positive teacher-student interactions and teachers' perceived ability to modify their students' attitudes and behavior are significant factors in their job satisfaction (Dinham & Scott, 1997; Skaalvik & Skaalvik, 2009, 2015; Veldman, van Tartwijk, Brekelmans, & Wubbels, 2013). Slaughter-Defoe and Carlson (1996) noted that teacher-student relations are the most important dimension of a school's climate. Barile et al. (2012) indicated that teacher-student relations play an important role in their sense of belonging in school, and Vieno, Perkins, Smith, and Santinello (2005) found that student sense of community in school was related to the degree of their participation in activities and sense of teacher fairness. Such students are less likely to get into trouble (Hopson & Lee, 2011), which ultimately increases teachers' satisfaction. Thus, teacher-student relations have an impact on teachers' job satisfaction.

Teamwork: Cohen and Bailey (1997) defined a team as "a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity" (p. 241). Teams develop in stages (Tuckman, 1965), during which they become creative and effective in diffusing change (Benoliel & Schechter, 2018). Skilled leaders promote teamwork. For example, Nielsen, Yarker, Randall, and Fehmidah (2009) found that transformational leaders improved the efficacy of nursing teams, leading to increases in their job satisfaction (Beverborg, Slegers, & van Veen, 2015). Such leaders also shaped teams by maintaining their work environment (Benoliel, 2016). Studies in schools have determined that meetings with the principal were effective in sharing his/her vision with team coordinators (Eden,

2001). The cooperation aspect of teamwork is also related to enjoyment, learning, and job satisfaction (Skaalvik & Skaalvik, 2015).

According to Fitzgerald and Theilheimer (2013), teamwork is related to professional development, as it enables staff members to learn together and build peer relationships and feelings (Slaughter-Defoe & Carlson, 1996). These factors are especially important for novice teachers who learn from veteran teachers (Egodawatte, McDougall, & Stoilescu, 2011).

Wang et al. (2019) found that professional development, autonomy in instruction, teacher-student relations, and teacher cooperation predict teachers' job satisfaction.

2.4. Hypotheses

Based the literature on relationship between research variables, we hypothesize the following:

H1: The principal's entrepreneurial leadership, measured as the degree of proactiveness and innovativeness, will have a positive relationship with teachers' job satisfaction.

H2: There will be positive relationship between the principal's entrepreneurial leadership, measured as the degree of his or her proactiveness and innovativeness, and 1) the teachers' professional development, 2) teacher-student relations, and 3) teamwork.

H3: Teachers' professional development, teacher-student relations, and teamwork will mediate the relationship between the principal's entrepreneurial leadership and teachers' job satisfaction

3. METHOD

3.1. Sample

The participants were 410 teachers from different elementary, junior and senior high schools in Israel. We chose only teachers who had worked for more than two years with the same principal because the questionnaire on entrepreneurial leadership measured the principals' proactiveness and innovativeness in the last two years.

All of the teachers worked in public schools. Of the 410 respondents, 85.4% were Jewish. Of them, 65.6% served in secular schools and 19.8% in religious schools. The remaining 14.6% were Arab teachers. Israel's Central Bureau of Statistics ranks the SES of every community on a scale of 1, the lowest, to 10, the highest. The average SES index of these schools was 6.88, S.D =1.69 (YNet, 2018). Significant differences were found on all research variables between Jews and Arabs where Arabs were higher. However, the results indicated the same model for the two populations.

In accordance with Skaalvik and Skaalvik (2010), we approached all of the teachers present in the school at a particular time and distributed the questionnaires.

3.2. Research Instrument

The 33-item questionnaire was taken from two sources. Items about entrepreneurial leadership came from Eyal and Inbar (2003), who measured entrepreneurship as the degree and frequency of school innovativeness and principals' proactiveness. Items about job satisfaction and the mediating variables of professional development, teacher-student relations, and teamwork came from a 2019 survey created by the National Authority for Measuring and Evaluation (NAME), a division that is adjunct to the Ministry of Education. The survey measures school climate and students' scholastic achievement in all schools in

Israel. It contains questions on numerous aspects of school life, such as teacher-student relations, teamwork, professional development, and teachers' job satisfaction. The survey is distributed to students, teachers, and principals. Using the survey enabled us to study phenomena that are important locally, yet are congruent with international studies. The survey, which tests teachers' perceptions of the research variables, consists of Yes/No questions, which we modified into 6-point Likert scale questions ranging from 1-not at all, to 6- very much. We calculated all of the scores by averaging the responses to the items on that scale. We then calculated the score on the entire scale as the average of the items on that scale.

3.2.1. Job Satisfaction

We used two items from the NAME questionnaire that referred to general job satisfaction as enjoyment and accomplishment. Respectively, the items were: "The school makes sure that teachers feel that it is pleasant to be there" and "The school makes sure to enable teachers to succeed." Internal reliability was $\alpha = .92$.

3.2.2. Entrepreneurial Leadership

The entrepreneurial leadership questionnaire was based on Eyal and Inbar's (2003) two dimensions: degree and frequency of principals' proactiveness and school innovativeness. The nine items included three items on principals' proactiveness and six items on school innovativeness. An example of the former is "Our school principal exhibits great initiative qualities" (Internal reliability was $\alpha = 0.75$). An example of the latter is: "The innovations implemented in the last two years have radically changed the school" (Internal reliability was $\alpha = 0.92$).

3.2.3. Professional Development

The seven items on this scale referred to activities related to planning and sharing knowledge between colleagues that enable growth. An example of the items is: "We make sure to share the knowledge that teachers learn in in-service with other teachers." Internal reliability was $\alpha = 0.79$.

3.2.4. Teacher-Student Relations

The nine items on this scale referred to the dedication of time and energy to students. For example, "In our school we hold personal meetings with students" and "Our school enables each student to advance according to their ability." Internal reliability was $\alpha = 0.87$.

3.2.5. Teamwork.

The four items on this scale referred to teachers' collaboration on pedagogical and emotional dimensions. For example, "The teachers help each other through difficulties" and "Teachers on the professional team plan the teaching aides they develop together." Internal reliability was $\alpha = 0.82$.

4. RESULTS

4.1. Descriptive Statistics

Table 1 presents the means, standard deviations, and correlations for all of the variables. The results show positive, strong and significant relationships between all of them.

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Table 1.
Descriptive statistics and Pearson's Correlation Coefficient among research variables.

		Satisfaction	Teamwork	Teacher-student relations	Professional development	innovativeness
Proactiveness	M=4.89 S.d=.79	.441*	.623**	.786**	.746**	.859**
Innovativeness	M=4.55 S.d=.91	.377*	.595**	.728**	.699**	
Professional development	M=4.47 S.d=.85	.567*	.839**	.824**		
Teacher-student relations	M=4.79 S.d=.71	.561*	.742**			
Teamwork	M=4.61 S.d=.92	.528*				
Satisfaction	M=4.68 S.d=.98					

* $p < .05$. ** $p < .01$. *** $p < .001$

4.2. The Regression Model

Next, we conducted a linear hierarchical regression to test the suggested mediating model in accordance with Kenny, Kashy, and Bolger's (1998) mediation model. The results are shown in Table 2.

Step I indicates that both proactiveness and innovativeness are correlated with job satisfaction ($\beta = 0.43^{***}$, 0.16^{***} respectively), supporting H1. Step II tests the relationship between the independent variable and the mediating variables. It indicates strong and significant correlations between entrepreneurial leadership (proactiveness and innovativeness) and two of the mediators: professional development: $\beta = 0.27^{***}$ for proactiveness, and 0.47^{***} for innovativeness, and teacher-student relations: $\beta = 0.19^{***}$ for proactiveness and $\beta = 0.45^{***}$ for innovativeness, but not teamwork. Thus, H2 was partially supported.

Steps III and IV test the effect of the mediating variables on the independent variable. The results indicate that only professional development and teacher-student relations predict job satisfaction, not teamwork. They also indicate that the presence of all variables does not diminish the effect of the initial variable on the outcome variable of job satisfaction. Thus, H3 was partially supported. Considering the results, we concluded that the mediation model was partially supported as it does not fulfil all of Kenny et al.'s (1998) requirements for a mediating model.

Table 2.
Summary of the mediation model.

Job Satisfaction				
	B	SE B	B	t
Step I: JS				
Pro	0.54	0.05	0.43	10.27 ***
Inno	0.18	0.05	0.16	3.84 ***
R ²				.32
F				185.35 ***
Step II: PD				
Pro	0.26	0.04	0.27	6.95 ***
Inno	0.44	0.04	0.41	10.4 6 ***
R ²				.41
F				274. 22 ***
Step III: TSR				
Pro	0.15	0.03	0.19	4.71 ***
Inno	0.41	0.04	0.45	10.9 4 ***
R ²				.36
F				225. 79 ***
Step IV: TW				
Pro	0.13	0.05	0.13	2.86 *
Inno	0.40	0.05	0.34	7.51 ***
R ²				.45
F				99.84 ***
Step III+ IV: JS				
Pro	.195	.051	.195	4.74 ***
Inno	.033	.042	.033	.86
PD	.276	.050	.276	6.41 ***
TSR	.230	.052	.230	6.11 ***
TW	.067	.037	.067	1.91
R ²				.46
F				135. 49 ***

* $p < .05$ ** $p < .01$ *** $p < .001$

JS= job satisfaction; PD = professional development; TSR = teacher-student relations; TW=teamwork; Pro =proactiveness; Inno=innovativeness

5. DISCUSSION

We examined the relationship between principals' entrepreneurial leadership and teachers' job satisfaction due to the need of school principals to lead to frequent innovations due to competition between schools as a result of privatization and decentralization. The results confirmed our initial claim that the principal's ability to be proactive and implement innovations affects teachers' job satisfaction. These results are consistent with those of previous studies on other leadership styles. For instance, that distributed leadership has a significant effect on job satisfaction (Samancioglu, Baglibel, & Erwin, 2020), that transformational leadership affects teachers' satisfaction (Bogler, 2001; Koutouzis & Malliara, 2017), and that this relationship increases employees' happiness (Geijssels, Slegers, Stoel, & Krüger, 2009).

However, while the results indicate that proactiveness and innovativeness are related to each other and go together, they affect job satisfaction in different ways. According to our findings, proactiveness predicts job satisfaction through the mediation of professional development and teacher-student relations, whereas innovation predicts job satisfaction directly, and proactiveness predicts job satisfaction more than does innovativeness. Thus, our claim regarding the mediation was partially confirmed. Our findings of the mediation concur with Garcia Torres (2018), who found that distributed leadership affects professional development, work satisfaction, and job satisfaction.

Our study also demonstrates that professional development and good teacher-student relations mediate between entrepreneurial leadership and teacher job satisfaction (Thurlings et al, 2015). When teachers are provided with intrinsic rewards, such as professional development and conditions for good relations with students – both being high-order needs of interest, challenge, and autonomy – teachers are satisfied with their work. Professional development answers the teachers' need for self-direction (Rose, 2020), which gives them interest and meaning that ultimately lead to job satisfaction (Graham, 2018; Keyhani & Kim, 2021). These rewards are satisfiers and motivators (Herzberg et al, 1959), and bring enjoyment to teachers (Skaakvik & Skaalvik, 2015). They encourage teacher experimentation and entrepreneurship (Brauckmann-Sajkiewicz & Pashardis, 2020), and create a culture in which innovation is welcome (Weckström, Karlsson, Pöllänen, & Lastikka, 2021). Teacher-student relations also predict job satisfaction as it defines teachers' and students' sense of belonging (Vieno et al, 2005) and thus contributes to teachers' job satisfaction (Dinham & Scott, 1997). Although proactiveness and innovativeness are correlated with teamwork, teamwork does not mediate for either of them. A potential explanation may be that teachers respond positively to changes that result from professional collaboration and collegiality and from having the principal share new ideas with them, not necessarily from teaming up (Garcia Torres, 2019).

These results confirm our initial claim that organizational factors are essential for successful innovations. Indeed, these relationships between entrepreneurial leadership and teacher outcomes have been observed in other countries, including Malaysia (Wibowo & Saptono, 2018) and Thailand (Kongjinda et al, 2020).

6. SUMMARY AND CONCLUSIONS

The findings are useful for schools seeking to implement frequent changes. They also provide guidelines for helping principals overcome teachers' overt or covert resistance to innovative programs and ensuring that the innovations continue rather than fade away.

Entrepreneurial leadership can turn the dissatisfaction into satisfaction by strengthening the teachers' intrinsic rewards that are most important to them, thereby enhancing their motivation, sense of belonging and power over their work to face the uncertainty, and the resultant willingness to engage in innovations.

Principals who are entrepreneurial leaders are known to inspire teachers to participate actively in these endeavors (Gupta et al., 2004). They create the confidence in teachers that "On the organizational trapeze, individuals will take the entrepreneurial leap only if they believe there will be a strong and supportive pair of hands at the other end to catch them" (Ghoshal & Bartlett, 1999, p. 93). Entrepreneurial leadership and orientation, particularly openness to innovation and change, affect educational and organizational outcomes (Man, 2010). A ripple effect is created whereby job satisfaction fosters entrepreneurial behavior in teachers (Amorim Neto, Picanco Rodrigues, & Panzer, 2017), which in turn may lead to the intrinsic rewards so needed by teachers for job satisfaction and maximum performance. Teacher entrepreneurship may consist of developing and writing teaching material for a project, initiating a new project, and mobilizing outside resources (Amorim et al, 2017). Such activity will increase entrepreneurial orientation and the school's ability to face increasing privatization, as well as the market-related competition demands that are being increasingly put on teachers and principals

7. LIMITATIONS OF THE STUDY

This study has two major limitations. The first is method bias. Conway and Lance (2010) argued that the bias in organizational research stems from individuals' self-reports of their principals as leaders. Bogler and Nir (2015) suggested that studies must collect information regarding principals from several sources rather than only from teachers. The second limitation is the context of the study. The teacher sample was homogeneous economically. The vast majority of the schools were of average SES. However, the respondent population was demographically heterogeneous. All schools studied were treated as one type. It is quite possible that considering the schools by type (religious/secular, elementary/ junior high/senior high, Jewish/Arab) might yield different results. It is also possible that context matters (Freeman & Fields, 2020) and that in other contexts, the results would be different. Thus, future studies should expand the sources of information such as that of the principals and the community, and contexts such as type and size of school, as well as exploring the impact of other organizational phenomena in mediating this relationship

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