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Entrepreneurial leadership practices and school innovativeness

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Entrepreneurial leadership, as a distinctive type of leadership required for dealing with challenges and crises of current organizational settings, has increasingly been applied to improve school performance. However, there is limited research on the impact of school leaders' entrepreneurial leadership practices on school innovativeness. The main purpose of this study is to identify the relationship between principals' entrepreneurial leadership practices and school innovativeness through the teachers' perspectives. The participants included 294 Malaysian secondary school teachers in Selangor, Malaysia. A questionnaire containing 64 items (50 items on school principals' entrepreneurial leadership practices and 14 items on school innovativeness) was utilized. An analysis of the data indicates that teachers perceive entrepreneurial leadership as highly important for school principals. However, the principals practise it moderately. Furthermore, this study found a significant correlation between teachers' perceptions of school principals' entrepreneurial leadership practices and school innovativeness. Implications of the findings for developing school principals' entrepreneurial leadership and school innovativeness are discussed.

Keywords: educational leadership; entrepreneurial leadership; school improvement; school innovativeness; school principals

Introduction

Entrepreneurial leadership is a distinctive type of leadership required for dealing with challenges and crises of the current organizational settings (Gupta, MacMillan & Surie, 2004). This leadership style enables leaders to successfully direct their organization and solve the problems through different steps of the organization's growth and development (Chen, 2007; Swiercz & Lydon, 2002). It also has great influence on leaders' competence in recognizing new opportunities to improve the organization's performance (Chen, 2007; Okudan & Rzasa, 2006; Gupta et al., 2004). These influential effects have led scholars to increasingly apply entrepreneurial leadership to improve various aspects of education and specifically school performance (Xaba & Malindi, 2010; Berglund & Holmgren, 2006; Collins, Hannon & Smith, 2004; Eyal & Kark, 2004; Eyal & Inbar, 2003). Entrepreneurial leadership has been emphasised to create a supportive environment for change and innovation at schools (Park, 2012).

There are different complexities and challenges of school organization such as higher demands for improving the quality of education in public schools, fast changes in the environment, and growing shortages in school resources and funds (Xaba &

Malindi, 2010; Eyal & Kark, 2004; Eyal & Inbar, 2003). Therefore, scholars believe that school principals require entrepreneurial leadership characteristics and the knowledge and competence to execute their tasks based on leadership principles. However, there is limited research on the association between school principals' entrepreneurial leadership practices and school performance and particularly school innovativeness (Park, 2012). In response, this study aims to examine whether there is a significant relationship between the school principals' entrepreneurial leadership practices and school principals' entrepreneurial leadership practices and school innovativeness through the teachers' perspectives. The paper is divided into four sections. The first section explains the theoretical foundation of entrepreneurial leadership and competencies of entrepreneurial leaders. The second section highlights the importance of entrepreneurial leadership practices for school improvement. The third section details the research method and findings. Finally, we discuss the findings in the light of the implications for developing entrepreneurial leadership competencies among school principals and school innovativeness improvement.

Entrepreneurial leadership: Definition and competencies

In their attempts to define entrepreneurial leadership, the researchers applied three main approaches. Firstly, they focused on inherent traits that distinguish entrepreneurial leaders from other leaders. Secondly, they examined the environmental and contextual factors that prompt organizational leaders to implement entrepreneurial principles and strategies in performing their tasks and roles. Thirdly, they explored the social processes through which entrepreneurial leaders influence a group of people to enact their vision (Kempster & Cope, 2010; Gupta et al., 2004). There are various types of definitions for the construct (Roomi & Harrison, 2011). While some scholars have looked at the similarities between entrepreneurship and leadership and defined entrepreneurship as a type of leadership in complex and challenging contexts (Fernald, Solomon & Tarabishy, 2005; Cogliser & Brigham, 2004), others have considered the differences between the two constructs and highlighted the competencies that enable leaders to behave as entrepreneurs and entrepreneurs to act as leaders (Gupta et al., 2004; Vecchio, 2003; Swiercz & Lydon, 2002). Through an integrating approach to leadership and entrepreneurship, Roomi and Harrison (2011:2) have recently defined entrepreneurial leadership as "having and communicating the vision to engage teams to identify, develop and take advantage of opportunity in order to gain competitive advantage". In fact, practising entrepreneurial competencies by leaders and leadership principles by entrepreneurs have one common goal, i.e. dealing with the challenges and crises of current organizational settings and ultimately improving the effectiveness of the leaders (Cogliser & Brigham, 2004; Vecchio, 2003).

Despite the debates on the definition of entrepreneurial leadership, there has been relative consensus among researchers on the distinctive competencies that motivate and enable entrepreneurial leaders to lead an organization successfully (Nicholson, 1998). These competencies are a combination of personal characteristics, skills and knowledge that have long-lasting and influential effects on entrepreneurial leaders' organizational performance (Man, Lau & Chan 2002). Swiercz and Lydon (2002) identified two types of competencies for entrepreneurial leaders, which are personal competencies and functional competencies. These competencies are explained in the following sections.

Personal competencies of entrepreneurial leaders

Among the personal competencies that have been specified for entrepreneurial leaders, proactiveness, innovativeness, and risk-taking are the most cited ones that indicate entrepreneurial orientations at both personal and organizational levels (Chen, 2007; Kuratko, 2007; Gupta et al., 2004; Covin & Slevin, 1991).

Proactiveness is being active in creating and leading toward the future rather than passively waiting to be affected by it. By being proactive, entrepreneurial leaders not only explore new opportunities for entrepreneurial activities, but also step into action and exploit the opportunities to improve the organization's performance (Kuratko, Hornsby & Goldsby, 2007; Kuratko & Hornsby, 1999). Proactiveness highly influences entrepreneurial leaders' creativity, opportunity recognition ability, desire and intention to initiate entrepreneurial activities and perseverance in achieving their visions (Zampetakis, 2008; Kuratko et al., 2007; Kickul & Gundry, 2002).

Innovativeness is the ability and tendency of entrepreneurial leaders to think creatively and develop novel and practical ideas relating to opportunity recognition, resource utilization and problem solving (Chen, 2007; Rae, 2007; Gupta et al., 2004). Finally, entrepreneurial leaders have been mostly characterized by possessing the propensity for well-calculated and prudent 'risk-taking'; the willingness to face uncertainties and venture into ambiguous areas despite a chance of costly failures (Chen, 2007; Zhao, Seibert & Hills, 2005; Mueller & Thomas, 2000). Although essential, the personal competencies are not enough for successfully leading entrepreneurial endeavours. Entrepreneurial leaders also need to possess the competencies that enable them to perform their roles and tasks successfully.

Functional competencies of entrepreneurial leaders

Functional competencies are the capabilities of entrepreneurial leaders that empower them to act differently from other types of leaders (Gupta et al., 2004). These competencies are related to the entrepreneurial leader's task performances such as operations, finance, marketing and human resources (Swiercz & Lydon, 2002). Based on the challenges that leaders face in transforming their organizations from a transactional to an entrepreneurial one, Gupta et al. (2004:245) have developed a theory for entrepreneurial leadership. The theory specifies two challenges for entrepreneurial leaders, namely: "Scenario enactment" and "Cast enactment".

Scenario enactment reflects the challenges of entrepreneurial leaders in envisioning the future and creating a scenario of innovative possibilities. To face this challenge, the leaders need to be proactive and anticipate future possibilities, create and develop various entrepreneurial opportunities and take the risks to enact the vision. The second challenge, *cast enactment*, is the difficulties faced by entrepreneurial leaders in influencing and inspiring a group of competent and committed supporters to enact the envisioned future. To be successful in dealing with this challenge, entrepreneurial leaders need to be competent in building commitment among their followers and specifying limitations in their path to realize the vision. Personal and functional competencies of entrepreneurial leaders are interrelated. Importantly, both of the competencies develop through involvement in entrepreneurial activities and facing the challenges and crises of entrepreneurial leadership task performances.

School improvement and entrepreneurial leadership

Educators and researchers have looked at the benefits of entrepreneurship for school improvement in two ways. Firstly, entrepreneurship, in general, and entrepreneurial leadership, in particular, have been considered as ways of thinking and lifestyle rather than merely establishing a new business (Kuratko, 2007; Klein & Bullock, 2006; Hytti & O'Gorman, 2004). In this sense, entrepreneurial characteristics and approaches can be applied to improve all aspects of education and schooling, specifically school leadership through influencing individuals' behaviours and their task performances (Berglund & Holmgren, 2006). Accordingly, school principals need to acquire and practise entrepreneurial leadership characteristics in order to improve their school effectiveness and to facilitate the process of school innovation (Hamzah, Yusof & Abdullah, 2009). Secondly, researchers have focused on the advantages of organizational entrepreneurship (Holt, Rutherford & Clohessy, 2007, Kuratko et al., 2007; Gupta et al., 2004; Swiercz & Lydon, 2002; Kuratko & Hornsby, 1999) for school organization improvement. In this context, organizational innovativeness reflects the capacity of a school to develop and implement novel ideas that lead to critical changes and improvements at the school (Eyal & Kark, 2004; Eyal & Inbar, 2003). School innovativeness has three main components including the capacity to explore new educational opportunities, the tendency to take action and exploit the opportunity and the changes that implemented innovations create in the school performances (Eval & Inbar, 2003). Therefore, entrepreneurship features are applied in school organizations to enhance their success in providing an effective teaching and learning environment.

Entrepreneurial leadership competencies, in turn, help school leaders to face the complexities and constraints of the school environment such as fast changes, limited resources, the variety of factors affecting school performance and the urgent need for preparing learners for their highly competitive future (Xaba & Malindi, 2010; Morris, Coombes, Schindehutte & Allen, 2007; Eyal & Kark, 2004; Eyal & Inbar, 2003). These competencies also enable school leaders to create the dramatic changes and innovations required in public schools by looking beyond the current status of the school and developing new opportunities for school improvement (Eyal & Kark, 2004). While the first approach looks at the critical role of individuals in adopting

entrepreneurial behaviours, the second approach highlights the importance of entrepreneurial elements in the school organization.

Previous studies on the innovations implemented in schools have provided empirical evidence that they cannot fundamentally change and improve school performances (Park, 2012; Eyal & Inbar, 2003). This can be partially attributed to school leadership that failed to provide a supportive environment for changes and innovations in the school (Park, 2012). In a recent study, Xaba and Malindi (2010) specified entrepreneurial characteristics of the principals in historically disadvantaged schools. The researchers concluded that principals in such schools unconsciously practise innovativeness, proactiveness and risk-taking in order to overcome the constraints in the school environment, particularly in relation to the required resources. More recently, Park (2012) found a significant relationship between principals' leadership style and support for innovation at schools. Eval and Inbar (2003:230) examined the relationship between primary school principals' proactiveness and school innovativeness. They defined school principals' proactiveness as "the willingness to start intrinsically motivated actions, which are not imposed by the authorities" and school innovativeness as "the perceived amount of innovations implemented in school during a given time". They found that only a small number of the schools vigorously implemented entrepreneurial approaches and the majority of the schools were in the first steps of initiating entrepreneurial orientation in their activities.

Research findings also suggest the significant influence of school leaders' creativity on school innovative practices such as the relationship between the school and parents (Athanasoula-Reppa, Makri-Botsari, Kounenou & Psycharis, 2010). Furthermore, the school principals' leadership style plays a critical role in school organizational creativity and innovativeness (Y1lmaz, 2010). Eyal and Kark (2004) related school principals' leadership style to entrepreneurial strategies in elementary schools. Their findings confirmed the hypothesized relationship between the principals' transformational leadership and school entrepreneurial strategies. Moreover, school leaders demonstrated different levels of entrepreneurial characteristics including proactivity and innovativeness. The authors called for further research on the relationship between school principals' entrepreneurial characteristics and school performance on other education levels than primary schools. Accordingly, we hypothesised that Malaysian secondary school principals' entrepreneurial leadership practices have a significant positive relationship with school innovativeness from the teachers' perspectives.

Method

This quantitative study involved six public secondary schools that were randomly selected from 35 public secondary schools in Selangor, Malaysia. Only public schools were included in this research because in centralized education systems, including in Malaysia, public and private schools differ in the degree of freedom to apply innovative and entrepreneurial approaches, both at personal and organizational levels (Eyal

& Inbar, 2003). Furthermore, we focused only on secondary schools because, as Eyal and Kark (2004) and Eyal and Inbar (2003) argued, school entrepreneurship varies in different education levels because schools are different in terms of the learners, the subjects offered to learners, the organizational bureaucracy and the degree of the principals' autonomy. Of the schools under this investigation, 19.5% have between 2,501 and 3,000 learners and 14.6% have between 1,501 to 2,000 learners. Only 12.6% of the schools are high-performing schools and 85.4% are ordinary academic schools.

Following previous research, we measured principals' entrepreneurial leadership practices and school innovativeness from teachers' perspectives because teachers are those who ultimately implement the changes and innovations that improve their school performances (Park, 2012; Eyal & Inbar, 2003). Furthermore, teachers' perceptions of the amount of innovation implemented in the school, the improvements these innovations created in the school performance, and the role of principals' leadership style in creating the innovations, are of great importance in implementing entrepreneurial approaches in the school and fostering the process of school innovations (Park, 2012). Finally, we assessed teachers' perceptions toward school principals' entrepreneurial leadership practices in order to avoid biased data on behalf of the principals. A sample of 294 teachers was chosen from the six secondary schools. We randomly selected 50 teachers from each school.

A questionnaire consisting of 64 items (50 items on school principals' entrepreneurial leadership practices and 14 items on school innovativeness) was administrated to measure the school principals' entrepreneurial characteristics and school innovation. Both of the constructs were measured in terms of their importance and frequency. The questionnaire also included the teachers' background information such as age, gender, years of teaching experience, and schools' type as well as the number of enrolled students. The questionnaire had a high reliability and validity to measure the constructs under this investigation (Cronbach's alpha = .97). The majority of the teachers were between 41 and 50 years old (42%). Most of the teachers were female (88.4%) and had between 12 and 16 years of teaching experience.

Findings

The study aimed to identify the relationship between school principals' entrepreneurial leadership practices and school innovativeness through the teachers' perspectives. An analysis of the data was performed in two steps, both descriptive and inferential, using Statistical Package for the Social Sciences (SPSS) version 20. The results indicated that although teachers perceive entrepreneurial leadership as highly important for school principals (mean = 3.77, SD = .66), the principals only moderately practise the characteristics and approaches of entrepreneurial leadership in leading their schools (mean = 3.49, SD = .67). Furthermore, there is a significant correlation between teachers' perceptions of the importance of the school principals' entrepreneurial leadership practices and school innovativeness (r = .51, p < 0.01) as illustrated in Table 1.

Variables		Importance	Innovativeness
Importance of entrepreneurial leadership for school principals	Pearson Correlation	1	.511**(.000)
School innovativeness	Pearson Correlation	.511**(.000)	1

Table 1	Correlation between importance of school principals' entrepreneurial
	leadership practices and school innovativeness

******Correlation is significant at the 0.01 level (2-tailed)

This means the greater the teachers perceive the importance of practising entrepreneurial leadership by school principals, the more innovative the school is in terms of the principal's efforts to improve school through creating an innovative school culture; encouraging and supporting entrepreneurial thinking and innovative ideas; and overcoming the challenges of applying innovative educational methods. In addition, as Table 2 shows, there is a significant correlation between the frequency of the school principals' entrepreneurial leadership practices and the school innovativeness as perceived by the teachers (r = .51, p < 0.01). In other words, the more frequently school principals practise entrepreneurial leadership approaches in leading their schools, the higher the schools' innovativeness will be.

Table 2	Correlation	between fre	equency	of school p	rincipals'	entrepreneurial
	leadership	practices and	d school	innovative	ness	

Variables		Importance	Innovativeness
Frequency of entrepreneurial leadership for school principals	Pearson Correlation	1	.661**(.000)
School innovativeness	Pearson Correlation	.661**(.000)	1

**Correlation is significant at the 0.01 level (2-tailed)

Therefore, there is a significant correlation between both importance and frequency of practising entrepreneurial leadership characteristics by the school principals and the school innovativeness.

Discussion and conclusion

Drawing upon Eyal and Kark's (2004) call for examining school organizational entrepreneurship practices in different education levels, this study set out to explore the relationship between school principals' entrepreneurial leadership practices and school innovativeness from the secondary school teachers' perspectives. Our findings indicate the high importance of entrepreneurial leadership characteristics and practices for school principals as perceived by the teachers. However, from the teachers' perceptions school principals practise entrepreneurial leadership approaches only moderately in leading their schools. This means school teachers are aware of the critical role that school principals' entrepreneurial leadership characteristics can play in school performance improvement and specifically school innovativeness. School principals may, however, not be aware of the importance of such characteristics in school leadership, the amount of innovations they can implement in the school, or the improvements they can create in school performance. This may necessitate improving school principals' awareness and knowledge of the new roles they should play in facilitating school innovativeness in order to be able to face the growing challenges of the school environment.

More importantly, they need to be aware of the significant influence of entrepreneurial leadership competencies on enabling school leaders to face the challenges and complexities of school environment and improving school leadership effectiveness, because awareness is the first step in entrepreneurial leadership learning (Okudan & Rzasa, 2006). In addition, school principals should be equipped with entrepreneurial leadership competencies and the skills required for implementing such leadership approaches in improving their school performances. Providing school principals with continuing professional development programmes is one of the pivotal strategies in improving their entrepreneurial leadership competencies (Berglund & Holmgren, 2006). Kempster and Cope (2010) emphasize that entrepreneurial leadership can be acquired by active involvement in education and training. Entrepreneurial leadership competencies can also be embedded in current teacher education programmes to prepare prospective school leaders for their future challenging tasks. Moreover, school principals' entrepreneurial leadership can be enhanced through observing the best practices of entrepreneurial approaches at schools (Kempster, 2009), social interactive and reflective learning (Kempster & Cope, 2010), and enacting entrepreneurial leadership characteristics in their school leadership (Kempster, 2006). Therefore, school leaders should be given special attention and should be identified as a separate target group in national and regional strategies with regard to entrepreneurial leadership education and training.

This study also found a significant correlation between teachers' perceptions of their school principals' entrepreneurial leadership practices, both in terms of importance and frequency, and the school innovativeness. This confirms the influential impact of school principals' entrepreneurial approaches on school innovativeness (Eyal & Kark 2004; Eyal & Inbar, 2003). The critical role that school leaders' entrepreneurial approaches play in school innovativeness improvement highlights the urgent need for improving school principals' knowledge and competence in practising entrepreneurial leadership to bring more innovation to schools. It also emphasizes the necessity of encouraging and supporting school principals to use entrepreneurial leadership to improve the school's performance. However, practising entrepreneurial leadership can be challenging for school leaders because they have to change their traditional approaches to school leadership (Vecchio, 2003). Therefore, they need to be well-educated, trained and prepared for their new challenging role as an entrepreneurial school leader. The findings may be helpful for educators to improve school innovativeness by enhancing school principals' entrepreneurial leadership knowledge and competencies. Moreover, researchers can use the factors examined in this study as a framework to investigate the current schools' entrepreneurial orientation at both leadership and organizational levels.

Although this study provides a significant contribution to the scant literature on school principals' entrepreneurial leadership and school innovativeness (Park, 2012; Eyal & Inbar, 2003), it has some limitations that should be acknowledged. As we have only focused on measuring school principals' entrepreneurial leadership practices and school innovativeness through the teachers' perspectives, further research is needed to examine school entrepreneurial leadership and innovativeness through school principals' perspectives, as well as qualitative approaches in order to better understand the entrepreneurship phenomenon at schools. Future research can also be conducted on the relationship between school principals' entrepreneurial leadership practices and teachers' performance and learners' academic achievements. Moreover, identifying the pedagogical strategies and methods for developing school principals' entrepreneurial leadership competencies has great potential for further investigation.

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