# Private Preschools' Managerial Risk and Solutions to Risk Management

**Yi-Gean Chen** Associate Professor Department of Early Childhood Education National University of Tainan, Taiwan

#### Abstract

The low birth rate and a big change of early childhood education revolution have created many challenges for preschools in Taiwan. Although many preschools attempt to change operational strategies, they are hesitant to do so due to a lack of appropriate risk management and assessment tools in the research field of early childhood education in Taiwan and other countries. This study attempts to construct indicators of measurement for risk management of preschools, in order to assist preschool managers in the identification and business risk management. The researcher combines three risk management models, HHM, ERM, and RM5, with the research results of relevant enterprise-related studies and preschool management studies to develop the measurement of preschool management risk. Based on the results of literature analysis and the Delphi expert consensus method, the results show the 10 aspects of managerial risk involve the quality of teaching, workloads and knowledge sharing, changing early childhood education policies, environmental facility safety, management and leadership, finance, challenges from neighboring competitors, a kindergarten's image, special characteristics and innovations, and human resources. The top 3 aspects in descending order of importance are: risk in human resources, risk in management and leadership, and financial risk. Three specific risk items in human resources top the chart, indicating that human resources are a high-priority item and preschool managers have to pay more attention to control, avoid, or solve risk in human resources. This study also indicates the 10 aspects of managerial risk can be detected through 53 specific risk items. Meanwhile, the corresponding risk management solutions are proposed in this study.

Keyword: Preschool, Risk Management, Risk Management Solutions

### 1. Background

Given the rapid change of modern society, enterprises must adjust business strategies in accordance with market needs and the direction of market development in order to remain competitiveness. In the field of education, many privately-owned preschools have perspicuous corporate characteristics. Business strategies are also valued in preschools founded by government sectors. However, as private preschools in Taiwan are undergoing a big change of early childhood education revolution, many preschools' managers wish to alter or adjust their business strategies, yet hesitate to do so, for fear that new strategies may cause managerial risk. In recent years, competition among private preschools becomes fierce and intense (Chen, 2013; Cheng & Chen, 2013). Thus, many researchers suggest that the preschool managers should apply the enterprises' business strategies in order to remain their competitiveness in the market, such as a low-cost strategy, a differentiation strategy, a focus strategy, a business diversification strategy, and forming a strategic alliance (Chen, 2015; Tsai, 2007).

However, there are many preschools that wish to apply the above-listed business strategies, yet do not have the courage to hastily employ such business strategies, as managerial risk are difficult to manage (Griffis & Whipple, 2012). Therefore, this study aspires to explore the managerial risk involved in running a preschool, as well as possible appropriate solutions to control these risk items. This study intends to conduct preliminary research, and develop the content of running the managerial risks of a preschool by collecting and organizing relevant literature, and using the Delphi expert consensus method. Furthermore, this study intends to use the Delphi expert consensus method to develop solutions for risk management in order to benefit preschool management. Meanwhile, the results of this study may provide pre-education institutions with references regarding managerial risk management.

### 2. Literature Review

After reviewing previous literature, the researcher found that three risk management models may be used as a foundation for developing the managerial risks of operating a preschool. These risk management models include: the ERM model (enterprise-wide risk management model), the HHM model (hierarchical holographic modeling), and the RM5 model (five risk management model). The ERM model is a risk management model that examines an organization's constitution (Lai & Lau, 2012). The ERM model is predominately employed to examine organizational strategies and resources to help maximize an organization's value (Lai & Lau, 2012, p. 667).

The HHM model carries out a comprehensive examination of an organization's intrinsic characteristics, which include risk management in the fields of economy, reputation, resources, business operation, environment, market, policy, management, and finance (Lai & Lau, 2012, p. 671). By employing a fusion of the ERM model and the HHM model, a preschool could conduct comprehensive examination of its intrinsic resources, special features, and possible threats to organizational business strategies. In addition, Rice (2010, p. 378-379) developed a business organization risk management model, called the RM5 model (five risk management model), as based on Michael Porter's five-force model.

The RM5 model (five risk management model) includes: managing an organization's internal risk, information risk, contractual risk, basic infrastructure risk, and possible influential risk factors. In this study, the researcher will combine the three risk management models (HHM, RM5, ERM) with relevant enterprise-related research results (Barki, Rivard, & Talbot, 2001; Lai & Lau, 2012; Longstaff, Chittister, Pethia, & Haimes, 2000; Quinn, 2003; Rice, 2010; Ting, Kwok, & Tsang, 2009; Yiannaki, 2012), and the research results in relation to operating a preschool (Chen, 2013; Chen & Cheng, 2012) in order to develop a draft of the aspects of managerial risks and specific managerial risks that are involved in operating a preschool. To verify a preschool's managerial risk and solutions for risk management, which are developed based on literature review, this study proposes to adopt the Delphi method to conduct expert validation, discussion, and modification, in order to establish practical managerial risk management solutions suitable for early childhood education.

### 3. Research Method

This study's research methods include documentary analysis and the Delphi method. Documentary analysis is mainly employed to collect and sort out relevant theories and research results, in addition to establishing the preliminary content of managerial risk and corresponding risk management solutions. The Delphi method is mainly for modifying and confirming the above- listed contents of risk and risk management solutions upon academic and industry experts' validation. As risk management is a new issue in the field of early childhood education, it requires a consensus opinion from academia and industries. The Delphi method is a research method that is adopted in unfamiliar or insufficient knowledge of a research issue, thus, collecting experts' consensus opinion is necessary (Skulmoski, Hartman, & Krahn, 2007).

The Delphi method is also a research method that facilitates a professional group's effective communication in a particular and professional field (Hsu & Sandford, 2007). As such, the Delphi method is suitable for this study. In order to adhere to the Delphi method's principles, this study's expert panel consists of 20 members in total, including early childhood education scholars and experts, and current early childhood education personnel. Bearing a resemblance to the most previous research (Custer, Scarcella, & Stewart, 1999; Hsu & Sandford, 2007; Ludwig, 1997), this study successfully gathered the necessary information, and had expert opinions reach a consensus after three rounds of the Delphi method.

The procedures for the development of the indicators of the risk management measurement are as follows:

- (1) The items and sub-items are established on the basis of literature reviews. The Delphi technique is then applied for three discussions (by 20 experts) to modify the items and sub-items previously developed on the basis of the literature review. This step confirms the contents of the risk management measurement.
- (2) The process of expert discussions on the basis of the Delphi technique also modifies the risk solution section of the risk items and sub-items. It is intended that the indicators can assist preschool owners to identify the risks, as well as control, remedy, and mitigate operational risks.

## 4. Research Results

(1). Based on the results of literature analysis, and employing the Delphi expert consensus method, the 10 aspects of managerial risk that a preschool must be aware of were confirmed. The 10 aspects of managerial risk involve the quality of teaching, workloads and knowledge sharing, changing early childhood education policies, environmental facility safety, management and leadership, finance, challenges from neighboring competitors, a preschool's image, special characteristics and innovations, and human resources. In particular, the top 3 aspects in descending order of importance are: risk in human resources, risk in management and leadership, and financial risk (see Table 1).

Aspects of Risk	Number	Mean	Standard	Rank	Aspects of	Number	Mean	Standard	Rank
			Deviation		Risk			Deviation	
A. The quality	20	5.0333	.58139		F. Finance	20	5.3083	.51092	3
of teaching									
B. Workloads	20	4.6125	.80898		G. Challenges	20	5.0250	.66836	
and knowledge					from				
sharing					neighboring				
					competitors				
C. Changing	20	4.8800	.79047		H. A	20	4.9143	.69276	
early childhood					preschool 's				
education					image				
policies									
D.	20	5.1313	.85212		I. Special	20	5.0500	.49070	
Environmental					characteristic				
facility safety					and				
					innovations				
E. Management	20	5.4700	.54782	2	J. Human	20	5.5250	.37081	1
and leadership					resources				

Table 1: The tabulated statistics of 20 exper-	s' opinions on the as	pects of preschools'	managerial risk
--	-----------------------	----------------------	-----------------

Note: Scores 1 to 6 are used to rate the importance of each risk item. 1 = the least important. 6= the most important.

(2). According to the results of literature review and the application of the Delphi expert consensus method, the 10 aspects of managerial risk that a preschool must be aware of were confirmed, and the 10 aspects can be detected through 53 specific risk items (see Table 2). Among the 53 specific risk items, the most important is "failure to recruit suitable teachers", the second is "insufficient human resources in teaching and administrative staff", the third is "preschool principals' lack of ability to lead teaching and administrative staff", the fourth is "teachers' unwillingness to stay at their jobs or high turnover rates", the fifth ones are " preschool principal leadership styles' failure in getting teaching and administrative staff's recognition", " comprised quality of early childhood education philosophies in order to accentuate a preschool's special school characteristics. Three of the above-listed seven specific risk items belong to the category of risk in management and leadership, one belongs to the category of risk in special characteristics and innovations, and one belongs to the category of risk in the quality of early childhood education.

Aspects of Risk	Specific Risk Items	Mean	Standard Deviation	Rank
The quality of	A1. Current strategies make early childhood education personnel become fidgety in teaching, and therefore, engender risk.	5.10	.852	
teaching	A2. Current strategies may make early childhood education personnel compromise the quality of teaching to cater to parents' preferences, and therefore, engender risk.	5.10	.788	
	A3. Current strategies may result in the problem of early childhood education personnel's inadequate professional competence in teaching or inability to demonstrate their professional skills, and therefore, engender risk.	5.00	.973	
	A4. Current strategies may hinder early childhood education personnel from being wholeheartedly devoted to the teaching work, and therefore, engender risk.	4.70	.733	
	A5. Current strategies may engender risk due to a preschool's outdated or inadequate teaching equipment and insufficient teaching support.	4.70	.865	
	A7. Current strategies may engender risk because a preschool fails to hire enough early childhood education personnel, and thus, have compromised quality of teaching.	5.60	.598	4
Workloads and	B1. Current strategies may engender risk because the strategies bring a heavy workload to early childhood education personnel's work in a preschool.	5.20	.834	
knowledge sharing	B2. Current strategies may engender risk because the strategies exacerbate the workload of classroom management and behavioral counseling for young children.	4.75	.851	
	B3. Current strategies may engender risk because the strategies exacerbate early childhood education personnel's parent-teacher communication workload.	4.30	1.081	
		4.30		
	B4. Current strategies may engender risk as the strategies trigger early childhood education personnel's self-protection mechanism, making them unwilling to share personal experience and tips with others.	4.20	1.152	
Changing early childhood	C1. Current strategies may engender risk as the strategies can possibly contradict with many philosophies of principles for providing early childhood education services.	5.10	1.165	
education policies	C2. Current strategies may engender risk as changes in early childhood education policies and decrees may cause a severe impact on a preschool's development.	4.85	.933	
	C3. Current strategies may engender risk because it is hard for a preschool to keep up with rapidly changing early childhood education policies and decrees.	4.95	.999	
	C4. Current strategies may engender risk as the strategies result in an intense relationship with a city (county) government's early childhood education authorities.	4.45	.826	
	C5. Current strategies may engender risk when parents fail to understand new early childhood education policies that are advocated to them.	5.05	.887	
Environm ental	D1. Current strategies may engender risk as a preschool's facilities fail to meet the standard of an evaluation.	5.35	.875	9
facility safety	D2. Current strategies may engender risk when a preschool is unable to improve its hardware facilities and environments and has inadequate safety equipment.	5.00	1.076	
	D3. Current strategies may engender risk as the strategies make it hard for a preschool's facilities and equipment to meet safety standards.	4.80	1.005	
	D4. Current strategies may engender risk as rates of injured young children stay high due to a lack of regular inspections and repairs and insufficient safety drills and facilities.	5.15	1.268	
	D5. Current strategies may engender risk due to the failure to instantly update and respond to regulations and decrees in relation to current environmental facilities and equipment.	5.00	1.124	

## Table 2: The tabulated statistics of 20 experts' opinions on preschools' specific managerial risk items

	D6. Current strategies may engender risk due to the failure to develop or fully implement a mechanism to handle accidents and emergencies.	5.40	.940	8
	D7. Current strategies may engender risk due to preschool buildings' safety issues.	5.30	.979	10
	D8. Current strategies may engender risk due to problems in escorting preschool children to school, picking up children after school, and safety issues.	5.05	.605	
Managem ent and	E1. Current strategies may engender risk because preschool principals lack professional knowledge and skills to guild teaching and administrative staff.	5.65	.671	3
leadership	E2. Current strategies may engender risk because preschool principals' leadership styles have difficulty obtaining teaching and administrative staff's recognition and support.	5.60	.598	4
	E3. Current strategies may engender risk because preschool principals are ignorant of business operations, which results in an organization without a system, makes systematized management impossible, and creates a loosely-constructed and ineffective organization.	5.55	.759	5
	E4. Current strategies may engender risk as an organization lacks the consensus of sharing weal and woe together, moving wheels by driving gears, being united as one, and psychological attachment to the organization.	5.45	.887	7
	E5. Current strategies may engender risk due to employee discontent, which arises when a preschool is over strict in managing early childhood education personnel.	5.10	.447	
Finance	F1. Current strategies may engender risk as the strategies may result in a preschool's cost overruns each month.	5.50	.761	6
	F2. Current strategies may engender risk as the strategies may result in an increase in a preschool's monthly water and electricity expenses, rent payments, or general expenses.	5.05	.605	
	F3. Current strategies may engender risk as the strategies may result in an increase in a preschool's monthly human resource expenses.	5.50	.513	6
	F4. Current strategies may engender risk as the strategies may result in a preschool's tight financial situation and capital.	5.45	.686	7
	F5. Current strategies may engender risk as the strategies may result in preschool's escalating debts.	5.05	1.099	
	F6. Current strategies may engender financial risk as a preschool's accounting system, such as receiving and making payments or purchasing, may have loopholes and result in embezzlement of funds.	5.30	.733	10
Challenge s from	H1. Current strategies may engender risk due to the failure in distinguishing neighboring preschools' characteristics of business operations.	5.25	.786	
neighborin g	H2. Current strategies may engender risk due to the failure to stop other emerging and rival preschools.	5.25	.851	
competitor s	H3. Current strategies may engender risk due to the failure to keep up with neighboring rival preschools.	4.70	.801	
	H4. Current strategies may engender risk due to the failure to accentuate a preschool's strengths.	4.90	.788	
A preschool' s image	K1. Current strategies may engender risk as a mediocre preschool reputation leads to ineffective effects.	4.65	.671	
	K2. Current strategies may engender risk as young children's unexceptional learning performance leads to ineffective effects.	5.05	.945	
	K3. Current strategies may engender risk as the strategies make a friendly preschool-community relationship unlikely and affect a school's image.	4.75	.786	
	K4. Current strategies may engender risk as the strategies, which do not comply with current laws and regulations, incur criticism of a preschool and affect the preschool's image.	5.15	.933	
	K5. Current strategies may engender risk as ineffective decree enforcement would cause harm to a preschool's image.	4.85	.933	
	K6. Current strategies may engender risk as the strategies do not comply with relevant laws and regulations, or were punished before, which would affect a	5.35	1.040	9

	maashool's image			
	preschool's image.			
	K7. Current strategies may engender risk as the strategies impair current early	4.60	.821	
	childhood education culture and characteristics.			
Special	L1. Current strategies may engender risk as the strategies are unable to bring	5.05	.887	
characteris	out special early childhood education characteristics to attract parents.			
tics and	L2. Current strategies may engender risk due to the shortage of an open and	4.90	.447	
innovation	innovative team to conduct regular innovative planning.			
S	L3. Current strategies may engender risk as some innovative gimmicks are	4.65	.489	
	over the top.			
	L4. Current strategies may engender risk because early childhood education	5.60	.754	4
	philosophies are sacrificed to accentuate special school characteristics.			
Human	M1. Current strategies may engender risk as it is often hard to recruit suitable	5.80	.410	1
resources	early childhood education personnel.			
	M2. Current strategies may engender risk because the strategies often make	5.65	.587	3
	early childhood education personnel reluctant to stay at their jobs, which			
	results in a high employee turnover rate.			
	M3. Current strategies may engender risk as a preschool is often unable to	4.95	.510	
	dismiss unsuitable early childhood education personnel, whose employment			
	and labor rights are protected by law.			
	M4. Current strategies may engender risk due to insufficient human resources	5.70	.470	2
	in terms of teaching and administrative staff.			
·	5	1		

(3). Three specific risk items in human resources top the chart, indicating that human resources are a high-priority item, which contemporary preschools' should measure to prevent risks, and focus on avoiding a failure in recruiting suitable talent, minimizing a talent drain, and precluding insufficient human resources. Corresponding risk management solutions are proposed by this study. In terms of recruitment, a preschool should recruit suitable teachers through a variety of channels, such as human resources websites, social networks, and print media. In terms of employee retention, a preschool should be dedicated to improving teachers' job satisfaction, building a supportive and positive relationship, enhancing the comfort of a work environment, and give preferential treatments to specialized and acknowledged teachers. In terms of supplementing and enriching human resources, a preschool should examine its overall human resources deployment and give appropriate corresponding responses, such as adjusting work allocation, hiring new employees, improving employee skills training, etc.

#### 5. Conclusion

This study aspires to explore the managerial risk involved in running preschool as well as possible appropriate solutions in controlling these managerial risks. The researcher intends to conduct preliminary research, and develop the content of managerial risks of preschools by collecting and organizing relevant literature, and using the Delphi expert consensus method. Furthermore, the researcher uses the Delphi expert consensus method to develop solutions in risk management in order to control the risks. Based on the results of literature analysis and the Delphi expert consensus method, the conclusion is as follows:

First, 10 aspects of managerial risk that a preschool must be aware of were confirmed. The 10 aspects of managerial risk involve " the quality of teaching", "workloads and knowledge sharing", "changing early childhood education policies", "environmental facility safety", "management and leadership", "finance risk", "challenges from neighboring competitors", "a kindergarten's image", "special characteristics and innovations", and "human resources". According to the opinion of Delphi experts in this study, the most important managerial risk is "human resources", the second is "management and leadership", and the third is "financial risk", so we can understand "lack of human resources" is a serious risk for preschool management. This result is different from other enterprise-related studies. Most of enterprise-related studies focus on "financial risk" (Lai & Lau, 2012; Yiannaki, 2012), not on "risk in human resources" and it indicates the specific characteristics of preschool management. Secondly, the 10 aspects can be detected through 53 specific risk items among which the most important one is "failure to recruit suitable teachers", the second is "insufficient human resources in teaching and administrative staff". These results show the importance of human resources for preschool management again, especially the preschool teachers' quality and quantity. According to the results of past studies, the high turnover rate of teachers is a serious problem in preschool management (Chen, 2009), so the researcher suggests the preschool managers should pay more attention to this issue.

According to the results above, human resources is the key risk in preschool management, so the corresponding risk management solutions are proposed in this study. In terms of recruitment, preschool managers should recruit suitable teachers through a variety of channels. In terms of retention, preschool managers should be dedicated to improving teachers' job satisfaction and giving preferential treatments to specialized and acknowledged teachers. In terms of enriching human resources, preschool managers should examine the overall human resources deployment and give appropriate corresponding responses.

Finally, the researcher hopes these results of this study can provide preschool managers a measurement to check their managerial risks and find the way to solve the risks, and expects this study can also be a criterion for other countries. I hope that in the future, there are more findings in this issue.

#### References

- Barki, H., Rivard, S., & Talbot, J. (2001). An integrative contingency model of software project risk management. Journal of Management Information Systems, 17(4), 37-69.
- Chen, Y. G. (2009). Public/Private preschool teachers' turnover in Taiwan: A test on correlative variables and theories. National Chiayi University Journal of the Educational Research, 22, 53-77.
- Chen, Y. G. (2013). The pilot study for the indicators of the scale of kindergarten teachers' competitiveness. The Tohoku Journal of Educational Studies, 16, 105-113.
- Chen, Y. G. (2015). The Relationship between Competitive Strategies of Kindergartens with Different Characteristics and Parent Satisfaction. The Journal of Global Business Management, 11(2), 76-87.
- Chen, Y., & Cheng, J. (2012). Leadership behavior and job performance of teachers in public and private preschools: the perspectives of institutionalization, reason, and Feeling. School Effectiveness and School Improvement, 23(1), 1-19.
- Cheng, J. N., & Chen, Y. G. (2013). The exploration of the dimensions to the scale of kindergarten's competitiveness and preschools' efficacy. Education and Sports Education, 12, 16-21.
- Custer, R. L., Scarcella, J. A., & Stewart, B. R. (1999). The modified Delphi technique: A rotational modification. Journal of Vocational Technical Education, 15(2), 1-10.
- Griffis, S. E., & Whipple, J. M. (2012). A comprehensive risk assessment and evaluation model: Proposing a risk priority continuum. Transportation Journal, 51(4), 428-451
- Hsu, C., & Sandford, B. A. (2007). The Delphi technique: making sense of consensus. Practical Assessment, Research & Evaluation, 12(10), 1-8.
- Quinn, D. M. (2003). Legal issues in education technology: Implication for school leaders. Educational Administration Quarterly, 38(2), 187-207.
- Lai, I. K. W., & Lau, H. C. W. (2012). A hybrid risk management model: A case study of the textile industry. Journal of Manufacturing Technology Management, 23(5), 665-680
- Longstaff, T.A., Chittister, C., Pethia, R., & Haimes, Y.Y. (2000). Are we forgetting the risks of information technology? Computer, 33(12), 43-51. (doi: 10.1109/2.88 9092)
- Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi methodology? Journal of Extension, 35(5), 1-4.
- Rice, J. F. (2010). Adaptation of Porter's five forces model to risk management. Defense Acquisition Review Journal, 17(3), 375-388.
- Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. Journal of Information Technology Education, 6, 1-20.
- Tsai, C.T. (2007).The case studying of innovative management for early childhood education. Journal of Child Care, 5, 35-58.
- Ting, J. S., Kwok, S., & Tsang, A. H. (2009). Hybrid risk management methodology : A case study. Internation Journal of Engineering Business Management, 1(1), 25-32.
- Yiannaki, S. M. (2012). A systemic risk management model for SMEs under financial crisis. International Journal of Organizational Analysis, 20(4), 406-422.