

© 2016, TextRoad Publication

ISSN: 2090-4274 Journal of Applied Environmental and Biological Sciences www.textroad.com

# **Safety Practice Management in Pre School**

# Zuraini Jusoh<sup>1</sup>, Zainuddin Zakaria<sup>1</sup>, Muhd Jismi Asmawi Johari<sup>1</sup>, Norchahaya Johar<sup>1</sup>, Kartini Mat Rashid<sup>1</sup>, Hayati Adilin Mohd Abd. Majid<sup>2</sup>

<sup>1</sup>Faculty of Business Management <sup>2</sup>Faculty of Hotel and Tourism Management Universiti Teknologi MARA, Dungun, Terengganu, Malaysia

> Received: March 31, 2016 Accepted: May20, 2016

# ABSTRACT

Safety can be defined as the condition of being protected from unlikely to cause danger, risk or injury. It is very important for parents or guardian to know the current safety practiced by pre-school and for pre-school conform to safety rules and regulations. Safety management practice benefits pre-school in improving the safe working conditions of the teachers, the management and also environment for the kids. This practice positively influences the safety of the organizations (pre-school) including all personnel (teachers, managements and kids), significantly reduce or even instilled preventive measures at pre-schools. The sample was taken from 2 different types of pre-school in Penang and Selangor because it has the most branches in Malavsia. The respondent was chosen in different group of people who involved in pre-school because to find out how this different group of respondents influences the safety process at the kindergarten. The respondents chosen are the management of pre-school, teachers of pre-school and the parents or guardian of children in pre-school. The results of the multiple regression revealed that 4 predictors were found to have a significant and positive association with the safety performance of the pre-schools namely safety rules and procedure, safety training, safety communication feedback and management commitment. Furthermore, from the regression analysis, safety rules and procedure are found as the most dominant predictor of safety performance. Management commitment was found to be the least influential element in influencing safety performance at this 2 pre-school. For a recommendation, rules and procedure must be understandable and displayed. So, it can be a guidance to management, teachers, guardian or parents and kids.

**KEYWORDS:** Safety Practice Management, Safety Performances, Management Commitment, Safety Training, Safety Rules, Safety Promotion Policy, Pre School.

### INTRODUCTION

It is believed by all parents that pre-school is substantial for their children as the beginning steps in education and preparing them for the primary school environment. A lot of pre-school have been set up with various ranges from teaching and playing till day care for the children. Taking care of kids was not an easy task. It all depends on the pre-school management to provide the best hospitality they could. Empirically hospitality includes the safety and security of the kids. Safety can be defined as the condition of being protected from unlikely to cause danger, risk or injury. Thus, it is very important to know the current safety practice that pre-school have been practicing. Safety management practice beneficial for pre-school in improving the safe working conditions of the teachers, the management and also environment for the kids. Significantly, accidents can be reduced and even better it can be avoided.

Increasing demand in pre-school with day care has boosted the business and it is likely a great opportunity for entrepreneur to seize it. In fulfilling the increasing demand, the pre-school tend to accept kids more than their capacity to handle them. Mostly pre-school only thinks of taking care and teaching the kids in the best way they can manage. However, they missed the important piece in keeping the kids safe in every way possible. Small accidents happened at pre-school are continuously. Even the accident does not cause serious injury, it is better be avoided. It shows the importance to have safety management practice at all levels to ensure safety environment for all.

The objectives of this study are to identify the relationship between safety management practice elements (independent variables) and safety performance (dependent variable), and to determine the safety management practice elements which have influenced the safety performance in pre-school. This study was involved 2 different types of kindergarten because both of this kindergarten have branches all over Malaysia. They were 8 branches in Penang and 9 branches in Selangor. The sample took place in Penang and Selangor. It has a different social-cultural and environment that could impact the safety management practice in the pre-school.

Corresponding Author: Zuraini Jusoh, Faculty of Business Management, Universiti Teknologi MARA, Dungun, Terengganu, Malaysia, E-mail: zuraini338@tganu.uitm.edu.my

#### Jusoh et al.,2016

The respondent was chosen in different group of people who involved in pre-school because to find out how this different group of people effect from the outcome of this study. They were the management of pre-school, para-educator of pre-school and the parents or guardian of children in pre-school.



Figure 1: Proposed theoretical framework

In this study, the independent variables were safety management practice. The element of safety management practice used were management commitment, safety training, workers involvement, safety communication, safety rules and safety promotion. Meanwhile, the dependent variable was a safety performance which includes the safety participation and safety compliances.

This study can provide a guidance to improve the safety condition in pre-school. Once the elements of safety management practice in this study are detected, the pre-school can improve their weak spot and at the same time can improve the safety practice in pre-school. Keeping a good safety performance can reduce the rates of accidents and injuries within the school. Accident free school will attract more children intake giving the chance for the school to expand its organizations. The school itself can build a good reputation from a good safety performance.

# LITERATURE REVIEW

#### **Safety Performance**

The dimension of safety performance incorporates with employee are safety compliance and participation. Safety compliance involves adhering to safety procedures and carrying out work in a safe manner while safety participation involves helping co-workers, promoting the safety program within the workplace, demonstrating initiative and putting effort into improving safety in the workplace.

In [9] pointing out that successful safety performance is not based on the employees solely, but management involvement is necessary in providing safety education and training making employee understand. Safety training is required for top level management too, once top level management is educated the importance of safety they will be committed in ensuring employee and organization's safety. Other strategies in improving safety performance establishing a connection on both the company and employee, an open communication

between management and employee are the best connection, opinion and feedback can be discussed and share to improved safety performance. In [5] stresses out safety rules and procedure will have greater impact on safety performance as well as safety promotion policies. By looking at task oriented behavior surely employee will perform well, as it is compulsory to oblige the rules and willingly to modify their behavior with a safety procedure to get the incentives or reward from the safety promotion. This gradually will boost up the safety performance in the organization.

# **Management Commitment**

In an organization, management is considered as the backbone. They manage everything in the organization to ensure everything run smoothly. Hence, it is wise that management plays an important role in safety management. According to [12], an organization where the management show high interest in the safety of their workers tend to have lower accident rates. This includes the safety program or training that the management carried out to prevent injuries of their workers. Rather than just safety program and training, management need to provide proper personal protective equipment (PPE) to their workers. Personal protective equipment provided should meet the International Standards Organization (ISO) standards, where each personal protective equipment must suitable with the type of works involve in the organization. Even, if it is necessary the personal protective equipment should also be provided to external customer if they are happened to be inside the organization. Before carrying on with any program or training, management should portray by tightly following the rules and procedure this also will contribute as an example to their workers.

#### **Safety Training**

The safety program carried out by the organization should be given high priority so that employee gets the necessary input. An employee can be alert to the safety issues, thus accident rates can be a negative addition to the input or the knowledge employee get from the safety training which give a big impact to their work. In [19] says even with an adequate safety training given to the employee, each of the employee's attitudes towards the safety issues and also perceptions of hazards in their workplace influenced them more.

However, the organization not just can run a safety training program for their employee but they also have to ensure the employee participate in the training too. Encouragement can come many sorts of ways and method. Practically, management ensures the employee attending the program by displaying the important and beneficial for both sides when they attend the program [14].

#### Workers Involvement

Previous studies had mentioned that most job accidents and injuries that happened at the workplace was resulted from the employees' unsafe act [18]. Employee involvement is important because they more alert in the safety matter or issues while carrying out daily works. Thus, it can minimize the risk of accidents during the task perform.

In [1] also mentioned that employee opinion on the safety matters should be acknowledged by the management. Employees who are the one have direct contact with the task and they can detect the risk or hazard from the task their doing or from the working environment. Management can use employee opinion in making decision and improvement regarding safety matters.

In [6, 10] criticized on employee honestly, based on their previous study, where they found that employee involvement in the safety issues are not sincere. They get involved in the safety matters either because they have too or made compulsory by the management. They also argued that if the employee involvement are not sincere they unable to help the organization in sharing the same point of view to identify risk or hazard, there is no solutions to the problem might occur later on.

#### **Safety Communication**

In [8] include that safety performance in the organization is influence by communication. They add that management should start to provide a hazard reporting system, so that accident can be prevented. It also ask all the organization start to implement this hazard reporting system. Based on his current study shows that most organizations do not have this kind of system, they all rely on the management and safety officer to detect the hazard. This will lower the effectiveness of hazard to be detected. The reporting system can also be categorized as a safety performance in the organization.

According [1], all the safety performance goals and target the management want employees to achieve should be very clear and transparent. The employees that understand the goals and target of the safety performance can give better feedback related to safety matters. The safety reporting system could give the opportunity and good feedback for the employee to discuss the safety matters, where this also a source of communication [11].

#### **Safety Rules**

In [8] concluded that safety rules and procedure are taken as a safety management practice. Effective rules and procedure are enough to prevent accidents from occurring. Rules and procedure must be understandable even for the external customers to follow during their visit to the organization. Both the rules and procedure need to be displayed. As for procedures, it needs to be detailed so that the employee can follow clearly.

Supervisor plays an important role, they are required to have frequent contact with employees ensuring they are following the procedure. For those employees who failed to do so need be strictly enforced to follow procedure [2]. Enforcing these rules and procedures for the employee to follow can be time consuming. Employees will follow the procedures and tend to work more safely when they notice their supervisor regards their safety equally important to the jobs they are doing.

#### **Safety Promotion Policy**

People are motivated to behave in ways that lead to desired consequences. They will modify their behavior to conform to a cultural norm if it is lead to a desirable outcome. Employees are people who will be motivated if there is a desirable outcome for them. In [7] added incentive programs can reward an employee in many ways (thanked, cash or other rewards includes recognition in newsletter). Management should also consider job promotions as a reward to its employees too. Job promotions based on this two factors impact the employee towards new goals at the same time safety conduct can be achieved. Simply rewarding the employees without clear consistency will never achieve the desired outcome or to prevent accidents. It will lead to undesired behavior of employees who only focus on the rewards instead of actual issues, resulting in more accidents [13].

#### **RESEARCH METHODOLOGY**

The purpose of this study is to explain the perception of the safety management practice for a safe and conducive environment at these pre-school. A deductive research design, using a survey method was adopted in order to postulate the relationship between the independent variables (management commitment, safety training, worker involvement, safety communications, safety rules and safety promotion policies) and dependent variables (safety performances). The researchers choose to select the respondents using a systematic sampling method and the sample size determined in this study equals to 193 respondents. In order to gather enough participants, we personally distributed the questionnaires to respondents at the two pre-school. The correlation and regression analysis is used to determine the relationship between the independent variables (management commitment, safety training, worker involvement, safety communications, safety communications, safety rules and safety performances).

#### **Sampling Procedure**

In this study, the population identified equals to 403 employees of both selected different types of pre-school. The respondents include the managements, teachers and parents or guardian of selected pre-school branches. The pre-school branches were located in Penang and Selangor, Malaysia and chosen according to districts. In each district, only one pre-school is chosen which the first pre-school that were established in a district.

In this study systematic sampling design was used. The advantage of systematic sampling is it easy to use if the sampling frame is available. It involves drawing every nth element in the population starting with a randomly chosen element between 1 and n. If the total number of population (N) is divided by the sample number (S), the nearest whole number is 3. The researchers therefore took the sample of every 2 respondents starting random number from 1 to 3. As a result, the total number of respondents chosen in this research equals to 197. However, after the data cleaning process is conducted, only 193 questionnaires were used.

# FINDINGS AND DISCUSSION

Initial measurement of the reliability of the instrument was completed by calculating the Cronbach's alpha value. Once the field work was executed, the data collected was subjected to the reliability analysis to establish the true ability of the items to measure the constructs chosen for the study. All results of the reliability test of this research are shown in Table 1.

Variables	No. of Items	Cronbach's Alpha					
Management Commitment	9	0.734					
Safety Training	6	0.741					
Para-educator's involvement	5	0.714					
Safety communication and feedback	5	0.654					
Safety rules and procedure	5	0.607					
Safety promotion policy	4	0.668					
Safety performance	12	0.824					

#### Table 1: Reliability analysis

In this study, 6 independent variables or predictors and one dependent variable have been identified from past research and literature. The variables and the number of items used in the survey are shown in Table 1. After taking into consideration the items that may compromise the Cronbach's Alpha value, the optimal number of items for each variable was finally chosen. The result shown in Table 1, all the variables are determined to be reliable for the study as shown by the Cronbach's Alpha of greater than 0.600.

# **Correlation Analysis**

The researchers conducted a Pearson correlation analysis in order to determine the strength and direction of the relationship between the independent variables with the dependent variable. The result can be observed in Table 2.

······································		··· · · · ·		- F		
Predictors	(A)	<b>(B)</b>	(C)	(D)	(E)	(F)
Management Commitment (A)	1					
Safety Training (B)	0.641**	1				
Educator's Involvement (C)	0.642**	0.619**	1			
Safety Communication and Feedback (D)	0.650**	0.598**	0.769**	1		
Safety Rules and Procedure (E)	0.519**	0.523**	0.567**	$0.587^{**}$	1	
Safety Promotion Policy (F)	0.312**	0.423**	0.438**	0.412**	$0.482^{**}$	1
Safety Performance (G)	$0.598^{**}$	0.614**	0.603**	0.614**	$0.629^{**}$	0.523**

Table 2: The Correlation Analysis between the Independent and Dependent Variables

\*\*\* All correlation is significant at the 0.01 level

Based on the correlation analysis displayed in Table 2, the researchers postulate that the relationship between the dependent variable, Safety Performance with the 6 independent variables. Based on the analysis as displayed in Table 2, the result indicates there is a significant relationship between the dependent variable Safety Performance and all 6 independent variables namely Management Commitment, Safety Training, Para-Educator Involvement, Safety Performance and Feedback, Safety Rules and Procedure, and Safety Promotion Policy. The strongest relationship is exhibited between Safety Rules and Procedures and the dependent variable with r value 0.629. This is followed by Safety Training, Safety Communication and Feedback, Educator's Involvement, Management Commitment and Safety Promotion Policy. All the results of correlation indicated that the relationships between the dependent and independent variables are moderate in strength as indicated by the r value that ranges from 0.629 to 0.523. Based on the correlation analysis, the researcher assumed that there is a linear relationship between the independent variables and a dependent variable.

#### **Multiple Regression Analysis**

Further analysis using multiple regression analysis (as shown in Table 3) was conducted. The test was conducted using a Stepwise method to determine the combine influences of all the independent (predictor) variables on the dependent variables (Safety Performance). The results of the model summary also produced 4 Regression models and the best model is the fourth model, as indicated by the highest r square value of 0.552 and F value of 57.975. Furthermore, results from the coefficient analysis, indicates that only four predictors are found to contribute to the changes in the level of safety performance as shown by the Sig. value of less than 0.050. It also means that 55.2 % of the changes in the safety performance are due to the combine influences of the 4 predictors. Furthermore, the results of the summary of the Regression Analysis in Table 3 revealed that the most influential predictor is the improvements of safety rules and procedure as indicated by the highest Beta ( $\beta$ ) value of 0.313. This is followed by the other predictors, safety training ( $\beta = 0.235$ ), safety communication and feedback ( $\beta = 0.181$ ) and management commitment ( $\beta = 0.167$ ). We also discovered that the relationship between the predictors and the dependent variable has no Multicollinearity effect, as indicated by the Tolerance value of greater than 0.20 and a VIF value of less than 10. All results are shown in Table 3.

Table 3: Summary of regression analysis							
Predictors	Regression Model No. 4	Sig.	Tolerance	VIF			
	Beta (standardized coefficients)						
Safety Rules and Procedure	0.313	0.000	0.599	1.668			
Safety Training	0.235	0.001	0.512	1.953			
Safety Communication and Feedback	0.181	0.012	0.467	2.141			
Management Commitment	0.167	0.020	0.471	2.123			
R	0.743						
R Square	0.552						
<b>F</b> value	57.975						
Dependent variable: Safety performance							

# CONCLUSION AND RECOMMENDATIONS

## Conclusion

Overall, this study has achieved the objectives. All 6 independent variables (management commitment, safety training, para-educator involvement, safety communication, safety rules and safety promotion policy) have a significant positive relationship towards safety performance.

Through the interpretation of R-square, it showed that the result is 58.3% for these 6 independent variables are able to contribute to the factors of safety performance in pre-school. Hence, remaining 41.7% from others unknown factor that need further study to find out. Among the 6 independent variables, it is determined that only 4 variables (management commitment, safety training, safety rules and safety promotion policy) significantly influence the safety performance in pre-school. In [5] stresses out safety rules and procedure will have greater impact on safety performance. As well as safety promotion policies, employee will perform well as it is compulsory to oblige the rules and willing to modify their behavior with a safety procedure to get the incentives or reward from the safety promotion.

#### Recommendations

Developing and improving safety performance is important towards the workplace. Better safety performance means less accidents and accident is reduced. Thus, recommendation is necessary in order to develop and improve safety performance.

Management plays main role in the organization, start with the management then only moving down to the employee. Thus, management should commit in providing safety meeting, safety seminar including safety training towards their employee. When management shows their commitment, employee will oblige as they have already had proper guidance from the management. According to [12], an organization where the management show high interest in the safety of their workers tend to have lower accident rates. Management also should provide a proper guideline regarding safety in the workplace. In [8] included safety rules and procedure is taken as a safety management practice, effective rules and procedure are enough to prevent accidents from occurring.

Other ways to improve the safety performance management should promote the employee or acknowledge or reward to their employee that comply towards the safety regulations. Giving promotion also will motivate them to perform work better as they look forward for the promotion or reward. Incentives encourage discussion and comparison of accidents among employees, and above all quasi-accidents in terms of minimizing growth and prevention [15].

The organization needs to provide more safety training that can make the children interact and understand the importance of safety. Since educating children in safety at this stage are helpless, through interaction of hazard children can understand better about the danger they might be facing at the organization. Providing more training are also necessary for management and the para-educator, management will be more alert towards the surroundings. As for the para-educator, they can analyze the hazard and risk of each of the programs they carried out towards the children even it is academic wise.

The organization should have a safety committee that involves the management, para-educator and guardian as the members of the committee. Having a safety committee will encourage the members to discuss and argue about any safety issues involving the organization either internal or external. In [4] communities should practice safety culture to help them to investigate, knowing and learning various safety issues.

As an employee in should be their responsibility to comply and follow any program or seminar held by the organization. The employee should take it positively when this kind of program is held by the organization, as this can help to improve themselves. The employee should sincerely and actively take part in any program held by the management, as this can also prosper a new knowledge to them.

#### **Future Research**

Additional research should be investigated by future researchers in order to identify the other unknown factors that influence the safety performance in pre-school. It may include safety motivation and safety knowledge as the variables. In [3, 16, 17] stated that recruiting new personnel that predisposed in displaying a safety conscious attitude in their work is considered as a safety management practice, which also helps to improve the overall motivational level of the workforce. Developing and improving the safety performance will significantly reduce risk and less accidents at any organization and workplace.

# REFERENCES

- Barling, J., C. Loughlin and E.K. Kelloway, 2002. Development and Test of a Model Linking Safety-Specific Transformational Leadership and Occupational Safety. Journal of Applied Psychology, 87 (3): 488-496.
- 2. V. Davis and K. Tomasin, 1990. Construction site safety. Thomas Telford.
- 3. Eckhardt, R., 1996. Practitioner's Influence on Safety Culture. Professional Safety, 41 (7): 23-25.
- 4. Gherardi, S., D. Nicolini and F. Odella, 1998. Toward a Social Understanding of How People Learn in Organizations: The Notion of Situated Curriculum. Management Learning, 29 (3): 273-298.
- 5. Guldenmund, F.W., 2000. The Nature of Safety Culture: A Review of Theory and Research. Safety Science, 34 (1): 215-257.
- Israel, B.A., E.A. Baker, L.M. Goldenhar and C.A. Heaney, 1996. Occupational Stress, Safety, and Health: Conceptual Framework and Principles for Effective Prevention Interventions. Journal of Occupational Health Psychology, 1 (3): 261-286.
- Komaki, J., K.D. Barwick and L.R. Scott, 1978. A Behavioral Approach to Occupational Safety: Pinpointing and Reinforcing Safe Performance in a Food Manufacturing Plant. Journal of Applied Psychology, 63 (4): 434-445.
- 8. Mearns, K.J. and R. Flin, 1999. Assessing the State of Organizational Safety-Culture or Climate? Current Psychology, 18 (1): 5-17.
- 9. Robert X. Peyton and Toni C. Rubio, 1991. Construction safety practices and principles. Van Nostrand Reinhold.
- 10. Quick, J.C., 1999. Occupational Health Psychology: Historical Roots and Future Directions. Health Psychology, 18 (1): 82-88.
- Roughton, J., 1993. Integrating Quality Into Safety and Health Management. Industrial Engineering, 25 (7): 35-40.
- 12. Yaghoub S.-Sahrai, 1971. An inquiry into factors that might explain differences in occupational accident experience of similar sized firms in the same industry. Michigan State University.
- Swearington, M.H., 1996. Do Safety Incentive Programs Really Help? Occupational Health and Safety, 65 (10): 164-166.
- 14. Tinmannsvik, R.K. and J. Hovden, 2003. Safety Diagnosis Criteria-Development and Testing. Safety Science, 41 (7): 575-590.
- 15. B. Toft and S. Reynolds, 1994. Learning from disasters. Butterworth-Heinemann.
- 16. Turner, B.A., 1991. Development of a Safety Culture. Chemistry and Industry, 4: 241-243.
- 17. Vredenburgh, A.G., 2002. Organizational Safety: Which Management Practice Are Most Effective in Reducing Employee Injury Rates? Journal of Safety Research, 33 (2): 259-276.
- Wilpert, B., 1994. Industrial/Organizational Psychology and Ergonomics Toward More Comprehensive Work Sciences. In the Proceedings of the 1994 12th Triennial Congress of the International Ergonomics Association, pp: 37-40.
- 19. Zohar, D. and G. Luria, 2003. The Use of Supervisory Practices as Leverage to Improve Safety Behavior: A Cross-Level Intervention Model. Journal of Safety Research, 34 (5): 567-577.