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# A META-ANALYSIS ON PREVENTIVE OCCUPATIONAL SAFETY AND HEALTH ACTIVITIES IN PRESCHOOL CENTRE IN PEOPLE REPUBLIC OF CHINA (PRC)

#### Abstract:

The main purpose of this paper is to examine the feasibility of having preventive occupational safety and health activities in preschool centers in People Republic of China (PRC). Specifically, it hopes to investigate whether there is a need for constructing preventive occupational safety and health activities in preschool centers in People Republic of China (PRC). Meta-analysis approach was adopted to analyze a sample of 169 articles. The finding concluded that about 67% of them highlighted the importance of having preventive occupational safety and health in preschool centers. However, there has been a lack of study done in the context of People Republic of China (PRC). It implied that there is an urgent need to improve and sustain the promotion of preventive occupational safety and health activities in China. The development of human resource management among educators in preschools centers in China is also another area that should be further emphasized by industry practitioners. This paper contributed to the knowledge of sustainability development in the context of pre-schools in China. Its empirical results may be helpful for policy makers to strategies human resource policies to sustain the occupational safety and health in preschool centers in China.

# **Keywords:**

Occupational safety and health; Preschool centers; Preventive occupational safety and health

**JEL Classification:** 100, J28, I21

# Introduction

Preschool centre is an industry that focuses on the children which are from 0-3 years old (Cooper, 2016). It is the first stage for children's character forming. And also can help to improve such children's abilities: language ability, sensory ability, emotional development with parents and even social skills (Anne, 2013). However, almost 82% research focused on children. As a matter of fact, teachers and managers as another important part in preschool centre still need to pay attention; their occupational career also need to develop healthy. For children, their safety and health in preschool centre need to mention such aspects: food, environment, mental health, and protect measures (Jones, 2014). For teachers and managers in preschool centre, need to mention from both body and mental aspects: the workplace environment; the respect from leaders; the reward and benefits and so on (Sauter, 2017)

Children already catch heavy attention from internal and external of preschool centers, and their preventive actions aims to ensure the safety and health of children in school times. Meanwhile, improve their personal growth in schools (Sauter, 2017). Teachers in preschool centers also need to catch attention, since their occupational safety and health also important, and their occupational safety and health related to the preschool centers' long term sustainable development (Jones, 2014). For instance, the preschool center teachers in safety and health occupational environment, their turnover rate will lower, and preschool center environment will become more stable, in other words, stable environment also helpful for children growth in preschool centers (Sauter, 2017).

Occupational health and safety is a multidisciplinary field concerned with the safety, health, and welfare of people at work (Robson, 2007).

- First of all, organization, such as preschools, must established policy for occupational health and safety. About this principle, Robson (2007) already mentioned that: the place provides for employees should be safe and health work environment; then requires for employees must follow human dignity and personal wellbeing (Robson, 2007).
- Secondly, occupational health and safety service should cover employees. Every employee, especially preschool educators, in occupational career plays different role for organization, all of them should enjoy same service and treatment, but reward can be different (Champoux, 2013). The service includes the accidents in occupational, workrelated diseases and occupational injuries (Hasle, 2016).

- Thirdly, prevention and protection in the occupational in the context of preschools is very important. The prevention and protect can starts from primary level, provide safe place to work, healthy place to break and provide employee medical insurance so that to avoid some accident (Eakin, 2010). About high level protect can be mental health, such as team members are friendly; the hardware for organization is advanced (Champoux, 2013).
- Finally, recognize that health promotion in preschool's environment is the key elements for occupational health and safety. Promotion employee can through follow ways: physical, mental and social wellbeing. Promotions can encourage employee work with positive motivation and attitude, and improve the performance in the working time (Lay, 2017).

The main purpose of this paper is to examine the feasibility of having preventive occupational safety and health activities in preschool centers in People Republic of China (PRC). Specifically, it hopes to investigate whether there is a need for constructing preventive occupational safety and health activities in preschool centers in People Republic of China (PRC)

# **Research Methodology**

Meta- Analysis was used as the research method for this paper as it is devoted into witting survey and the articles collected are true. This method is more accurate and more reliable when it compares to others (Salanti&Zintzaras, 2008). It is a very convenient and safe investigative method, and can save more time, save more money and make sure the high efficiency (Gennaro, 2010).

# **Research Steps**

In accordance to the suggestions of Charters (2017), the research steps of this paper are presented as below.

Planning the review.

This is first step of research, identify the necessary review for this paper, and among the search process, specify the research questions as well. Also, it is better to develop a review structure in order to provide clearly guide for later research steps.

Conducting the review.

After planning the review, the conducting review start from identify the research objectives of target review. The research objectives are related to this paper's purpose or helpful for this paper's purpose will be chosen as final data. And then, select the useful data from the conducting the review.

# Reporting the review.

This is the final steps of the research, after above two research steps, present the information in this paper, and present the research questions, result in the paper as well.

#### **Search Terms**

Gennaro (2010) suggested that, search terms should from population, context and outcome from target review.

# Population

Every existing research had different population size for research, so through the population size to identify the reliability of the research result. Since the research result will influence this paper's research.

#### Context

Different research had different context, while search the review, the context is flexible, as long as focus on preschool education, occupational safety and health.

#### Outcome

Because in the Meta- Analysis research method, outcome of existing research will influence the data collection and result of this paper.

#### **Resource Searched**

This paper will search from following database:

- Library (Segi University; University of Malaya; Heze University of China)
- Journals (Business, education, human resource)
- Articles (Business, education, human resource)
- Conference (Business, education, human resource)

# **Selection Criteria**

Gennaro(2010) stated that the selection criteria can be presented from inclusion criteria and exclusion criteria. Thus, the inclusion criteria and exclusion criteria are presented as below:

## **Inclusion Criteria**

- The research result can answer the research questions from this paper.
- The research can search from database above.
- Under the key words search terms

# **Exclusion Criteria**

Repeated papers

- Papers that without comprehensive opinion
- Research result is incomplete
- Research status still in the processing

#### **Selection Process**

- Tidy all the papers which in the inclusion criteria, and identify the relevant papers. Based on the title, abstract, literature review and full context to mark as No. 1, No.2 and so on.
- Merge all the target papers, to select the suitable one as the target data.
- From all the target data, select from title, abstract, literature review and full context again to ensure the data and discover the mistake may occur in the process. And then set up the measurement to start the research.
- Later, confirm the final data as the research size of this paper.
- The excluded papers also need to be documented, to prepare for quality assessment process of research.

# **Quality Assessment Criteria**

- 1. All the articles must be objective and comprehensive
- 2. Materials and comments should be at same opinion.
- 3. The pertinence for the articles must be mentioned.
- 4. The articles need to highlight the key words that research need.
- 5. Keep clam while reading, it can't be mixed opinion by researchers and the authors for the articles.
- 6. It is much better that there will be some statistical charts in the articles. It's helpful for understanding.

# **Data Extraction and Data Synthesis**

A total of 2,120 articles were chosen for the initial search, after duplicate removal, 1,843 of them were keep for search, and after title review, duplicate removal 908 data, and there are 935 journals and articles were kept; after abstract review, based on exclusion criteria 728 data, 207 journals and articles were kept for search; then after full- text review, in total of 46 targets were put into exclusion criteria, 161 journals and articles were kept for data. However, with the backward search, 8 journals and articles were added for data, so the final sample number was 169. The process of data extraction and data synthesis was presented in Figure 1.

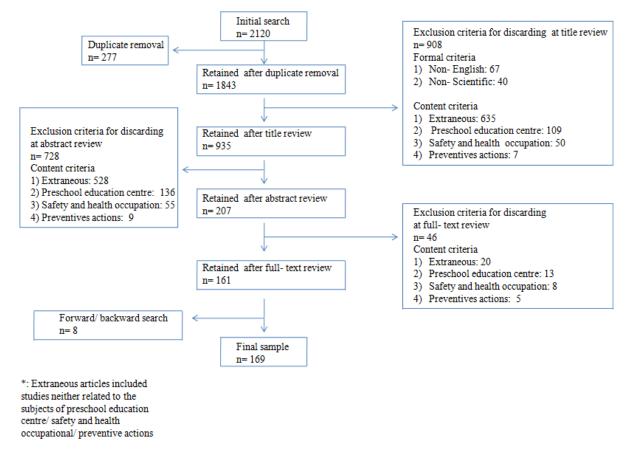


Figure 1: Data Extraction and data synthesis process

(Source: Author)

Based on Figure 1, a total of 169 data could be processed for detail analysis, from population size, research size and research outcomes to analysis result.

## Result

# Analysis from population size

Based on 169 articles, 52 of them were selected from 100- 200 samples in their research; 106 articles were chosen 200 – 300 samples in their research; and 12 articles were chosen 300 and above samples in the research. This result concluded that most articles in the target samples used large sample size in the research. Hence, overall research result is reliability and can used for this research to perform final analysis. Refer to Table 1.

Table 1: Population size of target 169 articles

100- 200	200- 300	300 and above
51	106	12

(Source: Author)

# **Analysis from research context**

Table 2 showed that 169 articles were researched in the context of preschool education, which was the focus of this study. Specifically, 102 articles were related to occupational safety and health; 46 articles were related to occupational preventive; and 21 articles were related to occupational safety and health and preventive. One of the interesting finding is that very few articles offer a comprehensive research insight by integrating both occupational safety and health and preventive, particularly in preschool education development and hence it is a possible area for future research.

Table 2: Research context of target 169 articles

Occupational	Safety	and	Occupational preventive	Occupational safety	and
health		health and preventive			
102			46	21	

(Source: Author)

# **Analysis from research outcomes**

After tiding all the target 169 articles of this paper, about 67% articles mentioned that occupational safety and health affected teachers' performance in preschool centers of People Republic of China (PRC), for example: occupational safety and health influence teachers teaching quality in preschool centers, occupational safety and health influence teachers working attitude in preschool center, etc. Whereas 33% articles mentioned that, current regulations of preschool centers don't provide complete protection for teachers' occupational safety and health in People Republic of China (PRC), for example:in current regulations of preschool centers, none ofrules focus on emotional management for teachers; in current regulations of preschool centers, none of rules focus on gender management for teachers, since in recent years, male also join the preschool centers.

Hence, overall outcomes ascertained that having a constructive preventive occupational safety and health in preschool centers is important in human management in preschool centers of China.

# **Analysis from Research Question**

Research Question: Whether is there a need for constructing preventive occupational safety and health activities in preschool centers in People Republic of China (PRC)?

Based on the above 169 sampled articles, and their research outcomes, the occupational safety and health activities in preschools of People Republic of China (PRC) is in an

unhealthy environment and their discussions are mainly focused on children. In addition to that, teachers were mentioned as another important party in preschools setting who have safety and health needs as well.

Besides, there were 148 articles stated the topic of preventive occupational safety and health as their further research scope, although it was not to focus of their papers. At the same time, preschool centers can focus on occupational safety and health do series measurement to do improvement, for instance, balance salary for teachers in same level; pay attention to mental health of teachers in preschool centers.

The above results ascertained that extensive future research effort should be placed on examining this area of study, such as, increase the development of emotional management for teachers in preschool centers and improve the existing regulations for occupational safety and health in the context of preschools of People of Republic of China (PRC) in terms of preventive occupational safety and health. In short, emphasizing on the preventive occupational safety and health in today's preschool centers may be able to reduce the turnover of teachers and mobilize enthusiasm of teachers (Huang, 2017)

With the improvement on preventive occupational safety and health for teachers in preschool centers in People Republic of China (PRC), such as balance gender structure management in preschool centers and through scientific management to manage teachers in preschool centers, rather than through experience management, children in the preschool centers will growth and learning in a health environment at the same time. Thus, children's study quality in preschool centers will be improved.

# Limitation

Firstly, meta-analysis has more tendentiousness during the research, researchers only study the key words for their research title, never mention others. (Charters, 2017). It is also hard to find some articles, not all the articles can be search online or in the library. (Gebbaro, 2010). There is also a limitation in the information search. Specifically, the researcher only focuses on the articles but own experience is not expressed in the article.

## Conclusion

This paper concluded that great attention should be placed on studying the preventive occupational health and safety activities in preschool centre in People Republic of China (PRC). School's children and educators' wellbeing should not be neglected to ensure them for having a safe and healthy working environment.

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