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## Developing a Grading System to Measure Quality of Childcare Centre in Malaysia

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### Abstract

The implementation of the grading system in Malaysia is intended to assist and facilitate the users to evaluate and choose the best services offered by service providers. In addition, the grading system can also encourage providers to conduct the proper practice and in accordance with the guidelines and laws set by the government. In Malaysia, the grading system has been carried out on the food premises, driving institutes and public toilets. However, we have found that there is a research gap related to the implementation of the grading system on childcare centre in Malaysia. The implementation of grading system was an attempt to reduce the anxiety of Malaysian parents to send their children to childcare centre. Thus, this study aims to develop a set of guidelines to authority agency namely the Social Welfare Department to establish a grading system on childcare centre in Malaysia. The development of a quality childcare centre scale is according to the following six major steps: (1) literature search, (1) scale development, (3) panel of experts' review, (4) scale purification on pre-test sample, (5) scale verification on survey sample, and (6) grade estimation to develop a grading system.

**Keywords:** quality childcare centre, developing scale, grading system

### Introduction

Although monitoring of childcare centre are often made by the department, cases of accidents due to negligence and deaths of infants or children in childcare centre continue to occur every year. The results of monitoring by the Social Welfare Department found that about 90 percent of 4,240 registered childcare centre failed to comply with the guidelines of the Social Welfare Department which can be dangerous to children. This has raised concerns among parents to send their children to childcare centre. It also raises questions among parents about the characteristics of quality childcare centre. The question

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were also raised about how to determine the quality of a childcare centre before deciding to send their children to these childcare centres.

In short, although monitoring is often carried out by the Social Welfare Department, issues related to non-quality childcare centre continue to rise. This situation illustrates the monitoring by the department did not have an impact on the quality of childcare centre. This implies there is a space for researchers to improve the instrument used by the department to assess the quality of childcare centre in Malaysia. In addition, the childcare centre in Malaysia is also not graded, as restaurants are given a grade A (very clean), B (clean) and C (unsatisfactory) by the Ministry of Health (MOH).

The implementation of food premise grading system by the MOH has long been carried out in Malaysia. Even the ABC grading system for restaurants is also carried out in other countries such as Brunei and Singapore. Apart food premises, the grading system in Malaysia also applied on driving institutes and public toilets. Public toilets in Malaysia currently has stars grading system that is controlled by the District Council. The implementation of the grading system is intended to assist and facilitate the users to evaluate and choose the best services offered by service providers. In addition, the grading system can also encourage providers to conduct the proper practice and in accordance with the guidelines and laws set by the government.

Previous research on childcare centre in Malaysia, however, do not clearly measure the quality of childcare centre from Malaysian parents' perspectives. Previous studies also have not been applied grading system on the childcare centre as the implementation of grading system on restaurants, driving institutes and public toilets. Accordingly, this explains the existence of research gaps in measuring the quality of childcare centre from Malaysian parents' perspectives, and in particular to apply the grading system on quality childcare centre. Therefore, this study attempts to fulfil this research gaps.

The aim of this study is to develop scale to measure the quality childcare centre from Malaysian parents' perspective. This scale will provide a new conceptualization related to the characteristics of quality childcare centre from Malaysian parents' perspectives. The findings of this study may suggest the grading system to be implemented by the Social Welfare Department in measuring the quality childcare centre in Malaysia. With the specific instrument, it may be able to reduce the parents' anxiety towards quality of childcare centre and our country may be able to reduce many cases related to the poor quality childcare centre.

The paper is structured as follows. Section 2 describes the current scenario of childcare centre in Malaysia. Section 3 discusses available measures of quality and considers what the literature says about which measures are most relevant for quality of childcare centre. Section 4 discusses the theoretical foundation that is referenced in the measurement of quality childcare centre. Section 5 to 7 elaborates on the research procedure, theoretical and practitioner significance, meanwhile section 8 is the conclusion.

### **Childcare Centre in Malaysia**

Till July 2016 only 4240 registered childcare centre been listed in Malaysia under Social Welfare Department. These statistical data has been mentioned by YB Dato' Sri Rohani Abdul Karim minister in Ministry of Woman, Family and Community Development in her official opening speech in conjunction with the ceremony of Childcare centre Day 2016 and the launching of [www.asuhan.my](http://www.asuhan.my) portal. It is such a small number compared to the real numbers of operating childcare centre in Malaysia. As in Pahang itself for instance, the table 1 shows the statistical number of registered childcare centre.

Table 1: Registered Childcare Centre in Pahang, Malaysia

District	Registered Childcare Centre
Kuantan	99
Raub	8
Pekan	9
Bentong	3
Bera	2
Cameron Highlands	3
Jerantut	4
Lipis	11
Rompin	4
Temerloh	13
Maran	0

## Literature Review

Childcare centre is an institution where children are get ready to enter a social and educational based environment (Dahari & Ya, 2011). In Malaysia, infants as early as 2 months and children until the age of four years old are registered at childcare centre to be equipped in a structured academic atmosphere under the supervision of trained childcare centre’s teacher before they go into kindergarten. Some researchers (Dahari & Ya, 2011) suggested that there are 12-basic things that should be considered by parents before they choose childcare centre for their children namely suggested twelves dimensions that should be considered by parents before deciding the twelve dimensions are curriculum, language of instruction, qualified teachers, quality of teaching, friendly staff, facilities and infrastructure, transportation, cleanliness and hygiene, safety, class size, nutrition, and location.

There are some dimensions that are proposed by previous researchers to measure the quality of childcare centre in the field of early childhood development. The following instruments are among the measurement tools, which have high validity and reliability that are commonly used in measuring the quality of early childhood education in abroad.

**Table 2: Dimension of Quality Childcare Centre**

	Authors	Measurement	Domain Observed	Observation Procedure	Scales
1.	Harms and Clifford, 1989)	The Family Day Care Rating Scale (FDCRS)	Measuring the environmental quality in family day care 1. Space and furnishings 2. Personal care routines 3. Listening and talking 4. Activities 5. Interaction 6. Program structure 7. Parents and provider	Questionnaire	37-items;  Yes, No, or Not Applicable Response  5-point scale
.	Abbott-Shim & Sibley, (1998)	Assessment Profile for Early Childhood Programs (PROFILE)	<u>5 subscales:</u> 1. Learning environment, 2. Scheduling, 3. Curriculum, 4. Individualizing, 5. Interacting	2-3 hours	60-items checklist;  Yes/No response
3.	Harms, Clifford, & Cryer (1998)	Early Childhood Environment Rating Scale – Revised (ECERS-R)	<u>Global quality &amp; 7 subscales:</u> 1. Space and furnishings, 2. Personal care, 3. Language and reasoning, 4. Activities, 5. Interactions, 6. Program structure, 7. Parents/staff	3 hours + 20 minutes interview;	43 items; 7-point scale

Table 2: Dimension of Quality Childcare Centre (*Continue*)

	Authors	Measurement	Domain Observed	Observation Procedure	Scales
4.	High/Scope Educational Research Foundation, (1989 & 2003)	Preschool Program Quality Assessment – 2nd edition (PQA)	<p>3 observed domains:</p> <ol style="list-style-type: none"> <li>1. Learning environment</li> <li>2. Daily routines</li> <li>3. Adult-child interaction</li> </ol> <p>4 domains via interview:</p> <ol style="list-style-type: none"> <li>1. Curriculum planning and assessment</li> <li>2. Parent involvement</li> <li>3. Staff qualifications</li> <li>4. Program management.</li> </ol>	2-3 hours + teacher interview;	63 items; 5-point scale
5.	Harms, Cryer, & Clifford, (2003)	Infant/Toddler Environmental Rating Scale (ITERS)	<p>Global quality &amp; 7 subscales:</p> <ol style="list-style-type: none"> <li>1. Space and furnishings</li> <li>2. Personal care</li> <li>3. Listening and talking</li> <li>4. Activities</li> <li>5. Interactions</li> <li>6. Program structure</li> <li>7. Parents/staff</li> </ol>	3 hours + 20 minutes interview;	39 items; 7-point scale
6.	Sylva, Siraj-Blatchford, & Taggart (2003)	Early Childhood Environment Rating Scale – Extended (ECERS-E)	<p>Developed to supplement the ECERS-R with more focus on academic achievement (reflects the British national pre-k curriculum):</p> <ol style="list-style-type: none"> <li>1. Literacy</li> <li>2. Math</li> <li>3. Science</li> <li>4. Diversity</li> </ol>	2 hours + 5 minutes interview;	18 items; 7-point scale
7.	Stipek & Byler (2004)	Early Childhood Classroom Observation Measure (ECCOM)	<ol style="list-style-type: none"> <li>1. Quality of instruction,</li> <li>2. Management,</li> <li>3. Social climate,</li> <li>4. Cultural sensitivity,</li> <li>5. Resources</li> </ol>	3 hours;	Time sample of specific behaviours
8.	Pianta, La Paro, & Hamre (2007)	Classroom Assessment Scoring System (CLASS)	<p>3 Teacher-child interactions domains:</p> <ol style="list-style-type: none"> <li>1. Instructional support</li> <li>2. Emotional support</li> <li>3. Classroom organization</li> </ol>	2-3 hours; 30-minute cycles of observe-code;	10 items; 7-point scale
9.	Han, Wang and Xu (2014)	Service quality childcare centre using SERVQUAL	<ol style="list-style-type: none"> <li>1. Tangibility</li> <li>2. Reliability</li> <li>3. Responsiveness</li> <li>4. Assurance</li> <li>5. Empathy</li> </ol>	Questionnaire	22-items; 7-point scale

In short, based on a review of the instruments that have been used abroad, this paper has identified the key dimensions to take into account when selecting childcare centre quality measures as components of quality rating and grading systems. Although many of the instruments that have been used to measure the quality of childcare centre in abroad, measurement used by the Social Welfare Department is considerably more complex. The inspection report by the regulatory body of the Social Welfare Department indicates that there are nine criteria evaluated whenever they do the inspection. The criteria are building / premises, space, cleanliness, safety, equipment / furniture, activities, menu and nutrition, communication and interaction, as well as management and administration.

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The scale used in the form checklist provided by the department is a subjective scale. The use of subjective measurement scale that is “yes”, “no” and “not applicable” perceived as imprecise (Spector, 1992) and raised some questions among service providers. There are concerns and doubts among service providers related to the subjective assessment, i.e. the inspectors have made their own assessment of the quality of childcare centre. This is because the subjective assessment may vary according to the different groups of inspectors and at different times (Aziz, Ismail, & Samad, 2014).

The 'yes' or 'no' answers given by the inspectors in the checklist form also make it difficult for service providers to evaluate the quality of their services. In fact, they are also difficult to make improvements in terms of quality of services based on the reports provided by the Social Welfare Department. The absence of quantitative scale causes the reports prepared by the Social Welfare Department may be inaccurate and can be questioned by the service providers. The absence of a quantitative scale also may slow down the efforts to implement a grading system on childcare centre in Malaysia. Therefore, there is a need to have a specific scale to measure the quality of childcare centre in Malaysia.

### **Methodology**

The procedure used to develop quality childcare centre scale largely follows the guidelines recommended by previous researchers (Aziz et al., 2014; Wotruba & Wright, 1975; Churchill, 1979; DeVellis, 1991). According with these researchers, there need aid six major steps with create scale, which are: (1) literature search, (2) scale development, (3) panel of experts' review, (4) scale purification on pre-test sample, (5) scale verification on survey sample, and (6) grade estimation to develop a grading system (see Figure 1).

The first step has already been done where we have referred to the previous instruments that have been used to measure the quality of childcare centre in abroad. The second step to be done is to change the measurement scale than originally using subjective measurement to use a Likert scale. The development of the scale is only involve the instrument that has been used by the Social Welfare Department in Malaysia.

The third step in developing quality childcare centre scale is by appointing a few panel experts from the academicians and a few representatives from Department of Social Welfare, to validate the contents of the first draft questionnaire. The panel experts will be asked to indicate the extent to which each

scale of item is appropriate to measure quality of childcare centre on the following scale ranging from: (1) for “very precise measurement scale”; (2) for “satisfactory”; or (3) for “need improvement”. This step is accordance with the study done by Aziz and colleagues (2014) in the process of developing scale of quality maid in Malaysia.

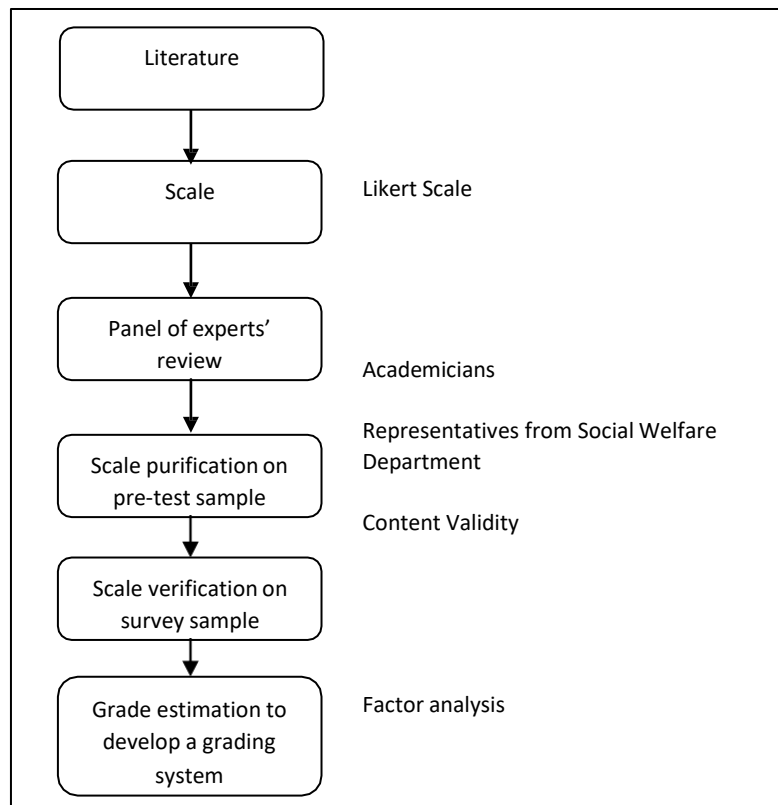


Figure 1: Steps in Developing Quality Childcare Centre Scale

Once obtaining approval from a panel of experts on the development scale, the process of verifying the instruments will be initiated. In order to determine the reliability of the scale, the instrument will be pre-tested in a pilot study involving several childcare centre. The main purpose is to get feedback from service providers of childcare centre regarding the content, scale and format of pilot study instruments. Then; the various content validity tests will be conducted. The tests will involve exploratory factor analysis, Cronbach alpha coefficients, convergent validity and discriminant validity.

After statistical analysis carried out on the proposed instruments in the pilot study, modification and purification of instruments will be carried out once again. Then the actual fieldwork will be carried out where the instrument will be tested on more childcare centre that will be selected using simple random

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sampling. Then, the statistical procedure will be carried out to verify the reliability and validity of the proposed instrument. The statistical procedure will involve exploratory factor analysis, Cronbach's alpha coefficient and criterion validity. After all these steps are carried out, and the instrument is ready to be used by the Social Welfare Department to implement a grading system on the childcare centre in Malaysia.

### **Significance Contributions**

The originality of this study may contribute to a formation of a new body of knowledge and enrich the literature sources in the field of scale development that will benefit the academicians. This study also may serve as a starting point for further researchers to conduct a research that focusing on determining the impact of having a quality childcare centre on the early childhood development.

This study also may contribute to practitioners and policy makers. The development of a scale may provide a more accurate evaluation on the quality childcare centre in Malaysian. Also, the scale could be useful as a tool to capture the qualities dimensions of childcare centre in order to give knowledge and understanding for parent to make choice. In addition, this study also contributes to the policy-makers in formulating strategies to implement a grading system on childcare centre in Malaysia.

### **Conclusion**

Collaboration between Ministry of Woman, Family and Community Development(KPWKM), Social Welfare Department and NGOs and together with Persatuan - Persatuan Pengasuh Negeri to advocate high quality standard of childcare centre in Malaysia that will provide a better practice among the childcare centre community in achieving professionalism in taking care of the children. Investing in the children is the investment of the betterments of the nation.



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