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Perception of Teachers and Parents on Appropriate Physical Environment for Learning Through Play in Malaysian Preschools

Pearly Pei Li Lim[*] / Azizi Bahauddin[**] / Nor Fadzila Aziz[***]

[*] School of Housing, Building and Planning, Universiti Sains Malaysia, Malaysia

[**] School of Housing, Building and Planning, Universiti Sains Malaysia, Malaysia

[***] School of Housing, Building and Planning, Universiti Sains Malaysia, Malaysia

ABSTRACT

As physical environments play a role in supporting learning though play (LTP) in preschools, users and interest group's perceptions of appropriate physical environment features for LTP become significant. This article examines perceptions of teachers and parents concerning an appropriate indoor physical environment for LTP in Malaysian preschools. A five-point Likert scale and preference ranking were employed to understand teachers' and parents' perception of six features including sizing of spaces; material availability; spaces for creation and respite; indoor-outdoor connection; and provision of challenges. The findings included; variety of materials, spaces for personalization, spaces for challenges and good indoor-outdoor connection.

Keywords: *appropriate preschool physical environment, teachers and parents' perception, learning through play environment, Malaysian preschools*

INTRODUCTION

Due to the increased awareness of the importance of play in according children the opportunity to explore and learn to take charge of their own choices (Shackell, Butler, Doyle & Ball 2008) governments are initiating *Learning Through Play* (LTP) as part of the curriculum for young children. Nevertheless, related research found that some countries have a clearer outlook on how the pedagogic aims of LTP determine the physical environment in support of various programmes, while other buildings were found to be barely functional, inadequately pre-fabricated or poorly transformed from other uses (Children in Europe, 2005). The physical environment of preschools are found to significantly affect children's performance, well-being and social behaviour, as well as influencing grades, knowledge

and skills (Walden 2015). Features related to the physical environment supporting LTP in preschools must be considered. Physical environments have the capacity to reflect the learning they support (Jilk 2005). Nevertheless, when it comes to the design of a physical environment, Parsaee, Motealleh, and Parva (2016), believe that not only do the opinions of designers matter, but needs and demands of users and interests groups have to be concurrently met as there may be divergence in opinions between various stakeholders. Teachers and parents may differ in their perceptions of needs and usage. To understand what features need to be included in appropriate environments for LTP, the first step is to identify what components are currently employed and what ideal factors need to be included. These factors are identified through the perceptions of parents and teachers. This information is important in supporting the vision and principles of LTP for the Malaysian context, and gives equal emphasis to promoting LTP as a learning approach in Malaysia.

REVIEW OF LITERATURE

Learning though play in Malaysia

LTP has been highlighted as one approach in achieving desired learning and development components in both the previous National Preschool Curriculum (Ministry of Education 2001) as well as the revised National Preschool Curriculum Standard (NPCS) (2016) in Malaysia. In general, the term play in play-based learning can be distinguished into two broad categories - free play and structured play. According to Wood (2010), free play closely resembles 'pure play' allowing children to take charge in play. On the other hand, adult led activities are known as structured play whereby planned approaches are embedded into play for distinct learning purposes (Wood 2010).

In the revised NPCS, the LTP practice in Malaysian preschools is defined as a planned and structured approach providing children with learning opportunities in a free, safe, enjoyable, and meaningful environment (Ministry of Education 2016). This means that rather than emphasizing free play, structured play is prioritized as an approach to LTP in Malaysia. Nevertheless, despite requirements for the NPCS to be made compulsory in all public and private preschools, it is not uncommon for educational reforms to meet with failure rather than success. Beliefs concerning the way children of various cultures learn, develop and function have yet to be fully comprehended (Li, 2005). This opinion holds true according to their study of play implementation in Malaysian preschool settings by Bakar, Daud, Nordin and Abdullah (2015). Lim, Khan, Hussein and Hee (2015), also observed that LTP was not implemented in all the preschools studied. Both studies found similar setbacks in the implementation of LTP due to time limitation as well as limited play materials and equipment. Besides, Majzub (2013), highlighted the lack of quality settings as a barrier to high quality preschool education in Malaysia. In this vein, as the physical environment plays a crucial role in facilitating play (Kagan 1990), there is a need to understand features of the physical environment which are appropriate for enhancing LTP in Malaysian preschools. Inappropriate preschool physical environments may consciously or unconsciously affect teacher's classroom management ability in promoting LTP. Thus, understanding the perceptions of teachers is significant as teachers play a role in organising and modifying the teaching and learning environment (Bakar et al., 2015). In addition, parental involvement has been highlighted as one of the benchmarks for quality preschool by the Economist Intelligence Unit (2012). With parental involvement strongly advocated in Malaysia (Badzis 2003), understanding parents' perceptions concerning existing LTP elements and their perceptions of what is an appropriate indoor physical environment for LTP in preschools is equally significant.

Teachers' and Parents' View on Learning through Play

In most literature regarding planning for play as a central method of education, there are typically three main points affecting opportunity for children's play according to Badzis (2003). They include (1) the role of teachers (2) parents in partnership and (3) the content and context of play including activity, materials, time and space arrangements. In relation to this, Qin and Nor (2018), further highlights that teachers hold extreme control in preschool classrooms with preschool settings being teacher-dependent. Similarly, they believe that besides parental expectations for children to be primary school-ready, limited resources and outdoor spaces are factors contributing towards a more structured and formal preschool curriculum (Qin & Nor 2018). This shows that parental expectations and the physical environment indirectly affect

teachers' decision in according play in preschools, thus affecting the overall opportunities for LTP to be successful.

When it comes to identifying appropriate physical environment features for LTP, Taylor (2009), opines that the physical condition of space and its impact are often ignored. Generally, teachers are educated to perceive 'environment' more in the abstract as well as through behavioural, psychological, or connotative terms. Thus, there is a need to understand the requirements of teachers' physical environment through a shared vocabulary to help shape the appropriate physical environment for LTP. This in turn would help enhance LTP opportunities because an unsupportive physical environment may hinder learning and teaching activities. This can be true especially when the physical environment is not contextually appropriate (Lim & Bahauddin 2018)

Bakar et al. (2015), observed that there is a need to further understand the perception of both teachers and parents of LTP. Discrepancies were found between teachers' professed beliefs on the importance of play and their attitudes towards implementing play in classrooms. Teachers were also uncertain in regards to the demands of parents when it came to employing LTP. Perceptions of teachers and parents on appropriate physical environment may also differ. Parental perceptions of what is included in an appropriate physical environment for preschool settings is part of understanding cultural relevance. This is because adopting physical environment features directly from one county to another would be inappropriate for the Malaysian context. Thus, appropriateness in the context of this study utilized the perception of teachers and parents to uncover the physical environment features which are deemed ideal for adaptation to preschools in Malaysia.

Supportive physical environment for learning though play

Oblinger (2006), opines that not only is the physical environment capable of defining how one teaches; it also reveals the learning approaches and people of the times. In fact, Taylor (2009), refers to the physical environment as a silent curriculum containing hidden messages while the Reggio Emilia approach suggests that early childhood environments should accomplish the role as "the third teacher" (Lippman 2010; Osborne & Franz 2015). These statements portray the significant role physical environment plays in preschool settings. Thus shifts in implementing LTP should inherently be accompanied by physical environment changes (Lim *et al.* 2015) as pedagogic intentions affect the use of space (Itoh, 2001). However, rather than identifying physical environment with form, minimal standards and technical matters, this study employs the use of physical environment features to describe conditions that support children's learning through play to make certain that these features are facilitative instead of deterministic.

Surrounding discussions of physical environments, key issues which have been highlighted include; spatial planning, suitability of furnishings and material finishing, safety features and conduciveness for children's comfort (Davison & Lawson 2006). In developing successful play spaces, five features were deemed significant by Hughes (1996), which included the following: availability of spaces encouraging movement and physical activity for strength building and energetic play; spaces which stimulate children's five senses; spaces for social interactions; creation of opportunities for manipulation of natural and fabricated materials; and spaces where activities are designed to challenge children's capabilities.

Other factors taken from professional literature concerning physical environment characteristics contributing to LTP were also included in this study (see Dudek 2005; Herrington, Lesmeister, Nicholls, Stefiuk 2007; Maxwell 2007; Moore 2002; etc). Physical environment features found to be supportive of LTP included:

(1) Availability of a variety of material and equipment: Montie, Xiang and Schweinhart (2006), found that the variety of materials available for children's use in preschools relates positively to the cognitive performance of young children. In addition, studies found that having a selection of appropriate material and equipment helps stimulate children's creativity (Addison, Burgess, Steers and Trowell 2010, and Gandini, Hill, Cadwell, Schwall 2005) and boost young children's confidence to be inventive (Prentice 2000).

(2) Reduction of behavioural constraints through appropriate sizing of spaces: Moore (1986, 2002), found that in inadequately defined spaces with few resources, more involvement by teachers and staff are required. However, when

behavioural constraints such as inappropriately scaled classroom and adjacencies (Maxwell 2007) as well as play areas are reduced, children's control over their environment increases (Trancik and Evans 1995).

(3) Provisions of various levels of challenges: Shackell et al., (2008), believes that challenges are essential in children's play and development for them to test their capabilities. Challenges also encourage children to take risks and develop fresh perceptions as unfamiliar challenges stimulate children's creativity (Day & Midbjer 2007).

(4) Good connection between indoor and outdoor play spaces: Good linkage between indoor and outdoor play spaces, especially in preschools settings, which have direct physical and visual connection have been shown to increase the frequency of using outdoor spaces (Herrington et al. 2007). Thus, Iwan and Poon (2018), believes that this feature encourages children's space exploration which is vital for both children's physical movement as well as their socio-emotional development.

(5) Availability of spaces for creation and manipulation: Spaces for creating and manipulating provide sensory attributes that help stimulate children's five senses. These components may include a sand and water table as well as access to music, sounds and to diverse smells emitted by plants and leaves (Gainsle, 2011). Besides, Trancik and Evans (1995)privacy, complexity, exploration, restoration, place identity, legibility, and safety. Control is the ability to use physical resources to meet user needs. The regulation of social interaction requires privacy. Balanced variety and mystery create a complex space that may encourage healthy environmental interactions. Restorative environments provide a chance for recovery from fatigue. Ownership, attachment, and familiarity are feelings that can be expressed in the physical environment to support the development of place identities. Legible environments can be organized into a comprehensible pattern, preventing confusion. Safe environments minimize hazardous conditions that may prevent the development of competence. (PsycINFO Database Record (c, believe that children develop competence through mastering tasks involving manipulating the environment.

(6) Availability of spaces for privacy and respite: Being continuously alert contributes towards cognitive fatigue (Wachs & Gruen 1982), thus compromising further learning (Maxwell 2007). Preschools ought to have dedicated private spaces as 'stimulus shelter' (Wachs & Gruen 1982) used as restorative environments offering such relief (Kaplan 1995). These 'quiet spaces' support children's cognitive processes through facilitating children's mental self-regulation (Korpela and Hartig 1996).

Other than understanding physical environment features within preschools that are supportive to LTP, Thomas and Garnham (2007), suggests that when it comes to the physical environment, cultural concerns must also be considered alongside technical matters, personal visual expressions as well as novel form. This is to ensure that the physical environment is appropriate to the vision and principles of LTP in different contexts as the definitions of play and how LTP is conducted in preschools may differ from country to country. This is where understanding the perceptions of teachers and parents of appropriate physical environment features for LTP in preschools becomes significant.

PROBLEM STATEMENT

Although LTP has been introduced as part of the teaching and learning approach in Malaysia's National Preschool Curriculum Standard (NPCS), LTP hardly happens in classrooms as oppose to teachers' claims (Curriculum Development Centre, 2008). Besides insufficient facilities (Siti Zaliha 1999), factors hindering play in preschools include inadequate play materials and equipment (Bakar *et al.* 2015). In a separate study, Majzub (2013)college lecturers, post graduate students and government officials .The data was obtained through a roundtable focus group discussion. The data was analysed by looking at emerging themes. The findings of the study indicate several pertinent issues involving curriculum, teacher training, equity and accessibility, assessment, and monitoring of preschool centers. Recommendations are forwarded to enhance the quality of preschool and early Child Care and Education.","author":[{"dropping-particle":"","family":"Majzub","given":"Rohaty Mohd","non-dropping-particle":"","parse-names":false,"suffix":""}],"container-title":"Recent Advances in Educational Technologies","id":"ITEM-1","issued":{"date-parts":[["2013"]]},"page":"150-

155","title":"Critical Issues in Preschool Education in Malaysia","type":"article-journal"},"uris":["http://www.mendeley.com/documents/?uuid=08560614-05a1-4676-808c-7881038734c1"]}],"mendeley":{"formattedCitation":"(Majzub, 2013, also highlighted the lack of quality setting as a barrier to high quality preschool education in Malaysia. These aspects relating to the physical environment of preschools affirm that facilitating play through the physical environment is a significant aspect in implementing play in classrooms (Kagan 1990). It is pivotal to keep the learning process in mind when it comes to designing learning spaces (Rook et al. 2015). The design of learning spaces has the capacity to perpetuate ideas concerning the way children learn and how they are taught (Nicholson 2005) as well as affecting children's learning process (Rook et al. 2015). A paradigm shift to include LTP as an approach in preschool education should be accompanied by physical environment modifications. This will ensure that the physical environment of preschools can support the vision and principles of LTP (Lim et al. 2015). With parental expectations affecting teachers' decisions in according play in preschools, this article aims to examine perceptions of teachers and parents on existing and perceived appropriate indoor physical environment for LTP in preschools of Malaysia.

METHODOLOGY

Sampling method

As this study formed part of a related study, questionnaires were distributed amongst teachers and parents through convenience sampling after four private preschools catering to children ages four to six years old were initially selected through purposive homogenous sampling. Private preschools were selected as they represent the biggest percentage in the number of students with 328, 456 students (Department of Statistics Malaysia 2016). Data saturation was used in determining sample sizes for both groups as Mason (2010), states that sample size is not the key but data saturation is for non-random sampling such as purposive sampling. All preschool teachers and principals of the four preschools took part in the questionnaire survey. A total of 30 questionnaires were distributed to teachers and parents respectively through an inter-rater. Only 20 teachers and 16 parents returned the questionnaires.

Questionnaire survey

The first part of the questionnaire enquired into the perception of teachers and parents regarding the existing indoor physical environment for LTP of preschools. This section was designed to gain an understanding of teachers' and parents' perception on six indoor physical environment features with questions enquiring into agreeability based on a five-point Likert scale with a score of 1 for "Strongly Disagree" to a score of 5 for "Strongly Agree". The six physical environment features included sizing of spaces, availability of materials, spaces for creation and spaces for respite, as well as indoor and outdoor connection, and provision of challenges. The second section of the questionnaire was designed to understand teachers' and parents'perceived appropriate indoor physical environment for LTP. Preference ranking was used as sharper distinctions between the various qualities can be attained through ranking technique (Alwin & Krosnick 1985). Both groups were asked to sort-out nine image variables based on preference ranking from 1 for most preferred feature to 9 for least preferred feature and a dash (-) for items that were deemed inappropriate.

Data analysis

Descriptive statistics using SPSS 11.0 package programme was employed to analyse the questionnaires. For the first section, data significance were analysed through independent samples t-test as both t-test and Mann-Whitney-Wilcoxon had comparable power for five-point Likert items (Winter & Dodou 2010)but it is unclear whether the item data should be investigated by means of parametric or nonparametric procedures. This study compared the Type I and II error rates of the t test versus the Mann-Whitney-Wilcoxon (MWW. For the second section of the questionnaire, mean-reduced rank score was employed to analyse the data whereby a value of 9 was appointed to items ranked first, followed by the value of 8 for items ranked second and so on. For items that were rated as inappropriate, a value of 0 was appointed.

RESULTS AND DISCUSSIONS

Teachers' and parents' perceptions on existing indoor physical environment of preschools for LTP

In the first part of the study, which sought to understand perception of teachers and parents regarding the existing indoor physical environment of preschools for LTP, six variables were analysed. The physical environment features analysed included sizing of spaces; availability of a variety of materials and equipment; spaces for creating, manipulating and leaving impression; availability of spaces for privacy and respite, indoor and outdoor connection between play spaces; as well as allocation of varying levels of challenges.

When analysed through independent samples t-test, data from teachers indicated that the mean for all six items were significant at a significance level of $p<$ .05 as shown in Table 1. In general, teachers agreed that their respective preschools had classrooms and play areas which were appropriately sized (M=4.05, SD=1.146, n=20) and their preschools have good connection between indoor and outdoor play spaces (M=4.00, SD=.858, n=20). Nevertheless, teachers' perceptions were more neutral with regards to the availability of spaces for creating, manipulating and leaving impression (M=3.95, SD=1.099, n=20), provision of varying levels of challenges in the indoor environment (M=3.80, SD=1.056, n=20) and availability of variety of materials and equipment in their respective preschools (M=3.75, SD=1.209, n=20). Of all the features examined, teachers seemed to agree least with the availability of spaces for privacy and respite (M=3.70, SD=.923, n=20).

Table 1: Teachers' Perceptions of Present Indoor Physical Environment for LTP in Preschools Administration

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Appropriate sizing of classrooms and play areas	20	4.05	1.146	.256
Availability of a variety of materials and equipment	20	3.75	1.209	.270
Availability of spaces for creating, manipulating and leaving impression	20	3.95	1.099	.246
Availability of spaces for privacy and respite	20	3.70	.923	.206
Provision of varying levels of challenges	20	3.80	1.056	.236
Good connection between indoor and outdoor play spaces	20	4.00	.858	.192

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Appropriate sizing of classrooms and play areas	15.806	19	.000	4.050	3.51	4.59
Availability of a variety of materials and equipment	13.877	19	.000	3.750	3.18	4.32
Availability of spaces for creating, manipulating and leaving impression	16.073	19	.000	3.950	3.44	4.46
Availability of spaces for privacy and respite	17.920	19	.000	3.700	3.27	4.13
Provision of varying levels of challenges	16.088	19	.000	3.800	3.31	4.29
Good connection between indoor and outdoor play spaces	20.840	19	.000	4.000	3.60	4.40

Source : Author

When it came to understanding parents' perceptions of the six variables concerning the existing physical environment of preschool, while the mean for all six variables were significant at a significance level of p< .05, discussion of data for this section were omitted after analysis. This was because, interestingly, comments from parents showed that they were unsure of the present indoor physical environment of preschools as they were less likely to enter the respective preschools. One of the parents commented that, '*Answer might not be accurate as I have never explored the school properly*'.

Taking heed from this comment, after further discussion with teachers, a decision was taken to omit this section for parents as the data may not reflect a realistic perception of the preschools' indoor physical environment. According to teachers, there is high likelihood that parents may not have had the chance to explore the grounds and indoor environment of the respective preschools due to security concerns.

Teachers and parents'perceived ideal physical environment features for LTP

When it came to understanding teacher's perceived ideal physical environment for LTP, preference ranking enabled the understanding of ideal values which teachers believed to be appropriate for adaptation in preschool settings. Data from mean-reduced rank score showed that the four physical environment features perceived as ideal included in ascending order, provision of challenges to stimulate children's development; availability of spaces for personalization; good indoor and outdoor connection; and availability of various materials and equipment. Data for teachers' mean reduced rank score are presented in Table 2.

Meanwhile, parents perceived that the ideal physical environment for LTP in preschools should include in ascending order, good indoor and outdoor

Table 2: Teachers' Mean Reduced Rank Score

Group		Material	Challenges	Privacy	Manipulation	Strength Building	Energetic Play	Personalization	Indoor/Outdoor Connection	Social Interaction
N	Valid	20	20	20	20	20	20	20	20	20
	Missing	0	0	0	0	0	0	0	0	0
Mean		6.25	5.80	3.75	4.70	2.60	4.40	5.85	6.10	4.60
Std. Deviation		3.024	2.462	2.712	2.364	2.162	2.583	2.346	2.447	2.683
Variance		9.145	6.063	7.355	5.589	4.674	6.674	5.503	5.989	7.200

Source : Author

Table 3: Parents' Mean Reduced Rank Score

Group		Material	Challenges	Privacy	Manipulation	Strength Building	Energetic Play	Personalization	Indoor/Outdoor Connection	Social Interaction
N	Valid	16	16	16	16	16	16	16	16	16
	Missing	0	0	0	0	0	0	0	0	0
Mean		6.81	5.38	3.38	4.25	3.44	4.94	5.69	5.31	4.75
Std. Deviation		1.834	2.604	2.363	2.295	2.898	1.982	2.120	2.869	3.317
Variance		3.362	6.783	5.583	5.267	8.396	3.929	4.496	8.229	11.000

Source : Author

connection; provision of challenges to stimulate children's development; availability of spaces for personalization; and availability of various materials and equipment. Data for parents' mean reduced rank score are presented in Table 3.

The analysis of the mean reduced rank scores portrays the perceived ideal physical environment features which teachers and parents deemed appropriate for inclusion within Malaysian preschools. Although preference ranking order of the top four physical environment features differed between teachers and parents, it was found that both groups identified inclusion of availability of various materials and equipment; good indoor and outdoor connection; availability of spaces for personalization; and provision of challenges as idea physical environment features. Table 4 summarises findings of teachers' and parents' perception on their ideal appropriate physical environment.

Perceived appropriate physical environment features for LTP in preschools

In general, teachers perceived the existing indoor physical environment of their respective preschools rather positively, agreeing that the preschools they taught in had appropriately sized classrooms and play areas as well as good indoor and outdoor connection. However, when comparing teachers' perceptions of the existing indoor physical environment of their respective preschools with their perceived ideal environment for LTP, findings indicated that good connection between indoor and outdoor was the only feature to be deemed both crucial and was perceived to have been met in their existing preschool environment. While features such as availability of a variety of materials and equipment, spaces for personalisation as well as provision of varying levels of challenges were deemed appropriate features for inclusion in the physical environment, teachers agreed that the existing physical environment in their preschool were less equipped with these features. The difference in perception may indicate that there may be a need to further enhance the variety of materials and equipment in support of LTP in preschools. Besides, there may also be a need to include spaces for children to personalise and provide varying levels of to help teachers enhance LTP in preschools.

Interestingly, when it came to parents' perception of the existing physical environment, parents were found to be unfamiliar with the physical environment of preschools especially the indoor environment. A comment from a parent highlighted that parents may in fact have no idea on what goes on behind the scene of preschools. As parents are part of stakeholder groups parental involvement would have to augmented in an effort to enhance LTP in preschools. This means that if parents are to be held equally responsible in contributing

Table 4: Perception of ideal appropriate physical environment

Teachers	Parents
1. Availability of a variety of materials and equipment	1. Availability of a variety of materials and equipment
2. Good indoor and outdoor connection	2. Availability of spaces for personalisation
3. Availability of spaces for personalisation	3. Provision of varying levels of challenges
4. Provision of varying levels of challenges	4. Good indoor and outdoor connection
Similarities	
The top four physical environment features deemed to be ideal included availability of a variety of materials and equipment, availability of spaces for personalisation, provision of varying levels of challenges and good indoor and outdoor connection.	
Difference	
Ranked importance between the top four variables.	

towards a richer LTP environment for their children, continuous dialogue with teachers and preschool administrations should take place to enable parents to get acquainted with the school's environment. Furthermore, comparison between teachers' and parent's perception revealed that both groups similarly held that the top four variables perceived as ideal features for physical environment included availability of materials and equipment, good connection between indoor and outdoor play spaces, availability of spaces for personalization as well as provision of varying levels of challenges. Similarities in perception of ideal physical environment feature found between teachers and parents demonstrates that design consensus can be achieved to construct design strategies as a next step in promoting supportive physical environment for LTP within preschools. With significant similarities between the perception of teachers and parents with regards to ideal physical environment features, the features found to be appropriate should be emphasised in the design and planning of future preschool establishments to enhance LTP in Malaysian preschools.

LIMITATIONS OF THE STUDY

This research is part of a main study conducted on four preschools in Johor to identify appropriate physical environment affordances for LTP in preschools. Thus, several limitations are acknowledged. First, due to time constraints and financial limitations, the sample size of the study was small, especially for the parents' group as most of the questionnaires were not returned. Also, the findings of this study were based only on participants from four private preschools. As such, findings are context-specific. A bigger sample conducted throughout Malaysia would be necessary to generalize results for a larger group. In addition, in-depth interviews and focus group discussions following the questionnaire survey would have provided better understanding of both parents' and teachers' perceived appropriate physical environment features for LTP. It is also conceded that there is a need for developing a more comprehensive physical environment indicator for LTP. The physical environment features included in the initial stage of this study were developed based on literature supporting the physical environment for LTP and which were considered appropriate for data collection

CONCLUSION AND SUGGESTIONS

The results suggest that efforts to enhance LTP in preschools should be directed towards assisting both teachers and parents to diminish the gap between the existing and the ideal physical environment for LTP. In the first section, the findings highlighted the underlying need to include parents in the everyday experiences in preschools as it was found that parents were unsure of the physical environment of preschools. There is a need to include parents in discussions of the physical environment to ensure that they are able to act as monitoring agents, playing the role in the check-and-balance of physical environment features which are supportive for LTP especially for preschools in the for-profit sector. Furthermore, the second section indicated that the perceptual similarity between parents and teachers would enable consensus building in the design of preschool's physical environment that reflects the principals and vision of LTP. Taken together, these two findings would enable children to be granted their right to play while ensuring that LTP is executed in preschools effectively.

This research is important because there has yet to be guidelines in managing the physical environment settings for LTP in Malaysia, Besides, offering a continuous dialogue between teachers and parents, this study is significant in understanding physical environment features deemed appropriate for adaptation in Malaysian preschools. Findings from this study may be used to guide preschool administrators and design professionals to adapt appropriate physical environment design features that enhance LTP. The results may also prove insightful for creating guidelines for renovating preschools in Malaysia. Similarities in perceived appropriate physical environment for LTP between parents and teachers imply that the respective features should be given emphasis in the planning and designing preschools. In conclusion, to support the vision and principles of LTP, designing the physical environment should be seen as a niche which not only fulfils utilitarian means of constructing a box in which children learn but a place supportive enough to provide meaningful learning through play experiences in which young children can thrive.

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