THE SYMPTOMATIC BEHAVIOUR SCREENING TOOL (SYMBEST) FOR EARLY IDENTIFICATION OF DEVELOPMENTAL DELAYS AMONG CHILDREN AGE 3-4.

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Abstract

This article suggests that developmental screening, especially for behaviour symptoms, should be promptly addressed and the practice must be introduced in the early childhood education programs to reach a justified consensus between the primary care practitioners and the school system. Given that, the primary of this research is to develop a symptomatic behaviour screening tool (SymBest) for early childhood educators to identify children with symptomatic behaviours. The design and development process of SymBest is based on the theory of maturation and the theory of cognitive development along with developmentally appropriate framework (DAP). Fuzzy Delphi analysis was conducted with 18 participants from diverse backgrounds of clinical and education to gain the expert consensus on the suitability of the constructs and items representing SymBest. The findings showed that the experts have a fair degree of agreement on the constructs and the items suggested to form SymBest. The constructs and items with accepted threshold value, percentage of group consensus and fuzzy score are then organised in sequence priority to form the screening tool.

Keywords: *Symptomatic Behaviours, Design & Development, Fuzzy Delphi.*

INTRODUCTION

Developmental delays detected as early as possible ensures early intervention and effective remedial plan. Intervened children are most likely adapted well in the mainstream schools later in the inclusive setting.According to National Association of Education For Young Children, position statement on code of ethical conduct and statement of commitment, educators and school system are encouraged to use assessment instruments and strategies that are appropriate for the children to be assessed and to use the assessment outcome to support children's development and to identify children who may need additional services(National Association for the Education of Young Children, 2011).Identifying children for developmental delays to the soonest may mitigate the risk of developing behaviour disorders or associated developmental disorders. This is because behavioural problems in young children are triggered by their developmental delays, which are left unnoticed. Nonetheless, in Malaysia, assessment in the school system is formative and authentic to assess children for academic excellence. Assessment in preschools is more on the effort to identify children who are having difficulties in literacy and numeracy, rarely focusing on developmental delays.However, in the current practice, there is lacking screening tools used in the early childhood programs in Malaysia especially in the government-aided childcare centres accurately to identify children at risk of emotional and behavioural disorders. It is vital for schools and educators to utilise early identification methods with a comprehensive and user-friendly screening tool to meet the needs of at-risk children.To bridge this gap, this studyfocuses on developing a screening tool for ECE educators to identify symptomatic behaviours among young children in mainstream early childhood education centres.

PROBLEM STATEMENT

Primarily, the reality in Malaysia, developmental screening or commonly known as developmental surveillance is available and done by primary care practitioners alone (Hussain Iman Muhammad Ismail, Ng H. P, & Thomas, 2017; Paediatric Department Hospital Ipoh, 2008). The reason being, the primary care settings are the place where most children younger than five years old are seen and ideal for developmental and behaviour screening (American Academy of Pediatrics, 2002). However, screening for early identification is also crucial to practice in the school system. Since screening is commonly to be MOH's responsibility alone (Faridah M. Said, Jamilah Othman, Maimunah Ismail, Bahaman A. Samah, & Khairudin Idris, 2011), the school system in Malaysia in all education levels are not introduced to use screening tools for early identification.

Secondly, in the education system currently, assessment is available in the form of the checklist for literacy, numeracy, and writing, but less for behaviour symptoms to identify developmental delays of children age four years old and below.The available tools are not practical to be applied somewhat adapted or adopted for children aged 3 to 4 years old to identify symptomatic behaviours. Third, when educators fail to identify the potential problems in a child's development and ensure development is on target (Slentz, Early, & McKenna, 2008) most of the time the symptoms are left unaddressed (Miller, Smith-bonahue, & Kemple, 2017) for referral and special education services. When parents overlook the traits of developmental delays, educators are the second potential people to identify children with developmental delays from the symptomatic behaviours.Alternatively a failure to provide early intervention timely due to lack of early identification, inaccurate diagnosis may result in grave consequences (Koegel, Koegel, Ashbaugh, & Bradshaw, 2014) like the persistence of behavioural problems, poor academic performance and prevention from reaching functional abilities.

Fourth, educators, who are the primary early detect have reported both a lack of preparation and knowledge on early detection of children with social and behavioural needs(Stormont, Reinke, & Herman, 2017). Since not all children at-risk of delays are identified by their parents at home (Zhang & Morrison, 2018), early detection in the educational setting is essential.

Finally, the lack of behavioural support from the school management is also another reason why educators are facing challenges to manage children's behavioural problems (Miller, Smith-bonahue, & Kemple, 2017). It is undeniable that educators need support from the school management for resources and guidance (Nye et al., 2016). Proper supervision from the school management, access to mental health consultants and cooperation from co-workers can be an excellent resource for providing ECE educators with on the job support to address children's behaviour problems (Miller, 2014).

Hence to enhance ECE educators' knowledge in the behaviour problems management and early identification, there is a need to develop a screening tool that preciselyscreens children with behavioural issues. Thus, this study is about developing a screening tool for ECE educators to identify symptomatic behaviours that may relate to developmental delays among young children in early childhood education centres'.

LITERATURE REVIEW

a) Development Delays in Early Childhood.

Developmental normality is described from 3 perspectives, a) statistical deviance; b) sociocultural norms and, c) mental health definitions (Parritz & Troy, 2014). From the perspective of statistical deviance when a child displays behaviours which are above or below of the age expectant such as dependency or assertiveness, it is considered to be developmentally delayed. Similarly, in sociocultural norms, children who unable to comply with age-related, gender-specific, or culturally acceptable expectations are perceived as challenging, struggling, or delayed. As such, from the mental health perspective, children who have a poor quality of life or function poorly or exhibits certain kind of symptoms might be at risk of a disorder. Thus, age is an index of developmental level

when measuring developmental delays in children(Rita & Israel C. Allen,2006). Judgments about behaviour require developmental norms, which describe the typical rates of growth, the sequence of growth, and forms of physical skills, language, cognition, emotion, and social behaviour. These serve as developmental standards to evaluate the possibility that something is wrong. In the development of SymBest, the child developmental domains were selected to be the constructs because identifying delays through the developmental domains provides a better understanding of the symptoms. At the same time, symptomatic behaviours at risk of developmental delays can be clearly observed by keeping a record on the milestones under each domain. The functions of each domain are also interrelated to another for optimal functioning skills. Conclusively, a follow-up information child's functioning is essential for timely recognition of symptoms and referral for intervention in order to prevent further delays. Driven by the importance of early identification, there is a critical need for a screening tool that is relatively simple to conduct and inexpensive (Schepers, Dekovi, & Feltzer, 2012). In the current practice educators are facing various challenges in recognizing children's symptomatic behaviours and managing those behaviours in the ECE centres.

b) Educators challenges managing children's behaviour problems in Early Childhood Education Centres.

A rapid developmental change occurring in young children from toddlers to childhood years causes the potential for children to develop behaviour problems that interrupt with the classroom instructions. While some behaviour problems ware off as the child grows, there is a large number of children who may suffer from persistent behaviour conditions, and it is under-recognized(Poulou, 2015). The cause of why children exhibit behaviour problems in the classroom remains as a query as there is no one definite under relying on reasons for the occur. Teachers are the main person directly connected to the children in the classroom environment. In accordance with this, early childhood educators have insufficient knowledge and skills for understanding behaviour problems, developing daily task suitable for the children's interest and needs. Educator's age, level of education and teaching experience, and teachers' self-efficacy are the contributing factors for teachers' inability handling children who are at risk of behaviour problems (Yumus & Bayhan, 2016). There is a lack of research on preschool educators' role and competencies or self-efficacy coping with these difficulties and mainly the emotional ones, which are often under-recognized (Poulou 2015). General educators have reported that they have low confidence or in-service to select the right method for detailed investigation on why children pose inappropriate behaviours in the classroom (Stormont, Reinke & Herman, 2017). When ECE educators receive sufficient coaching on effective behavioural management practices, young children who are engaged in behavioural issues improve in their social and emotional skills (Louise & Maureen, 2018). Educators require an understanding of children's behaviour problems, but above all, constructive suggestions for everyday practice is vital (Bruggink, Goei, & Koot, 2013). Most importantly knowledge on early identification of delays through children's behaviours is a skill every teacher should acquire. To materialize this, educators must realise the importance of identifying symptoms of delays within their practice instead of depending on medical practitioners solely.

c) Importance of Early Identification in ECE centers.

Educators are an invaluable resource for referring children in need of behavioural, emotional, and academic interventions because children spend countless hours in school. General education educators are the primary link between children's exhibiting problematic behaviour and receiving access to school-based services (Eklund et al., 2009). Early identification of children who are at risk helps school teams provide timely intervention and support to address behaviour problems before they become entrenched and difficult, if not impossible, to manage (Davis, Young, Hardman, & Winters, 2011). Intervention on time is also a support to address emotional and behaviour issues in young children before it gets rooted and difficult (Eklund et al., 2009). Although there is a reduction in certain kind of problems around 5 years old, a wide range of disorders has their beginning in the preschool years (Poulou, 2015). Emotional and behaviour problems in young children mostly invisible in early childhood. Many times, educators often miss or overlook the traits or symptoms.

Similar to it, not many children, especially in the mainstream early childhood programs, have prior developmental diagnosis of at risk of special needs. Hence, little attention has been paid to the earliest onset of these problems in the early childhood years (Poulou, 2015). In addition to early identification, availability of a feasible screening tool will add value to opinion or decision made on the child's symptoms for educators.

THEORETICAL FRAMEWORK

This section discusses the theoretical framework framing the development of (SymBest) for ECE educators to screening children with behavioural problems in the ECE centres. This section elaborates further on the theory of maturation, the theory of cognitive development and developmentally appropriate framework (DAP).

Theory of maturation explains the growth in various dimensions or aspects of physiology like birth, age and maturity. Gesell promotes nature as a significant influence on development. According to Arnorld Gesell (1928), growth in human can be viewed as changes of size, form, weight and structure, and it is a continual process. From another perspective, growth is a function of the body comparable to secretion or respiration. Finally, growth is also viewed from the dynamic aspect of behaviour that is as life grows, it reacts in a changing manner progressively and susceptible to a systematic observation. Gesell elaborated that the growth of behaviour certainly has some dependable connection to the growth of one's nervous system of the body. As the nervous system matures through the emergence of a sequence of behavioural values, mental growth is assured (Gesell, 1928). This means the conduct behaviour of a child is closely related to his or her expected maturational stage, which reflects the integrity of the nervous system. Having said that, patterns of behaviour follows an orderly genetic sequence in their emergence in all society of life (Thelen & Adolph, 1992). Hence, he believes that it is essential to evaluate a child's performance on a series of developmental and academic tasks in relation to the sequential ages and stages of child development in domains of cognitive, motor, language and social-emotional to best describe a child's collective behaviour and performances (Guddemi, Sambrook, Wells, Randel, Fite, Selva & Gagnon, 2014). Therefore, it is assumed that fundamentally the law of growth or development is universal, but the abnormalities in domains of development which Gesell addressed as the potentially dangerous deviations are highlighted because they serve to focus attention on the underlying mechanism of all growth. In SymBest the deviations addressed by Gesell are determined to be the items under each construct. The theory of maturation was developed to educate medical practitioners, educators and parents about "normal development" in order to establish a basis for comparison (Curtis, 2011). Hence, besides medical practitioners, educators and parents are also expected to recognise the differences between typical behaviour and symptomatic behaviours in order to make meaningful decisions for the benefit of the child. Gesell in his book "The Mental Growth of a Preschool Child" have discussed the norm of developmental domains like motor and adaptive development, language development and social development with typical milestones to be achieved from birth to 6 years old (Gesell, 1925). Thus it is appropriate that the developmental domains as per suggested by Gesell are chosen to be the measurement constructs of SymBest. Relating this, the items under each domain are for children aged 3 to 4 years old. The items are basically the red-flags of each domain which indicates the developmental delays. To support further the selection of domains of development, Piaget's view was reviewed.

In Jean Piaget's view, intellectual or cognitive development controls every other aspect of development, which is continual in all children in the same order. A child is pronounced as developing when significant changes are noticed in thinking. Having said this, the stages of age for children to reach optimal development is based on individuality which is both biological and psychological as well as factors emerging in the child's physical and social environment (Ramesh C. Mishra, 2014). The optimal function of domains like sensorimotor, language and communication and social and emotions closely related to the development of cognition. Unlike Gesell, Piaget's stages are not defined in terms of age; instead, they are defined in terms of performance in stages by the number of cognitive stimulations received (Mueller & Eycke, 2014). Piaget believed that children all pass through the same stages when developing thinking skills. However, it is the age at which children accomplish these stages of development can vary. Just as Gesell, Piaget too believed that when a

child's development is not reaching the expected milestones, then they are most likely to experience developmental delays, which require further assessments for a confirmed diagnosis. Conclusive from both the theories, it is found that measuring delays are essential based on the developmental domains and the milestones which indicates the red-flags. With the support of the theories, the construct and items of SymBest were determined. The child developmental domains as constructs and the red-flags of the milestones are the measurement elements of SymBest. To strengthened the development of SymBest, the Developmentally Appropriate Practice Framework (DA)P) was adapted to justify the needs of screening practice in ECE centres by ECE educators.

There are three core considerations in DAP for ECE educators to keep in mind while decision making. Amongst them are the importance of knowing child developmental domains and age-related characteristics, attempts to know about each child as an individual and educators knowledge on the social and cultural context the children live in are meeting to the purpose of developing SymBest. Educators who are knowledgeable about child development can make broad predictions about what children of a particular age group typically will be, what they typically will and will not be capable off, and what strategies educators can employ to promote learning and development (National Association for the Education of Young Children, 2009). In the process of knowing each child as a person, educators are encouraged to use varieties of methods like observation, checklist, rating scales, clinical interviews, parents interviews, the examination of children's work and individual child's assessment. Necessarily, knowing every child help educators to see children as they are to make decisions that are developmentally appropriate (National Association for the Education of Young Children (NAEYC), 2009). Although DAP guidelines are were intended as one index of quality for the best practices for typically developing children, the standard of developmentally appropriate practices is equally beneficial for children with special needs (Atwater, Carta, Schwartz, & McConnell, 1994). Educators effort to identify and address children with symptomatic behaviours in the classroom is undoubtedly a starting for decision making and provide an excellent base for incorporating intervention components. In recent years, in Malaysian Educational Blueprint, including children with special needs in the less restrictive educational environment as early as possible has been a great move since the year of 2013. The idea of inclusive education implementation in all educational level was strengthened further in 2018 by the ministry that by the year of 2025 70% of children with special needs will be included in the government schools by stages. The shift in this focus has surely presented some challenges for early childhood professionals, for it requires a meaningful collaboration between the field of early childhood and early childhood special education. Early childhood education is surely a starting point for children with special needs as a preparation for successful inclusion in the higher education programs later. In line with this, early childhood educators role in identifying children with symptomatic behaviours leading to developmental delays is definitely an advantage for both educators and children for a successful learning environment. Thus, the adaptation of DAP together with the theory of maturation and the theory of cognitive development is an ideal decision to meet the development features of SymBest measurement.

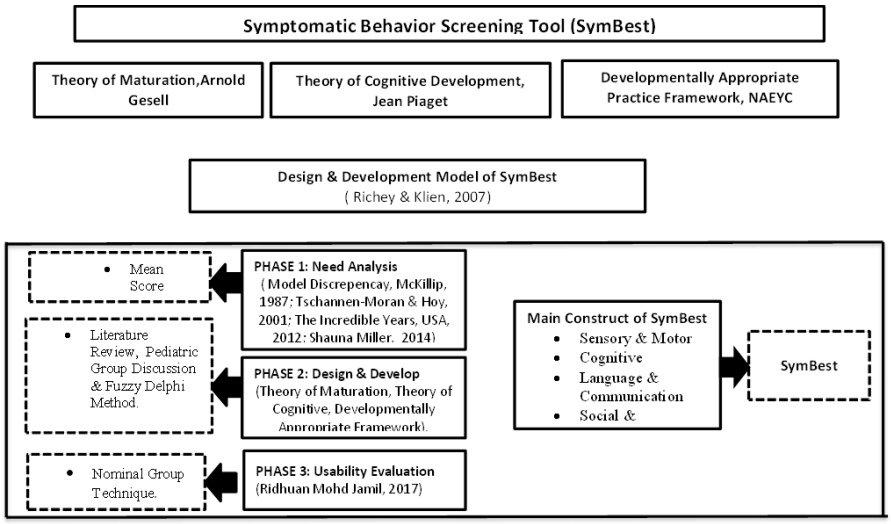
CONCEPTUAL FRAMEWORK.

This section highlights the main concepts of behavioural problems, important variables serve as a keystone for the development of the screening tool, specifically this section is aimed at conceptualizing the implementation of screening practice in ECE centres to screen children with behavioural problems through a development of symptomatic behaviour screening tool (SymBest) as an end product of the study. Regard to this, the conceptual framework shows the Theory of Maturation, Theory of Cognitive development, which linked to the variable of the screening tool. The theory of maturation describes that maturation occurs in all domains of development universally according to the biological age and therefore, deviations or red flags are seen when development is not compatible with the chronological age. Whereas in theory of cognitive, development is observed in stages based on one's performance and the performances are not measured based on age. The theory also believes the development of cognition is interrelated to other domains of development like sensorimotor, language, and social and emotional.

The main variables of SymBest are two, that is the constructs and the items. There are five constructs identified for this screening tool, which is; sensorimotor development, language and

communication development, social and emotional development, cognitive development, and creativity. The child developmental domains are based on Gesell's Theory of maturation and supported by Piaget's theory of cognitive development. Items for each construct is adapted from Red Flags: A Quick Reference Guide for Early Years Professionals by York Region Early Identification Planning Coalition, 2009 (Easton, Green, Ollen, Mintz, & Waddell, 2009). Further to strengthened the items to be culturally appropriate, a group discussion was held with 3 developmental pediatricians. The variables are then connected to the development process of the screening tool through the theories, as shown in the framework according to the phases in the methodology (Design and Development Research Approach).

The conceptual framework is also including the developmental model and approaches in each phase of the methodology to guide the development of the screening tool. In Phase 2, the theory of maturation, the theory of cognitive development, the developmentally appropriate framework is adopted to build the construct and items representing the screening tool. Finally, the suitability of the constructs and items was evaluated using the Fuzzy Delphi technique, as shown in the framework. Figure 1 shows the conceptual framework of the study.



RESEARCH QUESTIONS.

The research questions for the study is formulated in three phases according to Design and Development Research procedures.

For Phase 1, in identifying the needs to develop a screening tool for ECE educators to screen children with behavioural problems, the need analysis phase seeks to answer the following research question:

1.What are the needs to develop a screening tool to identify children's behaviour problems in the mainstream ECE in Malaysia?

As for Phase 2, the design and development seek to answer the following research question:

2.What is the design and development model of the screening tool to assess children's symptomatic behaviour?

Finally in Phase 3, the usability of SymBest seeks to answer the following research question:

3. What is the usability of the screening tool to screen children with symptomatic behaviours from educators opinions?

METHODOLOGY

This quantitative study is using the design & development (DDR) approach by (Richey & Klien, 2007). The study employed a DDR approach to developing the symptomatic behaviour screening tool (SymBest) for young children with behaviour problems. In general Richey and Klien (2007) affirms that this approach has three systematic phases that are, the need analysis phase, design & development phase, and evaluation and usability testing phase. This approach not only allows researchers to design a research study systematically but also create choices to apply various instruments and also research methods in every separate phase (Ramlan Mustapha, 2017). Fundamentally this approach is going through three comprehensive phases (Richey & Klien, 2007). The phases are as follows:

I. Need Analysis.
II. Design & Development
III. Usability.

Table 1 below shows the research method used in each phase for this study, which was adapted from Design and Developmental Research: Emergent Trends in Educational Research (2013).

Table 1: *Research method based on DDR approach.*

Phase	Research Method
Phase 1: Need Analysis	Literature Review and Survey design (score mean and percentage)
Phase 2: Design & Development	Focus Group, Literature Review and Fuzzy Delphi
Phase 3: Usability Test	Nominal Group Technique (Score mean and percentage).

(a) Phase I: Need Analysis

Purpose: In DDR approach need analysis represents the first phase of the research. Need analysis is a phase which allows the researcher to identify the needs to develop the screening tool for educators to identify symptomatic behaviours among children. Need analysis is also a powerful method of deciding if services in the population currently are adequate or not. If such services are inadequate, and a solution is available, it means there is a need. Given all that has been mentioned so far, in this phase besides identifying the needs to develop a screening tool, researcher too decided to get educators perception on classroom behaviour management, behaviour techniques used and the kind of support they receive from the school climate to understand the challenges educators are facing on the ground currently. Each research question in this phase leads to the development of SymBest (Ridhuan, Saedah, Zaharah, Nurulrabihah, and Ahmad Arifin, 2017). The participants are early childhood educators from the 4 government agencies throughout Malaysia. In this phase, an online survey questionnaire was distributed to 3550 respondents with a response rate of 538. From the overall response rate, as stated above, 434 educators were selected as a sample size of this study with judgemental sampling method (Zainudin Awang, 2015). The sample size is specifically educators who are teaching children of ages 3 and 4 as the user of the screening will be the educators who are teaching children of that age groups. There are 5 sections in the survey questionnaire for data findings, Section A respondents demographic, Section B: Educators Perceptions in Managing Children's Behaviour Problem, Section C: Educators Perceptions On Techniques Used For Behaviour Management, Section D: Educators Perceptions On The Availability Of Support and Section E: Educators perception on the needs of screening tool.

(b) Phase II: Design & Development.

Purpose: The second phase is the design and development of the screening tool to support and improve early childhood educator's skills and knowledge for early identification and screening

children with behaviour problems. The content of Symptomatic Behaviour Screening tool consists of constructs and items that aimed to screen children's behaviour to be symptomatic to developmental delays. The constructs and items of the screening tool are from child developmental theories, developmental appropriate practices(DAP), Red Flags: A Quick Reference Guide for Early Years Professionals by York Region Early Identification Planning Coalition, 2009 & Paediatric Group Discussion. Constructs are from the 12 principals of DAP (NAEYC), and the items are adapted from Red Flags: A Quick Reference Guide for Early Years Professionals by York Region Early Identification Planning Coalition, 2009 & Paediatric Group Discussion. Fuzzy Delphi method was used to validate the constructs and the items of SymBest. 18 panels of experts were involved in validating the constructs and items of the tool. A Fuzzy Delphi questionnaire with 7 points Likert was established to gain a consensus from the experts. Data collected was analysed with the Fuzzy Delphi Analysis Template (Abdul Muqsith Ahmad, 2018; Habibah Artini Ramlee, 2017; Mohd Ridhuan Mohd Jamil, 20017; Ramlan Mustapha, 2017).

c) Phase III: Usability.

Purpose: The purpose of this phase is to test the usability of Symptomatic Behaviour Screening Tool (SymBest), to validate if the screening tool is suitable to be implemented in the early childhood education (ECE) centres to screen children for symptomatic behaviour. In the context of this research, the aspect of satisfaction is focused on ECE educators from government agencies to evaluate the usability of SymBest. From the perspective of satisfaction, the researcher would like to seek the ECE educator's opinion on the usability of SymBest to screen children with symptomatic behaviour. The level of usability of a developed product can be determined based on the expert's opinion and perceptions given upon using the product (Jeng & Tzeng, 2012). In this phase to test the usability of SymBest, 21 early childhood educators with experience of more than 5 years in the working field participated. Data was collected by employing Modified Nominal Group Technique(NGT) method by conducting a face to face workshop. The following sections will elaborate on the finding of each phase on a separate note.

RESULT

The development of SymBest is based on two child developmental theories, Developmentally Appropriate Practices (DAP), Red Flags: A Quick Reference Guide for Early Years Professionals by York Region Early Identification Planning Coalition, 2009, and Paediatric Group Discussion. DDR approach follows three phases; Phase I: Need analysis; Phase II: Design & Develop, and Phase III: Usability Test.

(I) Findings of Phase I: The Need Analysis.

This phase was conducted using the need analysis online survey questionnaire, which was distributed among ECE educators from KEMAS, PERMATA, PERPADUAN, and YPKT. The online survey questionnaire was distributed to 3550 respondents with a response rate of 538. However, only educators who are teaching children age 3 and 4 was needed for this phase, and they comprise a number of 434 ECE educators from the response rate as the sample size for this phase.

Analysis of educator's perception in managing children's behaviour problems.

Therefore before considering of developing a screening tool to identify symptomatic behaviours among children, there was a need to investigate if the early childhood educator's needs a screening tool for managing and understanding children and their symptomatic behaviours. Thus, the study attempted to answer the first sub-question of this phase:

1(a). What are educators' perceptions in managing children's behaviour problems in the classroom?

In response to identifying whether ECE educators need a screening tool, the study attempted to seek educators perception towards managing children's behaviour problems in the classroom.Data interpreted shows mean value 3.75 and a standard deviation of 0.68. This number value interprets that majority of ECE educators to have a positive perception towards managing behaviour problems in the classroom. This explains that educators can manage children and their behaviours, mostly in the classroom. Most of the items in this constructs are falling into the score mean of high level. However items like "I tend to get through to the most difficult child in the class" (M = 3.56, SD = 0.73), "I prefer to use assessment strategies to gain knowledge on children's behaviour" (M = 3.63, SD = 0.72) and "I am able to prevent children's behaviour problem from ruining an entire lesson" (M = 3.63, SD = 0.69) at this point falling into the moderate level.

Analysis of strategies educator's use to manage children with behaviour problems in the classroom.

In this section, the study sought to investigate if the educators are using some behaviour management strategies in the classroom to manage children's behaviour problems. Thus the study attempted to answer the second sub-question of this phase:

1(b). What strategies educators' use to manage children with behaviour problems in the classroom.

In response to identifying what strategies educators use to manage behaviour problems in the classroom are, the study attempted to recognize the most common behaviour management strategies used by ECE educators currently. Data interpreted shows mean value 3.09 and a standard deviation of 1.28 on the average. This number value interprets that majority of ECE educators are using some behaviour management strategies to manage children and their behaviours in the classroom. Most of the items in this constructs are falling into the score mean of moderate level on the average. When the items are analysed individually, some items are showing low mean value, whereas some are showing moderate and high mean value. Items like, "I use physical restraints (pinch, tapping the shoulder, etc.)" (M=1.61, SD=0.76), "I send child home for misbehaviour" (M=1.11, SD=0.49), "I ignore misbehave that is disruptive to class" (M=1.52, SD=0.79), "I phone parents to report misbehaviours", (M=1.72, SD=0.94), "I phone parents to report good behaviour" (M= 2.10, SD= 1.19), and "I send WhatsApp/telegram/SMS message to parents to report child's behaviour difficulties"(M=2.29, SD=1.15), reporting low level of mean value (1.00-2.33), which means that, these strategies less preferred by educators as a technique to manage children's behaviours. Followed by this, items like "I use time out (take away to calm down) for misbehaviour' (M=3.06, SD= 1.05), " I single out a child or a group of children for misbehave" (M= 3.11, SD = 0.96), "I reprimand with a loud voice" (M= 2.48, SD = 0.89), "I use nonverbal signals to redirect child who is disengaged (Silent card, bell, music instruments)" (M = 3.14, SD = 0.89), "I send WhatsApp/telegram/SMS to parents about child's positive behaviour" (M = 2.84, SD = 1.20), and "I teach other children to ignore disruptive behaviour" (M= 2.38, SD = 1.10) are reporting moderate level of mean value(2.34-3.66). This means some educators are comfortable in using these strategies to manage children and their behaviours in the classroom. Finally items under the high level of mean value (3.67 – 5.00) are like, "I coach positive behaviour (values like sharing, helping, waiting)" (M = 4.18, SD = 0.58), " I praise positive behaviour" (M = 4.47, SD = 0.56), "I reward positive behaviour" (M = 3.85, SD = 0.78), " I use verbal redirection for child who is disengaged (e.g: calling name, come here, help me please)" (M = 3.87, SD = 0.73), "I use special privileges (teacher's helper, extra computer time, reading favourite book during story time) for positive behaviours" (M = 3.38, SD = 0.91), "I set up incentive program (stickers, prizes) for positive behaviours" (M = 3.36, SD = 0.97), "I warn of consequences of misbehave (loss of privileges)" (M= 3.46, SD = 0.92), " I speak to child about their misbehaves" (M= 3.70, SD = 0.70), "I model good behaviour to children (cleaning up, arranging toys)" (M = 4.31, SD = 0.55), "I teach specific social skills in circle time (sharing, making friends, following rules)" (M = 4.30, SD = 0.61), "I use imaginary play/ drama, stories and puppets for behaviour modification" (M = 3.79, SD = 0.82), " I set up problem solving scenarios to practice prosocial solutions" (M = 3.73, SD = 0.77) and "I teach children anger management strategies (counting,

singing)" (M = 3.55, SD = 0.92). Hence, from the findings, these are the most favorable and frequent strategies used by educators to manage children and their behaviours.

Analysis of the supports available currently for educators to identify children with behavior problems in the classroom.

In this section, the study seeks to investigate if educators are receiving support from the school climate to identify children with behavior problems in the classroom. Thus the study attempted to answer the third sub-question of this phase:

1(c) What are the supports available currently for educators to identify children with behavior problems in the classroom?

This section analysed the supports available currently for educators to identify children with behaviour problems in the classroom. Data is reporting the average mean value obtained from the data analysis. The average mean value of this section is 2.43, and the standard deviation is 1.25. The mean value indicates that ECE educators from KEMAS, PERPADUAN, PERMATA NEGARA, and YPKT is receiving support from the school climate moderately (2.34- 3.66). However, majority of the items in this section like, "I can get access to an expert in behavior if I needed" (M= 2.05, SD = 1.13), " I can get a behavior consultant upon request" (M= 1.79, SD = 1.06), " I receive a behavior plan from school after asking for help" (M = 1.85, SD = 1.05) and "I receive additional training on how to deal with behavior problems" (M = 2.31, SD = 1.16) have reported mean value at a low level (1.00-2.33). On the other hand, there are only two items like, "I had someone I could ask for opinion, when I have concerns about a child" (M= 3.43, SD = 0.97) and "I can ask for help from anyone in school for a child behavioral issues" (M= 3.13, SD = 1.07) mean value of moderate level (2.34-3.66).

Analysis of ECE educator's perceptions of the needs of a screening tool.

In this section, the study sought to investigate, ECE educator's perceptions on the needs of a screening tool to identify children with symptomatic behaviours. Thus the study attempted to answer the final sub-question of this phase:

1(d) What are ECE educators' perceptions of the needs of a screening tool?

This final section analyzed ECE's educator's perceptions of the needs of a screening tool to identify children with symptomatic behaviours. Data is reporting the average percentage and mean value obtained from the data analysis. When probed further the perception of ECE educators on the needs of a screening tool, the average mean value of this section is 4.36, and the standard deviation is 0.60. The mean value indicates that ECE educators from KEMAS, PERPADUAN, PERMATA NEGARA, and YPKT strongly agree that they need a screening tool to identify children with symptomatic behavior (3.67- 5.00). All the items in this section like, "can provide a record of growth in all developmental areas (physical, language, communication, emotion, social etc)"(M=4.38, SD = 0.60) "Can help educators to identify children at-risk of disorders"(M = 4.35, SD = 0.59), " Can help educators to identify children who may need additional support like referral to a medical practitioner" (M = 4.33. SD = 0.61), " Determine if there is a need for early intervention or support services" (M = 4.27, SD = 0.65), "Help educators to plan differentiated learning" (M = 4.42, SD = 0.57) and "Identify the strength and weakness of children" (M = 4.43, SD = 0.57) is supporting that the needs of a screening tool is crucial in ECE centres.

To sum up, ECE educators have strongly agreed that there is a need for a screening tool to identify children with symptomatic behaviour at risk of developmental delays.

II) Findings of Phase II: Design & Development.

This section will elaborate on the design and developmental process of the SymBest. There are two processes involved in this phase, which the design of SymBest and development of SymBest. The

focus of this phase is the measurement constructs and the items representing Symbest for ECE educators to identify children of age 3 to 4 years with symptomatic behaviours. Before the development of Symbest, the need analysis findings in the previous section states that there is a strong need for a screening tool for ECE educators to identify children with symptomatic behaviours based on each developmental domains. This contributed to the decision to develop a screening tool for ECE educators to identify children with symptomatic behaviours. Symbest consists of constructs of 5 developmental domains that is; sensory & motor development, language & communication development, social & emotional development, cognitive development, and creativity development. There are 30 items in the construct of sensory & motor development, 25 items in language & communication development, 28 items in social & emotional development, 18 items in cognitive development and 11 items in creativity development. The screening tool then was changed into the Fuzzy Delphi Questionnaire with linguistic scale to obtain the validation from 18 experts who were the participants of phase II.

Findings of the suitability of the constructs of SymBest analysed with Fuzzy Delphi Method (FDM).

Based on the 7 points linguistic scale, the responses of the expert participants from the fuzzy Delphi questionnaire were obtained. This section answered the first sub-question of phase II, that is :

2 (a) What are the suitable constructs of measurement for screening symptomatic behaviours by children based on experts consensus?

It is interesting to note that, four constructs out of five constructs proposed is accepted. Referring to the first rule of FDM, construct of sensory and motor development, language and communication, social and emotional and cognitive have consensus among the experts with threshold value below than 0.2. Based on the expert's view, the threshold value, "d" and the group consensus percentage was calculated for all the constructs to determine the consensus level among experts for each construct. The threshold value exceeded the value of 0.2. This indicates that the individual expert's views on the particular construct do not agree with other expert participants (Cheng & Lin, 2002). For example, as for the experts view on the constructs of SymBest, expert 2, 6,8,12,15 and 17 do not agree with other experts in the agreement of construct creativity proposed for SymBest. Therefore the construct creativity was rejected based on experts consensus, and the threshold value for this construct is 0.214 (above 0.2). However, as discussed in chapter 3, the calculation of the threshold value is performed overall for all the constructs in the section.

The second rule of FDM is calculating the consensus of experts in percentage whereby it must be more than 75%. Based on the analysis , construct sensory, and motor development, language, and communication, social and emotional and cognitive have gained 100% of group consensus from the experts. However, the construct creativity alone was rejected based on the calculated percentage of 66.67% of group consensus. The third rule of FDM is the fuzzy score (A) Average of a fuzzy number of each construct must be α – cut = 0.5 (Bodjanova, 2006). The average fuzzy number is calculated to determine the ranking, but it is not needed for this section as the constructs are arranged as it is in the literature. In response to this rule, constructs creativity is still rejected even though the fuzzy score value is more than 0.5. The reason emerged is, in order for the construct to be accepted, it has to meet the criteria set for all the three rules in FDM. Apparently, from this, it is noted that for construct creativity development, only one rule is accepted. Therefore the construct of creativity is rejected from representing SymBest.

Suitability of the items under the constructs of SymBest analysed with Fuzzy Delphi Method (FDM).

The following section will elaborate on the findings of the suitability of the items under all the constructs of SymBest. There are five constructs proposed for Symbest, which was validated by experts, and the data were analysed with FDM. The five constructs are; i) sensory & motor development, ii) language & communication development, iii) social and emotional development, iv)

cognitive development, and v) creativity development. The findings of the five proposed constructs were elaborated in the section above. This section answered the second sub-question of phase II:

2(b) What are the suitable items in the main constructs for screening symptomatic behaviours of children based on expert's consensus?

Construct Sensory Motor Development

Precisely to meet the first rule in FDM, there are 13 items under the construct of sensory and motor development have consensus among the experts with threshold value below than 0.2. The threshold value exceeded the value of 0.2. This indicates the individual expert's views for the particular items do not agree with other expert participants (Cheng & Lin, 2002). However, the calculation of the threshold value is performed overall for the questionnaire items. The second rule of FDM is percentage consensus of experts must be more than 75 %. Table 4.14 shows that 13 items under the construct sensory and motor development have gained a group consensus of more than 75 %. Therefore, the remaining 17 items (item number 2,5,6,7, 11, 12, 13, 17, 18,19, 20, 23,25, 27,28,29,and 30) from the total proposed items was rejected based on the calculated percentage of below than 75%.

Construct Language & Communication

In this section, 12 items under the construct of language and communication development have consensus among the experts with threshold value below than 0.2. The threshold value exceeded the value of 0.2. This indicates the individual expert's views for the particular items do not agree with other expert participants. However, the calculation of the threshold value is performed overall for the items of this section. The second rule of FDM is percentage consensus of experts must be more than 75%. Table 4.15 shows that 12 items under the construct of language and communication development have gained a group consensus of more than 75 %. As such, the remaining 13 (item number 5, 6, 7, 8, 10,14, 16, 17, 18, 20, 21, 24 and 25,) were rejected based on the calculated percentage of below than 75%.

Construct Social & Emotional Development.

The finding reports, 17 items under the construct of social and emotional development have consensus among the experts with threshold value below than 0.2. The threshold value exceeded the value of 0.2. This indicates the individual expert's views for the particular items do not agree with other expert participants (Cheng and Lin, 2002). However, the calculation of the threshold value is performed overall for the questionnaire items. The second rule of FDM is percentage consensus of experts must be more than 75%. 17 items under the construct of language and communication development have gained a group consensus of more than 75%. Thus the remaining 11 items (item number 4,6,8,9,14,1819, 20,21,23 and 25) were rejected based on the calculated percentage of below than 75%.

Construct Cognitive Development.

This section reports the findings of the suitability of the items under the construct cognitive development which was analysed with FDM. 9 items under the construct of cognitive development to have consensus among the experts with threshold value below than 0.2. The threshold value exceeded the value of 0.2. This indicates the individual expert's views for the particular items do not agree with other expert participants (Cheng & Lin 2002). However, the calculation of the threshold value is performed overall for the questionnaire items. The second rule of FDM is percentage consensus of experts must be more than 75 %. 9 items under the construct language and communication development which have gained group consensus more than 75 %. Hence, the balance of 9 items (item number 1, 5,6,7,10,13,14,16, and 17) proposed was rejected based on the calculated percentage of below than 75%.

Construct Creativity Development.

The following section presents the findings of the suitability of the construct creativity development. Based on the data analysis of this section, the items of creativity development is dropped. In the previous section, findings reported the lack of group consensus of this construct. Therefore, the construct was rejected. As such, the construct and items of creativity will not be included to form SymBest. As explained in the previous sections, construct creativity was rejected based on the calculated percentage of 66.67% of group consensus. Findings show only 4 items selected out of 11(item number 2.,3,4,5,9,10, and 11) proposed. Since the construct itself was rejected, and the number of items accepted was low based on expert's consensus, creativity development was eliminated from SymBest.

Sequence priority or the ranking of the items in each construct with FDM.

In this section, the sequence priority of the items in each construct is presented. The findings of the suitability of the constructs and items as elaborated in the previous section report that there are 4 constructs; sensory & motor development, language & communication development, social & emotional development, and cognitive development were confirmed to represent SymBest. The constructs creativity was dropped as it did not gain the consensus of the experts, and the items obtained acceptance was also too low to represent a construct. Therefore, the sequence priority or ranking of the items will be presented for the four accepted constructs of SymBest. The following sub-questions were answered:

2 (c) What are the sequence priority of the items in each construct in the screening tool based on experts consensus?

The third rule of FDM is the fuzzy score (A). Average of a fuzzy number of each item must be α – cut = 0.5 (Bodjanova, 2006). The average fuzzy number is calculated to determine the ranking of the items. The ranks of the items are arranged based on the fuzzy scores. In response to this rule, Table 2, 3, 4 and 5 shows the accepted items under the construct sensory and motor development, language and communication development, social and emotional development and cognitive in ranking with fuzzy scores above 0.5.

Table: 2 *Items Ranking Under the Construct of Sensory and Motor Development*

Fuzzy Score	Ranking	Items
0.837	1.	**Found restless with hands and feet.**
0.831	2.	**Avoid activities getting hand and feet messy(finger painting, play dough)**
0.828	3.	**Show repetitive movements (rocking, or repeated speech)**
0.806	4.	**Fall/ crash on the floor throughout the day.**
0.804	5.	**Focus visually on task**
0.798	6.	**Walks on toes**
0.794	7.	**Found over active or on the go more than other children (Jumps/ run/ climb)**
0.794	8.	**Sustain attention in activities**
0.793	9.	**Respond to name call**
0.780	10.	**Easily distracted**
0.759	11.	**Pay attention to the surrounding**
0.754	12.	**Fixed in certain objects, activities or topics**

0.743	13.	**Respond to and follow instructions presented verbally**

Table: 3 *Items Ranking Under the Construct of Language and Communication Development.*

Fuzzy Score(A)	Ranking	Language & Communication Development
0.859	1.	**Say what he/she wants.**
0.844	2.	**Follow simple one commands (come, sit, go, take)**
0.837	3.	**To respond verbal or nonverbal to "yes " or "no."**
0.809	4.	**Join group activity**
0.793	5.	**Communicate easily with other children and adults**
0.787	6.	**Understand what is said to her/him**
0.780	7.	**Pay attention to a short story and answers simple questions about it.**
0.746	8.	**Enjoy looking at books and other's stories**
0.744	9.	**Use colour, numbe, and time-related words, for example, 'red' car, 'three' fingers and 'yesterday/tomorrow.'**
0.726	10.	**Have poor vocabulary**
0.707	11.	**Greet**
0.696	12.	**Describe recent events, such as morning routines**

Table: 4 Items Ranking Under the Construct of Social and Emotional Development

Fuzzy Score (A)	Ranking	Social & Emotional Development
0.942	1.	**Initiate to make friends.**
0.857	2.	**Injure self while being angry (head banging, biting own self)**
0.844	3.	**Show interest in playing toys.**
0.837	4.	**Show appropriate facial expressions.**
0.837	5.	**Engage in pretend play.**
0.824	6.	**Injure others (kicking, hitting, biting, pushing)**
0.820	7.	**Prefer to be left alone**
0.819	8.	**Have eye contact**
0.815	9.	**Wait for turns**
0.806	10.	**Play toys in a typical way.**
0.794	11.	**Scream a lot more than other children**
0.794	12.	**Destroy others property**
0.793	13	**Throw things on others in anger**
0.793	14	**Destroy things in the classroom (wall charts, furniture)**
0.798	15	**Cry or scream as a respond to "no" or "stop" command**
0.763	16	**Destroy own properties**
0.717	17	**Snatch things from others (toys, food)**

Table: 5 *Items Ranking Under the Construct of Cognitive Development*

Fuzzy Score (A)	Ranking	Cognitive Development
0.796	1.	**Know own name**
0.793	2.	**Know what common objects are used for**
0.791	3.	**Uses objects and materials to build or construct things, e.g., block tower, puzzle, clay, sand.**
0.785	4.	**Organize objects by size**
0.770	5.	**Organize objects by shape**

0.769	6.	**Correctly name at least four colors and three shapes**
0.761	7.	**Have a longer attention span of around 5 to 15 minutes**
0.735	8.	**Know own age**
0.719	9.	**Recognize some letters**

III) Findings of Phase III: Nominal Group Technique.

Phase III is meant to test the usability of the developed screening tool, SymBestSatisfaction and opinion from the user shall determine the usability of every new product (Don J.F.J & Gwo H. T, 2012). In the context of this study, the researcher is seeking for the satisfaction of the user who is the early childhood educators, teaching children age 3 to 4 years old. The process of measuring the usability of SymBest started with a presentation slot to the participants of this phase who were the ECE educators teaching children of age 3 to 4 years old currently. Shortly after the presentation slot, the educators were required to answer the usability questionnaire provided to them along with the SymBest screening tool developed) to refer while rating their opinions. Like so many other products and services which require for users perception on the usage for commercial purpose, it is also essential to understand the comfortability of Symbest among the users who are the ECE educators from PERMATA, PERPADUAN, KEMAS & YPKT (Baker-eveleth & Stone, 2015).
Thus, to measure the usability of SymBest, the Modified Nominal Group Technique (Modified NGT) method was employed to seek for the perception of the ECE educators on the usability of the tool. A number of 21 participants of ECE educators who are teaching children age 3 to 4 years old from KEMAS early childhood centres were selected to participate in this data collection procedure. The sample of this phase is kept small yet precise because it requires only educators who are directly involved in at least a period of 5 to 10 years of working with children age 3 to 4 years old. The rational behind the selection of this sample size is similar to (Dobbie, Rhodes, Tysinger, & Freeman, 2004) that Modified NGT can be used to draw responses from groups of 6 to 40 and the samples selected represent the whole population. The level of agreement on the suitability by 7 points Likert by each participant has left a score value for each measurement constructs and items. This score value was converted to a percentage to interpret the data obtained to determine if the constructs and the items of SymBest are suitable and usable or the other way around. In connection with this, the percentage score as a group must be equal to or more than 70% for the contracts and the items to be accepted. As such, to this subjected rule (Deslandes, Mendes, Pires, & Campos, 2010) and (Dobbie et al., 2004) affirms that in Modified NGT a particular construct or item is accepted if the total percentage score by the participant is equaled to or more than 70%.

The Modified NGT questionnaire, which was given to the expert participants to rate during the workshop consists of 5 sections. Section A is the educators details, Section B is the identifying information of children, Section C requires educators' view on the suitability of the SymBest constructs, Section D requires educator's view on the suitability of the SymBest items under each construct and the final part is Section E which requires educators' view on the usability of Symbest overall.

Educator's view on items suitable for a child's information details.

The suitability evaluation of this section answered the following research question:

3(a) What are educator's opinions on the suitability of the items under the section of child's details in SymBest?

Findings obtained from the data analysis reports that all the items under the child's details are reported suitable based on the educator's view. There were 10 items suggested in the child's details section, which was accepted based on usability percentage of ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004). The accepted items for suitability are Rator's Name, Child's Name * (confidential), Child's Gender, Child's Age, Child's Ethnic, School Enrolment Date, Date Rated, State the concerned behaviour issues (speech delayed, hyperactivity, aggressive, etc), State the frequency of the behaviour

issue(3/6/9) months and state educator's opinion from the findings. The next section will answer the second research question of Phase III

Educator's view on the suitability of the constructs in SymBest's.

In this section, the suitability evaluation was carried for the constructs of SymBest by seeking an opinion from the expert participants. The evaluation answered the following research question:

3(b).What are educators opinions on the suitability of the main constructs of SymBest?

There are 4 constructs in SymBest that is, sensory & motor development, language & communication development, social & emotional development, and cognitive development. The 4 constructs are child's developmental domains from Developmentally Appropriate Practices by National Association for the Education of Young Children (NAEYC).

The analysis was carried out to view the educator's opinion on the suitability of the 4 constructs representing SymBest. The findings report that all the 4 constructs are suitable to represent SymBest based on educator's opinion. The constructs are accepted based on usability percentage of ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004). The reason for adapting the child developmental domains as measuring constructs is because at risk of developmental delays are reliable to identify according to the domains (Brown, Mcintyre, Crnic, Baker, & Blacher, 2011). The next section will answer the third research question of Phase III.

Educator's view on the suitability of the items under each construct in SymBest.

As been repeatedly reporting, the SymBest screening tool consists of 4 developmental domains representing as the constructs of measurement. Under each construct, the items are the red flags or developmental delays identified in children. The items or the red flags were adapted from the Red Flags: A Quick Reference Guide for Early Years Professionals by York Region Early Identification Planning Coalition, 2009 & Paediatric Group Discussion. Further with the Fuzzy Delphi Method, the constructs and the items were validated by 18 experts from the field of medical, behaviourism, and education. However, the usability and suitability of these items need opinions from the user of this SymBest tool. Therefore 21 ECE educators were selected to give feedback on the usability of this tool from their perspective. This section will answer the following research question.

3(c). What are educators opinions on the suitability of the items in each construct of SymBest?

The findings obtained will be presented in 4 segments according to the constructs.

(i) Items under construct sensory & motor development.

There are 13 items gathered under the construct of sensory & motor development. The analysis reports that all the 13 items are suitable and accepted based on educators opinion and NGT usability percentage of ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004).

(ii) Items under the construct language & communication.

There are 12 items accumulated under the construct of language & communication development. The analysis reports that all the 12 items are found suitable based on educators opinion and accepted based on NGT usability percentage ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004).

(iii) Items under the construct social & emotional development.

There are 17 items gathered under the construct of social & emotional development. The analysis reports that all the 17 items are suitable based on educators opinion and accepted based on NGT usability percentage of ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004).

(iv) Items under the construct cognitive development.

There are 9 items gathered under the construct of cognitive development. The analysis reports that all the 9 items are suitable based on educators opinion and accepted based on NGT usability percentage of ≥ 70.0% (Deslandes et al., 2010; Dobbie et al., 2004). The next section will answer the final research question of Phase III.

Educator's View on the usability of SymBest overall as a screening tool to identify children with symptomatic behaviours.

Upon evaluating the suitability of the constructs and items of SymBest, it was also much needed to know the opinion of the participants representing the user population on the usability of SymBest as a screening tool to identify children with symptomatic behaviour. Hence for this purpose, the usability items in this section were adapted from (Mohd Ridhuan Mohd Jamil, 2017) and modified to meet the requirement of this research. There are 6 usability items in this section with 7 point Likert of agreement from totally disagreed to totally agreed. Findings from the table 4.30, proves that ECE educators have agreed the Symptomatic Behavior Screening Tool (SymBest) on the whole is used for screening and identifying children of age 3 to 4 years with symptomatic behaviour. All the 6 items in this section have gain consensus more than 70% based on the educator's opinion. It was vital in this phase to seek experts opinion on the usability of SymBest overall as a screening tool.

Conclusively, the usability phase here is to evaluate the usability and the suitability of the constructs and the items of SymBest based on 21 expert participants opinions. In the context of this research, Symptomatic Behavior Screening Tool (SymBest) was developed for early childhood educators to identify children of ages 3 to 4 years old with symptomatic behaviours. Therefore, in this usability phase, the constructs, items, and the overall usability of the tool were evaluated by the early childhood educators who represent the user population. The findings of this phase report that all the constructs and the items evaluated are suitable with the measurement purpose, and the screening tool is useful for identifying children with symptomatic behaviours. The accepted constructs and items have met the acceptance criteria of NGT, that is a percentage level of more than 70% (Deslandes et al., 2010; Dobbie et al., 2004). The usability values obtained was based on the perceptions of the expert participants during the workshop conducted.

DISCUSSION

Screening children for developmental delays in the education system has not been a regular practice in Malaysia. The reason being, screening for developmental delays have been MOH's responsibilities all the while because the health care sector is believed to see children on a larger scale (Haji Muhammad Ismail et al., 2017). Although developmental screening is done efficiently by MOH, many educators have stated their concern that behaviours at-risk of delays are also obviously seen, especially in the ECE classrooms. Educators at school see children whose parents have missed to pick up the at-risk behaviours. ECE educators have stated that many of them do not have sufficient knowledge on how to identify children's behaviours to be symptomatic for delays. However, from the need analysis findings, ECE educators have emphatically stated that there's no one comprehensive screening tool to identify symptomatic behaviours as at-risk delays in the ECE system currently. Adding to this, from the need analysis findings, it is also found that the majority of educators have agreed that they need a screening tool for early identification.

The features of SymBest with child developmental domains as the constructs, and the symptomatic behaviours as the items under each construct to help educators in recognising symptoms of delays. In the past literature studies, (Rice et al., 2014) have stated that early childhood development typically follows a developmental trajectory to achieve motor, language, social & emotional and cognitive milestones within a specified age range. Whereas selecting the symptomatic behaviours as items which are also the red-flags of delays helps educators have a better understanding of the occurrence of the behaviour. The decision to combine developmental domains and to frame symptomatic behaviours as items to measure developmental delays in children is ideal. As stated by

(Baker, Blacher, Crnic, & Edelbrock, 2002) behaviour problems are seen at heightened risk for children with developmental delays, so identifying symptomatic behaviours is one way of early detection. Given all this reason, for early identification, developmental domains are the most suited option to be the main constructs of SymBest meeting the purpose of the tool to screen children for symptomatic behaviours at-risk of developmental delays.

According to (McConnell et al., 1998), a developmental assessment helps to gain information about a child's skills in all the developmental domains for decision making. He further elaborates that screening tests are quick and easy to administer and can be used to screening a larger number of children to identify developmental delays. A long assessment instrument may not be suitable in the field of education as it may cause rator fatigue, leading to an unreliable outcome (DiStefano & Kamphaus, 2007). Besides that, language and time is also an issue for educators to complete the screening due to multiple daily tasks. Considering all the challenges educators face, SymBest was developed as a screening tool in simple dual-language with additional features like web-based, mobile, personal computer accessibility, immediate scoring and pdf save. Educators can use the screening report during parent conference as well as a supportive document when referring children for clinical assessment.

Consequently, SymBest tool paves ways for early identification practice especially early childhood programs. Screening in the education system should be available in both nursery (Taska) and preschool (Prasekolah) besides the screening effort by MOH. Similarly, SymBest can also be used by educators from both private and public early childhood programs. At the same time, SymBest is also practical for parents usage to screen for symptoms of behaviours in their children although parents population is not focused in this study.

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