

Artikel Ulasan/Review Articles

Bridging the Research and Cultural-Practice Gap in Early Language Intervention in Malaysia

(Menghubung Jurang Penyelidikan dan Amalan Budaya dalam Intervensi Awal Bahasa di Malaysia)

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ABSTRACT

“Following the child’s lead” and “collaborative consultation with parents” are solidly grounded in the best practice of early language intervention. However, the success of these two practices are based on assumptions that they are valued by families and that they can be feasibly implemented by the attending speech-language pathologist (SLP). Such assumptions can be unjustified in cultures that value the use of “adult-guided instructions” over following the child’s lead and when the work setting of the SLP does not readily accommodate those practices. This article takes the form of a position paper. Through review of the literature, the paper (1) identifies the research-cultural practice gap in early language intervention in Malaysia; (2) positions the two research-informed practices – following the child’s lead and collaborative consultation with parents, on the continuum of intrusiveness in early language intervention; and (3) proposes the techniques of Milieu Teaching as an approach to bridge the research-cultural practice gap in Malaysia.

Keywords: Following the child’s lead; collaborative-consultation; early language intervention; speech-language pathology, Milieu Teaching

ABSTRAK

Amalan “mengikuti minat kanak-kanak di dalam interaksi” dan “perundingan usaha sama dengan ibu bapa” adalah dua praktis yang mantap di dalam intervensi awal bahasa kanak-kanak. Walau bagaimanapun, penggunaan kedua-dua praktis ini adalah berdasarkan andaian bahawa keluarga kanak-kanak menghargai praktis-praktis tersebut dan para patologis pertuturan dan bahasa (PPB) dapat mengamalkan praktis-praktis tersebut. Andaian-andaian ini adalah tidak berasas sekiranya para ibu bapa lebih cenderung untuk mengetuai interaksi kanak-kanak daripada mengikuti minat mereka, dan sekiranya tempat bekerja PBB tidak optimum untuk pengamalan kedua-dua praktis itu. Berdasarkan kajian literatur, artikel ini bertujuan untuk (1) mengenal pasti jurang di antara penyelidikan saintifik dan pengaruh budaya terhadap praktis-praktis intervensi awal bahasa di Malaysia; (2) meletakkan amalan “mengikut minat kanak-kanak di dalam interaksi” dan “kerjasama-konsultatif dengan ibu bapa” di dalam kontinum intrusif intervensi awal bahasa; dan (3) mencadangkan pengamalan Milieu Teaching sebagai suatu kaedah untuk mengurangkan jurang di antara penyelidikan saintifik dan pengaruh budaya terhadap praktis-praktis intervensi awal bahasa di Malaysia.

Kata kunci: Mengikut minat kanak-kanak; perundingan usaha sama; intervensi bahasa awal; patologi pertuturan-bahasa; Pengajaran Milieu

INTRODUCTION

In Malaysia, early language intervention services form a large proportion of the speech-language pathologist’s (SLPs) caseloads (Sharma 2008) but to date, there is limited empirical evidence on the delivery of early language intervention in Malaysia. As best practices are grounded in culture-specific evidence (van Kleeck 1994), there is a need to understand how information obtained from cultures with more established evidence on early language intervention practices could fit the needs of families in Malaysia. In countries like the US, the UK and Australia, empirical support in early intervention leans towards two practices, (1) following the child’s lead and (2) collaborative-consultation with parents (Carter et al.

2011; Girolametto 1988; Moore 1988; Yoder et al. 1993). Following the child’s lead involves joining in a child’s current focus of attention and responding to that focus of attention (Akhtar et al. 1991) to enhance the child’s cognitive capacity for language processing (McCarthren et al. 1995). Collaborative-consultation with parents requires that the SLP views parents as the key agent of change in intervention (American Speech-Language-Hearing Association 2008) and involves intensive parental training in order to provide specific and socially meaningful language facilitation strategies to children with language impairment (Roberts & Kaiser 2011).

As cautioned by van Kleeck (1994), the effectiveness of following the child’s lead and collaborative-consultation with parents in any country is related to the language

teaching beliefs and practices of the communities in that country. In Malaysia, the notions of following the child's lead and collaborative-consultation with parents are not new to the SLPs in the country. SLPs would have been exposed to these practices through their professional training, and internationally-established programmes such as the Hanen early language intervention programmes (The Hanen Centre 2015) or the Lidcombe programme for children who stutter (Onslow, Packman & Harrison 2003) that are available in Malaysia. While it is safe to assume that the SLPs in Malaysia are aware of the importance of following the child's lead and collaborative-consultation with parents, there is a gap in our understanding in the compatibility of these two practices with the language teaching and learning beliefs of the Malaysian culture. An attempt to understand this gap in the presence of limited context-specific scientific evidence is challenging; nevertheless the authors argue that an understanding is achievable by positioning these two practices on the continuum of intrusiveness proposed by Fey, Catts and Larrivee (1995) and in the framework of the collectivist culture. Finally, the authors would like to propose the systematic use of the techniques in Milieu Teaching (Hart & Rogers-Warren 1978) as a plausible means to bridge the gap between current evidence on best practice and cultural influences in Malaysia, in order to yield maximally positive language outcomes among young children with language impairment. The authors are aware that the position is made in the constraints of evidence in the literature and that further studies are needed before the claims of this article can be empirically affirmed.

GENERAL BELIEFS ON LANGUAGE TEACHING AND LEARNING IN MALAYSIA

The influence of culture on one's language teaching and learning is inevitable. The cultural practices in Malaysia are diverse and stemmed from the different ethnic groups within the country. In 2010, the Department of Statistics Malaysia documented the following population demographics: Malays and other indigenous peoples (67.4%), Chinese (24.6%), Indians (7.3%) and others (0.7%). Even though multicultural, by and large, the families in Malaysia tend to lean toward the "collectivist" culture (Keshavarz & Baharudin 2009; Triandis 1995). The collectivist culture is related to those who value interdependence among members of the community (Triandis 1995). Contrary to collectivism is "individualism," cultures aligned with independence among the members of community. According to Triandis (1995), both collectivism and individualism sit on two opposite ends of a continuum of culture. The social beliefs and practices of communities across the world or within a country can be marked on the continuum. Commonly, collectivism has been shown to be prominent in Asia, Africa and South America, while individualism is distinct in countries like the US and European countries. The influence of collectivism and individualism in interaction is distinct in one's perception of the responsibility, and power and risk

taking strategies assumed by each communication partner (Hwa-Froelich & Vigil 2004).

Conventionally, cultures that are aligned with collectivism are inclined to believe that parents are responsible for meeting young children's needs and grown-up children are responsible for taking care of their older parents (Hwa-Froelich & Vigil 2004). Individuals from the collectivist cultures also place an emphasis on the differences in power (i.e., status or age) between conversational partners. Therefore it is common that members of the community show respect to those regarded as having more power through social rules by being compliant or submissive in interactions. In addition, risk-taking strategies in interaction such as debating or challenging a person with greater power in the society are avoided. The cultural beliefs and practices of the collectivist communities, if held strongly, can contradict with the practices of following the child's lead and collaborative-consultation with parents in early language intervention services.

The practice of following the child's lead necessitates the adult's willingness to join in the child's attention-of-the-moment (Akhtar et al. 1991; McCarthren et al. 1995) and to regard the child's attempts to initiate interactions as valuable (van Kleeck 1994). This practice will not be embraced by parents if they don't perceive their child as equal partners in communication and if parents see the responsibility of leading the interaction as theirs rather than the child's. Following the child's lead may also be ineffective if parents believe that children hold little power when interacting with adults, and should therefore play a relatively passive role in social-interactions and produce only acceptable behaviours (Hwa-Froelich & Vigil 2004). Parallel to following the child's lead, success in collaborative-consultation with parents require that both parents and SLP view each other as holding distinct responsibilities but equal power in the working relationship. It is vital that both parties are open to expressing honest agreements or disagreements with each other. However, if the parent or SLP conforms to the stronger end of the collectivist cultures and regards only one party as responsible of intervention, long-term commitment and open-communication would be challenging (van Kleeck 1994). Similarly, if either party holds themselves as having greater power than the other, the one with lesser power would be predisposed to take on a more submissive than proactive role in intervention. Parents may also not indicate their disagreement in decision making for the fear of being disrespectful to the SLP, even though the disagreement would be beneficial to repair any miscommunication or improve on intervention. Often in Malaysia, through the authors' experience as service providers in language intervention, parents who place greater responsibility in intervention on the SLP tend to engage less in the co-construction of intervention development with the SLP.

Presently, there is limited empirical data on the influence of collectivism on language learning in Malaysia.

Hewitt and Maloney (2000) claimed that Malaysian parents preferred their preschool children's teachers to use the formal teacher-directed teaching over play-based teaching that follow the child's lead. Hewitt and Maloney (2000) also claimed that the Malaysian parents' preference for adult-directed instructions could be contributed by (1) social-cultural beliefs that academic achievement and examination results should be prioritised above play; and (2) a lack of knowledge in the role of play in language and social-emotional development. In a comparative study conducted by Winskel, Salehuddin and Stanbury (2013), the Malaysian mothers of children aged 0 to 12 years old in the study tended to score higher on interdependent relationships and demanded higher level of control in caregiving (a more authoritarian parenting style) than the Anglo-Australian mothers. A few studies on the interaction between Malaysian mothers and their adolescent children (Elias & Tan 2009; Keshavarz & Baharudin 2009; Lin & Lian 2011) revealed that Malaysian mothers tend to have expectations that their adolescent children follow their directives either unconditionally (i.e., authoritarian) or with rooms for explanations and negotiations (i.e., authoritative). The findings of culture-specific language teaching beliefs in Malaysia are consistent with findings pertaining to other collectivist cultures, such as those on the Chinese (Johnston & Wong 2002) and Indian mothers (Simmons & Johnston 2007) in Canada, and Chinese mothers in the UK (Vigil 2002). The mothers of these studies demonstrated (1) culture-specific preferences such as the use of instructions over play to teach young children language and (2) more attention-directing behaviours than attention sharing with their young children. Presently, the impact of culture-specific language teaching preferences such as adult-directed instructions, on children's language development has not been firmly established. Although studies have suggested a "no impact" on children's learning of vocabulary in the early stage of development (Vigil 2002; Vigil et al. 2006), less is known about the long-term effects of the adult-directed interactional styles on children with language delay.

EARLY LANGUAGE INTERVENTION SERVICES IN MALAYSIA

In Malaysia, many SLPs provide early language intervention in hospitals (where the children are seen as regular outpatients) and traditional institution-based speech-language pathology settings (Van Dort et al. 2013). Because of limited job placements for SLPs in home- and school-based settings, only a handful of SLPs attend to children with language delay in these naturalistic settings. The provision of early language intervention by the Malaysian SLPs is reviewed through a study by Joginder Singh et al. (2011). This study found that Malaysian SLPs typically gathered assessment information through observation of the child's behaviour in the SLPs' "artificial" clinics rather than in their naturalistic settings. In the delivery of intervention, SLPs typically assigned the role of "observer" to the parents rather than giving them direct training on

language facilitation strategies but provide home-based language programmes for parents. While Joginder Singh et al. (2011) study was specific to intervention for children who were pre-symbolic, it is to date, the only systematic investigation on service delivery for young children by the SLPs in Malaysia. Given the overlap in language intervention services between children who are pre-symbolic and children at other stages of early language development, it is plausible that the lack of collaborative consultation between SLPs and parents extends to young children of these other stages.

The SLP practices revealed by Joginder Singh et al. (2011) can be preceded by several assumptions: the SLP is mainly responsible for intervention at the clinical setting while parents are responsible at home; the SLP imparts knowledge and skills on language teaching through the expert-novice approach rather than equal partnership approach; there is a low priority on discussions pertaining to compatibility of practices at the clinical setting and home; and the active contribution of parents and the naturalistic home environment is minimal in the management of early language cases. These assumptions render clear distinctions in social-interactional responsibilities, power and risk management strategies that are aligned with the collectivist cultures (Hwa-Froelich & Vigil 2004). A closer examination of the lack of collaborative-consultation between the Malaysian SLPs and parents also revealed that many Malaysian SLPs have large work caseloads (Joginder Singh et al. 2011) which reduces planning time for an effective collaborative-consultation approach that is transferable to the child's naturalistic environment. Presently, it is estimated that there are 180 SLPs providing services to a population of 28.3 million people (Department of Statistics Malaysia 2010) in Malaysia. Further, to date, there is neither any standard policy and guidelines related to service delivery, nor adequate culturally appropriate evidence-based data in Malaysia. The high client caseloads faced by the SLPs and the lack of standard guidelines may render them insufficient time and knowledge to form effective collaboration with parents.

MODELS OF LANGUAGE INTERVENTION

The findings drawn from the literature insofar seemed to suggest incompatibility between the two known best practices in early language intervention (i.e., following the child's lead and collaborative-consultation with parents), and the general beliefs and/or practices in language teaching and learning among parents and the SLPs in Malaysia. In the attempt to address this issue, the authors position the practices of following the child's lead and collaborative-consultation with parents on Fey's et al. (1995) *continuum of intrusiveness*. Fey's intrusiveness relates to the SLP's control of the different aspects of intervention, including child interests, choices given to the child, pace and setting of intervention, materials, child responses and parental involvement (Figure 1). At the most intrusive end of this continuum, the maximally intrusive models allow the SLP

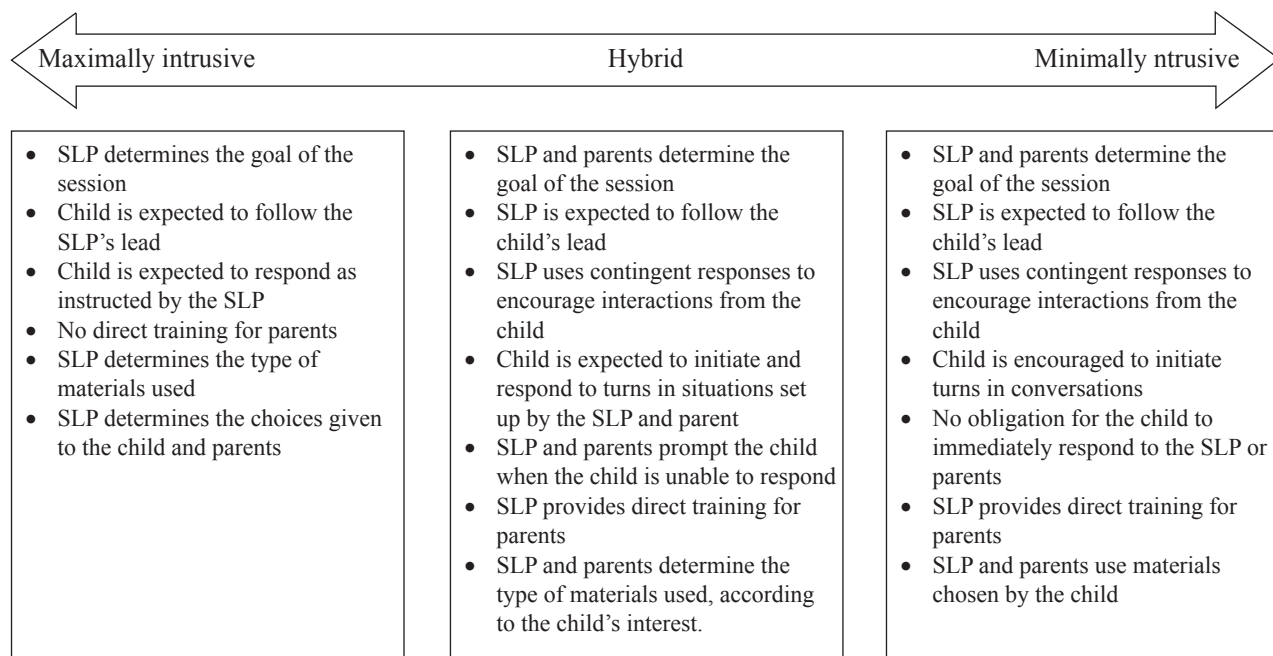


FIGURE 1. The intrusiveness continuum in language intervention

the highest control, in which the child and family have to follow the SLP's lead and the child is typically seen in a non-naturalistic environment such as a clinic or a class pull-out (American Speech-Language-Hearing Association 2008). At the least intrusive end, the minimally intrusive model requires that the SLP follows the child's lead in communication, uses naturalistic setting (e.g., home or classroom) and views parents as equal-partners in intervention. On the continuum of intrusiveness, between the maximally and minimally intrusive models, is the hybrid intervention model. The hybrid model is considered less intrusive because the SLP is required to follow the child's lead, collaborate with parents but still given the latitude to control the elements of intervention (Fey et al. 1995).

The degree of differences in following the child's lead and collaborative-consultation with parents in the maximally, minimally and hybrid models of intervention can be attributed to the theoretical framework in which these models are based on. The maximally intrusive model is shaped mainly by Skinner's (1957) behavioural theory that claimed learning occurs through the antecedent-behaviour-consequence paradigm. Following this paradigm, language intervention often involves the presentation of a stimulus by the SLP (antecedent), a response from the child (behaviour) and finally a reinforcement by the SLP (consequence). To facilitate the reoccurrence of a child's response or to shape the child's incorrect response to the target form, the SLP manipulates the complexity and type of the stimuli and reinforcement presented (Fey et al. 1995). Typically in this model, the stimulus-response-reinforcement intervention protocol is repeated over a set of stimuli (discrete trial training), and the SLP instructs the child what he/she should do or say (child follows SLP's lead). The nature of the

maximally intrusive model renders a high level of control in intervention to the SLP and might be favoured by those who conform strongly to the social rules of collectivism. This latter claim is not surprising given that the maximally intrusive model has a low emphasis on viewing the child as an equal partner in interactions (van Kleeck 1994). Nevertheless, the elements of the maximally intrusive model have been shown to be useful to teach isolated skills but lack the ability to yield effective generalisation of the learnt behaviours to other contexts (Goldstein 2002; Camarata et al. 1994; Delprato 2001).

The minimally intrusive model originated from responsive interaction theories that assert the role of adult-child interactions and naturalistic environments in scaffolding the child's language advancement (Bruner 1983; Vygotsky 1978). In this model, parents are explicitly taught to facilitative communication strategies such as recognising the child's non-conventional communicative behaviours, e.g., eye-gaze, body movements (Brady et al. 2009) and providing language input that maps the child's focus and interests in contexts that are meaningful (as opposed to artificial) to the child (Brady et al. 2009). These features of the minimally intrusive model have been shown to effect in language development such as the advancement of children's vocabulary, morpho-syntax, semantic and pragmatic skills (Wong et al. 2012; Camarata et al. 1994; McDuffie & Yoder 2010), improved parental language facilitation skills (Girolametto 1988; Kim & Mahoney 2004) and generalisation of intervention outcomes (Goldstein 2002; Roberts & Kaiser 2011). The minimally intrusive model demands that the adults follow the child's lead and adopt the collaborative-consultation approach in early language intervention, rendering it compatible

to those whose cultural beliefs and practices are aligned with viewing the child and the SLP or parent as equal team partners.

The hybrid model has its theoretical origins in both the behavioural and responsive interaction theories (Fey et al. 1995). In the hybrid model, the behavioural antecedent-behaviour-consequence paradigm is grounded in the forms of prompting, reinforcing, modelling and shaping new linguistic units (Hancock & Kaiser 2006). Concurrently, the responsive-interaction approach is stressed in the importance of following the child's lead and facilitating language growth in communicative contexts that are meaningful to the child. The hybrid model view parents as key agents in intervention and advocates collaborative consultation with parents (Kaiser et al. 2013). Similar to the minimally intrusive model, the hybrid model has been shown to be effective in advancing the different aspects of children's language skills, promoting parental communication skills and the generalisation of intervention outcomes (Kaiser et al. 2013; Koege et al. 2003; Carter et al. 2011).

Since the early 1980s, there has been an increase in evidence on the effectiveness of the minimally and hybrid intrusive intervention models in countries with firmly established speech-language pathology services such as the US, the UK and Australia (Iacono 1999; Kaiser et al. 2013; Mahoney et al. 1998; Roberts & Kaiser 2011). Consequently, these less intrusive models of intervention have been advocated in best practice policies and guidelines of those countries (American Speech-Language-Hearing Association 2008; Hayes 1991; Law et al. 2000). While policies or guidelines on best practices have yet to be developed in Malaysia, in light of the integration of the antecedent-behaviour-consequence and the responsive-interactive approaches in the hybrid model, the authors suggest that the hybrid model is highly plausible to bridge the incompatibility gap between the evidence-based practices of following the child's lead and collaborative-consultation with parents, and the general language teaching beliefs and practices in Malaysia. Specifically, the elements of the hybrid approach may be able to help adults involved in early language intervention make a gradual shift from any point on the maximally intrusive end to a point closer to the minimally intrusive end of the continuum. Although little is known about the efficacy of the hybrid model in a predominantly collectivist culture, Kim and Mahoney (2004) demonstrated that an early intervention programme that is less intrusive end had yielded positive child and parent outcomes in Korea, a mainly collectivist country.

In consideration of Malaysian parents' social-cultural beliefs in language learning and SLPs' practice in early approach from the language intervention, it is suggested that techniques of an approach from the hybrid model, Milieu Teaching (MT; Hart & Rogers-Warren 1978), are used to shift service delivery in Malaysia from the maximally intrusive models to the less intrusive models. MT consists of evidence-based intervention components (Hancock

& Kaiser 2006; Kaiser et al. 2013) such as following the child's lead and collaborative consultation that are worth keeping in cross-cultural practices, as well as specific directive instructions that are likely to be compatible with the Malaysian parents' belief system. The techniques of MT are likely to be already present in the Malaysian SLPs current intervention practices; however, it is the SLPs' awareness of and ability to position these techniques on the less intrusive end of the continuum that will warrant the effectiveness of using the hybrid model in Malaysia.

MILIEU TEACHING (MT)

MT (Hart & Rogers-Warren 1978) is an intervention approach that follows the child's lead through environmental arrangement and the use of specific behavioural techniques. In MT, environmental arrangement involves the organisation of the child's physical environment (e.g., activity or routine) to increase opportunities for parent-child communication and elicitation of targeted responses. Following the child's interest and initiation, specific techniques such as (1) modeling, (2) mand-modelling, (3) time delay and (4) incidental teaching (Hart & Risley 1975; Hart & Rogers-Warren 1978; Hancock & Kaiser 2006) are used to model and prompt for more elaborated language in the child's everyday contexts. The child's response is then reinforced with functional consequences such as giving access to the desired action or object and contingent feedback, including expansions or confirmation of the child's utterances (Hancock & Kaiser 2006). MT employs the use of prompts to shape the child's inaccurate response to the target linguistic unit or when the child is unable to respond. Table 1 summarises the techniques of MT.

Since its introduction in the 1970s, MT has been expanded into several variants, including the Responsivity Education/Prelinguistic Milieu Teaching (Warren et al. 2006) and Enhanced Milieu Teaching (Kaiser et al. 2013). While these MT variants are targeted at children at different language levels, the fundamental principles are still grounded on the antecedent-behaviour-consequence paradigm and responsive interaction on language development. Therefore there is an emphasis on following the child's lead, on training parents to recognise their child's communication intents and on helping parents to linguistically map their child's behaviours through contingent language input (Fey et al. 2006; Hancock & Kaiser 2006; Kaiser et al. 2013; Warren et al. 2006;). As a result, children learn language through responsive modeling of increasingly complex forms by their parents in social interactions (Hancock & Kaiser 2006). Furthermore, the implementation of the MT approach and techniques is consistent with evidence-informed practice since several studies have reported efficacy in the acquisition, generalization and maintenance of (1) language facilitation strategies and contingent feedback among parents and (2) language skills such as vocabulary, word combination, sentence complexity, social-communication and receptive

TABLE 1. Techniques of Milieu Teaching (Hart & Risley 1975; Hart & Rogers-Warren 1978; Hancock & Kaiser 2006)

Technique	Description	Example
Modeling	Linguistic mapping of the child's focus of attention through presentation of language units that are relevant to the context and that match the child's focus of attention. Modelling can be done through descriptive and parallel talk around the child's focus of attention or expansion of the child's utterance (adding extra information).	Child: (points at the car) car. Parent: Red car.
Mand-modeling	Modeling followed by a verbal prompt in the form of a question, choice or mand.	Child: (points at the car) car. Parent: Red car. Where's your car going? (<i>question</i>) Child: (points at the car) car. Parent: I've got two cars. Would you like the red or the blue car? (<i>choice</i>)
Time delay	Intentional waiting after the presentation of environmental stimuli to cue the child to take the next turn.	Delay access to something the child wants with an expectant look, identify a situation in which the child wants an object or assistance and then wait for the child to initiate help.
Incidental teaching	Stimuli and events are arranged within ongoing, typical activities to motivate the child to interact with people or practice a skill.	Place desired items out of the child's reach; keep certain toys in clear plastic containers with lids that the child cannot open without assistance; replace shelves that typically bear the child's toys with new, unanticipated items.

language in children with language impairment (Kaiser et al. 2013; Hancock & Kaiser 2006; Ingersoll 2011; Kaiser & Hester 1994; Hart & Risley 1975; Peterson et al. 2005).

The MT approach comprises adult-directed instructions (mand-modelling) that closely parallel the general Malaysian social-cultural belief in learning. Contrary to the maximally intrusive models that also use discrete trials under highly-structured environments, MT emphasises that the adult-directed instructions are used to follow the child's lead and within the child's naturalistic environments. Such adult-directed instructions are also known as follow-in directives (McCarthren et al. 1995). Follow-in directives have been argued as being highly facilitative to language development because they explicitly require a response from the child and at the same time, are in-sync with the child's focus of attention. In addition, through proper arrangement of the environment and incidental teaching, the SLP can create meaningful interactions within their workplace (e.g., requesting, shared book reading, play time) that parents can also participate in and continue to do at home. Consistent use of the MT techniques may potentially extend the Malaysian parents' value on language learning to naturalistic conversation-based activities and techniques.

CONCLUSION AND CLINICAL IMPLICATIONS

In conclusion, the authors position the techniques of MT, a hybrid approach as potentially plausible to bridge the general language learning and teaching beliefs and/or practices in Malaysia with the two evidence-based practices

of early language intervention: following the child's lead and collaborative-consultation with parents. The techniques of MT have potentials to shift service delivery in early intervention from the maximally intrusive model to the research-informed less intrusive models. MT, besides its strong evidence in intervention efficacy, also partially approximates the Malaysian parents' value on adult-directed instructions. Given the small number of SLPs in Malaysia, strategies should be placed to mobilise caseloads. Effective collaborative partnerships between SLPs and parents will maximise intervention time- and cost-effectiveness in the long term, as well as will empower parents to be proactive as key agents in the intervention process. It is therefore proposed that the techniques of MT are considered in future policies or guidelines for early intervention in Malaysia and countries who share the same cultural value on language learning.

The potentials of the MT techniques, although promising, should be acknowledged with caution. The effectiveness of MT in Malaysia has yet to be supported by any empirical data. There is therefore a strong demand for empirical data that informs MT's robustness to the cultural influences and the SLPs work constraints in Malaysia. The authors suggest a systematic approach that explores the appropriateness of MT as standard practice in Malaysia; identifies the implementation drivers of MT to enable sustainable service delivery; connects practice to policy; and develops nation-wide support and resources for the implementation of the evidence-based intervention techniques (Metz & Bartley 2011).

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