



**MONASH** University

**Translating “Signposts for Building Better  
Behaviour Program” to the Malay language**

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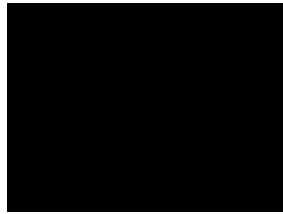
## **Abstract**

The research aimed to determine an effective process of translating an Evidenced Based Program (EBP) that was developed in the English language to the Malay language. The EBP that was being studied was the “Signposts for Building Better Behaviour” program. A literature review was conducted to examine the available translation processes. Answers to the question of whether cultural adaptation of the program materials were sought in order for materials to be effectively translated, understood and readable for the targeted participants were pursued. Through the research an effective process of translating the Signposts program to Malay was established and recommendations on a model for effectively translating an English based Evidence Based Program to other languages were made.

## **Declaration**

This project contains no materials which has been accepted for the award of any other degree or diploma in any university and, to the best of my knowledge and belief it contains no materials previously published or written by another person except where due to reference is made in the text of the thesis.

Signature:



Date: 26 June, 2015

## Contents

<b>Abstract.....</b>	<b>iii</b>
<b>Declaration .....</b>	<b>iv</b>
<b>Contents .....</b>	<b>v</b>
<b>Introduction.....</b>	<b>1</b>
<b>Background of Signposts.....</b>	<b>3</b>
<b>The Theoretical Frameworks Behind Signposts.....</b>	<b>4</b>
<b>Signposts in Singapore .....</b>	<b>5</b>
<b>The Malays in Singapore.....</b>	<b>7</b>
<b>The Demographics of Malays in Singapore .....</b>	<b>7</b>
<b>Malay Cultural Influence and Values.....</b>	<b>8</b>
<b>The Malay Families and Parenting Practices .....</b>	<b>9</b>
<b>The Influence of the Malay Custom on the Malay Parenting Methods.....</b>	<b>9</b>
<b>The Influence of Islamic Values on Malay Parenting Practices.....</b>	<b>10</b>
<b>Is Signposts suitable for the Malay population? .....</b>	<b>11</b>
<b>Literature Review .....</b>	<b>18</b>
<b>What are the available translation models? .....</b>	<b>19</b>
<b>What is the available research that looked at adapting an EBP for a different cultural group? .....</b>	<b>23</b>
<b>Ensuring Readability and Comprehensibility of the Translated Materials.....</b>	<b>31</b>
<b>Conclusion.....</b>	<b>32</b>
<b>Methodology .....</b>	<b>37</b>
<b>Participants .....</b>	<b>37</b>
<b>Materials.....</b>	<b>40</b>
<b>Procedure .....</b>	<b>42</b>
<b>Data Analysis.....</b>	<b>44</b>
<b>Qualitative Data.....</b>	<b>44</b>

<b>Quantitative Data .....</b>	<b>44</b>
<b>Results .....</b>	<b>46</b>
<b>Responses when Reading the Materials.....</b>	<b>48</b>
<b>The Behavioural Concepts in Signposts .....</b>	<b>50</b>
<b>Readability of Materials.....</b>	<b>52</b>
<b>Cultural Differences .....</b>	<b>56</b>
<b>Recommendations by Participants.....</b>	<b>59</b>
<b>Discussion.....</b>	<b>61</b>
<b>Recommendations.....</b>	<b>64</b>
Translation of the program materials to the Malay language.....	66
Pilot run of the translated materials. ....	67
Reviewing the cultural appropriateness of the translated materials & Ensuring the readability of the program. ....	68
Ensuring the fidelity of the EBP. ....	69
Effective communication lines to be established. ....	69
<b>Limitations of the Research .....</b>	<b>70</b>
<b>Recommendations for Future Research .....</b>	<b>71</b>
<b>Conclusion.....</b>	<b>72</b>
<b>References .....</b>	<b>73</b>
<b>Appendices .....</b>	<b>84</b>
<b>Appendix A Guidelines for Reviewer of Signposts materials (Malay professional) .....</b>	<b>84</b>
<b>Appendix B Questions for the Focus Group Discussion .....</b>	<b>85</b>
<b>Appendix C Questionnaire for Signposts Facilitator .....</b>	<b>87</b>
<b>Appendix D Cloze Test.....</b>	<b>90</b>

## Introduction

*Thank you, Merci, Terima Kasih, and Xie Xie.* They all sound different but they hold the same meaning. Even though the words sound different, the gesture of saying *thank you* as an expression of gratitude is a universal gesture understood by all. There are many basic human principles and practices such as saying *thank you* which are similar across all cultures but the way they are being demonstrated may vary due to every person's own cultural influences. Parenting practices is one of these basic human activities which people of all cultural groups engage in as a part of their daily lives although some of the practices may vary in form, from one cultural group to another.

Raising children well is a tall feat. The effects of parenting can have various impacts on children. The natural intuition by a parent to care and protect their children is believed to be something that is shared by many and as such if there was a parenting program that was evidenced to provide positive outcomes in both the parents and children, it should be made available for all, so that more parents and caregivers can benefit from the program. The Evidence Based Program (EBP) would thus need to be made available in various languages in order for the program to be accessible for larger groups of participants. A good and effective way to translate an EBP would therefore be a necessity in order for people of various cultural groups to benefit from it.

One available EBP that had shown positive outcomes for its participants is the Australian, Signposts for Building Better Behaviour (Signposts) program. It was delivered in Singapore and positive outcomes were achieved by the participants in Singapore too. Consequently, the program coordinators wanted to have the program to also be made available for non-English speakers in Singapore. Hooyman and Kramer (2006) said, "Given the cultural vulnerability in the meanings of disability, preparation for dealing with

a disability, and the family members' capacities and competing needs and ethics, culturally competent assessment and interventions must be developed to support families of children with disabilities" (p. 232). As such the best thing to do in supporting the cultural language speakers in their journey of supporting their children would be to make effective resources available for them.

Sue, Arredondo, and McDavis (1992) believed that providing intervention which is culturally appropriate is not only necessary but it is also an ethical responsibility for practitioners. Hoskins (1999) was of the view that in places where there was pluralism and multi-racial groups, practitioners and people who are involved in service delivery should adopt cultural attunement principles in their service delivery. Hall (1997) is of the opinion that if clinical practitioners did not use materials which were culturally appropriate in their interventions, it was considered a "cultural malpractice". Cultural attunement is however more than just having the knowledge of the cultural group, their values and practices. It is about understanding the meaning that the culture holds for the specific individuals (Hoskins 1999). Therefore in order to provide a culturally attuned program in Singapore, there had to be materials that were culturally appropriate for the Singapore population. The Signposts practitioners could thus impart the knowledge of Signposts to the respective cultural groups in a culturally appropriate manner especially since Singapore is a multi-cultural society. It would also be professionally ethical to have a program which is culturally appropriate for the different cultural groups in Singapore.

The Signposts coordinator in Singapore would start off the project of making Signposts available for the cultural speakers in Singapore by embarking on translating the Signposts program to the Malay language. If the project proved successful, the program will subsequently be translated for the other cultural language speakers in Singapore. The aim of this research paper is thus to examine how the Signposts program which is in the



English language and Australian based, can be effectively translated to the Malay language. The Australian language and culture is different from the Malay language and culture. As such, the research will identify the best process for the Signposts program to be translated to the Malay language so that the participants could be instructed on the Signposts content effectively. It is also hypothesized that cultural adaptations would have to be made to the Signposts program as part of the translation process in order for the program materials to be culturally appropriate and relevant for the Malay population. Answers to what are the other factors to look into when making the Signposts program available for the Malay population in Singapore will be sought through this research

The final outcome from this research is a model where an EBP in the English language, can be effectively translated and to best ensure that it is culturally relevant for the Malay population. Once this model is developed, it can be used to convert other EBPs that are in the English language that are well translated and culturally relevant for other cultural groups in Singapore. This will lead to the availability of more parenting resources and instructions for cultural language speakers in Singapore.

## **Background of Signposts**

Signposts is an evidence based parent training program developed by the Parenting Research Centre from Victoria (Hudson et al., 2001) for parents and caregivers of children, aged 3-16 years, with intellectual disability. It aims at equipping parents with the skills to manage their children's difficult behaviours before the behaviours get to a level of high intensity and require professional intervention. Parents are taught how to do a functional behaviour assessment and develop a plan to manage their children's difficult behaviours. Several behaviour strategies are taught to parents. The program is delivered to parents over six fortnightly sessions. The program materials, which are given to parents, comprise of

eight program booklets, a workbook and a DVD. The DVD contains scenes to further illustrate the content of the program booklets.

In a state wide study conducted in 2008 in Victoria, the program was found to have effectively helped the participants who were parents of children with intellectual disability. The participants were reported to be more satisfied and more confident in their parenting and in managing their children. The participants were reported to have felt less hassled, stressed, anxious or depressed. There were also positive outcomes reported on the children's behaviour (Hudson, Cameron, & Matthews, 2008).

### **The Theoretical Frameworks Behind Signposts**

Parental behaviours have a strong influence in changing children's behaviour. The Signposts program was developed based on the eco-behavioural principle, which suggests that the socio-ecological factors surrounding a child have great influence in preventing a child's challenging behaviour. It emphasizes that the family dynamics are instrumental in supporting the effective implementation of the behaviour strategies taught. The ecological factors in the systems surrounding the child such as the social, environmental and family systems are believed to be influential in the development and maintenance of the child's behaviour. The principle also promotes the use of natural reinforcers and natural teaching strategies in the context where the behaviour occurs (Gavidia-Payne & Hudson, 2002).

In Signposts, parents are instructed in the use of functional behaviour assessment where they are taught to analyse the factors that triggered and maintained their children's difficult behaviour. They are then taught to analyse what could be the functions of the problem behaviour exhibited by their children. Thereafter parents are taught behaviour strategies to manage the difficult behaviour such as the use of positive reinforcements and negative reinforcements, in light of the understanding of the function of the behaviour.

Further to that, they are taught on how they can provide alternative triggers and skills, which will then lead to the reduction of the difficult behaviours.

Some other techniques taught in the program are influenced by social learning theories. The precept of social learning theory is that behaviour can be learnt from role modelling. This is seen in module five where parents are taught how to role model and teach children new skills. In line with functional behaviour theories, the Signposts program does not promote for children to be punished for their undesirable behaviours but instead the parents are taught to practice authoritative and positive parenting methods using the strategies that are taught in the program to build better behaviour in children. Teaching parents to build good behaviour in their children is another way of preventing children from developing difficult behaviour.

All the Signposts theories and content teaching are laid out in the program materials and presented to parents in a structured manner where one content teaching is linked to the other subsequent content teaching. It can be presented to parents through various modes that is, through individual sessions with a family, telephone support with an individual, group sessions and individuals can also do self-directed learning of the program (Hudson, Cameron, & Matthews, 2008).

### **Signposts in Singapore**

Signposts was brought to Singapore in 2009 and has been delivered to Singaporean parents ever since 2010. In implementing the program in Singapore, some features have been adapted to better meet the needs of the Singapore population and suit the local context.

In Singapore, the program is only delivered through group sessions. The other modes of delivery are not used. The program is delivered over five weekly sessions instead of fortnightly (as is how it is delivered in Victoria). The final (sixth) session, which is a non-essential review session, is not conducted in Singapore.

There are some local examples incorporated into the teaching of the content, by local facilitators. A local 'Parents' Perspective' video was developed. In this video, local Singaporean parents who had completed the program shared their positive experience gained from the Signposts program. The video was developed to help disseminate the positive outcomes of the program to parents who were considering enrolling in the program. It was undertaken in light of Singaporean parents' feedback that they had difficulty understanding the Australian accent of the parents featured in the Australian 'Parents' Perspective' video. The changes made to the program structure were minor and no changes were made to the program content. The program's fidelity and integrity was protected to ensure that the effective outcomes of the program would not be jeopardised.

Sessions are offered on weekdays, weeknights, as well as Saturday mornings to cater to the Singaporean parents' schedules. More than 1500 parents have participated in the program over 3 years with an attendance to completion of more than 80%. At present, the training of the facilitators is conducted in Singapore by local trainers and there are over 200 trained Signposts facilitators in Singapore.

A replication of the Victorian statewide study done in 2008 (Hudson, Cameron, & Matthews, 2008) was conducted in Singapore. The aim of the study was to examine the effectiveness of the Signposts program when it was being implemented in a country that had a different cultural makeup. The outcome of the study was positive. The parents reported that they were less hassled, stressed or depressed. They felt more confident in

their parenting. They also reported positive outcomes in their children's behaviour (Yap et al., 2014). The study showed that the Signposts program was effective when it was delivered in a country with a different cultural setting. However one of the limitations of the study, as mentioned earlier, was that the program and study involved only participants who were English speaking. This was because the Signposts materials were then only available in the English language. Therefore, parents and caregivers who predominantly spoke and understood their native languages such as Malay and Mandarin, were not supported and there was no information on whether they would also benefit from the program. Therefore the natural next step to the process of implementation of the Signposts program in Singapore was to translate the program for the different cultural groups in Singapore.

## **The Malays in Singapore**

### **The Demographics of Malays in Singapore**

The Malay community is the second largest ethnic group in Singapore. The Malays make up 13.4% (Singapore Department of Statistics 2010) of the total population in Singapore. Malays in Singapore generally originated from the Malay Peninsula and the Indonesian regions (Mutalib, 2012; Zoohri, 1987).

Despite the different ancestral backgrounds, the Malays in Singapore generally speak the common Malay language. In the 2010 Singapore Census report, it was reported that 82.7% of the Malay population spoke Malay frequently at their homes and 99% of the population is Muslim. It was stated in the Report of the Parliamentary Select Committee on Elections (Amendment) Bill (1998: 11-12):

“A person belonging to the ‘Malay Community’ means any person whether of the Malay race or otherwise, who considers himself to be a member of the Malay community and who is generally accepted as a member of the Malay community by that community.”

The 2010 Singapore Census report also stated that the Malay population has the largest family size when compared to the other ethnic groups in Singapore. Malay females between the age of 40-49 years of age who had ever-been married, have an average number of 2.73 children whereas Chinese females (of the same age group) had an average of 1.89 children and Indian females (of the same age group) had an average of 2.05 children. In terms of education, 64.1% of the Malay population had secondary or below qualifications.

### **Malay Cultural Influence and Values**

The Malay culture in Singapore is very much influenced by the cultural practices within the Malay Archipelago. It follows therefore, that the Indic legacy and Islam would hold sway over the Malay way of life.

The Indic legacy influenced some of the Malay values and custom. This was because historically, the Hindu empire had a stronghold in the Malay Archipelago before the coming of Islam more than 400 years ago. This cultural custom and practices is what the Malays call *adat*, which existed before Islam had an influence on the Malay population. There was Hindu cultural influence embedded in the Malay *adat*. The *adat* acts as a behavioural guide for the Malays as well as guides for the family and social structures (Zoochri, 1987). *Adat* has a strong influence in the Malay family and daily life and this is evident from the many Malay proverbs that talk about the Malay custom having an important place in the Malay lives. One such proverb is, “*biar mati anak jangan mati*

*adat*”. The meaning of the proverb is that, a Malay person should uphold the Malay *adat* even if he had to do it by sacrificing his own child. Malay custom emphasizes the importance of good life values and behaviour (Goddard, 2000). These values and practices are also in line with the Islamic teachings that provide moral guides for the Muslims. According to Zoohri (1987) the Islamic teachings and *adat* coexist in the Malay society to provide the social guides and structure for the society.

Islam is the current dominant religion for the Malay community (Tham, 1979). Kling (1995) stated that, Islam has a great influence on Malays and Malay families. Islam plays an important role in guiding the ideologies that the Malays have in life, guiding them in their behavioural norms and moulding the structures and relationships in a family.

### **The Malay Families and Parenting Practices**

The Malay families are generally patriarchal, with the father seen as the leader of the family. In line with global social changes, there is increasing father involvement in the parenting of children in Malay households (Juhari, Yaacob, & Talib, 2013; Suratman, 2011). The Malay parents are guided mainly by *adat* and Islamic principles and values.

### **The Influence of the Malay Custom on the Malay Parenting Methods**

In the Malay custom, the words *adab* (to be courteous) and *sopan* (to be polite) are often used by Malay parents, when they try to instil good behaviour in their children. Thus proper conduct exhibited through courteous and polite manners is expected of Malay children. In the Malay family, a great emphasis is placed on the need to know the proper behaviour befitting the appropriate occasion and situation (Goddard, 2000). For example, children should never retort when their parents are talking to them especially when the parents are giving them a scolding. Respecting the elders or *orang tua* is an important feature in the Malay custom. Generally the custom promotes the need to respect anybody

who is of an older age (Goddard, 2000). For example, whenever a young person walks in front of an elderly, the young person must slightly bend his or her body to show respect. When a child meets an elderly person, he or she is expected to *salam* that is to kiss the right hand of the elder, which is also a practice, influenced by the Islamic culture. When a child fails to display these required behaviours towards their elders, he or she is said to be *biadab* (without manners) and his behaviour will be attributed to a lack of parenting (*kurang ajar*). Thus for children to be well instructed on socially good behaviour, is an important feature in Malay homes (Tham, 1993).

### **The Influence of Islamic Values on Malay Parenting Practices**

The majority of Malay parents refer to the Qur'an and the Prophet Muhammad's teachings for instructions and guidance on Islamic values. In Islam, parents are said to be, entrusted with love and care of their children and are accountable for their proper upbringing both in this life and the life hereafter. Parenting in general for the Malays encompasses the task of ensuring proper upbringing of the child to lead a balanced life, for the present and the future. Equipping the child with worldly and religious knowledge is one of the major tasks of parents (Juhari, Yaacob, & Talib, 2013, p. 212).

The responsibility and ability of a Malay parent to raise children good in character, is one of the integral values in Malay homes. Traditionally, Malay families used physical punishment in disciplining the children. In the past, the father had little involvement in parenting and they were seen as the disciplinarian in the family. The children feared the father and when the children became adults, they still had great respect for the father (Kumaraswamy, 2011).



In the mid 1970s, there was a rise in Islamic awareness globally and in countries such as Malaysia, there were efforts to Islamise the country. According to Stivens (2006), the 1970s was a period where the height of Islamisation occurred in the Malay population. Muslim parents had always been taught in the Islamic teachings, to be obligated to treat children with compassion and love. The rise of Islamic awareness had then led to authoritarian parenting methods being less practiced by Malay families after 1970s. According to Tham (1993) Malay mothers will try to discipline children by threatening not to provide love for the children. They prefer to reason with their children to behave well and use Islamic precepts to manage bad behaviour in children. These methods were preferred to caning. The Malay parents are increasingly concerned over their children's academic achievements and as such "withdrawal of privileges and criticism are more and more utilized though parents as a matter of choice would not like to use such methods" (Tham, 1993, p.96). Tham (1993) also said that, as Islamic awareness increased since 1970s, Malay parents are more inclined towards milder methods of punishment. As such, it is hypothesized that the Malay parents would take to the Signposts methods, which discourages caning, encourages positive and authoritative parenting methods and aims at building better behaviour in children.

### **Is Signposts suitable for the Malay population?**

It is hypothesized that the Malay parents can accept the Signposts program well since one of the main aims of the program is to build better behaviour in children. However some psychologists such as Nsamenang (1995) and Ogbu (1981) were of the opinion that human developmental theories are often *Euro-centric*. Based on these views, the question to ask would be whether an ethnocentric view is imposed by assuming that the Signposts program that was developed for the Australian population will be helpful for the Malay population.

The theories and concepts presented in Signposts are behavioural theories that originated from the Western world (Carr 1977; Carr 1994; Lovaas & Simmons 1969, Wolf et al. 1967). However the fundamentals of the theories are universal and relevant to all humans. The behavioural theories that underlie the Signposts program; the eco-behavioural theory, functional behaviour assessment and the social learning theories are human and behavioural developmental theories that explain human behaviours universally. These theories explain the general behaviours in people. These theories at the same time do not disclaim and explicitly acknowledge the fact that people from different cultural groups have their own unique behavioural characteristics. Their unique characteristics are shaped by their cultural backgrounds. Behaviour theories suggest that challenging behaviours are triggered and maintained by positive or negative reinforcers. Through the functional behaviour assessment methods of assessing the triggers and consequences of a challenging behaviour, the social and environment factors that influences the behaviour will be analysed (Loyd & Kennedy, 2014). As such the assessment looks at the specific child and his specific family cultural and social environment. With regard to the Signposts materials, examples that contain Malay cultural values and stories, could be used when illustrating the behavioural theories to the Malay participants. This will make the program culturally relevant for the Malay population. One example is as found in Figure 1.

Trigger	Behaviour	Consequence
Parent gives instruction for child to <i>salam</i> a guest	Child <i>salam</i> the guest.	Parent gives the child a labelled praise

Figure 1

In the Signposts program materials there are many instances where daily life examples are used to illustrate the behaviour principles. Daily activities of Malay families in Singapore could be used to replace the examples used in the original Signposts materials. For instance, in module five of the program, participants are taught how to break new skills into smaller steps and model the steps for the children. This process could be made culturally relevant by putting it in the context of the Malay family life. The theories could be used to teach the daily family routines such as doing regular household chores, which were relevant to the Malay family context. As such in making the behavioural principles and strategies relevant and applicable to the Malay family life, the cultural factors surrounding the child and family were being taken into account in shaping the child's behavioural challenges. This would thus makes the Signposts program relevant for the Malay population.

The influence of culture can especially be seen through the various parenting ways and methods that different cultural groups practice. Bornstein (2012) had suggested that some parenting practices and beliefs were universal, such as the need to provide a safe and nurturing environment for children. However some parenting practices such as methods in interacting with children vary between cultures. Bornstein (2012) concluded when a particular parenting method is the same across all cultures and serves the same purpose, it could be considered universal. However there are certain parenting methods that are different in form in the different culture groups, but they have the same purpose. Deater-Deckard et al. (2011) studied how parental warmth and control was expressed in nine different countries. They found that there were significant differences in terms of the level of warmth and control used in parenting across the different cultural groups they studied. Keller et al. (2011) studied the difference of parenting styles practised by the German middle class and Cameroonian families. They found that there were differences in the way

the two different cultural groups stimulated their children verbally and non-verbally. In their study they found that the German mothers provided more face-to-face contact with their children when compared to the Cameroonian families. Ferguson et al. (2013) in their study, which looked at parenting styles and transitivity across cultures, found that Asian parenting styles were significantly different from Euro-Caucasians parenting styles. They found that the Asian parents were more autocratic than the Caucasian parents.

Jambunathan (2000) studied the parenting practices of various cultural groups in America. In his study, he found that parents from different cultural groups had different parenting attitudes. The parents' attitudes in meeting the needs of their children, expectations of their children's developmental achievements and methods of disciplining their children differed across the cultural groups he studied on. Thus these studies have shown that although parenting beliefs such as having the need to nurture, protect and stimulate children are universal, parenting practices across different cultures can vary. The difference in the parenting practices across cultural groups are characterised by their cultural influences. The studies also tell us that parenting and culture have a reciprocal relationship. The cultural values of a cultural group, influences the parenting practices. At the same time the parenting ways of a cultural group defines their unique cultural identity. What is found to be normative parenting practices for a cultural group may be found as not relevant or peculiar for another cultural group. In the study by Keller et al. (2011), the German middle class families had different cultural values as compared to the Cameroonian families. The German families stressed the importance of self-autonomy and these values were imparted to their children through their parenting practices. On the other hand, the Cameroonian families lived in villages with extended families in their household and as such their parenting attitudes and practices also differed. The German mothers had more fact to face contact and conversations with their children and this was what the author called as *distal parenting*, that would eventually promote self- autonomy. The Cameroonian mothers on

the other hand had more body contact with their children and often stressed on the importance of family relations that was a normative practice for rural families that lived with extended family members. The studies discussed above that compared the different parenting styles practised by different cultural groups evidently showed that parenting methods are influenced by the unique cultural values held by the specific cultural groups (Bornstein, 2012; Bowie et al., 2013; Coll et al., 1996; Deater-Deckard et al., 2011; Ho, Bluestein, & Jenkins, 2008; Keller et al., 2011).

Therefore the precept of the Signposts program that is to build good behaviour in children is a universal parenting value, which we assume the Malay parents can relate to and benefit from. The core content of Signposts which aims at instructing parents on methods to help parents to manage their children's challenging behaviours and promote desirable behaviours in their children is a universal parenting value. Rowe, Vazsonyi, and Flannery (1994) suggested that when children are provided with the right triggers no matter which cultural background they come from, the same positive outcomes can be observed in the children across cultures. Since literature pointed out that culture and parenting practices have a reciprocal relationship, it would thus be necessary to adapt the Signposts program for the Malay population after the program materials had been translated to the Malay language.

The Signposts core content which is underlined by behavioural principles would be retained in the translation work. However the examples and stories used to explain these content teaching would be culturally adapted. The core content of the Signposts program that were retained are listed in List A. This list of content teaching (List A) were discussed with the program developers who provided their advice and input to confirm that these were items that could not be changed during the translation process.

### **List A: Core content of Signposts Program**

#### Module 1:

- 1) Describing behavior specifically using the telephone test
- 2) Measure behavior using frequency count, duration count or permanent product

#### Module 2:

- 1) Identifying the ‘antecedents’ and ‘consequence’ of a behavior
- 2) Using positive reinforcements to strengthen behaviors
- 3) Setting household rules to trigger good behavior in children

#### Module 3

- 1) Identifying the purposes of behavior
- 2) Replace undesirable behavior with desirable ones by providing alternative triggers to behaviors
- 3) Providing negative consequences to weaken undesirable behavior

#### Module 4

- 1) Building routines
- 2) Planning for high risk situations by preparing engaging activities, setting up rules, preparing positive reinforcements for the desirable behaviors and negative consequences for the undesirable behaviors

#### Module 5

- 1) Teaching new skills to children by breaking the skills down and teaching the skills to them, step-by-step and role modeling.

Researchers had suggested that in order to make parenting intervention strategies relevant and effective for the specific cultural groups that were being addressed, the parenting instructions should be culturally appropriate for the relevant cultural groups (Bornstein, 2012; Bowie et al., 2011; Deater-Deckard et al., 2011; Keller et al., 2011; Leung, Lau, & Lam, 1998). A parenting educational program cannot effectively promote positive development in children of minority groups if it excludes cultural contextual factors (Coll et al., 1996). These research findings further affirmed that the essential step in making the Signposts program culturally relevant for the Malay population in Singapore would be to translate the materials to the Malay language. To further make the materials culturally relevant, the stories and examples to explain the content teaching as in list A will be made culturally appropriate.

## **Literature Review**

The literature review was aimed at seeking the answers to the research questions that was posed earlier. One of the key questions was how could the Signposts program, which is in English and Australian-based, be effectively translated to the Malay language. To this end the review summarises and examines the available translation models used in translating program materials from one language to another. It sought the answers on how to translate the Signposts program to the Malay language contextually. The review also examines whether cultural adaptations to the program would be needed. Answers to whether there were other factors to look into when translating the Signposts program to Malay were also pursued.

The key findings from the review and the ideas that were relevant for translating and culturally adapting Signposts to the Malay language were extracted and synthesized from the literature review. These findings subsequently shaped the process that was set-up for the translation of the Signposts program to Malay. The research will focus on the process of translating Signposts to the Malay language in a contextually and culturally appropriate manner. It also focuses on the process of reviewing of the translated Signposts materials to ensure that it was contextually and culturally appropriate. It will review some research that carried out cultural adaptations of Evidence Based Programs. Research had shown that it would be necessary to make an EBP culturally relevant when it was adopted for a different cultural group. From the literature review, information on the processes and methods in making an EBP culturally relevant would be attained. Thereafter conclusions and recommendations on the processes to be set up for translating and reviewing the Signposts program are provided at the end of the literature review.



## **What are the available translation models?**

One of the earliest and best-known methods used in translation to ensure the accuracy of the translation work is Brislin's back translation procedure. Many researchers have reported on the successful use of back translation in translating English prose texts (Brislin, 1970).

Some authors however have suggested that back translation has its limitations. Douglas and Craig (2007) for example, argued that back translation would be able to literally translate a forward translation well but it might not necessarily capture the true essence of the statements translated because there may be some statements such as idioms, which contained culturally laden meanings, which a direct translation may not capture. Back translation may sometimes pick up these problems of literal translations but at times it may not. This argument is relevant when English materials are being translated to the Malay language. Some English language terms when translated to Malay will make little sense and confuse the Malay readers. For example in Module Two of the Signposts program, there is a section entitled 'Strengthening Desirable Behaviour'. In this section, there is a discussion on how a child's good behaviour can be reinforced. If this title is to be literally translated to Malay, it will say, '*Menguatkan Kelakuan Baik*' which means, 'how a good behaviour can be made strong'. If translated in this way, this text does not hold the true essence of the original English phrase. A more accurate translation would be '*Cara-Cara Mempertingkatkan Kelakuan Baik*' which means, "what are some ways to increase desirable behaviours". In this aspect, back translation will not help to identify when Malay inappropriate words are used in translating the Signposts materials, because when it is back translated to English, the translator may translate it to the original phrase that is, 'Strengthening Desirable Behaviour'.

Consequently, a person doing this translation work will not only need a good grasp of the Malay language, but will also need to have some knowledge of Signposts and understand the content of the Signposts materials. In this way, the translator will be able to effectively pick out words that are inappropriately translated and thus the materials can be translated not just literally but it will be translated relevant to the Signposts context and at the same time relevant to the Malay cultural context. Literal translation of the materials will likely happen if the translators do not have information on the content of Signposts. Literal translation happens when the words in the program materials are translated correctly word for word but the words used in the translation may not have the meaning that the original words hold. The goal in translating the Signposts program materials to Malay is thus to achieve materials that are both literally and contextually translated. When materials are contextually translated, the words used to translate the original materials are appropriate as they hold the intended meaning of the content. There may be several words that can be used to translate the original Signposts materials but the words that hold the intended meaning of the content would be the most accurate words to use. When words that best fit the intended meaning of the content materials are used in translation, these are words that are termed to be contextually accurate.

Similar to the argument made by Douglas and Craig (2007), Swaine-Verdier et al. (2004) also believed back translation would not be able to ensure that a text would be translated to the exact meaning of the original text. They argued that text, which had not been well forward translated, might hold different content from the original text and thus the back translation would also differ in content from the original text. Secondly, one might think that a forward translation was poor after reviewing the back translation when in fact it was the back translation which was poor. Thirdly, a back translation which corrected the weak grammar from a forward translation would give the incorrect

impression that the forward translation was of good quality. This argument by Swaine-Verdier et al. (2004) is especially pertinent for the process of translating the Signposts materials.

As discussed, in translating the Signposts materials, the accuracy of the translation is important not only in terms of its language and semantics but the materials have to be contextually appropriate so that the target audience can relate well to the materials. Back translation will only be able to help translators in identifying materials that have not been accurately translated but it will not be able to ensure that the materials are contextually and normatively appropriate.

Jones et al. (2001) were of the opinion that Brislin's back translation could be effective if it was revised. They suggested that a group of translators should translate and back translate the materials independently all at the same time. They believed that having various people translating would enable the translation process to be completed faster and that it held greater integrity since comparisons could be made between the different versions of materials that were translated. Instead of having various people doing back translation, Beaton et al. (2002) suggested having two bilingual translators independently translate the original materials. A synthesis of the translation work would be done and a back translation would then be carried out. The translated material would be reviewed by a group of judges and the final version would be pilot tested. Upon completion of the pilot test, further amendments would be made to the translated materials.

These processes suggested by Jones et al. (2001) and Beaton et al. (2002) would not be resource efficient. It would take a lot of time and resources for many different individuals to do the translation and back translation work. It would subsequently take a longer time to synthesize the translated materials since there would be many different

versions of the translated work.

Douglas and Craig (2006), in examining the translation of materials for sales and marketing, suggested instead a five-step translation process, which they said was collaborative and at the same time iterative. In order to evaluate translated materials, they suggested having two groups of people testing the translated materials. One group made up of participants who were bilingual and another group with participants who were monolingual. They also suggested having a focus group to review the different words and phrases used. They recommended for the translation and review process to be an iterative process until a satisfactory version was achieved. They also suggested that a collaborative approach by the different groups of people involved in the project should be taken to make certain that various views and feedback were collected. A committee would do the review of the materials to ensure that not only were the materials accurately translated but it would also trigger the same response from its readers.

Acquadro et al. (2004) as cited in Symon et al. (2013) designed a seven-stage process of translation. The process started with defining the concepts used in the original materials, followed by a forward translation. Next, a back translation was done and the materials were pilot tested. If more than one language were being translated, they suggested that the materials be internationally synchronized. Finally the materials would be proof read and a report on the translated materials would be put up. This process, which they implemented, started off with a review of the key concepts even before the translation was conducted. This would ensure that the translators understood the meaning of the concepts so that the essence of the concepts would not be lost through the translation. This will be a good procedure for translating the Signposts materials to ensure that the meaning and definition of the behavioural theories, which are universal terms, will not be lost after the material is translated and that the theories are translated accurately.

Rosati et al. (2012) had adapted the Family Matters, Evidence Based Program (EBP) for the Thai population. In translating and developing the Thai materials, they started with a forward translation. The translated materials were then presented to 13 focus groups, which comprised of eight parent groups and five adolescent groups. The focus groups reviewed the materials and advised on the appropriateness of the language as well as the readability of the material. The input from the focus groups was taken and the translated material was further revised. Thereafter the materials were back translated and finally reviewed by project staff. The process that was implemented in this project had both professionals and lay people reviewing the materials. This process provided various perspectives on how different groups of people would relate to the translated materials. However it was not clear why they had used 13 focus groups to review the materials. It was not explained why so many people were needed for this process. There was no indication how having so large a number of reviewers engaged would assist in attaining a better quality of translation work.

### **What is the available research that looked at adapting an EBP for a different cultural group?**

Translating the Signposts materials is just the initial stage to the whole process of adapting the Signposts program for the Malay population. In order to ensure that translated Signposts materials are both literally and contextually appropriate, cultural adaptations might have to be made to the translated materials. Therefore translation of the program materials by professional translators would not suffice. A cultural adaptation of the translated program materials would be necessary. There are many research studies which reported on the cultural adaptation process of an EBP and the positive outcomes achieved by the programs (Bigfoot & Funderburk, 2011; Houlding, Schmidt, Stern, Jamieson, & Borg 2012; Martinez Jr & Eddy 2005; Jurcik, Chentsova-Dutton, Slolopieieva-Jurcikova,

& Ryder 2013; Kumpfer, Magalhães, & Xie 2012; Kumpfer, Pinyuchon, Teixeira de Melo, & Whiteside, 2008; Poulsen et al., 2010; Rosati et al., 2012; Self-Brown et al., 2011). These studies showed that cultural adaptation of intervention programs produced positive outcomes and that it is the process to undertake to ensure social validity when intervention programs are implemented for specific cultural groups (which the program was not originally designed for). This information from literature thus apprises that in translating the Signposts materials and making it available for the Malay population, cultural adaptation of the program materials is necessary. Review will thus be made on what processes are needed for the cultural adaptation of an EBP translated materials, what are the items in an EBP translated materials, which have to be adapted, and what are items in the EBP translated materials that have to remain unchanged in order for the EBP to achieve positive outcomes.

According to Castro, Barrera, and Martinez (2004), a culturally adapted EBP was able to increase participants' enrolment and retention. Kameoko (1998) said that participants would be inclined to attend programs which honoured their culture and traditions. Sanders (2000), said that behavioural interventions were said to be more effective when relevant cultural information and practices of the specific group such as their family structures and set-up, styles of parenting and their beliefs on child developmental issues and other social matters were included in the adapted program. Other than ensuring social validity, the cultural adaptation of an EBP had other positive effects. A culturally adapted EBP could achieve better buy-in from the targeted participants and the participants were found to be more committed towards the program. It appeared that a culturally adapted program was able to better engage the participants.

There are several studies examining the cultural adaptation processes of EBP. In the study of the cultural adaptation of the Strengthening Families Program for several

cultural groups, Kumpfer, Pinyuchon, Texeira de Melo, and Whiteside (2008) suggested a nine-step process to be used for adapting an EBP internationally. The first step was to gather data for needs assessment. They then carefully selected an EBP, which they could best culturally adapt. Once the program was chosen, they implemented the program using the original program materials. The next step they took was to select the right staff for the program. The staff were then trained and supervised to ensure that the program was implemented well. The program's quality was maintained and at the same time program fidelity was ensured. Thereafter several pilot runs were conducted and cultural adaptations were made on an on-going basis. The program was then continuously revised so that it could better engage the families. Evaluation on the outcome of the adapted program was conducted and the results of the effectiveness of the program were then disseminated.

Kumpfer, Magalhães, and Xie (2012) had later added another step to the nine-step process which Kumpfer et al. (2008) designed. After the third step a fourth step was included, which was to translate the program materials to the cultural language and minor cultural adaptations were made. Previously this step, which looked into translating the program materials, was placed as an added task in the third step. However there was no information in the study on why this extra step was later included. When the step to translate and culturally adapt program materials was made as a distinct step in the process of culturally adapting a program, it seemed to suggest that translation and making minor cultural adaptations to the EBP program materials was an eminent step in initiating the process of culturally adapting an EBP. The subsequent steps that followed this newly added step were processes that Implementation Science classifies as processes to ensure the sustainability of a program implementation process (Fixen et al., 2005). In reviewing the steps that Kumpfer and her colleagues (2012) recommended for the cultural adaptation of the Strengthening Families Program, it seems to suggest that in delivering a culturally

adapted EBP to a specific cultural group, the translation process of the program materials is equally important to the implementation process of the program.

In the cultural adaptation of the ‘Parent Child Interaction Therapy’ (PCIT) program for the American Indian/Alaskan Native (AI/AN) population Bigfoot and Funderberk (2011) stressed the importance of having cultural consultants in the adaptation process especially in the translation of the program materials. They had four steps in their process of culturally adapting an EBP. There were fewer steps to their process, as they did not talk about whether there was a needs assessment conducted and they did not explain how they came to choose the EBP. They started off the process by reviewing the program’s core content. Thereafter, they worked together with the program developers and trainers in reviewing the program materials. Next, they solicited input from locals who had expert knowledge on the local culture. The last step was to translate the program with great attention to cultural sensitivities. In this study, they emphasised the importance of the local people as an important resource for the cultural adaptation process. They were regarded as the experts in ascertaining the cultural appropriateness of the adapted program.

Poulsen et al. (2010) wrote on the cultural adaptation of the Family Matters program from America, for the youths in Kenya. They started the process by doing a needs assessment. Following that, a decision was made on which program best met the needs of the target group. The next step was to carry out a pre-test run using the program materials which had been culturally adapted and further changes to the materials were made based on the feedback given by the participants from the pre-test. Subsequently the adapted program was implemented and an evaluation on the program was conducted.



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Kumpfer, Pinyuchon, Texeira de Melo and Whiteside (2008)

- 1) Needs assessment
- 2) Choose the best EBP to culturally adapt
- 3) Implement program using the original materials
- 4) Staff selection, training and supervision
- 5) Program quality was maintained
- 6) Program fidelity was ensured
- 7) Pilot runs were conducted and cultural adaptation were on-goingly made
- 8) Program was continuously revised
- 9) Evaluation on the program was done and the outcome was disseminated

Kumpfer, Pinyuchon, Texeira de Melo and Whiteside (2008)

- 1) Needs assessment
- 2) Choose the best EBP to culturally adapt
- 3) Implement program using the original materials
- 4) Staff selection, training and supervision
- 5) Program quality was maintained
- 6) Program fidelity was ensured
- 7) Pilot runs were conducted and cultural adaptation were on-goingly made
- 8) Program was continuously revised
- 9) Evaluation on the program was done and the outcome was disseminated

Kumpfer, Magalhães, & Xie (2012)

- 1) Needs assessment
- 2) Choose the best EBP to culturally adapt
- 3) Implement program using the original materials
- 4) Translate program to the cultural language and minor cultural adaptation is to be made
- 5) Staff selection, training and supervision
- 6) Program quality was maintained
- 7) Program fidelity was ensured
- 8) Pilot runs were conducted and cultural adaptation were on-goingly made
- 9) Program was continuously revised
- 10) Evaluation on the program was done and the outcome was disseminated

Bigfoot and Funderberk (2011)

- 1) Review program's core content
- 2) Review the program materials together with program developers and trainers
- 3) Gain input from locals
- 4) Translate program with great attention to cultural sensitivities

Poulsen et al. (2010)

- 1) Needs assessment
  - 2) Choose a program that will best meet the needs of the people
  - 3) Do a pre-test using the culturally adapted materials
  - 4) Further changes were made to the materials based on feedback gained from the pre-test
  - 5) Implement adapted program and conduct an evaluation
-

## **Figure 2** Cultural adaptation of Evidence Based Programs studies

In the various cultural adaptation processes discussed above, the implementation of the culturally adapted program could only start after the translated materials and minor cultural adaptations had been piloted. In the studies by Kumpfer and her colleagues (2008, 2012) and Poulsen et al. (2010), further cultural adaptations were subsequently made based on the input and feedback provided from the various people involved in the pilot runs.

Evidently from the research discussed, in making Signposts available for the Malay population, it is important to pay close attention to the translation process. The Signposts program material must be translated to the Malay language well and cultural adaptations to the materials are to be made at the same time. The Signposts materials will be translated and its cultural appropriateness will be ensured. Barrera, Castro, Strycker, and Toobert (2013) called the translation of program materials as one form of “surface structure change” and they thought that it is a critical process in the cultural adaptation of an EBP. Poulsen et al. (2010) believed that this translation process was a “clear necessity”. (p. 279) Nation et al. (2003) as cited in Kumpfer et al. (2012) also found the translation process important in the cultural adaptation of an EBP. They said that participants would be receptive to an EBP that could be easily understood and was at the same time culturally sensitive.

Translating the materials will allow the Malay speaking population to have access to the program materials and it will be necessary to make the materials relevant to them so that they will be able to relate the program to their everyday lives and most importantly to their parenting practices at home. This would not only increase their understanding of the program materials but also increase their ability to implement the learnt strategies in their natural home environment when the program materials are contextually relevant to them.

Griner and Smith (2006) through their research found that culturally adapted interventions were highly beneficial for the participants. They found that non- English speaking parents who had high needs for intervention programs to be adapted for them, reaped a lot of benefits from the cultural adaptation of the intervention programs.

A big challenge in translating and making adaptations to an EBP is to ensure that the positive outcomes of the EBP will continue to be achieved. It is thus important to ensure that the fidelity of the program is not affected through the adaptations (Poulsen et al., 2010; Self-Brown et al., 2011).

Self-Brown et al. (2011), through their research had found that program fidelity would be affected if changes to the program's core content were made. Kumpfer, Pinyuchon, Teixeira de Melo and Whiteside (2008) evaluated the dissemination of the Strengthening Families Program in several countries and found that generally cultural adaptation of the program had shown positive outcomes except for the one that was conducted in Hawaii. When the program was adapted in Hawaii, they had the program sessions reduced from 14 sessions to 10 sessions. An additional 10 sessions were subsequently added into the original program. The additional sessions covered Hawaiian cultural issues. Therefore in total the adapted program had 24 sessions. The outcome from the Strengthening Families Program which was adapted for the Hawaiian population, suggested that program effectiveness would be affected when the program structure was changed. The program integrity was thus compromised. Kelly et al. (1999) were of the opinion that when significant elements in a program were compromised, the intervention outcome will be affected and thus they suggested that the program content and theoretical components should not be changed in an adaptation process. Literature thus suggests that the fidelity of an EBP would be compromised if changes were made to 1) the program structure 2) the core content of the program. Therefore these would be two areas, which

cannot be changed or adapted during a cultural adaptation process of an EBP.

Careful steps are therefore needed to ensure that the fidelity of the program is maintained while the translation and minor cultural adaption of the Signposts materials are being carried out. Kumpfer et al. (2012) suggested that when adapting an EBP, those working on the project should have a good knowledge of the target participants' cultural values. They should also gain the approval on the changes that were being made from the program developers. These factors would help to ensure the maintenance of the integrity of the program. Kelly et al. (2000) suggested that those involved in the program implementation should work closely with program developers so that problems with fidelity and adaptation matters can be managed and addressed well. Sormanti et al. (2001) also believed that the program would be made effective and relevant if the program providers, participants and researchers worked together in developing a certain program. At the same time they had also recommended to engage people from the respective cultural groups who have good knowledge of the cultural values and practices in the cultural adaptation process.

### **Ensuring Readability and Comprehensibility of the Translated Materials**

A good translation and cultural adaptation process would ensure that the program materials are literally and contextually translated. However well translated program materials, may not ensure that the materials are readable and comprehensible for the target audience. Horner, Suratt, and Juliusson (2000), who studied the development of good patient educational materials for people with varied literacy skills, suggested that educational materials not only should be made in multiple languages, they should also be readable. They said that educational materials should be made visually easy to read so as to enhance comprehensibility of the materials. Brook (1998) as cited in Horner et al. (2000, p.18) said that educational materials could be made visually easy to read by having

“adequate font size, use of white space to visually break up content areas, the addition of illustrations to supplement the text, and content organization moving from basic to more complex concepts”. Mumford (1997) recommended that text for adults should be no smaller than font size 12 and that larger font sizes of 14 to 20 would be better.

Seligman et al. (2007) had used low literacy principles for their patient education materials. They suggested for illustrations to be included in the materials, not only for decorative effect but also to assist in highlighting key content. The illustrations could help in illustrating the more complex content materials that were hard to explain using simple words (Seligman et al., 2007, p. 71).

Therefore from what was suggested in the research just discussed, it will be important to ensure that the program materials are readable for the target audience. To enhance the readability of the educational materials, it will be helpful to have certain features included such as ensuring that the text is of appropriate font size and that there is adequate white space between texts. Relevant graphics, visuals and photographs can also be included in the materials. These features will provide visual cues and stimulation to further enhance the readability of the translated Signposts program materials. It was also suggested that simple language to be used in explaining the more difficult concepts or content teaching.

## **Conclusion**

The focus of this research as outlined previously will be on the translation and minor cultural adaptation of the Signposts program to the Malay language. From the literature review, it was concluded that there were several steps that could ensure the effectiveness of the translation of the Signposts program for the Malay population. There are also steps that are essential in order for the materials to be relevant for the Malay

population. At the same time, it would be important to make the materials readable and comprehensible so that the target audience can benefit from the program. The key findings from the literature review had been synthesized and with this, the steps that should be taken in translating the Signposts program to the Malay language were concluded and implemented.

### **1) Translating the program materials to the Malay language**

The literature review suggested that despite its effectiveness, there were limitations when using back translation as the sole method to ensure the contextual accuracy of translated materials. Translation processes discussed in the literature review had used back translation as part of their translation process. At the same time the authors had other methods included in their translation process in order to ensure that their translated materials were contextually accurate and culturally appropriate. Rosati et al. (2012) had focus groups to review and test the materials. Acquadro et al. (2004) as cited in Symon et al. (2013) did a pilot test using the translated materials. All the projects on translation discussed had their materials either pre-tested or pilot tested.

Since back translation is not a tool that can fully ensure the contextual accuracy of translated materials, back translation will not be used in the process of translating the Signposts program materials to Malay. Key features found relevant and commonly used in the research projects discussed in the literature review, such as getting the materials reviewed by various groups of people and pilot testing the materials will be used in translating the Signposts materials to Malay. In translating the Signposts materials, the translators need to ensure that they had translated the materials so that they are:

- culturally appropriate for the Malay population and
- contextually appropriate so that the behavioural concepts/theories are well

delivered

Purposeful steps will be taken to make the translated materials culturally appropriate for the Malay population. Some examples that are used in the text will need to be changed instead of literally translated. For example in Module Five of the program, there is an example used where the parent is teaching the child to use the mower. A typical Malay or Singaporean family will not be able to relate to this as the majority of the population live in flats where there are no lawns. In Module Three, parents are informed on the dangers of physical punishment and this method of punishment is discouraged. In order to further reinforce this teaching, information on how Prophet Muhammad never hit children can be included here.

The core content was not reviewed prior to the implementation of the Signposts program in the English language. This was because, the content had been found to be suitable for the Singapore population by the project coordinators. The positive outcome from the Singaporean participants who attended Signposts in English had led the project coordinators for translating Signposts to Malay to conclude that the Signposts program content was suitable for the Singapore population as a whole. However in order to further validate that the content was appropriate for the Malay population in Singapore, the research participants were asked to provide their comments on it. More will be discussed in the Methodology section.

Prior to the start of the translation process, the professional translators were given information on the background of Signposts and information on the behavioural concepts used. Definitions of the key concepts and terms specific to behaviour theories were explained to them. They were also given examples of text that they could change and adapt to the local context.

## **2) Pilot of the translated materials**



The translated materials were trialled with a group of Malay parents. Feedback from the pilot participants and the group facilitator was gained upon the completion of the pilot run. Their feedback provided significant information on whether the translated materials were well translated and comprehensible to the target audience.

### **3) Reviewing the cultural appropriateness of the translated materials**

There were groups of locals invited to review and provide feedback on whether the translated materials were culturally appropriate for the Malay population. In this process, feedback on the cultural appropriateness of the translated materials was sought from a group of Malay professionals, the Malay Signposts facilitator involved in the pilot run, and the parent participants who took part in the pilot Malay Signposts program.

The Malay professionals engaged for the review of the translated materials were bilingual in the Malay and English languages. They were Malay in race and thus had good insight into the Malay lifestyle and culture. The professionals chosen came from diverse professional backgrounds. There were professionals who have had experience working with the Malay families and children and thus they were au fait with the Malay family dynamics and issues. There were professionals who were involved in the teaching or writing of Malay literary works. There were also professionals who were trained in the Signposts program so that they could provide input on the accuracy of the translated behavioural concepts and theories.

### **4) Ensuring the readability of the program materials**

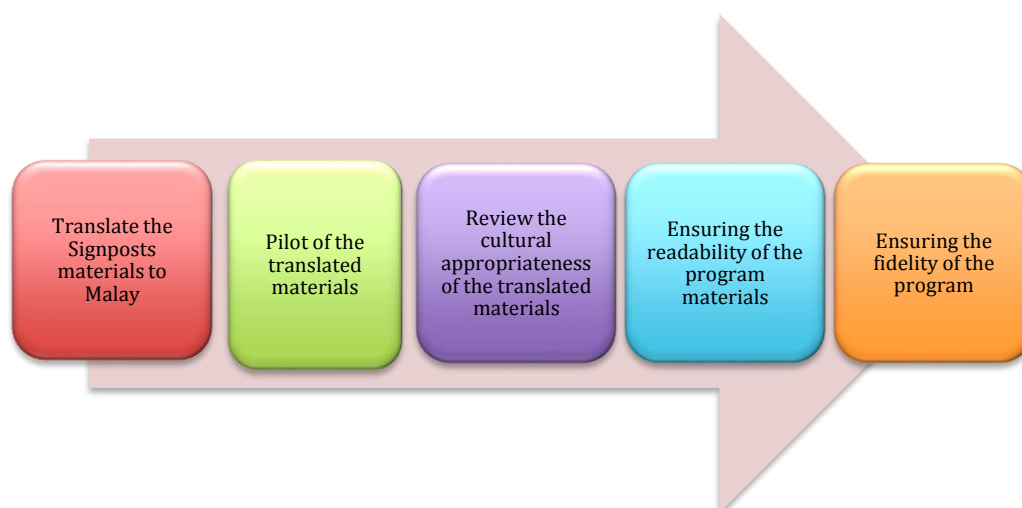
One of the commonly used readability tests is the Cloze Test. The Cloze Test which was developed by Taylor in 1953 (Taylor, 1956) and was validated among others by Rankin (1959) and Bormuth (1967, 1968). A passage from the translated Signposts materials was extracted and words were be deleted at every *nth* word. In this research,

every fifth word was deleted. Every deleted word was replaced by a blank space.

Participants were asked to fill in the blanks. The right words filled in the blanks were scored. The scores provided the measure of whether the passage was readable for the participant. It had been validated and used with various different languages (Oller et al., 1972; Robinson, 1973). Although some have found the Cloze Test to be applicable in testing the readability of materials in native languages, there are also those who argued that the test had not been validated for specific cultural groups (Kass & Kithinji, 2010). The Cloze Test had rarely been used to test the readability of Malay materials. Nevertheless it was a validated readability test for several other languages. The Cloze Test was thus used to evaluate the readability of the Signposts program materials that were translated to the Malay language. This provided an indication of whether the translated materials were readable for the target audience.

### **5) Ensuring the fidelity of the program**

Close working relationships were fostered between the Singapore Signposts coordinators and the Australian program developers. Input on the translation and minor cultural adaptations of the program materials were sought from the program developers. An official agreement to work on the cultural adaptation project was drawn up between the program developers, program coordinators and researchers. The project coordinator consulted the program developers on the suggestions and recommendations for cultural adaptations of the program materials before implementing them. This was the process that ensured the fidelity of the program was not affected through the translation and cultural adaptation process of the Signposts materials.



**Figure 3 :** The Steps to be Implemented when Translating Signposts to the Malay language

## Methodology

### Participants

A total of 14 participants were involved in this study. There were three groups of participants. For easy reference, they will be referred to as Group 1, Group 2 and Group 3.

#### Group 1 (Professionals)

There were nine professionals involved in Group 1. There were seven Malay professionals and two professionals from the Parenting Research Centre.

The Malay professionals were acquainted with the researcher and they were chosen because they were bilingual and well versed in the Malay and English languages. They were also chosen based on their varied field of experience working with people in the Malay community. They held vocations as a journalist, secondary school teacher, pre-school teacher, early interventionist, health care worker and religious teacher. The group comprised of one man and six women. They all had tertiary qualifications and their ages

ranged from 23 to 45 years old ( $M = 38$ ,  $SD = 32$ ). They had participated in the study on a voluntary basis. The journalist had more than 10 years of experience working, reporting on both the English and Malay news in Singapore. One of the secondary school teacher, teaches English literature and at the same time speaks fluent Malay both at home and at work. The other secondary school teacher had done Higher Malay as a subject in her secondary school days and had experience teaching the Malay language. Another participant was a kindergarten teacher who teaches the English language and she had also taken up Malay as one of her majors at university. The early interventionist and the health care worker were reported to use both the English and Malay language when conversing with family and friends. The religious teacher had her primary and secondary education at a religious school where she took Higher Malay as one of the academic subjects in school. Therefore the participants that were chosen were deemed to have a good grasp of both the English and Malay language based on their profile and self-reports.

The two professionals from the Parenting Research Centre were two of the original developers of the Signposts program. The Parenting Research Centre and the Department of Child Development from KK Women's and Children's Hospital (KK DCD) where the Signposts program and research is mainly conducted in Singapore, had a formalized partnership. The two organizations signed a formal agreement where an established partnership was fostered for the purpose of development and implementation of the Signposts program in Singapore.

### **Group 2 (Malay Parents)**

The Group 2 participants comprised of four women whose children were on follow-up with the KK DCD. Three of them were mothers of children on follow-up with KK DCD while one of them was an aunt to one of the KK DCD patients. The women's

ages ranged from 32 to 41 ( $M = 34.8$ ,  $SD = 13.69$ ). Three of them were full time homemakers while one of them was working in the cleaning service sector. They were all Malay in ethnicity and they reported that they were predominantly Malay speaking. The most highly qualified amongst them graduated from the Institute of Technical Education<sup>1</sup>. Two of the women were Singaporean while the other two were Indonesians who married Singaporean Malays. The Indonesian ladies have stayed in Singapore for several years and they were Singapore Permanent Residents.

### **Group 3 (Signposts Malay facilitator)**

There was only one participant in this group. She was Malay in ethnicity and she was proficient in both the English and Malay languages. She was 49 years old and had tertiary qualification. She is a senior social worker and she is also a trained Signposts facilitator. She has had experience running the Signposts program in the English language.

The data given by the Malay professionals, Malay parents and Malay Signposts facilitator provided perspectives from people of varying educational qualifications and social backgrounds. Their opinions on whether they thought the translated materials were well understood and culturally relevant had helped to provide an understanding of the factors, which were important when translating an EBP to a different cultural language. Subsequently, the program developers who had expert information on the Signposts program provided their input on whether the cultural adaptations made had affected the fidelity of the program.

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<sup>1</sup> The Institute of Technical Education provides pre-employment and technical training for post secondary school students.

## **Materials**

### 1) List of guidelines for review of translated materials

A list of guidelines for the Malay professionals in Group 1, to use in reviewing the translated materials was developed. The guidelines were developed so that the professionals could identify the factors they believed would make the translated program materials culturally relevant for the Malay population. The list of guidelines was also developed to determine whether the translated materials were translated effectively and easy to follow. The professionals were asked to: provide feedback on whether the materials were effectively translated, if the translated materials could be well understood, to comment on any words or expressions found awkward and if there were stories found to be culturally inappropriate. The professionals were also asked to review the grammar and vocabulary used in the translated materials. The list of guidelines can be found in the Appendix.

### 2) List of questions for focus group discussion

A list of questions was designed to guide the focus group discussion, with Group 2 participants. The questions set were aimed at acquiring the participants' responses to the translated materials. Answers to whether the translated materials could be well understood and culturally relevant were sought.

In the list, there were questions asking the participants what they thought and felt about the program. Stories and examples from the Signposts module booklets were read out to the group participants to comment on their cultural relevance for the Malay community. The participants were then asked whether they could understand or relate to the translated behavioural technical words such as 'planned ignoring', 'labelled praise' and 'time-out'. The participants were also asked to provide feedback on the effectiveness of the

translated materials. The list of questions for the focus group discussion can be found in the Appendix.

### 3) Cloze Test

A random passage from the Signposts supplementary module booklet was extracted and used for the *Cloze Test*. The passage was from the booklet 'Family as a Team'. The first and the last sentences were not modified. Every fifth word in the passage was deleted and a blank space of consistent length replaced the deleted word (Bormuth, 1968). The *Cloze Test* was one page in length. The Cloze Test can be found in the Appendix.

### 4) Questionnaire

The questionnaire consisted of questions asking the pilot program facilitator (Group 3 participant) to provide input on the translated Signposts materials. The questionnaire was specifically developed to gain answers for this research. The questions asked, were to ascertain whether the translated materials could be used to run the Signposts program. The focus was again on the effective translation and cultural relevance of the materials. The questions asked were whether the facilitator thought that the participants from the pilot program could understand the translated Signposts materials well. She was then asked whether there were words that she found to be inappropriately translated. She was also asked to comment on whether she had any difficulties presenting the translated materials during the workshop. Her opinion on whether the materials were culturally relevant was also sought. The questionnaire can be found in Appendix.

### 5) Likert Scale Question

There is a Likert scale question included in the list of guidelines for Group 1, the focus group discussion for Group 2 and questionnaire for Group 3. The Likert scale question sought the participants' opinion on how well they rated the translated materials.

## **Procedure**

The Monash University Human Subjects Ethics Committee and Singhealth Centralised Institutional Review Board (in Singapore) have approved the research. All the participants were asked to participate in the project voluntarily. Informed consent was obtained from the participants.

### **Review by the Malay Professionals**

The participants were engaged through the researcher's personal contacts. They were given information on the background of the Signposts program so that they understood the context of the materials they were reviewing. They were each given one to two booklets of the Signposts materials. They were given both the English version and Malay version of the same set of materials. The list of guidelines was provided to help them in their review of the translated materials.

They first read through the original Signposts materials (English version). Subsequently they read the Malay translated Signposts materials. They made comparisons between the two versions and provided their input on the translation of the Signposts materials that served as the data needed for the research. Their responses were sent to the researcher via email.

### **Focus Group Discussion**

Once the Malay translated Signposts materials were available, a pilot run of the Signposts program in Malay was carried out. Upon completion of the pilot run, a focus



group discussion with the participants who attended the program was carried out. The participants took part in the discussion voluntarily. The researcher led the focus group discussion. The discussion was carried out in Malay. It was audiotaped, transcribed and translated to English for coding.

### **Cloze Test**

The Cloze Test was administered to the Group 2 participants at the end of the focus group discussion. The researcher gave the instructions on how to complete the Cloze Test verbally. There was no time limit given for the participants to complete the test.

### **Feedback from the pilot run facilitator**

The pilot run facilitator was the first person to run the Signposts program using the Malay translated materials. She had volunteered to participate in the research. Throughout the run, she took note of the inappropriate words that were used in the translation. She also took note of examples and content in the translated materials that she found to be culturally irrelevant to the Malay community. At the same time, she recorded the items she found difficult to present to the group. Upon the completion of the pilot Malay Signposts program, she was asked to complete a questionnaire. The questionnaire asked for her input on the effectiveness of the translated materials and their cultural relevance to the Malay community.

### **Advice from the program developers**

The data collected from the Malay professionals, pilot group participants and Malay facilitator were shared with the program developers. The recommendations for change were brought to them for their advice and approval. This was an on-going process until the finalised translated materials were confirmed.

All the data collected from the various participants informed the researcher on the best design for the Signposts materials to be translated to the Malay language. This design can then be applied whenever the Signposts program is to be translated to any other ethnic language used in Singapore.

## **Data Analysis**

Data collected from the three groups of participants were mainly qualitative data. They were collected from the participants' written and verbal responses (focus group discussion). Quantitative data were only obtained from the scores achieved in the Cloze Test completed by Group 2 participants and the participants' response on the Likert scale question.

### **Qualitative Data**

The qualitative data gained were analysed using thematic analysis. "Thematic analysis is commonly used in qualitative research and occurs when all the data are in. It is a process of segmentation, categorization and relinking of aspects of the database prior to the final interpretation" (Grbich, 2012, p.3). Thematic analysis was used to analyse the data from the Malay professionals, the focus group discussion and the questionnaire response from the Group 3 participant.

The data gathered was analysed and themes from the data were identified. The data was coded based on the themes identified. The 6-phases of thematic analysis suggested by Braun and Clarke (2006) was used to analyse the data gathered.

### **Quantitative Data**

Quantitative data was obtained from the Group 2 participants, through the Cloze Test. When a participant completed a blank with the exact word that was deleted or a close

synonym, one point was given, regardless of spelling. The total score gained by each participant was calculated and converted into a percentage score. According to Rankin (1959) if a person scored 75% or more in the cloze test, it indicated that the cloze test passage the participant took was at his or her comfortable reading level. Therefore the scores gained by the participants who took part in the pilot program gave an indication on whether the translated materials were readable for the target population. Rye (1982) as cited in Bertram (2006), said that the Cloze Test scores would indicate the participants' level of readability. He said that those who scored 39% and below would be reading the passage at the frustration level. Those who scored between 40 to 59% were able to read the passage if there was instruction and help. Those who scored 60 to 100%, would be considered to be reading the passage at an independent level.

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Rye (1982) as cited in Bertram (2006) p. 9

0 – 39%	Participants are reading at <i>frustration level</i> . The passage is too hard for them to manage and they struggle in understanding the meaning of the passage.
40-59%	The participants are reading at <i>instructional level</i> . The participants are not able to read the passage without instructional help and guidance.
60 – 100%	The participants are reading at an <i>independent level</i> . The participant is able to read the passage without any help

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**Figure 4:** Cloze Test Score

Response from the Likert scale question was tabulated and a mean from the response was attained to provide an indication on how well the participants rated the translated materials.

## Results

One of the more interesting findings from the data collected was that the participants from the pilot Signposts program could relate and accept the content teaching of the Signposts program. They did not comment that the concepts and strategies taught were culturally inappropriate or difficult to be implemented in their homes. This was encouraging and a good indication that the translation of the Signposts program to the Malay language was a relevant process. As mentioned in the literature findings, Bornstein (2012) was of the opinion that some parenting practices and beliefs were universal. As such, the behavioural concepts in Signposts which instructed on positive ways of building better behaviour in children seemed to be universal in value and they could be related to by the Malay participants.

The problems identified in the translated materials were that the participants had difficulties understanding the materials when 1) the words used were out of context 2) inappropriate words were used for translation 3) the sentence structure was awkward. The participants had also found some of the stories and examples used in the materials culturally inappropriate for the Malay community.

In reviewing the translated Signposts program materials, we were not reviewing the process of translation per se or how well or badly the materials were translated. The review was to ensure the readability of the translated materials and that the Malay population in Singapore could relate to them. The review was also meant to find out if the materials were culturally relevant. Analysis was made on the appropriate words and examples used, so that the Malay population could understand and relate to the materials. As Baker (2011) said, “It is in fact virtually impossible, except in extreme cases, to draw a line between what counts as a good translation and what counts as a bad one. Every translation has

points of strength and points of weakness, and every translation is open to improvement.”

(p. 25) The aim of the research was to analyse the factors that should be taken into consideration when the Signposts program was translated and adapted for the Malay population.

The data collected from the various groups of participants were comments and feedback provided on all the translated Signposts written materials. These materials consisted of the module booklets, workbooks and slides that were used for the running of the pilot group program. The Signposts program consisted of; an introduction module, five essential modules in Signposts, and two supplementary modules. The essential modules contained the teaching of the behavioural concepts and strategies.

Modules	Main Content Teaching in the Module
Introduction Session	Aims of Signposts and the reasons for difficult behaviour
Module 1: Measuring your child's behaviour	Describing child's behaviour specifically and methods of measuring children's behaviour
Module 2: Systematic use of daily interactions	Identifying a child's strengths. Identifying the triggers and consequences of a child's behaviour. Strategies to strengthen children's good behaviour. How to provide effective instructions and setting up some household rules at home.
Module 3: Replacing difficult	Purposes of behaviour. How to replace undesirable behaviour with a better behaviour.

behaviour with useful behaviour	How to weaken undesirable behaviour. Time out and how to implement it.
Module 4: Planning for better behaviour	Setting up routines  Planning for high risk situations
Module 5: Developing more skills in your child	Teaching children new skills through role modelling and breaking down of skills.  Skills in communicating with other people involved in child's life e.g. teachers
Supplementary Module: Dealing with Stress	Strategies in recognizing stress and managing stress
Supplementary Module : Family as a Team	Problem solving skills to be planned and implemented as a family.

**Figure 5:** Signposts Program Modules

### **Responses when Reading the Materials**

Upon reading the original Signposts materials, some of the Malay Professionals from Group 1 had the opinion that it would not be difficult to translate the Signposts original materials to the Malay language. One of them after reading the English text felt that the English text was “straightforward and concise”. She thought that some of the more difficult text should be kept in the “present and active listening tense”, when they were to be translated to Malay. This would make the translated sentences simple and easy to relate to. One participant also thought that one important factor to consider in the

translation process was to find words that were contextually appropriate since the materials held a lot of teaching on the behavioural concepts and strategies.

The data gathered from the Likert scale from all the three groups of participants, was tabulated and the mean score was 2.5. Therefore the participants seemed to generally have a neutral stand on how well the program materials had been translated. On the other hand, the qualitative data gathered from all the three groups of participants seemed to indicate they there were of mixed feelings on how well the materials was translated to the Malay language. One Malay professional said that she felt “extremely frustrated” reading the text because she found most of the items were literally translated and as such it was difficult to understand the content of the text. Another Malay professional found only some words to be awkward and inappropriate. This less emotional reaction was expressed by a participant who was trained in behavioural interventions. Her background understanding on the behaviour concepts could have helped her with the understanding of the content materials. Therefore, even though inappropriate words were used in the translation, she could still understand and follow the content teaching in the materials.

There were some other participants who reported being very confused when reading the translated materials and these were people who were trained in Signposts as well as people who were not well versed in Signposts. The pilot Signposts facilitator who was trained in Signposts and had experience running the program in English was confused and had difficulties understanding the translated text. She reported having to refer to the English text in order to better understand the translated text. The Group 2 participants reported struggles and emotional reactions in reading the translated text too. One of them said, “I felt stressed reading the materials”. This was because she could not understand what she was reading. She said, “I had to focus very hard and concentrate”, when reading the module booklets. Another Group 2 participant reported that she had to read the

materials a few times before she could understand the materials. All the participants in Group 2 said that they could only understand the text after attending the pilot Signposts workshop. After the Signposts facilitator had taught them on the concepts and content teaching, they could then understand the content in the text. According to the Group 2 participants, they could relate to the behaviour concepts that were taught in Signposts but what they found difficult were the words and phrases found in the translated text. They were not able to make good meaning of the text just by reading them. Although the Group 2 participants reported that the words used for the translation of the behaviour terms had affected the readability of the content materials, their feedback suggested that they had perhaps needed the help from a facilitator to link the stories and examples in the materials to the behaviour concepts taught. The workshop was thus important in aiding their understanding and they could not manage with independent learning of the Signposts program just by reading the materials. Kumpfer et al. (2002) in their study had said that when programs were culturally adapted, the participants would understand the materials better if the facilitator were to verbally explain the content teaching using colloquial terms.

### **The Behavioural Concepts in Signposts**

It was interesting that the Group 2 participants reported that they had no difficulties understanding the teaching of the behavioural concepts. They could also understand the examples and stories that were used to illustrate the concepts. For example, in the teaching of measuring of behaviour, participants were taught on how to measure children's behaviour using frequency, duration and permanent product methods. They were able to understand the concepts and some of the examples used such as using the frequency method to count how many times a child hit other children, using the duration method to count how long a child sucked his thumb and using the permanent product method to count how many mathematics sums that child completed. However they were not able to



understand the teaching just by reading the translated materials alone. They understood the teaching only after the Signposts facilitator had presented the concepts to them in simple language. They found some of the words used to translate the behaviour terms hard to understand. The words used had thus affected the readability of the content teaching of the concepts. One example was the term, *permanent product*. The translated phrase was *hasil kekal*. These words in Malay, on their own did not hold much meaning but the explanation of the phrase and concept of permanent product by the group facilitator had helped the participants to better relate to the term. The examples and stories in the text used to illustrate the concept had also helped the participants' understanding of the term *permanent product*. Therefore the content teaching was not difficult for the participant to understand but it was the translated behaviour terms which the participants could not comprehend.

The Group 2 participants said that they did not think that it was necessary for the behaviour terms to be translated. The terms could remain unchanged in English but the explanation and examples are the ones that had to be translated so as to aid their understanding of the concepts.

The pilot Signposts facilitator, Group 3 participant, had similar views. She was of the opinion that the participants did not have difficulties understanding the behaviour concepts and that the examples and stories in the materials had helped the participants with the understanding of the concepts. She only observed that the participants were confused over the teaching of the functional behaviour assessment where the group participants were taught the concept of identifying the triggers, behaviour and consequence of a child's difficult behaviour. She said that upon translation to the Malay language, the concepts became rather confusing. One of the reasons this confusion occurred was because the word *trigger* was at times translated to the word *akibat* and at times to the word *kesan*. Although

it would not be wrong to use these words for the word trigger, contextually the more appropriate word would be *akibat*.

Attempts were initially made to translate the behavioural terms in the program materials. However after the translation was completed and struggles of understanding the behavioural terms were reported by Malay professionals and pilot participants, the program developers from Parenting Research Centre had then advised for specific universal behaviour terms such as *time out* not to be translated. The terms should remain unchanged while the explanation on the concepts could be done in the participants' own cultural language.

### **Readability of Materials**

Based on the cloze test data, the Group 2 participants scored a mean score of 28%. This would indicate that the materials were not at the participants' comfortable reading level. Based on the scoring table by Rye (1982) as cited by Bertram (2006), the participants were reading at a frustration level. According to the participants, they all had no problems reading the words in the materials and they could understand the individual meaning of the words used in the materials, but not when taken as an entirety. They suggested that their understanding of the materials were affected as they found some of the words used in the translation uncommon and inappropriate for the context they were used for.

### **Readability was affected when words were out of context**

The input provided by the Malay Professionals was mainly on the words used in the translated materials. There were words that they found inappropriate and there were words that they found to be used out of context. Similarly the Group 2 participants had difficulties reading the translated materials because they found some of the words used in

the translated materials unfamiliar and some they found to be inappropriate. The pilot Signposts facilitator had also identified several words that she believed were uncommon (not used in daily conversation) and some were not accurate for the context they were used for.

***Readability was affected when uncommon words were used***

Some of the words that the participants (from all three participant Groups) said were not familiar to them or not commonly used were words that were usually used in formal contexts such as in formal official documents and not words that were used in regular conversations. The words were; *melepa, wujudkan, pematuhan, sukar, mudah* and *pengtakrifan*. The more common words used in informal context and in conversations for the words mentioned above would be *menyapu, mengadakan, mengikut arahan, susah, senang* and *memberi huraian*.

There were some words that were commonly used in the Indonesian language. These words were thus uncommon for the Malay participants who were mainly Singaporeans. They could not even comprehend some of these words. The words were; *ketakbergantungan, pematuhan, kebarangkalian, mandiri, mengerti, and diomeli*.

There were also some words that could not be found in the traditional Malay language. These words are now in the Malay dictionary but the words were originally derived from the English language. The participants had found these words difficult to understand as they were not commonly used in their everyday language too. Examples of such words were; *tanda rait* (marked right), *penjagaan respit* (respite care), *pujian berlabel* (labelled praise) and *bantuan fizikal* (physical assistance).

### *Words that were contextually inappropriate*

The pilot Signposts facilitator was rather confused reading some of the translated materials and had to refer to the original English version. This was because some of the words used in the translation were not contextually appropriate and as a result the words changed the original meaning of the content materials.

Difficulties in understanding the translated materials were reported when the content materials were literally translated. The literal translation at times did not hold the same meaning as the original materials. For example, the phrase *weakening undesirable behaviour* was translated to *melemahkan tingkah laku*. The Signposts facilitator had some difficulties explaining this phrase because the literal translation was not appropriate. The word *weak* in this context, meant to reduce or lessen the occurrence of the identified behaviour. The Malay literal translation had meant, to make the behaviour less strong. In this context the appropriate phrase would be *mengurangkan tingkah laku*.

The behaviour term, *planned ignoring* which was translated to, *pengabaian terancang*, did not hold any significant meaning in the Malay language. It was the explanation and examples to illustrate the concept that had helped the pilot Signposts facilitator to facilitate the understanding of the behavioural concepts to the participants. The term *time out* also had no significant meaning after it was translated to Malay. The translated term would have the meaning, *rest time*. This would utterly change the meaning of the term and as such might alter the readers' understanding of the *time out* concept.

There were a few other words that the participants could not understand because they were literally translated and the Malay translated words held no significant meaning. One of them was the translation of the word *privileges*. The participants could not relate to this word. The Malay word *keistimewaan* was used to translate the word privilege. They

had difficulties understanding the word *kekuatan kemahiran* which was used to translate *strengths*.

The other translated words that the participants could not understand were the behaviour terms such as *permanent product*, *trigger*, *strengths* and *labelled praise*. Although they could not understand the translated words, they could understand the concept and teaching of the concept. There were no words in Malay that could be used to directly translate these terms and so perhaps with regard to such behaviour terms, the original term in the English language should remain but the explanation and teaching of the terms and concept should be in the Malay language.

There were also some phrases that were literally translated and ended up being a string of words that did not make much meaning to the whole text. The sentence structure was awkward and as such the readers had difficulties understanding the content of the text. Examples of such phrases were; *all the time during most of the days* and *planned activities routine*. Another example was *a less high risk situation* which was translated as *keadaan risiko yang lebih rendah*. It would have been more appropriate to translate it to *pada keadaan yang kurang mencabar*. The meaning of the phrase is *at a less challenging situation*. This phrase would hold the accurate contextual meaning of the English version of the text and it will be easily understood by participants. Khalaila (2013) who did a study on translating English language medical questionnaires into Arabic, found that words should be translated conceptually and not translated word-for-word. The meaning of the translated words might change if it was translated word-for-word.

Most of the recommendations suggested for change by the Malay professionals from Group 1, were words that they thought were literally translated and did not relay the intended meaning of the phrase or content material. Several pages of words that were

contextually and literally inappropriate were put up by the Malay professionals. Among others, they thought that the phrase *eye contact* was inappropriately translated. The phrase was translated as *hubungan mata*. This is a correct literal translation but the meaning of this phrase would be *eye relationship*. There would be no Malay words that could be used to directly translate this phrase but a set of words to explain the phrase would perhaps be needed to replace the phrase. Another example was the phrase *a good head with figures*. It was translated to *kepandaian dari segi angka*, which would mean *skills with numbers* in English. This translation was correct but culturally the more commonly used phrase to be used for skills with numbers would be *pandai dalam kira-kira*. In this phrase, if *kira-kira* was literally translated to English, it would mean *counting*.

### **Cultural Differences**

Although the participants were able to understand most of the examples found in the text, there were some which they could not relate to. These were examples which they believed were culturally inappropriate or not relevant to the Malay Singaporean context. One example was when the game *pokies* was mentioned. The participants from all the three groups did not know the game. This is a game which is not played in Malay homes in Singapore. In Module Two, in order to illustrate the concept on identifying behaviour triggers, the example given was that a child would ask for food when he saw the *Golden Arches*. The phrase *Golden Arches* was literally translated and none of the participants in Group 2 could understand the phrase. This is because the restaurant is commonly referred to as *Mcdonald's* in Singapore. In order to avoid this confusion and to avoid the issue of using of a company's trademark name in a printed text, it should be replaced with a common food shop found in Singapore such as the *Bubble Tea Shop*. (Bubble Tea is popular in Singapore and there are many shops selling this drink in public places).

Another example that the Group 2 participants could not relate to, was when there was reference made to famous people such as *Dawn Fraser* and *Fred Astaire* in the module booklet. They were Australian and American personalities respectively, whom they did not know about. They had instead suggested for these names to be replaced with the names of Malay personalities who were known in the Malay region such as *Fandi Ahmad* (a famous local footballer) and *Siti Nurhaliza* (a famous Malaysian singer). These two personalities are known in the region by many Malays in Singapore, Malaysia and Indonesia.

There were also examples found in the text which the participants understood and knew of but they felt were culturally not relevant for the Malay community. They had suggested for these examples to be changed to examples that were more relevant to the daily lives of the Malay families. This was helpful input because when relevant cultural examples are used, greater engagement of the participants could be achieved through the program materials. Castro et al. (2004) had found this to be true through their research. They found that participants were more responsive and receptive when the intervention provided to them was culturally relevant to them. They were able to understand the content teaching well when the materials were matched to their readability and met their needs well. This could especially be achieved when examples from the cultural group's everyday routine were used in the program materials.

In Module Two, one of the examples for the teaching of measuring behaviour was on the behaviour of breaking windows. The participants said that this is a behaviour that does not happen in the Malay homes as most of the Malay families live in flats where the windows are far from the children's reach. Some of the children's activities mentioned in the text were also found to be culturally not relevant. These were playing on the trampoline and playing basketball. It is not common to find a trampoline in Malay homes as there is

often limited space for such an item to be stored in their flats. The participants had advised not to use the example of children playing basketball because they said that their children do not play the game and it was uncommon for Malay boys to play basketball. The game that most Malay boys would usually play was soccer.

In Module Two, the word *swear* was used and this was translated to the word *sumpah*. This was a correct translation of the word however one of the Malay professionals said that culturally the word *swear* was not appropriate. The Malay community hardly uses this word as it is considered as crass. In the Malay culture as mentioned earlier, the need for talking nicely with *adab* is an unspoken rule which is influenced by *adat*.

In Module Five, some of the things that participants were taught were the strategies on how to teach children new skills. One of the examples used in the module was how to teach a child to operate the lawnmower. The Group 2 participants said that this was a machine that not only their children have never operated, they, as adults had never operated one too. One of the participants said, “this is a Caucasian culture”. Since they all lived in flats, there was no use for such a machine. One other example illustrated in the module was teaching a child how to put on a jumper. The participants found this not relevant, as their children did not wear jumpers. They had instead suggested for this example to be changed to the example of teaching a child how to put on a shirt. Although the shirt is not a cultural costume, it is a piece of clothing that is commonly worn in the Malay family life context.

Some other examples which the participants found to be uncommon in the Malay family were, teaching a child how to bake a cake and how to wash their own shoes. These were examples which they said were culturally relevant but these were activities which were mainly done by the mothers and that they do not teach young children to do these



activities. Participants from Group 1 and Group 3 however did not find these examples as culturally inappropriate. Thus it may not be a general cultural issue but rather a culture specific to some families. Some of the participants from Group 1 shared that teaching children to bake a cake is an example that could be well related to. Nevertheless the opinion from the Group 2 participants was deemed more pertinent because the target audience for the Malay Signposts program would be participants having a similar family background to the Group 2 participants.

### **Recommendations by Participants**

The participants recommended for the text readability to be made better by using words that were simple. The language used in the text should be kept basic so that the audience would not have difficulties reading them. The Group 2 participants suggested for colloquial language to be used. Words that were common and used in the everyday language would aid their understanding of the content material.

One of the participants in Group 2 said that, if she were to read materials that used the common everyday language, she would “feel touched”. This indicated that the materials play a part in engaging the participants. When they are able to relate to the content teaching, they would feel some sense of emotional bond to the program. Another participant said that it would be the same feeling as reading a novel where there was some form of emotions related through the words in the novel. Some feeling words were suggested to be included in the text too. The participant also said, “when everyday language is used, it would be the same experience as having a conversation with another person”. The language that people use in a conversation, would be similar and common to them and thus they would be able to reach out to each other well. The participants seemed to feel that the program is personalized and able to better meet their needs when everyday language is used for the Signposts materials.

Another recommendation made by the participants was for the examples used in the text to be culturally appropriate for the Malay families. They said that this would further facilitate them in the understanding of the materials. They asked for examples of the everyday things that they do at home. For example in the teaching of new skills, instead of teaching a child to operate a lawnmower, they suggested other skills such as ironing clothes or clearing the table after meals. The participants had also suggested for the examples and teaching of the concept to be put in the local context as much as possible. For example in the teaching of time out, participants were taught to find a suitable room for time out to be implemented. They said that this was not relevant because they lived in flats where all the rooms were used up and that there was no suitable room that they could prepare just for time out. They thought that it would be more relevant if they were instructed to prepare a space in the house for the purpose of time out. One simple feature that they thought would make the materials more culturally appropriate was for the names of the people in the stories to be changed to local names.

One of the Group 2 participants had suggested that the content materials be laid out in point form. She was of the opinion that the content teaching would be laid out in a straightforward manner if it was laid out in point form. Another participant supported her recommendation but she had also wanted the current text in prose, to remain. She said that they would refer to the prose text for further details and explanation of the content teaching which are laid out in point form. The pilot Signposts facilitator also had the same recommendation. She believed that the text would be better understood when they are laid out in point form or bulleted form. She said that the content teaching should be less “wordy”.

The Group 2 participants said that the font used also “played a part” in facilitating their understanding of the content materials. There were some portions in the text that were

in bold as these were the key teachings in the text. One of the participants felt that this was visually too overwhelming and tiring on the eyes. The text in bold had turned her off from reading the materials. This had thus affected the participant's motivation to read the materials.

The pilot Signposts facilitator thought that Module Three was generally easy for the participants to understand because the examples used were clear and the flowcharts in the booklet had helped the participants in understanding the theories taught in that module. This indicated that using visuals to illustrate the content teaching would further reinforce the participants' understanding of the content teaching.

## **Discussion**

The review done by the different groups of participants had provided various perspectives on the readability and cultural appropriateness of the translated materials. The participants came from varying social backgrounds and as such, their input would be influenced by their differences in worldviews. As Mutalib (2012) had said the Malays are, "Like other ethnic Singaporeans, different segments and classes of the community experience different types and degrees of problems and challenges in their life pursuits, which are perhaps magnified in a city-state that has fully embraced globalization" (p. 4). The participants thus provided a good representation of views from the Malay community.

The data gathered were to help with answering the research question on whether the Signposts program, which is Australian based and written in the English language, can be effectively translated to the Malay language. The data had provided the ideas on what would be the process to undertake in effectively translating the Signposts program to the Malay language. It informed on how the materials could be translated contextually

appropriately so that participants can understand and benefit from the content teaching of the program. It also gave the answers on whether cultural adaptations to the program materials were needed. The data provided significant implications on the revision and changes to be made to the translated program materials.

Through the data gathered it was evident that other than translating the Signposts program materials, cultural adaptations to the materials is essential so that the participants could be better engaged and they could better relate to what was taught through the program. The suggestions given by the pilot group participants on the stories and examples in the Signposts materials had provided strong evidence that cultural adaptation in this process is necessary. However it was observed that most of the suggestions and changes that the participants made were not unique to the Malay population in Singapore. Most of the suggestions of stories and examples to be used are culturally appropriate for the whole population in Singapore. The suggested stories and examples are thus culturally appropriate for the Singaporean context as a whole. This could be because the Malay families are living in an urban setting and thus the daily examples they had given were daily urban living examples, which were applicable to all in Singapore. A likely reason why not many examples unique to the Malay life were suggested could be because the examples used in the Signposts materials, mainly did not clash with the Malay *adat* and religion.

Another possible reason why the participants had suggested stories and examples which were not exactly unique to the Malay population could be attributed to the fact that the Malays in Singapore were well integrated in Singapore's multi-racial community. Singapore experienced racial riots in the 1950s and 1960s. Following these crises, the Singapore government had decided to introduce policies to foster integration between the different ethnic groups in Singapore. The Singapore government had prevented the

formation of ethnic enclaves. Policies that ensured that there was a mix of races in every block of flats of the public housing were introduced. In 1989, the Singapore government introduced the Ethnic Integration Policy where there were quotas set for the flats in the public housing. There were permissible quotas set for the different ethnic groups to own the flats in a particular block of flats and in a particular neighbourhood (Ooi, Siddique, & Soh, 1993). Britain's Minister for Faith and Communities, Sayeeda Warsi visited Singapore in April 2014 and she said that Singapore had integrated well and that the people of different ethnic groups could live together in a harmonious environment and at the same time retain their ethnic identities and religious beliefs (Straits Times, Apr 25, 2014). As such the family life and daily living activities that the Malay families in Singapore have is not much different than the daily living activities in other ethnic families in Singapore. Since the families live in urban cities, there would thus be some similar daily activities that take place in the homes of the Singaporean families with the daily activities that other families in other urban cities experience. This was however a hypothesis that was not further probed into and this would be an area for further research. Nevertheless cultural adaptation is still needed to better meet the needs of the target audience.

The data gathered from the participants had also proved that a culturally adapted program would be able to resonate well with the cultural participants and thus it would increase participant engagement. This suggests that a culturally adapted program would lead to better participation rate and retention. This would be another area where further research could be done. Participants' attendance, retention and satisfaction could be measured for the future runs of Signposts program conducted in Malay. The data collected could be used to assess whether the translation and cultural adaptation of the program had an influence in the participant's participation rate, retention and satisfaction.

## Recommendations

From the data gathered, several recommendations were suggested. The factors to consider to ensure effective translation of an EBP:

- 1) Not all the behaviour terms need to be translated but the explanation of the terms has to be done in the cultural language
- 2) Translate the materials contextually and appropriately (the detailed processes are further explained below)
  - a. Discussions and dialogues with translators to be conducted to ensure that translators have good understanding of the Signposts content
  - b. A list of glossary containing recommended words, stories and examples to be given to translators
- 3) Use stories and examples which were culturally appropriate (these adaptations on the materials are to be made by the project coordinators before the translation process starts)
- 4) Use common/colloquial language that is understood by all,
- 5) Keep the sentences simple
- 6) Include some words or stories that participants could relate to emotionally
- 7) Consistently use the same words to describe a specific term throughout all the program materials
- 8) Make the words in the text visually pleasing; use adequately sized fonts (at least font size 12), only bold the headings
- 9) Have visuals such as flowcharts to illustrate the content teaching
- 10) Have the content teaching summarized in point form. This is in addition to supplement the prose text

The input from the reviewers will be used and changes to the translated materials will be made accordingly so as to improve the readability and cultural appropriateness of the Malay Signposts program materials. Continued revisions of the materials should be made, with more feedback and input received from participants of the Malay Signposts programs and professionals who will be involved in the delivery of the program in the future. Douglas and Craig (2007) were of the opinion that a translation process should be iterative until a satisfactory set of materials was produced. To date there had not been any formal documentation or research done on translating an English language EBP to the Malay language. Thus the suggestions from the research could fill this gap. The suggestions will be used to formulate a process that could be used to effectively translate an EBP to the Malay language.

Translating English to Malay is not a simple process. The sentence structure in the English language is different from the structure in the Malay language. It would not be possible at times for phrases or sentences to be directly translated because the syntax and grammar of the English language and the Malay language are different. Sechrest et al. (1972) said that this problem would arise because every language has its own grammar and syntax rules. This problem of not being able to achieve equivalence in terms of grammar and syntax would occur when there were long phrases and sentences to be translated. As such when English materials were translated to Malay, other than using the appropriate words for the translation, the sentence structure would also need to change so that they did not sound awkward. This will also facilitate the readers' understanding of the content materials.

Based on the data gathered, most of the time, the difficulties in understanding the materials arose because there were no equivalent words to translate the English words/term to the Malay language. Baker (2011) suggested several solutions that can be used to tackle

this translation problem. The words that were to be translated in Signposts were usually lexicalized in a different way in the Malay language and for this, Baker had suggested for the translation to be done by paraphrasing it with an associated word. In other times the words that were to be translated to Malay were not lexicalized at all in the Malay language. In this situation, one suggestion that Baker had was for the translation to be done by paraphrasing the word or sentence by first unpacking the meaning of the word and using unrelated words to fit the meaning of the word.

Based on the literature review findings discussed earlier, the steps that were proposed to be taken to ensure the effective translation of the Signposts program materials could be further improved for future projects of translating Signposts program materials for other cultural languages. The data gathered from the participants, therefore validated that the steps suggested could be used to ensure the readability and culture appropriateness of the translated program materials however more steps into the process would need to be included to further ensure that the materials are contextually and culturally appropriate. The additional processes suggested is further explained below.

**Translation of the program materials to the Malay language.** The translation of the program materials should be done by professionals who are well versed in both the English and Malay language. Since the program materials contained theories on behavioural psychology, it would be helpful for the translators to have some background knowledge of the behavioural theories so that the words would be translated in the right context. Some information and background of Signposts was provided to the translators as well as some suggested changes to be made on some of the examples in the text so that the materials could be contextually and culturally appropriate. However this information proved to be insufficient and more discussions and dialogue should be carried out between the project coordinator and the translators. The discussions and dialogues are to provide



the translators with more understanding of the Signposts content, which had to be contextually appropriate, especially the teaching on the behavioural terms and principles. As discussed, some universal behavioural terms, such as *time out* should not be translated. Only the explanation and teaching of these universal behavioural terms and concepts would be done in the cultural language. There were also some suggestions of cultural adaptations given to the translators but some of the suggested adaptations were not made materialised through the translation process and it would also not be fair to expect the translators to make the cultural adaptations, as this was not their primary role. As such the cultural adaptations should be made to the materials by the project coordinators before the translation process took place.

The input provided from the reviewers (Group 1, 2 and 3) on the recommended words, stories and examples would be compiled as a glossary that could be used when a future English EBP is to be translated to the Malay language or when the Signposts program is to be translated to other cultural languages in Singapore. This glossary will be provided to the translators as reference to aid the translation process. This would help to ensure that the words are translated in the correct context and appropriate words are used. To have this glossary list, had already been suggested by Acquadro et al. (2004) as cited in Symon et al. (2013). This list was however not developed and used for this project and it had proved to be a needed tool to aid the translation process.

**Pilot run of the translated materials.** This process was necessary, as the pilot group participants might be assumed to have provided the same response to the Malay translated materials, as would other future participants of the Malay Signposts program. The profile of future participants for the Malay Signposts program would assumed to be similar to the participants from the pilot Malay Signposts program. It would thus give a good evaluation on whether the materials were meeting the needs of the target audience.

Their feedback would also indicate whether the materials had been useful tools that would eventually be helpful for the target audience. Therefore the program materials would not become white elephants, which the participants would not use after completion of the Signposts workshop. Furthermore if the program and program materials were found to be irrelevant to this group of people, compliance and acceptance of the program would be reduced. As Lau (2006) said, when social validity was lacking in the content and procedure of an intervention program, the people would reject the program even though the program was found to have good outcomes.

**Reviewing the cultural appropriateness of the translated materials & Ensuring the readability of the program.** As discussed in the literature review, back translation will not be the best process to ensure that the translation of the English Signposts materials to the Malay language was done effectively as it will not be able to verify if the materials had been translated contextually and in a culturally appropriate way. Carrying out the *Cloze Test* with the target audience of the program would give some indication on the readability of the program materials. It was from the Cloze Test that the translated Signposts materials were found to be not at an appropriate reading level for the targeted audience. More information on struggles in reading and comprehending the materials were gained through the qualitative data gathered from the various groups of research participants. Therefore it was more effective to ensure the readability and cultural appropriateness of the materials by having the materials reviewed by various groups of the cultural speakers. Through this process, concrete information on what affected the readability and comprehensibility of the participants were gathered. Acquiring input from professional reviewers who are well versed in English and the cultural language, on the linguistic aspects and cultural appropriateness of the translated materials is a process which McGreevy et al. (2014) called *negotiated consensus*. They believed that having the input

from a group of professionals from varied fields would provide different perspectives on the translated materials. However the downside to the process implemented by McGreevy and colleagues (2014) was that only input from professionals was attained and input from people of the target audience was not attained. As such having feedback and input from the pilot group participants provided the balance. Thus engaging various groups of participants as done in this research provided good and balanced input on the translated materials.

The input and recommendations gained from the research participants would help to ensure that the translated materials could better meet the needs of the Malay community. As Allen et al. (2007) said, when an EBP was culturally adapted, considerations should be made to ascertain that the language was culturally appropriate and the stories and examples illustrated were culturally relevant. They also said that the examples of inappropriate behaviour used in the materials had to be culturally relevant.

**Ensuring the fidelity of the EBP.** In translating the Signposts materials, it would be crucial that the fidelity of the program is not affected. The fidelity of the program has to be maintained so that the program participants will continue to achieve positive outcomes from the program. The best way to ensure the program's fidelity is to consult the program developers. They could advise on the things that have to be maintained in the program. They should also be consulted on whether the changes to be made through the translation process are acceptable.

**Effective communication lines to be established.** The essential component in the whole translation process of the Signposts program materials was the input and feedback from the various groups of people involved in the process namely the project coordinator for the translation of the Signposts program materials to the Malay language, the researcher, the program developers, the translators and the review groups. As such in order

to ensure that the process is smooth, good communication lines should be established and regular discussions should take place between the groups of people. The project coordinator and researcher would need to work closely so that the recommendations and changes of the program materials can be discussed, executed and implemented well. The reviewers should have a main point of contact to facilitate the exchange of input and feedback. The suggested person to manage the reviewers will be the researcher so that the collection of data could be well executed. As for the translators, the project coordinator would be the suggested person to work with them. The project coordinator can monitor the timeline for the translation work to be completed. The program developers should have regular discussions with both the project coordinator and the researcher of the project so that all parties will be able to ensure the fidelity of the program.

### **Limitations of the Research**

In selecting the participants for the review of the translated materials, there was no formal measurement of the participants' language proficiency. It would be good to establish the participants' proficiency in both the English and Malay language. This will be one way to ascertain that their input on the translation strengths and weakness was valid. There was also a lack of representation of male participants. Future research should include more male participants so that the findings can reflect a more generalized perspective from the cultural group as a whole.

The data gathering process would be better organized if they were collected in phases. The review by professionals could be gathered first and changes on the translated materials made based on their review. The amended materials will then be used for the running of the pilot program. In this way, the pilot participants could also provide their comments on the changes that were recommended by professionals. More feedback could then be gathered from the participants of the pilot group and the program facilitators. Their

feedback and input would be collated and further changes would be made to the program materials. All the other steps to the process of translation and adaptation of the program materials will be retained as discussed above.

### **Recommendations for Future Research**

Once the confirmed translated program materials were produced and used, there should be a measure of the outcome of the program run using the confirmed materials. A similar research to that was done by Hudson, Cameron, and Matthews, (2008) and the research done by Yap et al. (2014) should be carried out when the translated Malay Signposts materials were confirmed and delivered to the Malay-speaking participants in Singapore. The results gathered could be compared with the two previous studies to examine whether the Signposts program carried out in the Malay language produced similar positive outcomes as the Signposts program carried out in the English language. The outcome from such a research would also further inform on whether the fidelity of the program had been affected by the translation process of the program materials.

## **Conclusion**

The responses from the participants had indicated that the Signposts program was relevant for the Malay community in Singapore. In translating an English EBP to another cultural language it will be necessary to also do cultural adaptations of the program materials. As such culturally adapting the Signposts program for the Malay population would establish social validity and ensure that the program can reach to participants who were mainly Malay speaking. The recommendations that were gathered through the research could also serve as the guide for the Signposts program or an English based EBP to be translated to other cultural languages. In this way, the recommendations from this research would increase the social validity in providing evidence-based interventions for participants who are cultural language speakers.

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## **Appendices**

### **Appendix A Guidelines for Reviewer of Signposts materials (Malay professional)**

#### 1) What to do when reviewing the translate Malay Signposts materials

- Pretend that you are a parent/caregiver who is dominantly Malay speaking reading the materials
- Suggest changes
- Provide your thoughts on the materials
- Edit the grammar and vocabulary

#### 2) What to look out for when you review the materials

- Awkward expressions
- Incomprehensible messages/information
- Culturally inappropriate stories/examples used
- Are there any Malay words that are more appropriate than what was used
- Those who are trained in the behavioural theory; please comment if the behavior theories had been conveyed clearly in the translated materials

#### 3) If you are to rate the translation of the Session materials; 1 being poor and 5 being excellent. How would you rate it and why?

## **Appendix B Questions for the Focus Group Discussion**

- 1) What are your thoughts about the translated Signposts materials?
- 2) How did you feel reading the Signposts materials in the Malay language?
- 3) Did you find the program materials easy to understand? Please give reasons for your answers.
- 4) Were you able to relate to the examples and stories found in the program materials? (Facilitator will read out the stories and examples used in each module)
- 5) Were there words and expressions that you could not understand?
- 6) Were you able to relate to the terms used in the program:
  - a. Telephone test
  - b. Duration count
  - c. Frequency Count
  - d. Permanent Product
  - e. Trigger, Behaviour Consequences
  - f. Strengthening Desirable Behaviour
  - g. Planned Ignoring
  - h. Labelled Praise

- i. Access to favourite activities/treats
  - j. Time-out
  - k. High Risk Situation
  - l. Planned Activities Routine
  - m. Teaching By Showing
  - n. Step By Step Teaching
  - o. Teaching By Modelling
- 7) Did you find the program materials useful?
- 8) If you are to rate the translation of the Session materials; 1 being poor and 5 being excellent. How would you rate it and why?



- 4) Did you have any difficulties using the materials in your presentation of the content in:

Module 1:

Module 2:

Module 3:

Module 4:

Module 5:

- 5) If you are to rate the translation of the Session materials; 1 being poor and 5 being excellent. How would you rate it and why?

- 6) Do you have any other suggestions to improve the materials so that it is culturally appropriate for the Singapore Malay population?

## Appendix D Cloze Test

### Meningkatkan kemahiran menyelesaikan masalah keluarga anda

Semua keluarga menghadapi masalah \_\_\_\_\_ berkaitan dengan kehidupan seharian. \_\_\_\_\_ daripada masalah ini diselesaikan \_\_\_\_\_ mudah; contohnya, apabila memutuskan \_\_\_\_\_ untuk makan malam atau \_\_\_\_\_ yang perlu dilakukan apabila \_\_\_\_\_ seorang anak mendapat selesema. \_\_\_\_\_ am, keluarga semakin cekap \_\_\_\_\_ penyelesaian segera kepada masalah \_\_\_\_\_ kerana mereka kerap berlatih \_\_\_\_\_. Dalam kes-kes ini, proses \_\_\_\_\_ penyelesaian dilakukan hampir secara \_\_\_\_\_ dan sebahagian besar penyelesaian \_\_\_\_\_ didapati berkesan.

Terdapat masalah \_\_\_\_\_ yang perlu difikirkan dengan \_\_\_\_\_ mendalam kerana masalah ini \_\_\_\_\_ baharu dialami oleh keluarga. \_\_\_\_\_ itu, penyelesaian untuk masalah \_\_\_\_\_ tidak datang secara automatik \_\_\_\_\_ memerlukan lebih banyak masa, \_\_\_\_\_ dan pemikiran yang teliti. \_\_\_\_\_ yang baik untuk masalah \_\_\_\_\_ ialah apabila keluarga mengalami \_\_\_\_\_ ibu/bapa yang hilang pekerjaan, \_\_\_\_\_ keluarga perlu berpindah, apabila \_\_\_\_\_ perlu bertukar sekolah atau \_\_\_\_\_ membuat keputusan mengenai urusan \_\_\_\_\_ tinggal untuk ibu/bapa yang \_\_\_\_\_ uzur. Dalam keadaan ini, pemikiran \_\_\_\_\_ lebih mendalam perlu untuk \_\_\_\_\_ penyelesaian yang memenuhi keperluan \_\_\_\_\_ ahli keluarga.