Impact of Barney and Friends Programme on Social Skills among Early Childhood.

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ABSTRACT

Television is a world full of images. Various programmes are designed specifically for children whether it is educational programme or not, and these programmes are keeping pace with the development around the world. Children at early childhood phase are normally interested in television programme that give them entertainment and joyful. Educational programmes like Barney and Friends, is an example of the favourite tv programme amongst the children of this age group. The purpose of the study was to examine the impact of Barney and Friends programme on social skill among children at early childhood. A total of 40 children aged between 24 months and 42 months were selected from several kindergartens around Indah Permai residential area, Kota Kinabalu, Sabah. This research employed experimental design within and between subjects with pre and posttest group design. In this study, the children were allowed to watch two series of Barney and friends programme. Data were measured using Social Skills Checklist. Results showed that the Barney and Friends programme had no significant impact on social skills of children at early childhood.

Keywords: Educational Television Programme, Social Skills, Early Childhood
INTRODUCTION

Children will start to pay attention to the media, especially television from the beginning of their social skills process by age three, 95 percent of children start watching television programmes specially designed for them, more than the time they spend in play (McCall, Parke and Kavanaugh, 1977). Television plays a positive role in the development of young children’s creativity and imagination. Children start telling what they watched in the show based on their imagination and creativity (Crunco and Pezdek, 1984). According to Valkenburg (2001) children use television content in their imaginative play.

Inspiring, entertaining, making learning fun and innovative are words to describe the type of programmes children need in their television programme (Alexander, Hoerrner and Duke, 1998). The sign when a child likes something is they do it repeatedly. Findings by Bickhman, Wright and Huston (2001), showed that children who watched educational programmes in the pre-school age (two and three years old) had higher scores when they were five years old in language, mathematics and also in reading. Beside positive impacts, watching television can have negative impacts too. It may increase violence and aggression, fears, anxieties and perceptions of danger among children (Cantor, 2001; Bushman and Huesmann, 2001).

Children are more likely to learn when they watch the programme and watch it regularly (Stipp, 2003; Fisch, 2004). Many studies report that cognitive development and social skills can happen among children when they start to be exposed to educational television programmes from early childhood (Singer and Singer, 2001; Fisch, 2004; Berk, 2009).

Research Problems

Today, as we can see, television plays an important role in early children’s lives and socialization. Television is the national hearth. In some homes it is a steady backdrop from morning till night. Many families arrange their schedules, their meals, their conversation, and even their furniture around the television set. Children will learn and explore the world through television. Television can also be considered as taking over the care of the early child. This is because according to Singer and Singer (2001), in early childhood, children spend more than three hours per day watching television.

Nowadays, in America, most children in early childhood spend more than 18 hours per week watching television (Jordan and Woodard, 2001). Meanwhile in Japan, according to Kodaira (2001), children spend more than 17 hours per week to watching television especially in primarily commercial television. Children in Malaysia spend more time for watching television than children in America or Japan. Apart from that in Malaysia, Lastar (2011), found that children spend 3.3 hours per day and 23.1 hours per week watching television. This result showed that nowadays, children are more interested to watch television rather than take part in activities which could bring benefit to them such as doing school work, or reading. Television is one of the greatest educators ever invented. It influences the attitudes, behaviors, and values of viewers. Whether we intended it or not it is beginning before children can walk, talk, read, or write.

Hundreds of studies have shown that violent television programmes contribute to aggressive behavior and negative impact among viewers. Not all television programmes are the same and they do not all produce the same impact among viewers. Same as educational programmes and non-educational programme that children watch will have a different impact on children among early childhood. But if we believe that children can learn negative lessons from television, then it stands to reason that they can learn positive lessons, too. From the above findings, it is important that children should watch programmes which stimulate their overall development since they are spending long hours in front of television. So it is necessary to ascertain that programmers especially of educational television programmes include elements which facilitate their development in cognitive, social and academic improvement.
Therefore, in this aspect when children are exposed to a variety of television programmes, especially like Barney and Friends programme, it will most probably influence the growth of their social skills. However, this is yet to be proven. Furthermore, there is still not much information pertinent to the topic discussed. Realizing the concerns over television’s potential contribution to a broad range of positive or negative impact on children’s early childhood, a study is needed to answer several related research problems, namely:

1. Does watching Barney and Friends programme have significant impact between two group at pre assessment on social skills among early childhood?
2. Does watching Barney and Friends programme have significant impact between two group at post assessment on social skills among early childhood?

**Research Objectives**
The purpose of this research is to examine the impact of Barney and Friends programme on social skills among early childhood. Therefore the general objectives are:

1. To examine the impact of Barney and Friends programme between two groups at pre assessment on social skills among early childhood.
2. To examine the impact of Barney and Friends programme between two groups at post assessment on social skills among early childhood.

**Significance of the Study**
Children who grow up in the modern world today are directly exposed to the media. Modern world has caused the standard of family life also to become more advanced, and nowadays in large cities, half of the children have television sets in their bedrooms. In other words, bedrooms will be the media center for children (Dacey and Travers, 2006). Because a lot of time is spent by children in front of the television and using electronic media as one of the learning materials, it is important to study the impact of Barney and Friends programme on social skills of children among early childhood.

In this study, Barney and Friends programme was suggested to be shown to children in early childhood. Why Barney and Friends programme? Not others? This is because Barney and Friends programme is the most popular programme at this time (2007) before Upin and Ipin took over. Upin and Ipin were starting to appeal to audiences since 14th September 2007. The most important reason why Barney and Friends programme was chosen by researcher was to gauge this programmes suitability for children among early childhood in Malaysia. That is why in this research, researcher wants to find out whether television programmes especially Barney and Friends programme give impact or not on social skills of children in early childhood. Many studies show that educational television programmes have had a positive effect on social skills of children compared to non-educational television programmes (Fisch, 2004).

Based on Fisch (2004) above, by exposure to non-educational programme would be found to result in negative effects on social skills of children or that by watching educational programme such as Barney and Friends would result in positive effects can still explore with this study. Social skills of the children are very important aspects in the child’s development. Whether watching educational television programme has any impact on social development of the children is very important, considering the fact that children are spending long hours in front of the television. The result could give insights into the understanding of how influential Barney and friends programmes or non-educational programme in their social skills. The results can give new knowledge in the educational child development field. Teachers can select best educational programmes and implement them in their teaching curriculum in a better way.

Apart from that, identifying the impact of Barney and Friends programme on social skills of children in early childhood can help the researchers, parents and teachers or caretakers in kindergarten to select implement them in a more meaningful way. Moreover, this study hopefully can represent the finding as an educational phase for researchers in the field of education and development of children.
organizations, teachers, caregivers, parents, or others individuals who wish to study further on educational television and social skills among children in early childhood.

**Bandura’s Social Cognitive Theory**

Albert Bandura is the main creators of the Social Cognitive Theory. This researcher uses the theory because it relates to the development of individual behavior. This theory explains the type of behavior of deliberate human mind. This theory also states that behavior, environment and cognitive individual or individuals involved are an important factor in the development. Cognitive or individual refers to an individual’s character such as introvert or extrovert and belief that an individual can operate his or her experiences effectively. Meanwhile, cognitive or individual processes are like thinking and planning which emphasize the relationship between environment and behavior (Santrock, 2010)

Bandura emphasized the interaction between behavioral, cognitive or individuals and the environment. Behavior can affect cognitive or individual factors and vice versa. Individuals’ activities involved are able to influence the environment and the environment can influence human cognitive development and so on. Bandura stresses that cognitive process is linked with environment and behavior. For example, children might observe parents yelling in anger or treating other people around them and peers with hostility with no respect. Later child will act the same way and will showing the same characteristic as their parents. As we know, the child’s mind is clean and empty like a sponge that can absorb everything in front of them. Based on Now I know My ABC and Let’s Play School CD, Barney and friends encourage children to work together, love and do good while aiding friends and instill good values to be practiced in everyday life. At the same time the children will imitate all the values shown in this Barney and friends programme which are indirect positive values. In this study, the researcher was focus on observational learning also called imitation or modeling. This means social skills of children in early childhood will occur through observing what others do. The researcher assume that children in early childhood will imitate and learn the lessons which are included in Barney and Friends programme and this will affect their social skills.

**Research Hypothesis**

H₀₁: There will be no significant differences impact of watching Barney and Friends programme between two group at pre assessment on social skills among early childhood.

H₀₂: There will be no significant differences impact of watching Barney and Friends programme between two group at post assessment on social skills among early childhood

**Literature review**

Singer and Singer (1998) did a study on 121 preschool children related to the impact of Barney and Friends programme on social skills among early childhood associated with good behavior. The subjects mainly consisted of white people who are from middle-class families. The sample was divided into four groups. The first group watched 10 episodes of Barney and Friends’ series for two weeks with each of these episodes followed by the instruction that is designed to expand the knowledge found in the episode. The second group watched 10 episodes of Barney and Friends, but was not followed by the instruction. The third group only received their lessons without watching Barney and Friends series. The last group did not receive the instruction and did not watch Barney and Friends series, but only learned through their daily routine at school. Children were tested with pre and post assessments on their knowledge related to the Barney and Friends programme and social skill and good behavior. They found that children that been given both assessments of viewing a series Barney and Friends and the instruction got highest scores (12 points) compared to second group who only watched the series Barney and Friends who scored (10 points) and third group which got a score of five. Control group got only three points. It indicates that watching Barney and Friends can improve social skills and good behavior among children.
Children can achieve their social skills positively when they watch educational television programmes regularly. Latif and Yahaya (2004) found that children showed improvement in social skills, positive socializations and gender role knowledge while watching Sesame Street programmes regularly. Calvert et al. (2001) found that improvement in social skills among children in early childhood after exposure to educational television programmes. This study was conducted on 97 children in America. They used internet as a data collection tool to collect all the information about the sample. This study reported that educational television programme broadcasted by ABC, CBS, NBC and FOX gave information on social and emotional development. 75 percent of educational television programmes listed in this study showed that it had an impact on social behavior.

Impact of educational television programme among children was showed by Miller and Hengst (2001) who involved 32 children in Europe. The finding showed that the holistic development and social understanding of children based on their experience on listening from story and telling a story. This is related with the content inside the educational television programme which is Barney and Friends which tell stories to children based on the books. Some studies have reported that there was no improvement in social skills of children after watching educational television programme. This is supported by Zillmann, Bryant, and Huston (1994) who showed that children’s social perception will not grow when the children passively sit and watch television without learning anything.

Meanwhile studies were based on Cole, Arafat, Tidhar, Tafesh, Fox, Killen, Rey, Leavitt, Lesser, Richman and Yung (2003), who studied the impact of Rechov Sumsum/Shara’a Simsim: A Sesame street television series to promote respect and understanding among children living in Israel, the west Bank and Gaza. Three groups of samples were including in this research Israel-Jewish children, Palestinian-Israel children and the children from a Palestinian preschool. A total sample of 275 watched the Sumsum/Shara’a Simsim in Hebrew and Arabic language for four months. They found that there was no impact on social skills of children after watching the educational television programme.

METHODOLOGY

This research was experimental design within and between subject with pre and posttest group design. The subjects were measured on social skills. Both pre and post assessments were carried out on social skills of the subjects. Pre-assessment was carried out with Social Skill checklist (SSC) (Project DATA, 2004) for both experimental and control groups. This pre-assessment, (SSC) was carried out because of to measure the social skills of children. After pre-assessment, the children in the experimental group were exposed to educational television programmes daily in one hour sessions for 30 days.

Children in the control group were not exposed to educational television programme but were exposed to non-educational television programme such as Ultraman and Power Rangers. Both groups were undergoing regular teaching programme conducted by teachers in kindergarten. After 30 days, post-assessment was carried out by using same tools used for pre-assessment such as Social Skills Checklist (SSC) (Project DATA, 2004).

Sample
A total of 40 children within the age of 24 months (2 years) and maximum age of 42 months (3 years and 6 month) attending kindergarten, and of both sexes (18 boys and 22 girls) were chosen as a research subjects in this study.

Research Location
The kindergartens involved were Al-Hadhanah Kindergarten, Permai Ria Kindergarten, Ummi Kindergarten and Intan Gemilang Kindergarten, all of kindergarten is around Kota Kinabalu, Sabah, Malaysia.
Research Instruments
To measure social skills of the children, Social Skills Checklist (Project DATA, 2004) was used. This measurement was chosen by researcher to measure the social skills of children. This checklist has four sub scales, social play and emotional development, emotional regulation, group skills and communication skills. Teachers answered the questions by using four point likert type rating scale such as almost always, often, sometimes and almost never at pre and post-assessment. The Pearson r score for the inter-reliability of the instrument was found to be a very high (0.97). Two CD series of Barney and Friends were used in the present study. The series of the episode is Now I Know My ABC, and Let’s Play School. The episode Now I Know My ABC, it takes about 39 minutes viewing time. For Let’s Play School episode, the total time is 48 minutes and 28 seconds.

Research procedure
Informed consent was obtained from parents and the owner of the kindergarten before conducting the study. After getting the permission to do the research, pre-assessment was carried out with Social Skill Checklist (SSC) (Project DATA, 2004).

Children were systematic randomly selected into two groups: group E and group C. During pre-assessment, all the children were assessed with SSC. After finishing with SSC, researchers started to show the children in group E Barney and Friends programme CD 1 (Let’s Play School) for 15 days (one hour per day) and after that it continued with CD 2 (Now I know My ABC’s) for another 15 days (one hour per day). Meanwhile for control group (group C) were showed with non-educational programme. First 15 days, control group were showed with Ultramen for one hour per day and second 15 days with power rangers. Both treatments were taken for 30 days for one hour per day for five days (working days) directly from Monday to Friday. 30 days for the treatment with children in group E and C who were chosen by research because it is based on the study done by Singer and Singer (1998), in their study, they did 10 episodes of Barney and Friends. For two to three weeks they give the children watch the Barney’s one episode per school day. The episodes also were shown at the children’s day care centre, so that the children can view ensemble.

Duration for watching Barney and Friends programme and non-educational programme for both groups E and C for each CD was one hour. During the exposure of Barney and Friends programme and non-educational programme, was shown for 15 minutes then break for five minute and then continue again for another 15 minutes and break again for another five minute and start again for 15 minute showing the Barney and Friends programme and non-educational programme for children among early childhood. Researcher had to break for five minute every 15 minutes after showing Barney and Friends programme for experiment group and non-educational programme for control group because during the pilot study, children lose concentration and attention to focus and watch Barney and Friends programme. This was supported by Ruff and Lawson (1990), who mentioned that children in early childhood have attention span around five to 10 minutes. Meanwhile Benton and Nabb (2003) also stressed that child’s brain can only focus to do something for 10 to 15 minutes. It is because in human brain, the basal rate of consumption of the glucose content would be exhausted in 10 to 15 minute. All the procedure and the flow during the assessment were same for both groups.

Control group was exposed to non-educational television programme to see the effectiveness and the impact of the programme and also to make a comparison with both groups, as well as to see the outcome before and after the treatment given to the two groups. Children watched Barney and Friends programme and non-educational programme while sitting as a group. After watching Barney and Friends programme and non-educational programme for 30 days (both CD), post assessment was carried out with SSC again. The samples were tested individually in a quiet room in their kindergarten. All the results at pre and post assessment for control group and experiment group were analyzed by using SPSS V.18
RESULT

a. **Hypotheses H₀₁:**
There will be no significant differences impact of watching Barney and Friends programme between two groups at pre assessment on social skills among early childhood.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social skills</td>
<td>Pre</td>
<td>Experiment</td>
<td>20</td>
<td>228.65</td>
<td>44.19</td>
<td>.21</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>230.85</td>
<td>15.03</td>
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An independent sample t test was conducted to compare experiment group and control group at pre assessment on social skills among early childhood. Table above (1) showed the result at pre-assessment on social skills between two groups. Result on pre assessment showed that there was not a significant difference between experimental group (M=228.65, SD=44.19) and control group (M=230.85, SD=15.03), conditions; t (38) = 0.21 p=0.84). Based on p value the hypothesis stating that there will be no significant differences impact of watching Barney and Friends programme between two groups at pre assessment on social skills among early childhood was accepted.

b. **Hypotheses H₀₂:**
There will be no significant differences impact of watching Barney and Friends programme between two groups at post assessment on social skills among early childhood

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
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<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social skills</td>
<td>Post</td>
<td>Experiment</td>
<td>20</td>
<td>252.60</td>
<td>41.36</td>
<td>1.11</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>241.90</td>
<td>12.73</td>
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Table 2 showed the result of the impact of watching Barney and Friends programme between two groups at post assessment on social skills. An independent sample t test was conducted to compare the experiment group in post assessment and control group. On post-assessment, statistically there was not a significant difference noticed between two groups. Mean score for experimental group was 252.60, (SD=41.36) and for control group was 241.90, (SD=12.73) t value was 1.11, p was found as .28.

Based on p value the hypothesis stating that there will be no significant differences impact of watching Barney and Friends programme between two groups at post assessment on social skills among early childhood was accepted. Result showed that Barney and Friends programme had no significant impact on social skills among early childhood.

DISCUSSION

Social development is one of the development processes which enable children to interact with other people according to the way that can be accepted by society and culture. The hypothesis H₀₁ there is no significant difference impact of watching Barney and Friends programme between two groups at pre assessment on social skills among early childhood and H₀₂, there is no significant difference impact of watching Barney and Friends programme between two groups at post assessment on social skills among early childhood are both accepted. An independent sample t-test is conducted to compare the experiment group and the control group at pre and post assessment on social skills among early childhood. The result for pre assessment showed that there is no significant difference between experimental group (M=228.65, SD=44.19) and control group (M=230.85, SD=15.03), conditions; t (38) = 0.21 p=0.84). Meanwhile the result for post assessment showed that mean score for
experimental group is 252.60, (SD=41.36) and for control group is 241.90, (SD=12.73) t value is 1.11, p is as .28.

Based on the result for $H_1$ and $H_2$ showed that the Barney and Friends programme has no significant impact between groups. It means that social skills of the children among early childhood does not have any change after watching Barney and Friends programme between the two groups during pre and post assessment. This finding is consistence with other findings (Cole et al., 2003 and Zillmann et al. 1994). The manners and social behaviors which were shown in Barney and Friends are mainly suitable for western culture and may be not suitable in Malaysian context. This is the gap between the culture where Barney and Friend programme were created especially for western children and not for Asian children, so the social skills development of the children in Malaysia will not change after watching Barney and Friends programme. The way that people greet each other and gestures and postures shown in social interaction is different in Malaysia compared to western culture. This is another reason why social skills of children in early childhood are not impact after watching Barney and Friends programme.

Gottfried and Bathurst (1995) mentioned that environment around children especially at home where the child grow and how they interact with parents and others in family have significant impact on the social skills of children. Culture in Malaysia is different compared to western culture. According to Bandura’s theory (Santrock, 2010) environment can influence social skill of children. Other studies were also highlighted the fact that cross cultural variations may lead to less or no improvement in social skills among children after watching television programme (Cole et al., 2003). Meanwhile based on Cole, Arafat, Tidhar, Tafesh, Fox, Killen, Rey, Leavitt, Lesser, Richman and Yung (2003), the impact of Rechov Sumsum/Shara’a Simsim: A Sesame street television series to promote respect and understanding among children living in Israel, the west Bank and Gaza. Three groups of sample were included in this research such as the children from Isarel-jewish, the children from Palestinian-Israel and the the children from Palestinian preschool. A total sample of 275 and they watched the Sumsum/Shara’a Simsim in Hebrew and Arabic language for four months. They found that there was no impact on social skills of children after watched educational television programme.

The exposure of the programme was only for one month. Children may require more time to change their social skills which may be another reason for not showing improvements in social skills. After the children watched Barney and Friends programme, the researcher did not give a lesson to expand on the message of the episode. Singer and Singer (1995) found that child needs reinforcement, stimulation and encouragement from adult especially from the parents when watching educational television programme to improve children’s social skills and also their behavioral development. Singer and Singer (1998) found that children who watched Barney and Friends programme showed improvement in social skills especially when there was a follow up immediately by an adult such as parents or teacher who reinforces the programme content after they watched. The researcher did not explain the message of the episode which may be a reason for not showing improvement in social skills of the children.

Another reason could be that child’s social skills will not develop when the children passively sit and watching educational television programme without learning anything as suggested by Zilman et al. (1994). According to Piaget (1954), children from six to seven years old know how to play the game and know how to cooperate in game playing with friends but it does not occur in pre-operational stage. This could be another reason for not showing impact in social skills.

It is noticed that children who are up to the age of two years, the children were able to have been better imitation of behavior and could find hidden object after watching live models that the same models on television (Fisch, 2004). The explanation is that the children below age of three were able to learn better from live experiences rather than from television. The young children who in early childhood is unable to learn from television at all and the social skill was not give improvement. Television may be less effective than live interactions for the children in early childhood who are at
least for this age group. In this study, researcher used 27 children who are below three years old as samples.

The Implication of the Finding
Children are the assets of the country. It is important to take note that children would get influenced by what they see and what they hear. Therefore, activities to stimulate their social skills should be monitored and the learning materials should be appropriate and meaningful. Most of the children in early childhood in Malaysia are spending half of the day at nursery or kindergarten. They may spend almost 11 hours, starting from 7am to 6pm in kindergarten as their parents are working. Due to long hours spent in kindergarten, television programmes are used as a part as a daily routine in almost all the kindergartens. Therefore, teachers and day cares provider should be careful in selecting the television programmes. They should focus more on providing the programmes with educational themes that can help in achieving positive childhood development outcome. They can include educational television programme in their curriculum for the better output as it is shown in the present study.

Recommendation of the Study
The duration of educational television programme can be increased. In the present study, the exposure is only for 30 days. It is recommended that researcher should spend more time with the children and explain the content in detail. It would be better if the language of educational television programme is in their mother tongue.

Apart from that, it is suggested for the future research to look at other concept of development among the children in their early childhood such as in emotion development, creativity, and others. In this study, the researcher is only focused on the cognitive development of children. The future research could look into various developmental aspects.

CONCLUSION
There is limited research on Barney and Friends programme in Malaysia. For this reason, this study aims to explain the impact of Barney and Friends programme on the social skills among early childhood. The finding of the study indicates that Barney and Friends programme has no impact on social skills of the children. This study highlights the importance of educational television programme and the role of parents and teachers of the children in early childhood. So it important to choose what they watch on television screen and parents and teachers are the best people to choose the suitable programmes for them. The programmes should be interesting, meaningful, stimulating and enriching and suitable to the socio-cultural environment.

REFERENCES


