Comparing the phonological awareness of bilingual and monolingual pre-school children

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Abstract

The present study compared a pre-school Turkish-English bilingual child and an age-matched monolingual Turkish and monolingual English child in terms of phonological awareness to explore whether the bilingual child had an advantage over the monolingual children. The phonological awareness of children was tested through word recognition task based on initial phoneme identification. The results in this study revealed that the bilingual child had an advantage on the monolingual peers in terms of phonological awareness.

Keywords: Bilingual Studies, the Phonological Awareness, The Metalinguistic Awareness

1. Introduction

Research studies investigating the differences between bilinguals and monolinguals have come such a long way that the advantages and disadvantages of each one on another have been a subject matter being discussed so far. This controversy on the advantages and disadvantages of monolinguals and bilinguals on one another has found its way through different studies regarding diverse aspects of bilingualism. Metalinguistic awareness, which has been the focus of studies comparing bilinguals and monolinguals, has been considered one the precursors of the language development. The research studies on metalinguistic awareness of bilingual children have examined a variety of facets such as; morphological, phonological and syntactic awareness. However, among these facets the phonological awareness has usually been one of the corner stones for the literacy development not only in bilingual but also monolingual children (Goswami, & Bryant, P., 1990; Durgunoğlu et al, 1993; Wagner; Torgesen, & Rashotte, 1994; Durgunoğlu, 2002; Lefrançois & Armand, 2003, Lafrance & Gottardo, 2005). Studies report that the metalinguistic development of monolingual children and bilingual children differs in terms of rate and the manner (Bialystok, 2001). Bialystok (2001) reports that the term metalinguistic, which may also be considered as an umbrella term, can be referred to the knowledge, the ability, and the awareness in language development. However, metalinguistic development is considered as precursor of any other skill development such as literacy skill, vocabulary retention. Among the studies on metalinguistic awareness, the studies examining the phonological awareness have usually been connected to the development of literacy (Goswami, U. & Bryant, P., 1990; Durgunoğlu et al, 1993; Wagner; Torgesen, & Rashotte, 1994; Durgunoğlu, 2002; Lefrançois & Armand, 2003, Lafrance & Gottardo, 2005). The phonological processing of bilingual children is reported to be different from the phonological processing of
monolingual children. While being exposed to two languages, the bilingual children are required to pay more attention to the phonetic properties and as a result; they are assumed to develop higher levels of phonological awareness (Bialystok, 2001; Bialystok, 2002; Verhoeven, 2007).

Although a number of studies focused merely on the impact of phonological awareness on literacy development, the comparison of the phonological awareness between bilingual and monolingual children has been a subject to few studies in the literature. Rubin and Turner (1989) investigated the phonological awareness of the English speaking monolingual and French-English bilingual in French immersion programs. Thirty two children attending Grade I was tested through tests on reading and spelling tasks that included both real words and non-words. Both groups performed equally well at reading and spelling orthographically regular words and non-words. The bilingual children in the immersion program performed better at tasks on spoken words than monolingual peers, whereas monolingual children were better when reading orthographically irregular English words than bilingual peers. Yelland et al. (1993) investigated the impact of early bilingualism on the level of awareness in terms of vocabulary skills. The participants were kindergarten and Grade I students formed of a group of monolinguals in English and a group of bilingual English children, named as “marginal bilingual group”, who were attending Italian sessions for an hour each week. After attending Italian sessions for six months, the children were asked to make judgments about whether simple pictures depicted an object with a long name (polysyllabic) or a short name (monosyllabic). The results of the study showed an advantage for bilinguals. The study also revealed that the competence in the degree of the second language does not always reflect the degree of metalinguistic awareness development, and that the metalinguistic awareness resulting from bilingualism is not always an asset for high level bilinguals. Campbell and Sais (1995) examined the phonological awareness of 5 year old children. The children were monolingual English speakers and Italian-English bilinguals at least one of whose parents was Italian. They used four tasks in order to assess the phonological awareness of the participants. Those were a) detecting a mismatch in the initial sound of a set of words, b) detecting a mismatch in meaning, c) deleting morphemes from words and d) identifying letters. The bilingual children outperformed their monolingual parents in detecting a mismatch in the initial sound of a set of words, detecting a mismatch in meaning, deleting morphemes from words. But both bilingual and monolingual children did equally well in the letter identification task. The bilingual advantage on monolinguars was seen in three of the tasks.

The present study compares pre-school Turkish-English bilingual children and an age-matched monolingual Turkish and monolingual English children in terms of phonological awareness to explore whether the bilingual children have an advantage over the monolingual children. From this aspect, this study is distinct regarding the age and language background of the participants when it is compared with the similar studies in the literature.

2. Research Question

The purpose of this study was to compare a pre-school Turkish-English bilingual child and an age-matched monolingual Turkish and monolingual English children in terms of phonological awareness to explore whether the bilingual child had an advantage over the monolingual children. The study sought to answer the following question:

1. Do Turkish-English bilingual pre-school children demonstrate any bilingual advantage in terms of phonological awareness over their Turkish and English monolingual peers?

3. Participants

The present study was conducted with three children who were Turkish-English bilingual, Turkish monolingual and English monolingual. The participants were pre-school children attending different nursery schools in the region. The age of the children varied from 4 year, 4 months to 4 years, 5 months. In order to make a sound comparison, the number of the participants was kept equal with one participant in each group.

Altan is a 4:05-year-old Turkish-English bilingual child. Erin is a 4:03-year-old monolingual English child. Yagmur is a 4:04-year-old monolingual Turkish child.

4. Tasks
The research has shown that phonological awareness can be assessed by a number of tasks which demand different levels of difficulty. The tasks changing according the difficulty were listed by Yopp (1988). Any demanding task for the participants aged between 4 and 6 may be quite easy for the participants aged between 6 and 7. In order to assess the phonological awareness of bilingual and monolingual pre-school children in this study; word recognition task through the initial phoneme was used. In the development of task, the parents having children between ages 4 and 5 were asked to list the possible words which the children aged between 4 and 5 may know. The first list consisted of the words with different number of syllables and with different initial phonemes. The researcher found the pictures of these words and printed them out. In a group of three research assistants, the pictures were discussed whether they show what is intended to show. Due to the feedback from the sessions carried out in a group of researchers, some pictures were replaced with new ones. A week before the tasks administered to the children, the children were asked to name some pictures. This was done in order to see which words are known by the participants, and also to prevent the naming mismatches such as rabbit-bunny or sofa-couch. Word lists on two languages were prepared by the help of that picture naming done one week before the tasks administrated. The lists on each language had twenty tasks. Each task had four words, two of which were beginning with the same phoneme. The participants were asked to find the target word beginning with the same phoneme as control word. The tasks were tape-recorded and each answer given by participants was ticked in the chart as either right or wrong.

5. Procedure

Each participant was tested individually in one (for monolingual child) and two (for bilingual children) sessions each lasting approximately 30 minutes. The sessions were tape recorded. Every session was accompanied by either a teacher or an accompanying parent of the participants.

5. Results

In the present study, bilingual participant was given forty tasks; twenty in English and twenty in Turkish; whereas the monolingual participants completed twenty tasks in each task. Each task was analyzed individually and the overall result of the each participant was calculated based on the right answers. Without missing any of the tasks, three participants in the study completed all the tasks in tasks either in a correct or wrong way. However, the final results differed among three participants.

<table>
<thead>
<tr>
<th>Answers</th>
<th>Bilingual</th>
<th>Monolingual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Altan</td>
<td>Erin</td>
</tr>
<tr>
<td>English</td>
<td>Correct</td>
<td>Incorrect</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Turkish</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Percentage</th>
<th>Bilingual</th>
<th>Monolingual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%100</td>
<td>%95</td>
</tr>
<tr>
<td></td>
<td>%05</td>
<td>%75</td>
</tr>
<tr>
<td>Over All Percentage</td>
<td>%100</td>
<td>%95</td>
</tr>
<tr>
<td></td>
<td>%75</td>
<td>%25</td>
</tr>
</tbody>
</table>

Let’s discuss the results individually, Altan, the bilingual child in the study, completed all the tasks in a correct way. Although Altan gave some short breaks during the task completion, he was observed to have completed the tasks without difficulty. There were twenty tasks in each language; Turkish and English. The tasks in English were given first and then the tasks in Turkish were given. His results show that he completed hundred percent of the tasks successfully.

Erin, the monolingual English participant, answered nineteen tasks out of twenty in a correct way. During the task completion, it was seen that Erin hesitated in a few of the tasks; however, she did nineteen of them in a correct way. The results in English and Turkish were different from each other. When looking at the tables, it can be seen that the children completed the tasks in a correct way. Erin completed the tasks in a correct way in the English language; whereas, in the Turkish language, although he completed the tasks in a correct way, he made many mistakes. This shows that Erin is more competent in the English language.
The task she answered in a wrong way was the last item in the task. Her results show that she completed ninety-five percent of the tasks successfully.

Yağmur, the monolingual Turkish participant, answered fifteen tasks out of twenty in a correct way. Her results show that she completed seventy-five percent of the tasks successfully. When the wrong answers given by Yağmur are analyzed, it is seen that the tasks are different in terms of the initial phoneme. There is not a common initial phone among the tasks. They begin with /y/, /h/, /b/, /k/, and /ş/. It is also seen that there is not another task beginning with /y/, /ş/, /h/, initial phonemes in task. Although there are tasks beginning with vowels, all the tasks answered in a wrong way by Yagmur begin with a consonant and formed of equal number of syllables. The target words and control words have two syllables in each task.

6. Conclusion

The results of the present study given above support the results of previous studies on the comparison of monolinguals and bilinguals in terms of the phonological awareness. The previous studies reported that there was a bilingual advantage on monolinguals in terms of the phonological awareness (Bruck & Genesee, 1995; Campbell & Sais, 1995; Rubin & Turner, 1989). The studies given above all, in a sense, have a connection to English, as English is one of the languages examined in this study. The authors comparing the Italian-English bilinguals report that the languages tested in the bilinguals are more systematic and regular in terms of phonologic and syllabic structure than English (Campbell & Sais, 1995; Yelland et al., 1993). In their study, Cossu et al., (1988) reported that the discrepancies in the success of the participants resulted from phonologic and orthographic differences between the languages. Cossue et al. compared the Italian and American children in terms of phoneme and syllable awareness and found the Italian children had higher phonological awareness since Italian had simpler vowel structure. Although the present study does not directly cover the comparison of the two languages in terms of their phonological structure, the results paralleled with the similar ones in the literature. The bilingual child outperformed his monolingual peers. When the backgrounds of participants are examined, it is seen that Altan, the bilingual child, uses English more than Turkish. This situation may give him an advantage on the development of phonological awareness when the phonological development in a complex language, English, is considered to have put him in an advantageous position and also have paved the way for further development. On the other hand, it is seen that Erin, the monolingual English child, also performed quite well in the tasks, where she did nineteen out of twenty tasks right.

The results reveal that the present study replicated the results of the studies on the comparison of bilinguals and monolinguals in terms of phonological awareness (Cossu et al, 1988; Rubin & Turner, 1989; Yelland et al., 1993; Bruck & Genesee, 1995; Campbell & Sais, 1995).

The results in this study may require a further investigation in which more tasks are included; however, the age of the participants is a restriction for doing in depth research. The participants are too young to realize the importance of what is being done and the tasks are too confusing to be a game for them. Considering the overall task, a study like this may be carried out in an extended time in which the participants will not be required to carry out tasks in a short time. By the help of extended application, the data collection instruments, task may be strengthened. In sum, the data collected through present study show that Turkish-English bilingual pre-school child demonstrates bilingual advantage in terms of phonological awareness over their Turkish and English monolingual peers.

Acknowledgment

I am grateful to Assoc. Prof. Dr. Ayşe Gürel for her support.

References


