We are IntechOpen, the world’s leading publisher of Open Access books
Built by scientists, for scientists

3,900 Open access books available
116,000 International authors and editors
120M Downloads

154 Countries delivered to
TOP 1% Our authors are among the most cited scientists
12.2% Contributors from top 500 universities

WEB OF SCIENCE™
Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com
Response Behaviors in Conversational Speech among Japanese- and English-Speaking Parents and Their Toddlers

Yuko Yamashita

Abstract

The present study aimed at exploring the responses of listeners in conversational speech between parents and toddlers. Children’s responses toward parents and parents’ responses toward children were the focus of this study. Participants included five dyads each of typically developing two-year-old toddlers and their parents from Japanese- and English-speaking families. Responses of a mother/father toward a child or a child toward a mother/father were classified into three categories: non-lexical backchannels (e.g., hoo, nn, hai), phrasal backchannels (e.g., hontoo “really,” soo desu ka “is that right?”), and repetition. The results showed that the average ratio of overall backchannels and repetitions produced by parents was quite similar in both languages and was much greater than that produced by children in both languages. Among Japanese-speaking parents, non-lexical backchannels and repetitions were preferred to phrasal backchannels, while among English-speaking parents non-lexical backchannels were most frequently used. With Japanese-speaking parents, almost half of the repetitions were exact repetitions. They frequently repeated what a child had said and added the sentence-final particle “ne” or content words. These findings are expected to be useful in understanding response behaviors in spoken communication between parents and their children.

Keywords: conversational speech, response behaviors, child-directed speech, backchannels, repetition

1. Introduction

Interactions between parents and children largely influence the early stages of language development. Parents use a specific conversational style when they interact with their children.
There are similar characteristics and cross-linguistic differences in interactions between parents and children across cultures. For example, Ferguson [1] found that phonological and syntactic modifications, exaggerated prosody, and a simplified lexicon were common characteristics of child-directed speech across 27 language backgrounds. Fernald et al. [2] also reported that parents used higher mean-f0, f0-minimum, and f0-maximum; greater f0-variability; shorter utterances; and longer pauses across languages (French, Italian, German, Japanese, British English, and American English) when they interacted with their infants. Other studies showed both similarity and cross-linguistic differences in interactions between parents and children. For example, Fernald and Morikawa [3] reported that Japanese and English mothers displayed some common characteristics such as linguistic simplification and frequent repetition, while the frequency of labeling target objects and the usage of onomatopoetic words were the differences seen between the communicative styles of the two languages. Choi [4] found that English-speaking mothers used more nouns than verbs and focused more on objects than on actions, as compared to Korean-speaking mothers, when they interacted with their children in book-reading and toy-play contexts. These studies showed that there are common characteristics and cultural differences in interactions between parents and their children. However, only a few studies have explored how parents respond as listeners in their interactions with their children during the early stages of language development. The present study explores conversational styles, including the responses of a listener, between English- and Japanese-speaking mothers and their children. An overview will be given of: the literature of the previous research on response behaviors, the method, and the results. Lastly, a discussion will be presented.

2. Literature review

Listeners’ responses to a speaker are commonly known as “backchannels” [5] or “reactive tokens” [6]. Backchannel responses include both verbal (e.g., uh-huh, hmm) and non-verbal (e.g., head nods, smile, gazing) forms. The present study focuses on verbal forms. Backchannels produced by the listener play an important role in helping conversations go smoothly. Many researchers have discussed the types and functions of backchannels [6–8]. Clancy et al. [6] suggested that there are several types of reactive tokens in verbal forms: backchannels, reactive expressions, collaborative finishes, repetitions, and resumptive openers. Maynard [8] identified six functions of backchannels: continuer, understanding, support and empathy, agreement, emotive, and minor additions.

Backchannel behaviors are universal across cultures, but there are cultural differences in terms of their frequency, type, and placement [8–11]. Listeners are expected to produce culturally appropriate types of responses toward speakers; otherwise, they are viewed as being inattentive, interrupting the conversation, or not showing empathy [12]. Heinz [9] explored backchannel responses among German and American English speakers and found that German speakers used fewer backchannel responses and placed them less frequently in overlapping positions compared to American English speakers. Clancy et al. [6] explored reactive tokens with English-, Japanese-, and Mandarin-speakers. The results showed that Japanese and English speakers used overall reactive tokens more frequently than Mandarin speakers, and the ratio of backchannel responses to total reactive tokens by Japanese speakers was much higher than that of English- and Mandarin-speakers.
The Japanese term aizuchi is commonly translated as “backchannels.” According to Iwasaki [13], aizuchi includes non-lexical backchannels (e.g., hoo, nn), phrasal backchannels (e.g., hontoo “really,” soo desu ka “is that right?”), and substantive backchannels (e.g., repetition of words or a clarifying question). Many studies have reported that Japanese listeners frequently use backchannels compared to speakers of other languages [8, 11, 14]. For example, Maynard [8] found that Japanese participants produced backchannels far more frequently than American participants and did not provide greater variability in the types of backchannels than American participants. White [14] also reported that the Japanese provided backchannels for every 14 words, while Americans did so for every 37 words. The reason why Japanese listeners frequently produce aizuchi is that they prefer to construct and maintain interpersonal harmony in their culture [13, 15, 16].

Only a few studies explored response behaviors as a conversational skill in spoken communication between parents and their children. Through their interaction, parents provide and children learn culture-specific responses [17]. For example, Miyata and Nisisawa [18] observed the acquisition of backchannel behaviors (utterance-final aizuchi and utterance-internal aizuchi) in a boy aged between 1.5 and 3.1 years and found that utterance-internal aizuchi, which signifies only continuation and understanding, appeared about 6 months later than the utterance-final aizuchi. Hess and Johnston [19] observed backchannel responses in normal children aged between 7.5 and 11.9 years and found that backchannel responses increased significantly with age. Kajikawa et al. [20] explored the conversational style of mother-child interactions. They focused on the frequency of speech overlap such as the particle “ne” produced by the speakers and backchannels produced by the listeners and found that conversational style with frequent overlaps emerged in two-word utterances.

Although response behaviors are important in spoken communication, there are relatively few studies that have explored them in conversations between parents and their children and analyzed how language/cultural backgrounds influence how to respond in conversations. Therefore, this study aims to compare response behaviors in interactions between Japanese parents and their children and English parents and their children. In this study, backchannels and repetitions were counted as response behaviors. The function of repetition is to help learners develop their language by realizing their mistakes and evaluating what they utter [21]. The research questions are as follows:

- Whether there are cross-linguistic differences of response behaviors in conversational speech between parents and children.

3. Method

Participants were ten dyads each comprising typically developing two-year-old toddlers and their parents from Japanese- or English-speaking families. There were four girls and one boy from Japanese-speaking families and two girls and three boys from English-speaking families. Conversational speech between parents and children was recorded and transcribed from each audio file in the Kyushu University children’s database constructed by the author [22]. Monologue speech from either the parent or child and singing were not included in this study.
Basic information on speech data is shown in Table 1. EF/EM and JF/JM refer to English- and Japanese-speaking families, respectively, where F and M denote the gender (female or male) of the child. Speaker changes were counted according to Clancy et al. [6, p. 359] and occurred at any point at which another speaker took a turn; laughter turns were not included in this study. With regard to the types of backchannels, this study followed the categories proposed by Iwasaki [13, p. 666]: “non-lexical backchannels,” which comprise vocalic sounds that have little or no meaning (e.g., hoo, nn, hai), and “phrasal backchannels,” which are phrases or words with meaning (e.g., hontoo “really,” soo desu ka “is that right?”). In Iwasaki’s study, there was another category labeled “substantive backchannels,” which included repetition, a summary statement, or a clarifying question. This study, however, did not include substantive backchannels; instead, the category of “repetition” was added. Since this study focused on parents and two-year-old children, who were in the process of learning a language, repetitions occurred frequently. If she/he repeated a word or a portion of a speech that another speaker produced, it was counted as a repetition. Responses of a mother/father toward a child or a child toward a mother/father were classified into these three categories: non-lexical backchannels, phrasal backchannels, and repetition. Answering questions and responses to invitations and orders were not included in this study. The frequency of each category was counted, and the variability of these responses was observed.

4. Results

In this study, it was observed that a parent developed a topic or shared information and the child responded toward that parent. It was also observed that parents and children developed topics collaboratively and parents actively provided children with feedback. As noted in Iwasaki [13], if a person develops and controls a topic of conversation, other participants attend the conversation and provide backchannels; however, if participants develop a topic collaboratively, backchannels can occur from all participants. Backchannels of both a parent toward a child and a child toward a parent were counted in this study. Figure 1 shows the average frequency of overall responses (non-lexical backchannels, phrasal backchannels, and repetitions) among English- and Japanese-speaking parents and children. The ratio of overall responses to all speaker changes was counted. The average frequency of overall backchannels and repetitions was 24.36 and 1.75%, respectively, in English-speaking parents and children,
and 22.71 and 4.16%, respectively, in Japanese-speaking parents and children. With regard to parents’ response behaviors toward children, the results showed that more than 20% of all speaker changes occurred through non-lexical backchannels, phrasal backchannels, or repetition, regardless of language background. The results also showed that children from either background did not frequently use backchannels or repetitions.

Table 2 shows the frequency of each type of backchannel in Japanese- and English-speaking parents. The ratio of each type of backchannel, repetitions, and repetitions to overall responses was counted. For Japanese-speaking parents, non-lexical backchannels and repetitions were preferred to phrasal backchannels, which was statistically significant ($\chi^2 = 64.26, df = 2, p < 0.01$). For English-speaking parents, non-lexical backchannels were preferred to phrasal backchannels and repetitions, which was also statistically significant ($\chi^2 = 65.81, df = 2, p < 0.01$).

Figure 2 shows the frequency of non-lexical backchannels in English- and Japanese-speaking parents and children. The ratio of non-lexical backchannels to all speaker changes for each speaker was counted. For English-speaking parents, the frequency of EM01 was the greatest (22.29%) and the frequency of EF01 was the lowest (3.60%). For Japanese-speaking parents, the frequency of JF03 was the greatest (15.00%) and the frequency of JF01 was the lowest (3.16%). In other words, more than 20% of all speaker changes was non-lexical backchannels produced by parents for EM01 dyads, and 15% of all speaker changes was non-lexical backchannels produced by parents for JF03 dyads. EM01 parents frequently produced “oh” or “uh huh” and JF03 parents frequently produced “un (uh huh)” that functioned as a continuer (see more details in Excerpts 1 and 2). With regard to children, the frequency of non-lexical backchannels was less than 6%, regardless of their language background.

Excerpt 1 is a conversation between a father and son from an English-speaking family (EM01). The child’s utterances were transcribed as it sounded by the annotator. In this conversation, the father kept using the non-lexical backchannel “uh huh” that functioned as a continuer in lines 2, 6, and 8. Excerpt 2 is a conversation between a mother and daughter from a Japanese-speaking family (JF03). The mother and daughter played cooking with toys. The mother
asked the girl what she wanted to use and wash for cooking. The girl could not answer the questions directly, but the mother kept using the non-lexical backchannel “un (uh huh)” that functioned as a continuer in lines 14, 20, 22, 24, 26, and 28.

Note: In the following excerpts, C refers to child, F to father, and M to mother.

(1) Excerpt 1 (EM01)

1 C: Dubaah yee
2 F: Uh huh
3 C: Noo Tow
4 F: Toby that’s right
5 C: Noh tooh
6 F: Uh huh
7 C: Tooh tooh tooh
8 F: Toby **uh huh**
(2) Excerpt 2 (JF03)

10 M: jyaa tugì hora nani tsukau
   Well, what do you want to use next?
11 C: anka hoshitto aka
   I want red
12 M: un?
   Huh?
13 C: aka hoshii akahoshiide
   I want red, I want red
14 M: Un.
   Uh huh
15 C: aka hoshii
   I want red
16 M: dore araimasuka
   Which one do you wash?
17 C: aka hoshi aka
   I want red, I want red
18 M: aka hoshiine
   You want red
19 C: aka aka
   Red, red
20 M: Un.
   Uh huh
21 C: hoshii
   Want
22 M: Un.
   Uh huh
23 C: akatte
Table 3 shows the variety of non-lexical backchannels among English- and Japanese-speaking parents. For English-speaking parents, the frequent vocalic forms were “yes, yeah” (35.61%), “oh” (34.15%), and “uh huh” (17.07%). For Japanese-speaking parents, the frequent vocalic forms were “un” (56.25%), “hai” (23.96%), and “a=, a=” (10.42%). The variety of non-lexical backchannels of children was also observed. For English-speaking children, the frequent vocalic forms were “hm” (34.78%), “yes, yeah” (26.09%), and “oh” (17.39%). English-speaking children seldom produced “uh huh,” as opposed to English-speaking parents. Conversely, for more than half of all the non-lexical backchannels, Japanese-speaking children produced “un” similar to Japanese-speaking parents.

Figure 3 shows the frequency of phrasal backchannels among English- and Japanese-speaking parents and children. The ratio of phrasal backchannels to all speaker changes for each speaker was counted. For English-speaking parents, the frequency of EM01 was the greatest (18.37%), and the frequency of EF01 was the lowest (1.94%). It was the same tendency as the frequency of non-lexical backchannels. In other words, EM01 produced both non-lexical and phrasal backchannels frequently and EF01 did not produce either non-lexical or phrasal backchannels frequently. English-speaking children did not produce any phrasal backchannels.

<table>
<thead>
<tr>
<th>English-speaking parents</th>
<th>Japanese-speaking parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocalic form</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>yes, yeah</td>
<td>73 (35.61%)</td>
</tr>
<tr>
<td>oh</td>
<td>70 (34.63%)</td>
</tr>
<tr>
<td>uh huh</td>
<td>35 (17.07%)</td>
</tr>
<tr>
<td>hm</td>
<td>16 (7.80%)</td>
</tr>
<tr>
<td>uh</td>
<td>7 (3.41%)</td>
</tr>
</tbody>
</table>

Table 3. The variety of non-lexical backchannels with English-speaking and Japanese-speaking parents.
Japanese-speaking parents rarely produced phrasal backchannels (less than 6%). Similarly, Japanese-speaking children also seldom produced phrasal backchannels.

Table 4 shows the variety of phrasal backchannels used by English- and Japanese-speaking parents. Among English-speaking parents, the frequent phrasal backchannels were “That’s right, right” (34.95%), “OK” (33.98%), and “Good girl/Good boy” (17.48%). For Japanese-speaking parents, the frequent phrasal backchannels were “so, sone (It is so)” (38.24%), “sugoi (great)” (23.53%), and “soo desu ka (Is that so?)” (20.59%). As noted in Iwasaki [13], phrasal backchannels are often treated as reactive expressions. English-speaking parents used phrasal backchannels such as “Good girl/Good boy” and “That’s good” to praise a child and “That’s right, right” to show agreement. Similarly, Japanese-speaking parents also used phrasal backchannels, such as “so, sone” to show agreement, and “sugoi” to praise a child.

Excerpt 3 is a conversation between a father and child from an English-speaking family. The father asked the child about a character in the picture book, and the child tried to answer the question. The father provided the same phrasal backchannels—“That’s right”—to show agreement in lines 30, 32, and 34.

![Figure 3. The frequency of phrasal backchannels among English- and Japanese-speaking parents and children.](image)

<table>
<thead>
<tr>
<th>Vocalic form</th>
<th>Frequency (%)</th>
<th>Vocalic form</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>That’s right, right</td>
<td>36 (34.95%)</td>
<td>so, sone “it is so”</td>
<td>13 (38.24%)</td>
</tr>
<tr>
<td>OK</td>
<td>35 (33.98%)</td>
<td>sugoi “great”</td>
<td>8 (23.53%)</td>
</tr>
<tr>
<td>Good girl, Good boy</td>
<td>18 (17.48%)</td>
<td>sodesuka “is that so?”</td>
<td>7 (20.59%)</td>
</tr>
<tr>
<td>That’s good, That sounds good</td>
<td>4 (3.88%)</td>
<td>honto “really?”</td>
<td>3 (8.82%)</td>
</tr>
<tr>
<td>Alright</td>
<td>4 (3.88%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. The variety of phrasal backchannels with English-speaking and Japanese-speaking parents.
(3) Excerpt 3 (EM01)

29 C: Poo
30 F: Uh huh that's right it's Thomas and who else who's that
31 C: Ah kah
32 F: An incredible that's right
33 C: Oh wooh woo
34 F: Roller wall yes that's right

Figure 4 shows the frequency of repetitions among English- and Japanese-speaking parents and children. The ratio of repetitions to all speaker changes for each speaker was counted. For English-speaking parents, the frequency of EM06 was the greatest (8.70%), and the frequency of EM05 was the lowest (4.02%). For Japanese-speaking parents, the frequency of JF03 was the greatest (16.92%), and the frequency of JF09 was the lowest (4.25%). Japanese-speaking parents frequently repeated the words their children produced in order to show understanding, evaluate what their children said, or correct their mistakes. It needs to be noted that children were sometimes asked to repeat what their mother/father had said; this was not counted as repetition produced by the children.

Excerpt 4 is a conversation between a mother and child from a Japanese-speaking family. The mother repeated the words “throw it away” that the child uttered in order to confirm that this was what the child requested in lines 35 and 36. She added the question “You don’t need it anymore?” with the same meaning but a different way of asking to make sure once again in line 36. Excerpt 5 is another conversation between a mother and a child from Japanese-speaking family. The mother repeated the words “throw it way,” changing a grammatical tense, in order to correct what the child uttered in lines 44 and 45. After the mother

![Figure 4. Repetitions among English- and Japanese-speaking parents and children.](image)
asked whether her child wants to come with her, the child said her name “Mi.” The mother repeated her name “Mi” and added the content word “iku (goes)” for better grammatical sense in lines 54 and 55.

(4) Excerpt 4 (JF10)

35 C: poi suru

Throw it away.

36 M: poi suru no mou iranai no sore?

Throw it away. You don’t need it anymore?

37 C: un iranai.

Yes, I don’t need it.

38 M: he

Oh.

39 C: gomi haitteru?

Is there trash?

40 M: un. Gomi haitteru aa jyaa poi shitoite hai arigatou.

Yes, there is trash. Well, throw it away. Yes, thank you.

42 C: dekita

I did it.


Yes, great. You did it.

(5) Excerpt 5 (JF01)

44 C: poi

Throw it away.

45 M: hai poi shita

Yes, threw it away.

46 C: un nai

Yes. Not be found.

47 M: nani ga nai?

What is not found?

48 C: kami
Paper

49 M: kami ga nai. kami aru yaro.

Paper is not found. There is paper.

Candy

50 C: ame

Candy is not found. What is this?

51 M: ame naiyo. A kore nani

Un

52 C: un

---<6 lines omitted>---

53 M: issho ni kuru?

Do you want to come with me?

54 C: Un. Mi

Yes. Mi

55 M: Mi chan iku. a mazu kore mo nainai senaikan

Mi chan goes. Well, we have to throw it away first.

56 C: Un.

Yes.

Repetitions by Japanese-speaking parents were further explored. Their repetitions were coded into two categories: exact repetitions and local repetitions. Exact repetition was when parents repeated an entire utterance in an exact way. Local repetition was when parents added, removed, and substituted content words, function words, and the sentence-final particle “ne,” which often occurs in Japanese, as listed in the following examples. Japanese speakers frequently use “ne” in conversations to build affective common ground between the speaker and the listener for cooperation [23]. As Uyeno [24] noted, speakers use the sentence-final particle “ne” to show agreement of propositional content. In this study, almost half of all repetitions were exact repetitions. With regard to local repetition, parents frequently repeated what a child had said and added the sentence-final particle “ne” or content words. Local repetitions included the following:

• Addition of content words
• Addition of function words
• Addition of the sentence-final particle “ne”
• Addition of content words and the sentence-final particle “ne”
• Addition of function words and the sentence-final particle “ne”
• Substitution of content words
5. Discussion

This study explored the responses of listeners in conversational speech between English- and Japanese-speaking parents and their two-year-old children. Responses of a mother/father toward a child or a child toward a mother/father were classified into three categories: non-lexical backchannels, phrasal backchannels, and repetition. The ratio of overall responses to all speaker changes was counted. The results showed that both English- and Japanese-speaking parents used all three categories, which amounted to more than 20% of all speaker changes. There was no difference in the frequency of overall responses between English- and Japanese-speaking parents. Previous studies that explored backchannels in adult-adult conversation showed that Japanese listeners used backchannels more frequently than English speakers [8, 11, 14]. Our findings are not consistent with previous studies in that there was no difference in the frequency of overall responses between English- and Japanese-speaking parents. It is probably because this study explored response behaviors in conversations between parents and children, where parents frequently use backchannels and repetitions to encourage their children to continue talking, show understanding, and correct mistakes, which might be universal across languages. Interestingly, there was a language/culture difference in the type of response behaviors exhibited; non-lexical backchannels and repetitions were preferred to phrasal backchannels among Japanese-speaking parents, while non-lexical backchannels were preferred to phrasal backchannels and repetitions among English-speaking parents. With regard to children’s response behaviors, this study did not find frequent use of backchannels and repetitions. Language development of all children in this study was at the two-word stage, when a child uses simple phrases and begins to develop complex phrases. However, they did not use backchannels and repetitions as frequently as the adult speakers. As Hess and Johnston [19] noted, backchannel response behaviors of listeners that provide collaborative feedback could be among the last skills that children acquire during language development. At which age they begin to use these response behaviors needs to be further explored. The findings of the present study are expected to be useful in understanding response behaviors as a conversational skill in spoken communication between parents and their children.

6. Conclusion

This study determined that there was no difference in the frequency of overall responses between English- and Japanese-speaking parents. This study also suggested that there was a language/culture difference in the type of response behaviors between English- and Japanese-speaking parents. Although this study did not reveal children’s response behaviors, this study
found that there were similarities and differences of parents’ response behaviors between two different languages. Studies with children with older age will clarify how parents’ response behaviors influence the acquisition of response behaviors during language development.

Acknowledgements

This work was supported by JSPS KAKENHI (Grant Number JP26770194).

Author details

Yuko Yamashita

Address all correspondence to: yama-y@shibaura-it.ac.jp

Shibaura Institute of Technology, Tokyo, Japan

References


