

Teaching Mands for information using “when”

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Executive summary

Two adolescents with autism participated in programmes which involved the manipulation of establishing operations (EO) in order to increase the value of manding for information using “when”. Throughout their Individual Education Plan (IEP) in 2019/2020 information was withheld to evoke the request for “when.” The results demonstrated that one pupil exhibited zero mands for information initially which increased to 100% independently. While the other pupil already used “when”; however, they continued to maintain this skill with high levels of independence. Therefore, effective teaching was implemented to teach the adolescents with autism to mand for information using “when?” through the use of vocal prompt fading.

Introduction

Manding is an important functional communication skill that immediately benefits the individual (Albert et al., 2012). As a result, mand training is essential, and there are numerous benefits which include; an increase in social interaction; immediate access to a desired item or activity; an increase in spontaneous language and a decrease in problem behaviour. Mand training has demonstrated to be effective in developing language for individuals with autism (Albert et al., 2012, Sundberg et al., 2002; Marion et al., 2012).

Once an individual has developed a strong manding, receptive, tact and intraverbal repertoire, which usually occurs around the age of two or three, a natural milestone for typically developing children is often to request for information to obtain unknown information or to increase social interaction and to expand the verbal repertoire. (Shillingsburg et al., 2011) They will start to mand for information such as, "What's daddy doing?" or "Where's mummy?" (Sundberg et

al., 2002). However, many children with autism at that age may not have developed the skill, and therefore need to be taught extrinsically.

Ultimately, given the importance of manding for information, observations and baselines were conducted to demonstrate that although the pupils used some mands for information, the mand for “when” was not consistent or was not known.

Method

Setting – The implementation of the intervention was taught for two vocal pupils with a diagnosis of autism and were aged 15 years old at the time. The pupils were taught in various locations around their school. Teaching trials were conducted throughout the school day. Following the successful acquisition of the mand “what,” “where,” and “who” the mand for the information “when” had been introduced for both pupils.

Measurement – When teaching the mand for “when” the tutor would provide both pupils with some information, but withhold when something was happening. For example, the tutor would say “we have group later” and the expected response from the pupil would be “when?”. The information would vary on each trial based on the pupil’s establishing operation (EO). The tutors collected trial by trial data and recorded the frequency of independent and prompted mands for information. A correct response was recorded on the data sheets with a checkmark if an independent “when?” was emitted. If the pupil failed to respond within five seconds, the response was then scored as incorrect with an “X” in the box. Mands for information were each scored on the same paper in different boxes. The data was then converted into a daily percentage graph for independent responses.

Procedure – During the intervention, the tutors contrived EO situations in which the pupils would be required to emit a mand for information. When the pupils emitted the correct response, the experimenter reinforced with the information in regards to the questions with a greater magnitude or duration. If the pupils emitted an incorrect response or a non-response within 5 seconds, the tutors re-created the EO and provided a vocal prompt. Once the pupils emitted the correct mand with the prompt, the experimenter provided the pupil with the information.

Mastery Criteria – In reference to research, the mastery criteria will be set for the pupils to acquire 90-100% of independent correct responses over three consecutive days (Endicott & Higbee, 2007; Shillingsburg et al., 2014).

Follow up – Once the mand for information for “when” was acquired, the skill continued to be taught in discrimination with the other mands for information in the pupil's repertoire such as “who,” “what,” and “where.”

Results

Overall, the intervention to teach mands for information was successful and both pupils acquired the skill to mand using “when” (seen in figure 1 and figure 2). During the teaching for “when” both pupils acquired the skill within 10 teaching trials.

In the first teaching session, pupil A emitted 100% independent responses and in the following two sessions, pupil A responded with 80% and 88% corrected responses. Within the first 10 teaching trials pupil A emitted on average 93% accuracy. In the first teaching session for pupil B, they responded with 0% independent responses. Nonetheless, pupil B had an increasing trend with independent responses for the following 10 trials. Within the first 10 trials pupil B's average was 70% accuracy. Although, both pupils acquired the skills within 20 trials, pupil A required less prompting from his tutor in comparison to pupil B.

Pupil B's graph demonstrates 11 days wherein he answered with 100% independent responses however, on 28.11.19 and on 03.12.19 there was a decrease with 75% and 50%. There may be numerous factors which may have contributed towards a decrease in responses after acquiring the target behaviour. Some variables to consider may be a potential change in tutor on that day, there may not have been motivation for the pupil to request “when” or the pupil may have difficulty with discrimination, to name a few. Nevertheless, despite a slight decrease in response the following 3 days the pupil B demonstrated 100% correct responses.

The graphs demonstrate the skill to mand for “when” was acquired during different terms. Pupil A was taught during Spring 2020 term and pupil B was taught during Autumn 2019 term. Graph 1 shows pupil A had 12 days of teaching wherein Graph 2 shows pupil B had 23 days of teaching. By pupil B having more teaching days demonstrates a more reflective maintenance of the skill. It is recommended pupil A will need further days to demonstrate he has maintained the skills to mand for “when” with 100% accuracy.

In summary, the results demonstrate both pupils acquired the skill to mand for information using “when” and required the same amount of trials despite a difference in the average.

Discussion

The Sundberg et al., (2002) study exemplify the importance of motivation when teaching mands for information. Motivation makes the information valuable and it relies on reinforcers to establish the correct response form. Sundberg et al. (2002), continue to explain, motivation is a key factor to teach mands for information and it is important to maintain and generalise this skill. As a result of continuously using a variety of reinforcers and confirming the motivation throughout the intervention, aids the pupil's success with acquiring the skill to mand for “when?”

This intervention has demonstrated and assisted the pupils with an increase in communication skills. To conclude, this intervention demonstrated its strengths by achieving positive outcomes with teaching both pupils with autism to acquire the skills to mand for information. Nonetheless, it would be beneficial to investigate and demonstrate the percentage of correct responses when the mands are taught in discrimination in natural settings.

Figure 1

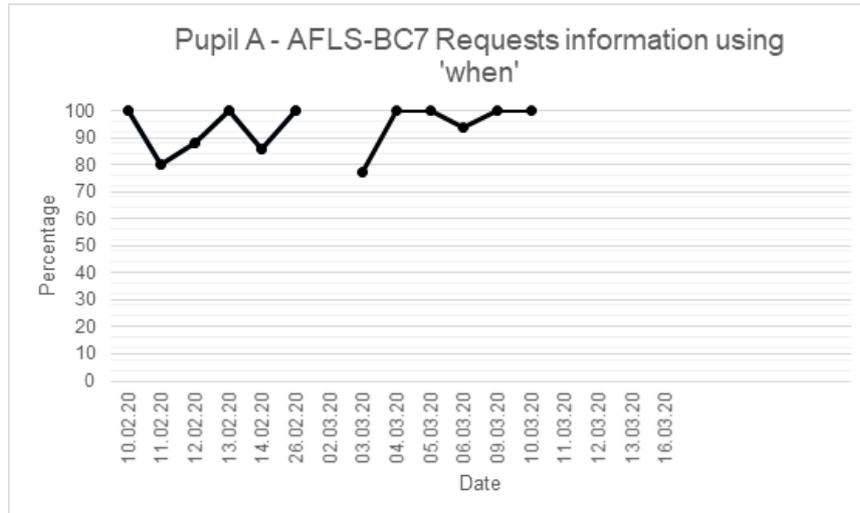
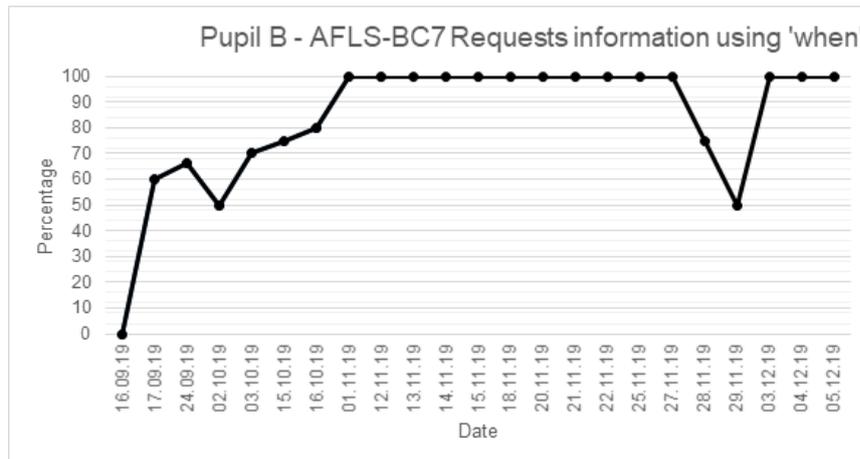


Figure 2



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