Critical Review: The Efficacy of Animal-

The goal of the study was to explore whether the presence of the therapy dog during walks back to the ward after the AAT session impacted the social communication skills of the participant. After every traditional therapy session, a porter accompanied the individual back to his ward; however, after the AAT session, the therapy dog and handler (i.e. the speech-

increased from 40% to 80% over treatment. The percentage of correct identification of pictures increased from 30% to 80% over the course of treatment. The results from the analysis of the social behaviors demonstrated a shift in the percentage of nonverbal behavior to verbal behaviors. In the first session, looks were the predominant social behavior; however, by the last session, verbalizations were the most prevalent.

In order to evaluate the validity of the results, the methodological weaknesses need to be considered. Case studies provide a low level of evidence, namely because of the small sample size and the lack of a control group, which limits the ability to draw conclusions from the study and to generalize to other adults with apraxia. One major limitation of the study is that the data analysis

BDAE, a test of aphasia, before and after treatment, is not the appropriate test to determine whether AAT is an effective treatment for apraxia. A test specifically designed to assess apraxia would have yielded more scientifically sound results. In addition, the statistical analysis of the progress throughout the therapy block was extremely limited. Since a baseline was not obtained, a proper statistical analysis could not be conducted. The reader was only provided with descriptive statistics, which weakens the validity of the evidence. In addition, the author was the only person responsible for providing the therapy and collecting the data. This could have caused results to be biased due to prior knowledge of the hypotheses. Another major limitation of the study is that the design does not allow the effects of AAT to be isolated from speech therapy. It is possible that WA could have seen improvements with traditional speech therapy alone. Therefore, the degree

confidently ascribed to the effects of enhancing speech therapy with AAT is questioned. A final limitation is subject selection. During the study period, WA received daily treatment to learn American Indian Gestural Code. This leaves readers uncertain if the reported changes were due to the experimental treatment or the other treatment. In addition, the subject suffered from dementia, which could have impacted the results. Overall, this study provides some equivocal evidence that AAT is effective for increasing communication in adults with apraxia.

Conclusions & Recommendations

Although there is little evidence to support the benefit of using AAT with clients with aphasia or apraxia, there is agreement that incorporating animals into speech-language sessions does not have a negative effect on clients and may motivate them to achieve their therapy goals. In each study reviewed, all participants exhibited improvement in communication while participating in AAT in adjunct to traditional speech therapy. Participants were also more enthusiastic about therapy when they knew the dog would be present. Overall, the research provides some weak evidence that AAT may increase communication in adults with aphasia or apraxia. Therefore, this evidence should be considered preliminary and further research is recommended. Future research should use larger sample sizes and experimentally sound procedures. Randomly assigning a larger number of participants into an AAT group and a control group (i.e. traditional speech-language) will help to increase the reliability and validity of these studies. This will help to isolate the effects of AAT from traditional speech therapy. Despite the limited evidence, speech-language pathologists should consider incorporating AAT into their practice when working with adults with aphasia or apraxia.

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