**Title**: Providing Behavior Support Services in a Community Based Program: Barriers and Quality of Life Outcomes

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**Introduction**: Individuals with intellectual and developmental disabilities can display challenging behaviors, defined as behaviors can that put the individual or others around them in physical danger; furthermore, these behaviors have the potential to severely limit the person's ability to access the community (Emerson, 2000). Challenging behaviors occur more frequently in people who have significant intellectual and communication deficits (Jones et al., 2008; Matson et al., 2011; Matson et al., 2013), and can interfere with their ability to live independently, sustain employment, and learn adaptive behavior skills, (Myrbakk & von Tetzchner, 2008; Matson et al., 2011; Simoes & Santos, 2016; Gur, 2018); therefore, potentially impacting their quality of life (Allen et al., 2007). Through the use of functional analysis (Iwata et al., 1982) it was discovered that challenging behaviors are not aberrant but rather a learned and rational means of reaching an objective. Addressing these behaviors usually occurs through behavior support, the application of Applied Behavior Analysis and Positive Behavior Support (LaVigna & Willis, 2012). In the community-based program of focus, the goal is to address challenging behaviors through behavior plans and training direct support providers and/or family members to implement the plan and collect data. For the current study, a retrospective qualitative analysis of the behavior plans was used to determine the common barriers to implementation in a community-based setting, as well as the quality of life changes that are attributable to addressing challenging behavior.

**Method:** The Nisonger Behavior Supports Services Program (NBSS) serves adults and children with developmental disabilities (DD) and challenging behaviors (CB) through a contract with the Franklin County Board of Developmental Disabilities in Columbus, Ohio. The NBSS assigns a behavior support specialist (BSS) who reviews the individual's records, collects baseline data, and develops behavior support strategies. The BSS trains the direct support professionals on the implementation of the behavior strategies and the collection of data. The BSS met monthly or bi-monthly, and review data, take notes on improvements or new behaviors, and address any challenges in implementing the behavior strategies. One hundred adults (18 years of age or older) served by NBSS over ten years, between January 2008 and December 2018, were randomly selected to participate in this program evaluation. To qualitatively identify the barriers to implementation and quality of life changes, written comments were extracted from the individual files and analyzed using an Applied Thematic Analysis (ATA). Two researchers went through independently and identified the qualitative data pieces in 25 randomly selected participants of the 100 participant files. The researchers identified the initial codes and consensus coded after their initial creation. Finally, the researchers completed confirmatory coding on 25 additional participants.

**Results**: A variety of themes emerged from the qualitative analysis to describe both the barriers and quality of life changes. The barriers identified ranged from barriers at the program level (e.g., the complexity of the data sheets), barriers at the participant level (e.g., difficulty finding effective reinforcement), and barriers at the staff/implementation level (e.g., lack of staff training due to high staff turnover). Furthermore, there were positive and negative quality of life changes that were noted throughout the files to describe changes that could happen when attempting to reduce challenging behaviors. The quality of life changes fell into three major themes to encompass both the positive and negative: changes in social participation, changes in the overall autonomy of the individual, and changes in the individual's wellbeing (Chavez, 2020).

**Discussion:** The results of the qualitative analysis pointed to barriers at all levels of the system. The identification of barriers provides an opportunity to close the gaps through various different avenues including increasing staff buy-in to the data collection and the behavior plan implementation, as well as changes at the program level to increase that buy-in. Based on the quality of life changes that were noted, it is possible to see a change in the individual's lives from participation in this program. This leads to further opportunities to quantify these changes over time now that it is clear where the changes are most likely to be seen. There were limitations of this study including that it was retrospective, meaning that the qualitative analysis was limited by what was in the record and what was not in the record. Furthermore, there were multiple behavior support specialists documenting over ten years, leading to a variety of depth and detail in the narrative provided. However, despite these limitations, there is fruitful evidence that behavior supports addressing challenging behaviors, when done correctly and overcoming most of the barriers can lead to a positive quality of life changes for the individual.

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