

Walker Squawker Report

Front Porch | Center for Innovation and Wellbeing

Introduction

The [Joy for All](#) Walker Squawker is a cheery, animatronic bird created to deliver joy, fun, and companionship to older adults and their families. The Walker Squawkers include a tactile and highly detailed fabric exterior, a wide range of songs and authentic native sounds, a motion sensor that recognizes and rewards walking, ChirpBack Technology™ which allows the birds to respond to the sound of your, and a variety of other sensors to maximize life-like interactivity.

There are currently two models of birds: The Cardinal and the Blue Bird.



In February 2023, [Front Porch Center for Innovation and Wellbeing](#) (FPCIW) conducted a 3-week pilot using the Walker Squawker at Fredericka Manor Care Center, a Front Porch skilled nursing community in Chula Vista, CA. The bird was originally designed as a way to remind a resident to use their walker, but FPCIW proposed a pilot to explore the possibility of its use as an intervention tool in memory care or skilled nursing to support challenging behaviors such as sundowning, resistiveness, and anxiety. This report highlights the impact and results of the Walker Squawker from survey data from 21 tracking surveys and interviews with activities and care staff.

Background: Measuring Effectiveness of Walker Squawker

Each session with the Walker Squawker was between 5 and 15 minutes to promote positive engagement with residents. “Dosing” is an important part of the approach and use of the robot pet companion to maintain the “surprise and delight” value of the devices.

The Walker Squawker program has had a positive impact on residents and staff. Staff at Fredericka Manor observed residents interact with the Walker Squawker and reported improvements in behavior during and after their interaction. Residents interacting with the Walker Squawkers had replaced negative behaviors (anxious, sad, isolated, pacing, and yelling) with positive ones (calm affect, talking/interacting with others, and bright affect). Surveys were used to report these behaviors noticed before, during, and after interactions with the Walker Squawkers.



“Awww, happy, he’s really cute, explaining the feeling of happiness, peaceful.”

“It’s the way they laugh, like it’s a certain type of laugh. It sounds like someone just finished telling them a hilarious joke. When they see the bird, it brings them a lot of joy.”

Results: Decrease in Anxious Behavior & Increase in Bright Affect

There was a decrease in anxious behaviors among residents during and after interactions with the Walker Squawkers. In Figure 1 below, the baseline behaviors that were observed included reports of calm, yelling, pacing, isolation, sadness, and anxiety; with fewer residents having a bright affect or talking/ interacting with one another. The most noticeable behavior change during and post interaction was the bright affect of residents.

- 60% of residents had decrease in anxious behavior during and post interacting with the Walker Squawker
- Observed anxious residents decreased from 16% to 3.4% during the interaction
- Bright affect increased from 8% to about 40% during and post interaction

Figure 1. Baseline Behavior – Before Intervention (n=21)

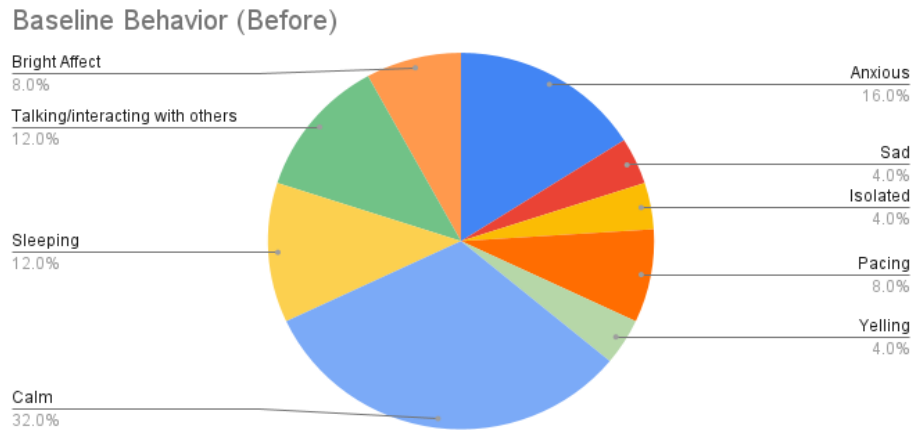


Figure 2. Intervention Behavior – During Intervention (n=21)

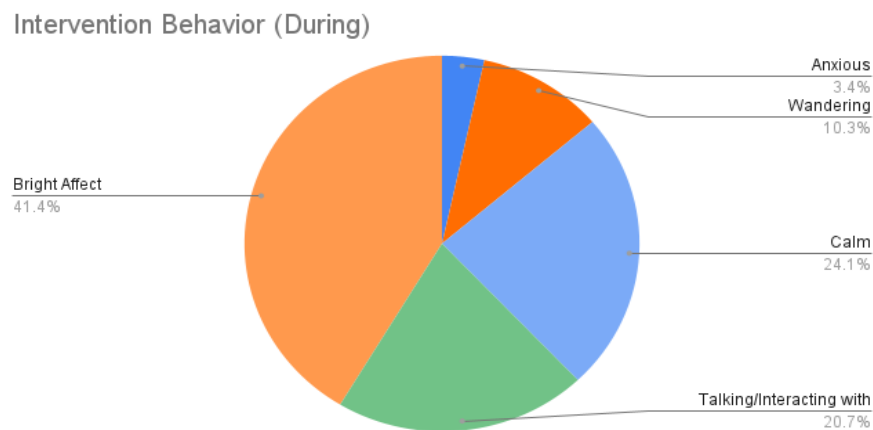
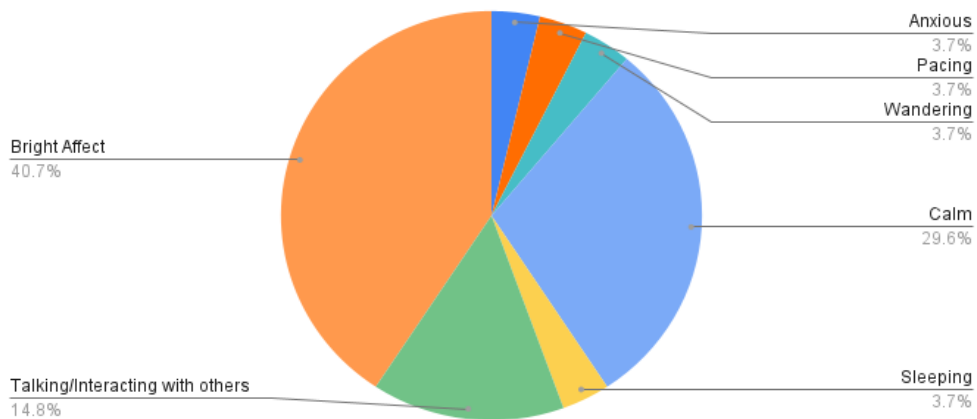


Figure 3.

Post

Post Intervention behavior (15 mins after)



Intervention Behavior – Post intervention (n=21)

Before the care team introduced the Walker Squawker to residents, they noted that 8% of participants had a bright affect; during the intervention, the bright effect jumped to 41.4%, and sustained at 40.7% among the same residents after the device was taken away.

Fredericka Manor staff additionally found ways to utilize the Walker Squawkers during unexpected situations. For example, the community experienced a COVID-19 outbreak and were thus under lockdown; the Walker Squawkers were then used throughout the hallways so residents could hear the birds sing.

“I went to Elvila’s room and she was so calm and sleeping. Then she saw and heard the bird and got curious because I showed her the bird earlier, she got happy.”

“Carol was so happy during the intervention, as soon as she saw the bird she got so excited and happy. She had a smile on her face the whole time.



“She would get up again and try to go back and forth sundowning. Then I’d bring the bird back to her again. It works and she will get distracted in a wonderful way with the bird.”

“Left it with the resident and it was singing. The resident would try to throw the bird in the air to see it fly.”

Conclusion

Overall, the Walker Squawker has had a positive effect on the residents and staff of Fredericka Manor. It has helped improve residents' behaviors in positive ways and decrease negative ones.

Based on the interactions with the staff, we have found that the Walker Squawker is an easy and effective tool for residents and the community at large. The staff enjoy using the bird and seeing the residents light up when they get a chance to interact with them. The community staff found a lot of comfort that the Walker Squawkers give to their residents whether they are being cheered up by the bird, thinking of their family, or calming them down when they are having a rough day.