

School Wide Gains of Developmentally Delayed Clients

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In August of 2007, a toilet training room was opened at JRC. In this room, clients focused on toilet training and activities of daily living. In January of 2008, an activities of daily living classroom was opened. In this classroom, clients worked on many different activities of daily living, such as brushing teeth, dressing, independent eating and many other skills. These two events prompted a school wide focus on activities of daily living and its importance in the lives of developmentally delayed clients. We will be comparing school wide data previous to the implementation of the activities of daily living program and school wide data after the implementation of the activities of daily living program.

Method

Participants and Setting

There were a total of forty nine participants in this study. Of the forty nine participants, thirty four were male, while fifteen were female. Ages ranged from 9.5 to 21.7, with the average age being 18.8. The average IQ was 41. Diagnoses included autism, intellectually disability and multiply handicapped. All participants attended school at the Judge Rotenberg Center and lived in one of JRC's group homes.

Several clients that participated in this study were assigned to the toilet training room. The room was comprised of six large bathroom stalls, a sink, refrigerator, long tables, a computer work station and a reward area with a television and comfortable chairs. Each participant was assigned a stall, and a seat at the long table. Their seat was assigned so that they would be no more than eight feet from their designated bathroom stall. When not sitting on the toilet, participants worked on daily living skills, such as buttoning, unbuttoning, zipping, unzipping, hand washing, brushing teeth, pointing to body parts, non-verbal imitation and computerized academic tasks.

Other clients in this study completed work in the activities of daily living classroom. This classroom was dedicated to teaching clients any activities of daily living that they needed. They could work in the classroom, in a nearby kitchen, dining area or bathroom. Clients did not spend all of their time in the activities of daily living classroom, but were pulled from their regular classroom to work on specific skills.

Measures and Instruction

Clients were administered the Brigance Diagnostic Inventory of Early Development on an annual basis. Results from 2006 and 2007's administration were used to determine if a client could or could not complete the skills looked at in this study. Starting in 2012, clients were assessed using an in-house assessment that looked at a client's skills in communication, activities of daily living, pre-vocational, vocational, pre-academic and academic. This assessment was administered every 6 months. The data from the January 2013 administration was used to determine if a client could or could not currently complete the skill listed.

All activities of daily living skills were analyzed and a task analysis was developed. Tasks were broken down into the smallest steps. All activities of daily living were taught using a backwards or forwards chain. Clients were timed, and the number of gestural, verbal and physical prompts was recorded. All data was plotted on a standard celeration chart and analyzed regularly. Rewards were given for improvement, which was defined as the deceleration of needed prompts to complete the task.

Results

Fastening Clothes (Buttoning, Unbuttoning, Zipping, Unzipping)

Previous to the implementation of the school wide activities of daily living program, thirty-six percent of the clients in this study could fasten their clothes independently and sixty four percent could not. Fastening clothes included buttoning, unbuttoning, zipping and unzipping. Six years after the implementation of the school wide activities of daily living program, seventy one percent of the clients in this study could fasten their clothes independently and sixteen percent could not. This is shown in figures 1 and 2.

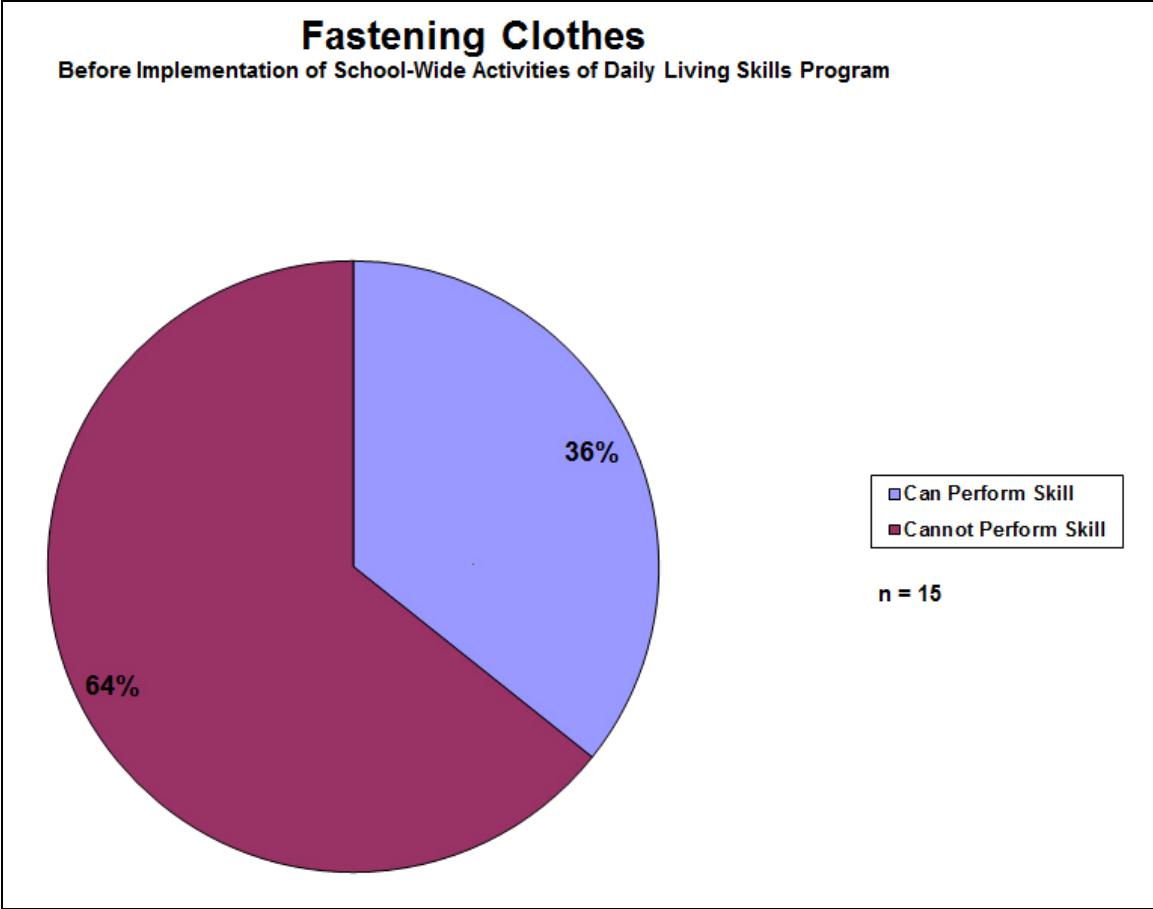


Figure 1

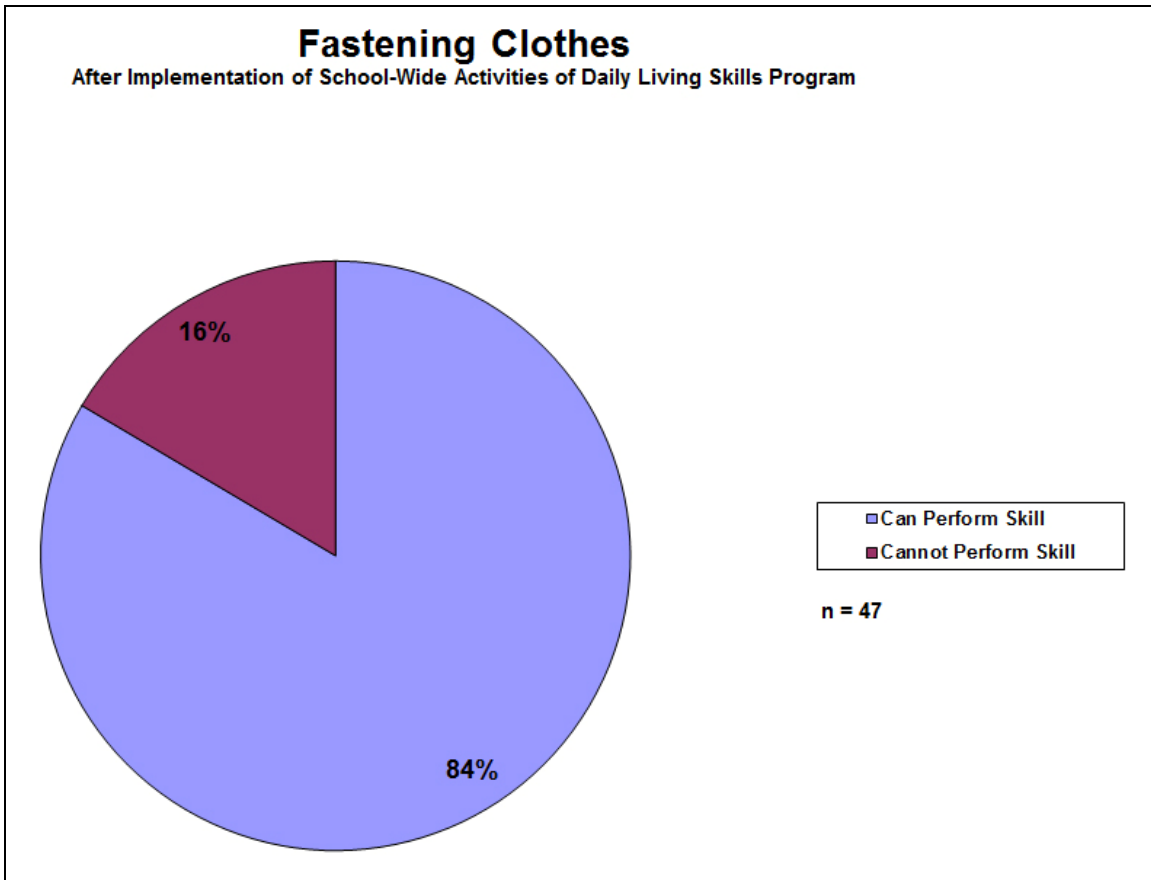


Figure 2

Independent Bathing (Washing Body, Washing Hair)

Previous to the implementation of the school wide activities of daily living program, seven percent of the clients in this study could bath independently and ninety three percent could not. Bathing independently included washing body and hair in the shower. Six years after the implementation of the school wide activities of daily living program, eight-four percent of the clients in this study could bath independently and twenty nine percent could not. This is shown in figures 3 and 4.

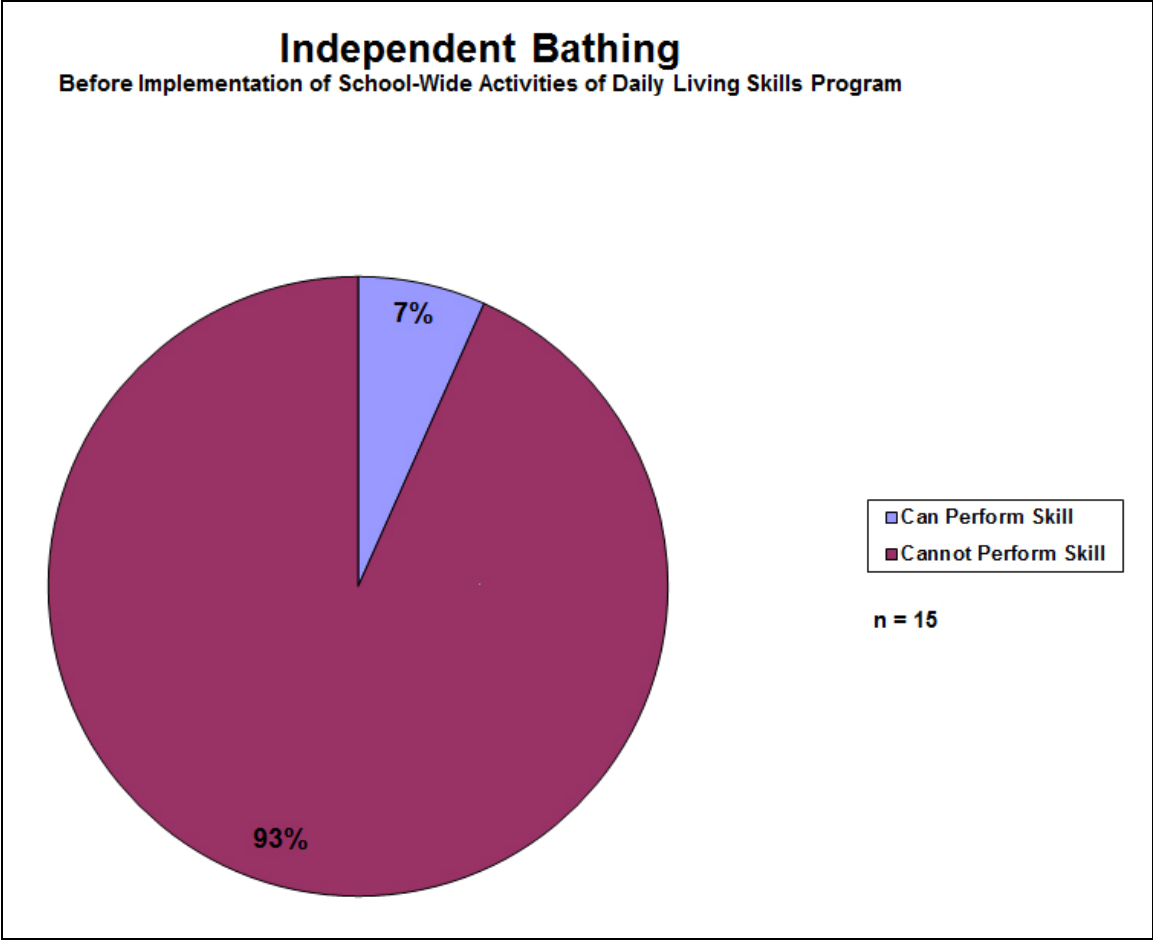


Figure 3

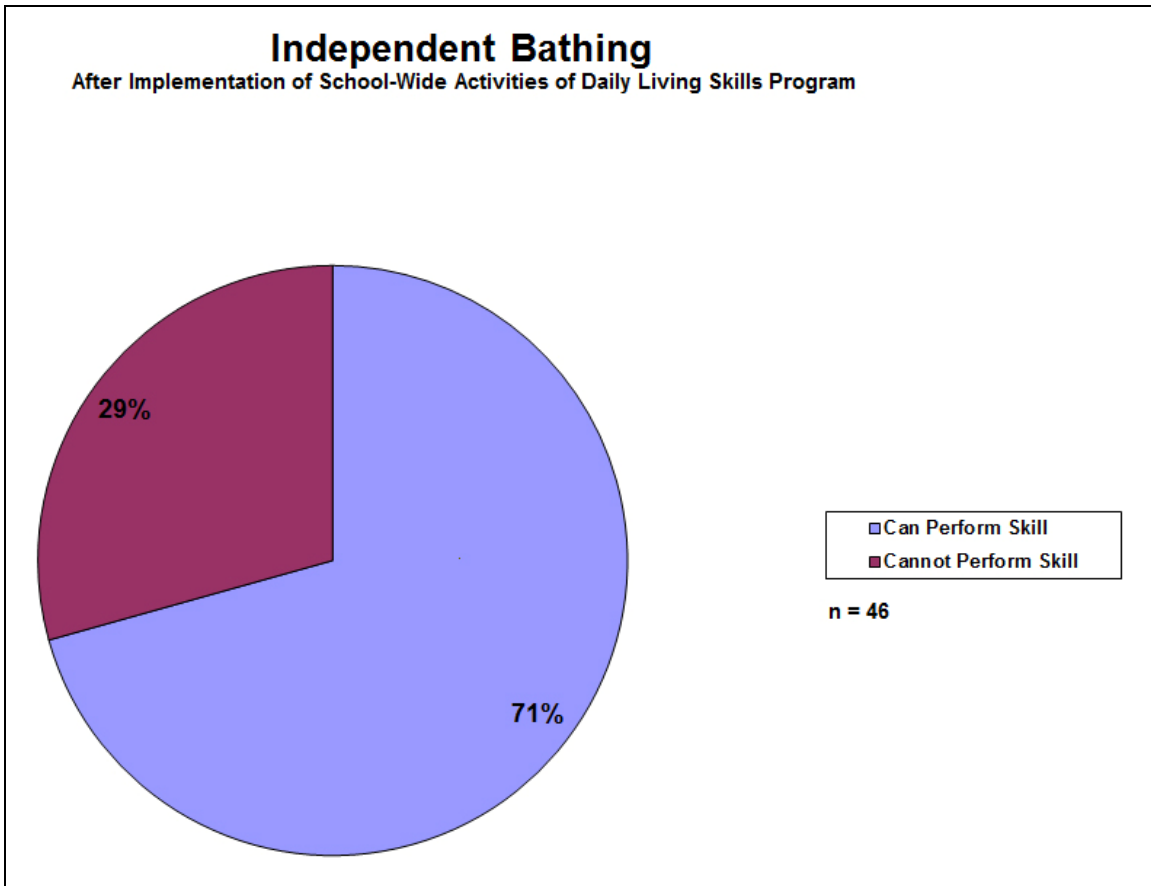


Figure 4

Brushing Teeth

Previous to the implementation of the school wide activities of daily living program, twenty percent of the clients in this study could brush their teeth correctly and eighty percent could not. Six years after the implementation of the school wide activities of daily living program, seventy nine percent of the clients in this study could brush their teeth correctly and twenty one percent could not. This is shown in figures 5 and 6.

Brushing Teeth

Before Implementation of School-Wide Activities of Daily Living Skills Program

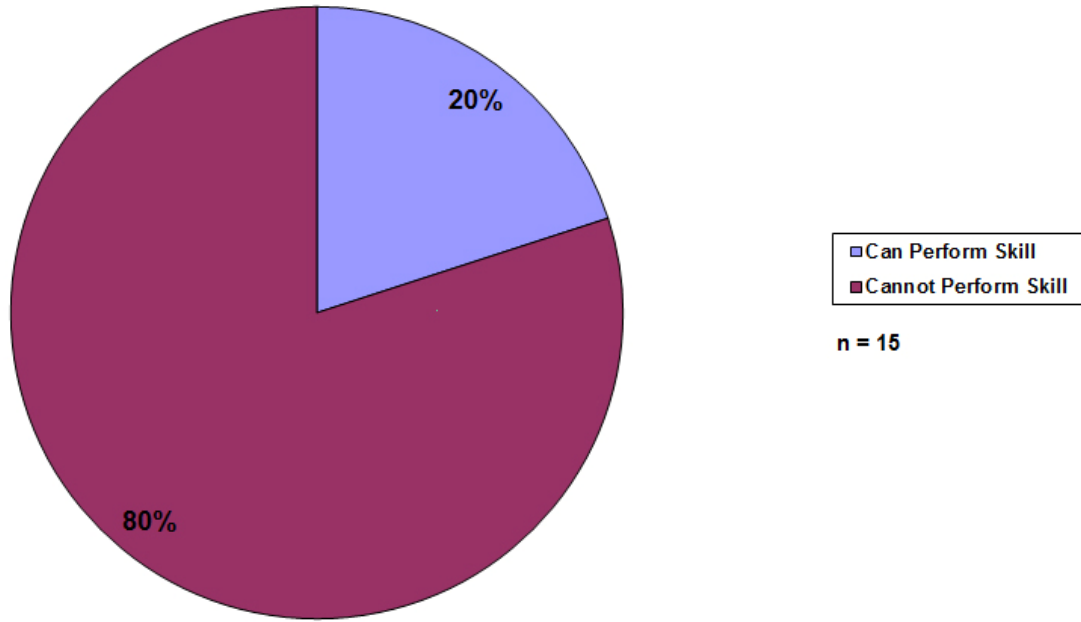


Figure 5

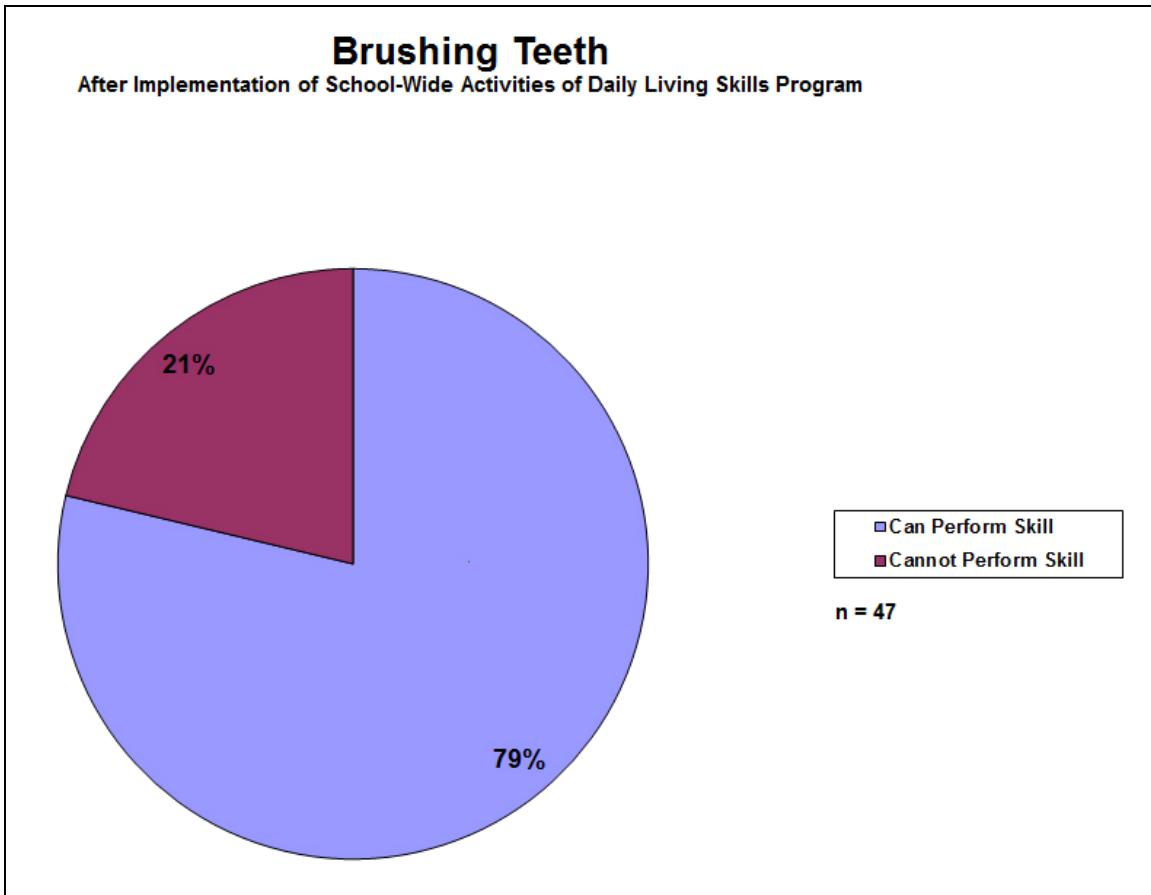


Figure 6

Toilet Trained

Previous to the implementation of the school wide activities of daily living program, twenty seven percent of the clients in this study were toilet trained and seventy three percent were not. Six years after the implementation of the school wide activities of daily living program, ninety six percent of the clients in this study were toilet trained and four percent were not. This is shown in figures 7 and 8.

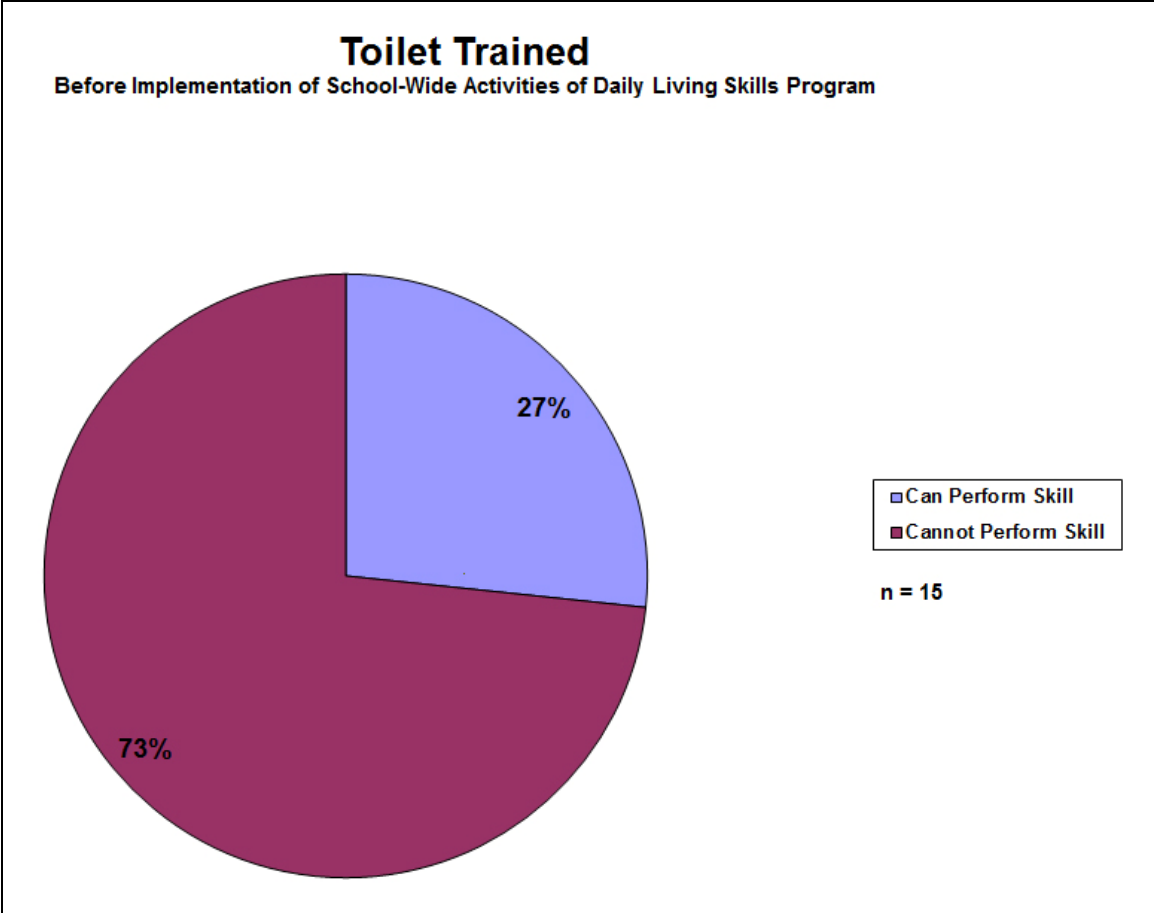


Figure 7

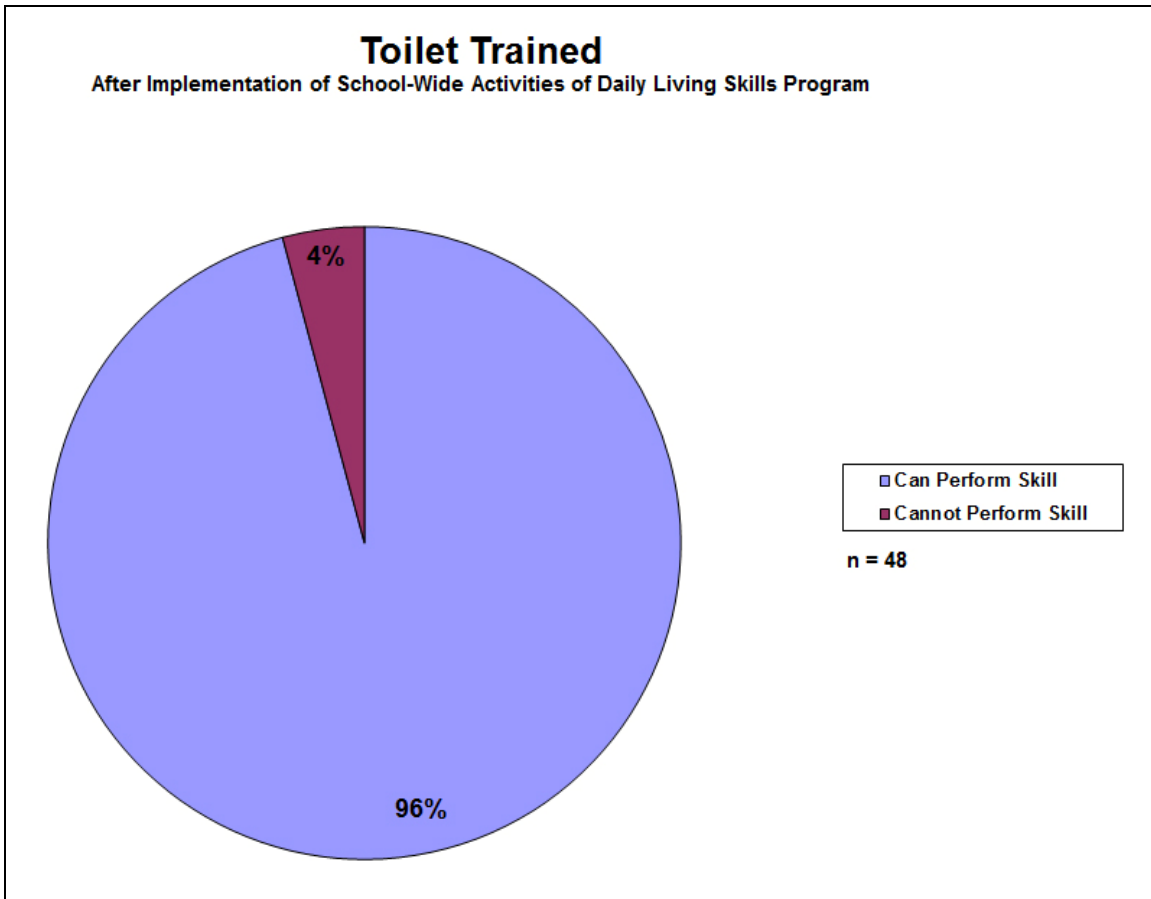


Figure 8

Independent Eating

Previous to the implementation of the school wide activities of daily living program, sixty seven percent of the clients in this study could eat independently and thirty three percent could not. Eating independently included using correct utensils, using a napkin and eating neatly. Six years after the implementation of the school wide activities of daily living program, eight-three percent of the clients in this study could eat independently and seventeen percent could not. This is shown in figures 9 and 10.

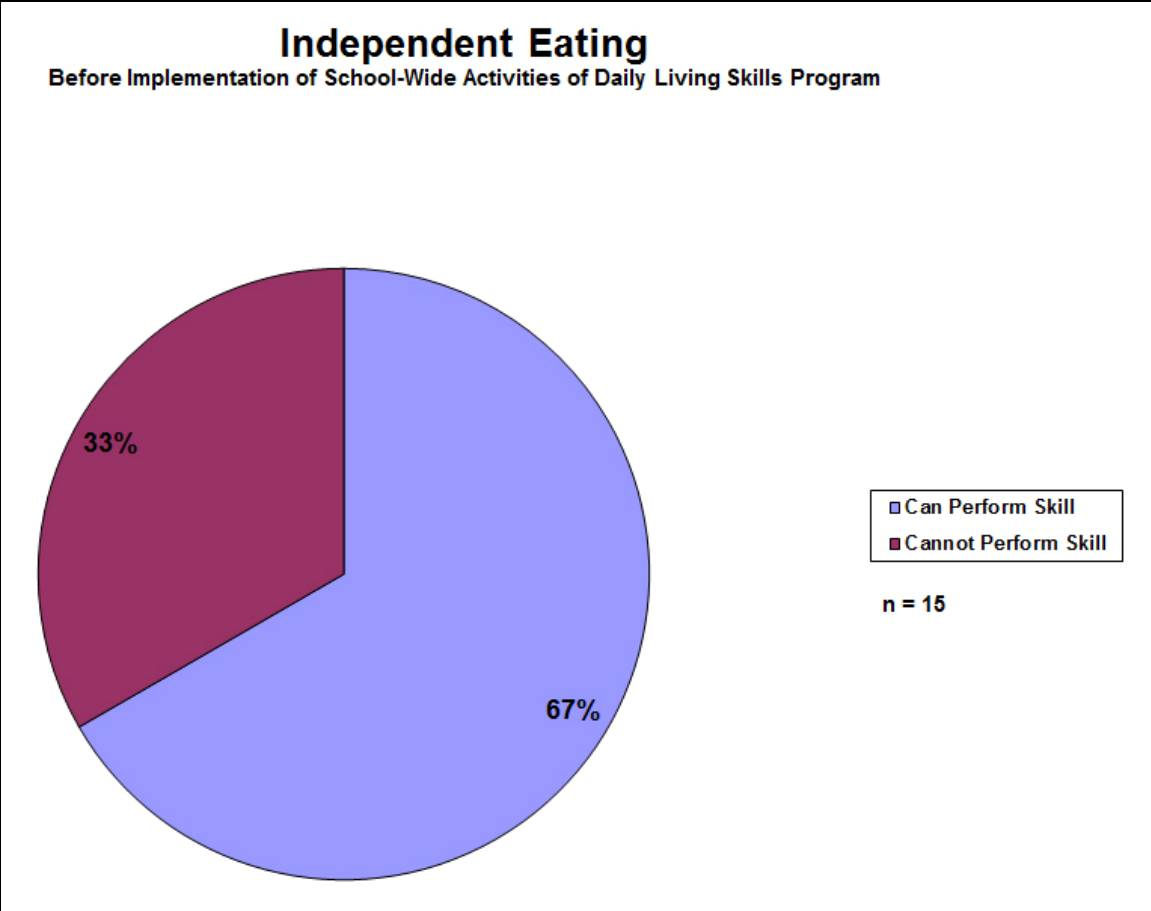


Figure 9

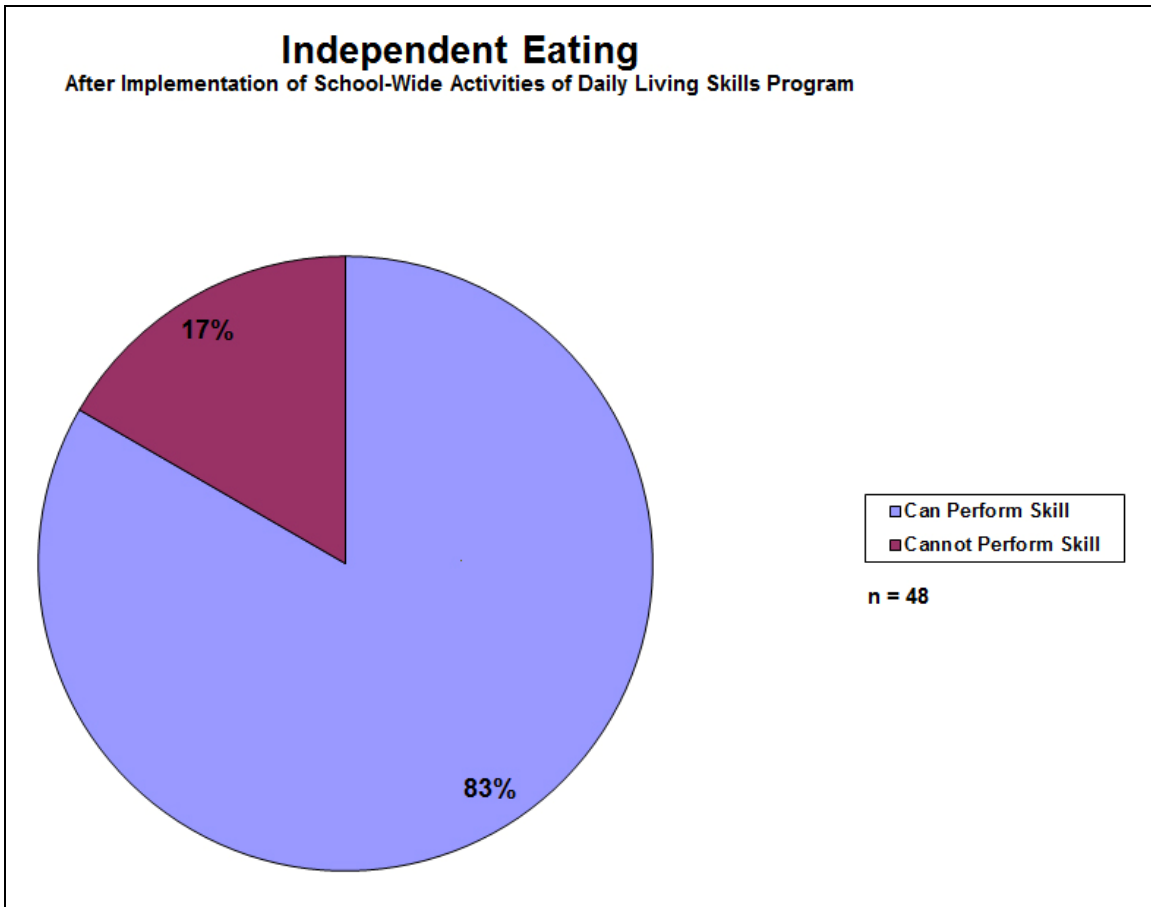


Figure 10

Brushing Hair

Previous to the implementation of the school wide activities of daily living program, twenty percent of the clients in this study were able to brush their hair and eighty percent were not. Six years after the implementation of the school wide activities of daily living program, eighty nine percent of the clients in this study were able to brush their hair and eleven percent were not. This is shown in figures 11 and 12.

Brushing Hair

Before Implementation of School-Wide Activities of Daily Living Skills Program

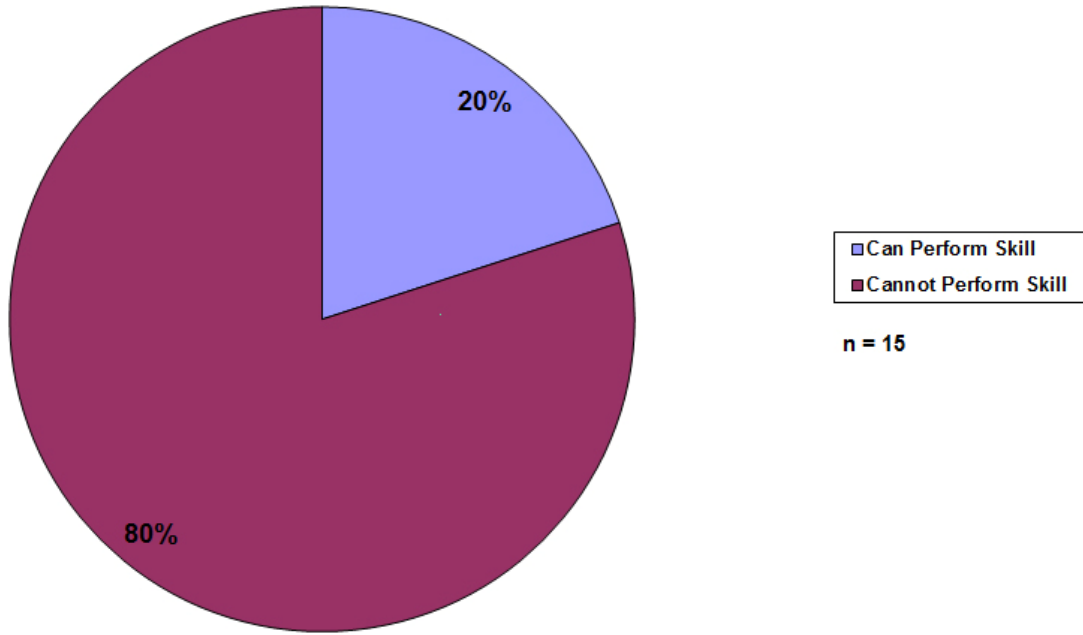


Figure 11

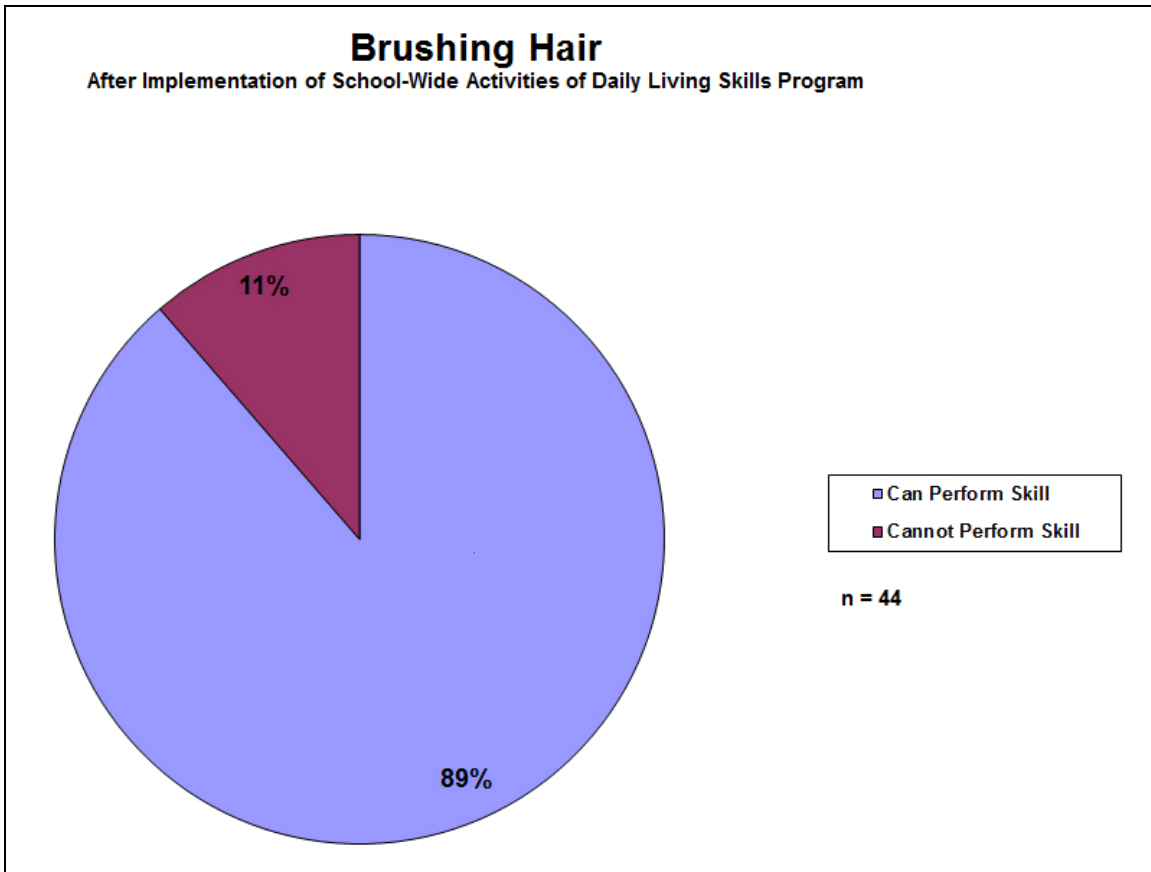


Figure 12

Dressing Independently

Previous to the implementation of the school wide activities of daily living program, forty percent of the clients in this study could dress independently and sixty percent could not. Dressing independently included pulling a shirt over the head, putting on pants and putting on socks and shoes. Six years after the implementation of the school wide activities of daily living program, eight-nine percent of the clients in this study could dress independently and eleven percent could not. This is shown in figures 13 and 14.

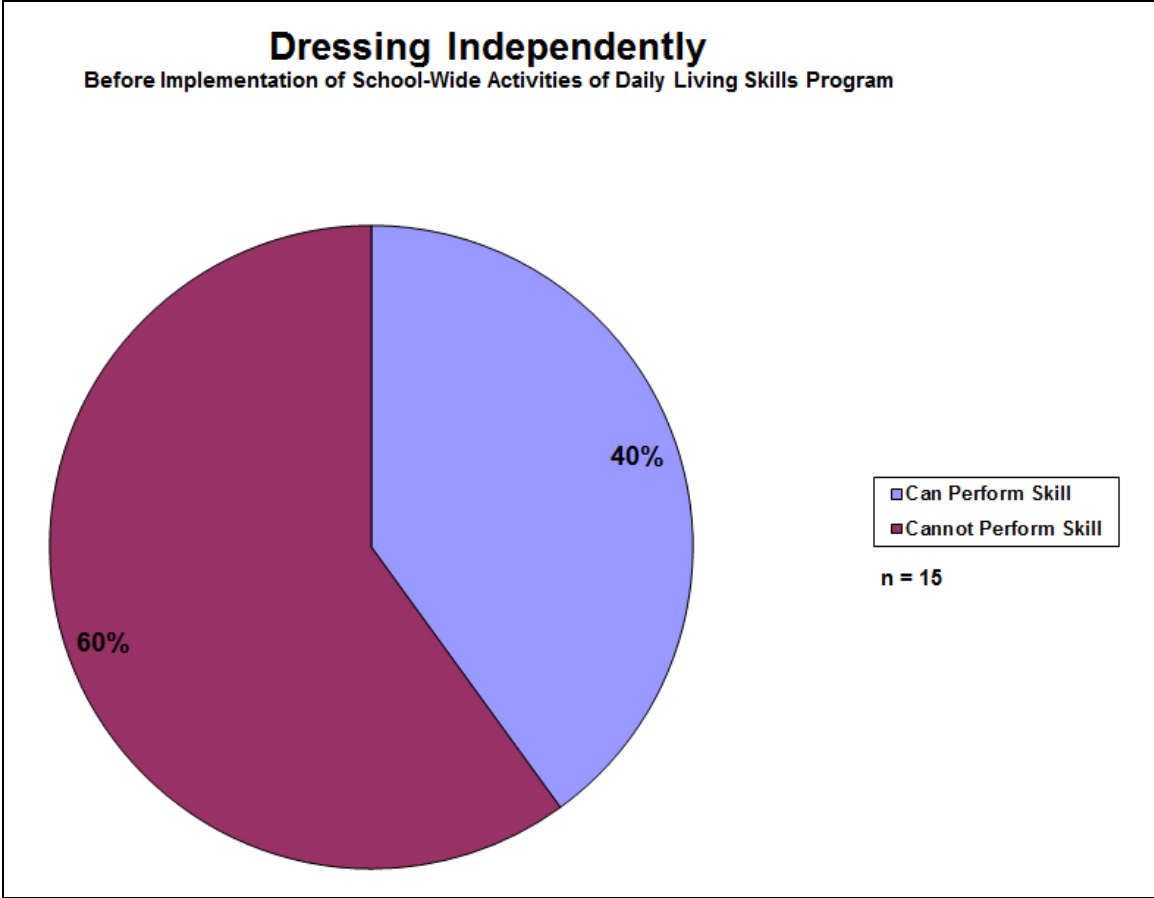


Figure 13

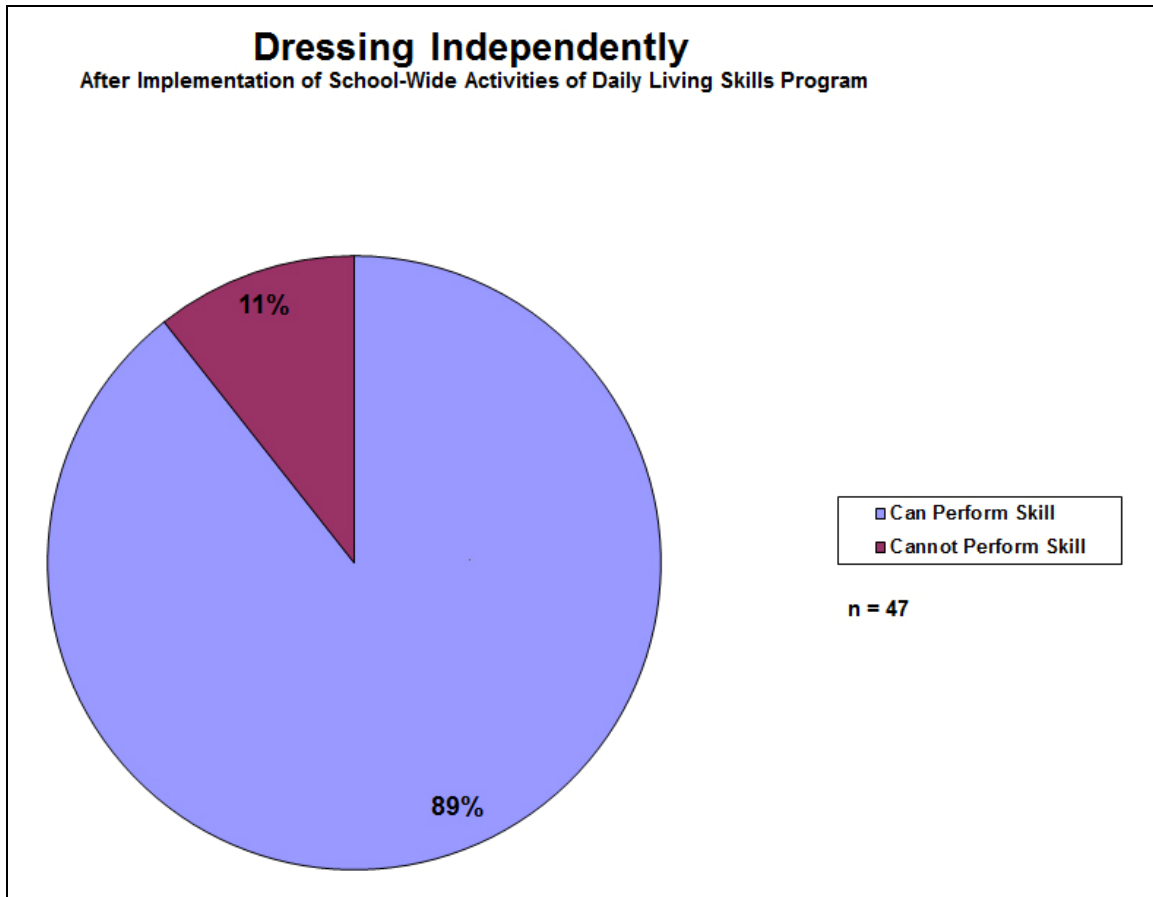


Figure 14

Discussion

The school-wide implementation of the activities of daily living programs has been very successful. We have seen profound improvements in clients' skill sets. Clients' quality of life has improved. These programs have had an effect on all clients, whether they worked in the activities of daily living skills classroom or toilet training, or none of those settings. Due to staff being trained in prompting, chaining and following task analyses, they were able to work on skills with clients in all settings, to include at the residence. This was a wonderful by-product of these programs being started.

In the future, we will examine retention of these skills on a school-wide basis. Once something is mastered, how often does it need to be probed to ensure retention? We will also look at generalization of these skills in different settings with and different staff. We are interested to see if time it takes to acquire the skills has an affect on retention of the skill.