Increasing Personal Hygiene in Adults with Dual Diagnoses

by

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Dedication
“What would you think if I sang out of tune?”

- The Beatles -

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A heart felt thank you to my family; my grandparents, Jacqueline and Paul Pickell, Margo and Bill Simpson, Brian and Irene Carroll. My parents, April and Jay Simpson and Dave and Lori Carroll who have shaped the person I am today. To my boyfriend Josh Bolton, your love and understanding have truly made the difference. To my friends, Candace Parsons, Sarah Riedel, for
keeping me sane and focused, Emma Donavan your patience is legendary, and Jordan, Jensen and Jared for quiet inspiration.

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Lastly, to the Canadian Music Scene as I have listened to and found many talented Canadian Musicians while writing this thesis.
ABSTRACT
The present research study was designed to evaluate the efficacy of positive reinforcement to increase showering behaviour in adults with a dual diagnosis. Participants were three females and one male, ranging in age from 20 to 60. A functional assessment using modified FACTS showed that the function of the behaviour was different for each participant. Participants were verbally prompted to shower, and were reinforced with verbal praise upon completion for each shower. When a participant completed a predetermined number of showers each week, they were rewarded at the end of the week with a one-hour preferred activity. This study was effective in increasing daily showering behaviour among three of the four participants. A preference assessment should have been administered part way through the study to maintain the strength of the reinforcement and prevent satiation.
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Chapter I: INTRODUCTION

Various individuals with intellectual and developmental disabilities exhibit deficits in adaptive skills, such as vocational, self-management skills (task completion) and Daily Living skills (showering; Cannella-Malone, Brooks, & Tullis, 2013; Jacobson & Ackerman, 1990; Kraijer, 2000). Activities of Daily Living (ADLs) is a term used in healthcare to refer to daily self-care activities within an individual's place of residence, in outdoor environments, or both (Fisher & Doyle, 2008). ADLs are important skills that allow individuals to live independently or semi-independently. Individuals with a mental disorder, particularly those who are dually diagnosed, often have significant difficulties in carrying out many self-care activities, and thus are limited in their ability to function independently. An individual with a deficit in adaptive functioning may find it more difficult to engage in community relationships. Additionally, this lack in adaptive functioning may foster learned helplessness as a direct result of the reliance on family and caregivers (Cannella-Malone et al., 2013).

There is a significant amount of research in the realm of ADLs with reference to the elderly population, particularly those with dementia and or brain injury (Godbout, Grenier, Braun, & Gagnon, 2005). However, there is a lack of research in the successful completion of ADLs for individuals with dual diagnoses (Cameron, Ainsleigh & Bird, 1992). Dual diagnosis is defined by Canadian Mental Health Association (2014) within Canada, a state of individuals with a mental illness and a co-occurring developmental disability.

This study aims to address this gap in the literature. A focus on showering was deemed appropriate, as it is a skill that staff felt needed extra attention. Through the nature of the client’s dual diagnosis, the cognitive ability to automatically care for one’s appearance and hygiene is not second nature to many of the residents. Thus this study aimed to increase showering in residential clients with a dual diagnosis. Using reinforcement and prompts, the researcher attempted to increase showering behaviour in individuals with developmental disabilities and mental illness living in a supported independent living environment.

The population of this study was defined as having dual diagnoses. The participants vary in both age and gender. The literature review will outline different interventions previously implemented to help adults with developmental disabilities increase ADL behaviour. In the method section, the number of participants and population of clients are detailed; the clients experience a developmental delay with a co-occurring mental illness. Data was be collected using staff and self-reports of the clients’ showering habits and weighing their shampoo bottles to provide an objective assessment as to whether they are complying with showering requests. The discussion section will present strengths and limitations of this study, challenges it faced during implementation and its contributions to the field. Finally, recommendations will be made for further research.
Chapter II: LITERATURE REVIEW

As the general population ages, so too does the population of individuals with developmental disabilities and/or dual diagnoses (Fisher & Doyle, 2008). According to Fisher and Doyle (2008), individuals who experience intellectual and/or developmental disabilities have deficits in their adaptive behaviour skills, often a slower rate of learning and behaviour disorders that impact their ability to learn and maintain new skill sets. Age is not the only determining factor in support of individuals who find difficulty in their daily routine. Activities of Daily Living (ADLs) were previously defined as daily self-care activities within an individual's place of residence, in outdoor environments, or both (Fisher & Doyle, 2008).

Developmental Disabilities

According to the U.S. Department of Health and Human Services, as cited in the Administration on Intellectual and Developmental Disabilities (AIDD) on the Department of Community living website (2000), the term developmental disability is defined as a severe, chronic disability of an individual that incorporates the following factors: mental and/or physical deficiency or a combination of the aforementioned, which began to show signs in the individual before 22 years of age. It has a high likelihood to continue indefinitely, can result in substantial functional limitations in three or more of the following areas of major life activity: self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, economic self-sufficiency; and reflects on the individual’s need for a combination and sequence of special, interdisciplinary, or generic services, individuated supports, or other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated.

Discrepancies in various domains of adaptive behaviour functioning, such as the daily living skills domain, are typical of individuals with developmental disabilities (Jacobson, Ackeman, & Krayer as cited in Sigafoos, 2007). ADLs are an important skill set for an individual to continue to live independently. Age is not the determining factor in this.

Dual Diagnosis

According to Frontenac Community Mental Health and Addiction Services (2015), dual diagnosis is defined as the presence of developmental disability and co-occurring mental illness with an onset on or before 25 years of age (October, 2014). Many individuals who seek help have a co-occurring disability along with their mental illness. This creates a unique set of circumstances that involves individual treatment plans tailored to the persons who seek help coping with their illnesses. With some developmental disabilities, acquired brain injuries and psychoses, some acquired behaviours are either not learned or need re-teaching to help individuals live more independent lives.

Teaching ADLs to individuals with dual diagnoses should increase their ability to live in a minimally supported independent living environment. The current study involves participants with a wide range of ages, from 25 to over 50. Many of the techniques used in research studies on methods of helping elderly clients maintain independence when completing ADLs were considered when designing the parameters for this study.

Fisher and Doyle, (2006) used the activities and motor processes skills (AMPS) assessment to help determine the greatest treatment plan for individuals with intellectual disabilities that also had deficits in motor skills processing. Fisher and Doyle found overall that the level of difficulty remained throughout the study, in conclusion it was discussed that
Anxiety

Anxiety is one of the more common disorders diagnosed by psychologists. Defined by Davison, Flett, and Neale (2010), anxiety is described as an unkind feeling of fear and trepidation accompanied by increased physiological arousal. Anxiety often presents in many ways; in a study done in 2014 by Pini et al. found that according to epidemiological studies found that separation anxiety disorder happens more frequently in adults than children. Current studies are unclear whether adult separation anxiety disorder (ASAD) is a product of anxious attachment or a form of agoraphobia. (Pini et al., 2014). Anxiety may be a deficit dealt with in this study due to the high rate of co-occurrence. Treatment is readily available via one-on-one counselling that will use various behavioural methods to decrease anxiety, such as muscle relaxation, deep breathing and reminders to engage in positive coping strategies such as sitting quietly, listen to music and talk it through.

The progression towards reaching new goals, both within this study and in other programing, can be difficult to balance. Depending on situational anxiety, progress toward goals may regress depending on a number of factors. For example, if relief staff are filling in for primary care staff, activities for the day and clients’ expectations deviate from the previously scheduled routine. This will influence their concentration and focus on the previously established goals. Agoraphobia, according to Davison, et al. (2010), agoraphobia is often linked to panic disorders, as it is a cluster of fears centred on being in open spaces and leaving the home. Agoraphobia can co-occur with various mental health disorders. It is important to take this into account when treating an individual with anxiety disorder with aspects of Agoraphobia because what may be reinforcing for other clients to increase their showering behaviour, like going out with friends or doing a fun activity outside the home could have an adverse effect and cause more anxiety and stress due to the activity happening outside the clients’ normal ‘comfort zone’. Showering is important no matter the motivator, because there are health benefits such as, improved blood circulation, reduced stress, and fewer symptoms of depression. Participants will be required to work through anxiety provoking situations that may arise throughout the course of this study. Pointing out the benefits to showering may aid the individual to overcome their agoraphobia to help motivate them to shower consistently.

Supported independent living

Many mental health agencies provide clients with varying levels of support dependent on their diagnosis and personal needs. This can take many forms, from one on one counselling sessions, group skill building workshops or residential support. At Frontenac Community Mental Health there are a select number of clients who qualify for minimal support with advanced ADLs such as cooking, keeping appointments, and medication check ins.

Activities of Daily Living

To assess activities of Daily Living or ADLs for short, the ADL-IS was developed by Reisberg et al., 2001. The ADL-IS is a widely used instrument to assess the related functioning in everyday life each of which is scored along a 4-point scale (0-3) during an interview with the participant. According to Lehfeld, H., Schläfke, S., Hoerr, R., & Stemmler, M. (2014), this scale was developed in cooperation with many countries including Eastern and Western Europe and the United States. (Lehfeld et al., 2014). The total mean score is calculated by dividing the sum
of item scores by the number of applicable items, where the higher the score achieved indicated the weakest performance.

ADL assessments have become the standard in assessing an individual’s capability of completing everyday tasks and level of independence they are medically safe to maintain.

One essential ADL is showering. According to Reistetter, Chang, and Abreu (2009), “taking a shower is defined as the action of washing oneself under running water sent out from a showerhead in the bathroom. Showering plays an integral role in an individual’s social interactions, physical and mental health, and personal hygiene” (p.4). Adequate showering habits have been supported by research as an important tool in maintaining health and well being (Clark, Sanders, Carlson, Blanche, & Jackson, 2007).

Depending on the level and severity of the disability, there may be possible difficulties in completing the target behaviour of showering. Reistetter, Chang, and Abreu, (2009) found individuals with a brain injury (BI) frequently require supervision, assistive equipment, or home adaptations for safety to help increase their independence with showering. This has led to an increased focus on the goal of maintaining independence of showering behaviour instead of completing the understanding of showering habit (Reistetter et al., 2009).

Prompts

Prompts are verbal or gestural hints or reminders used to shape a behaviour, according to Miltenberger, (2008). Prompts are used to help shape an individual’s’ behaviour regarding a specific task. For example teaching a child to read would involve a vocal prompt of a parent helping the child sound out the words as they read them on a page. There are two types of prompting that can help engage a client to participate in the target behaviour: physical prompts and verbal prompts. Because physical prompts involve aiding an individual in completing a task often using hand-over-hand demonstrations, only verbal prompts were used in this study. Verbal prompt is defined as a form of prompting where the verbal behaviour of another individual effects the correct behaviour of the person being trained in the company of the discriminative stimulus. (Miltenberger, 2008)

Some interventions to increase ADL completion include prompting the participants towards the desired target behaviour. Prompting is used in many situations. For example, prompting is utilized in teaching a new behaviour, creating a routine and strengthens certain behaviours for the benefits of the client (Miltenberger, 2008). Cameron, Ainsleigh, and Bird, (1992) studied an individual with aggressive tendencies and Down Syndrome, who also refused physical prompt to help bath himself; a stimulus prompting method was implemented, instead of traditionally used instructional strategies, because it was found ineffective. (Cameron, et al., 1992) The study found that overall using stimulus prompts and changing to the preferred type of soap aided in teaching successful bathing routine and decreasing maladaptive behaviours associated with the bathing routine. (Cameron et al. (1992).

Fading is an effective tool to minimize prompt dependency. Fading allows behaviours to generalize to their natural environment without added work to maintain them. (Miltenberger, 2008).
Positive Reinforcement
Reinforcement is defined as the method in which the event of behaviour is monitored by a consequence that influences an increase in the future probability of said behaviour (Miltenberger, 2008).

The reinforcement process is described in schedules. The most effective schedule of reinforcement is continuous. For every successful instance of the target behaviour, reinforcement is given (Miltenberger, 2008). This will approximate a high rate of completion of the arranged programing. Consistency is important in delivering reinforcement. It is the element that will turn an action into a habit. When the target behaviour is reinforced consistently a habit can begin to form which will help the participant maintain the desired behaviour change after the program has been faded out.

Skinner (1986) maintained that participation in the chores of daily living or ADLs connects the individual with potentially reinforcing consequences associated with task completion. Different rewards have varying levels of importance to the participants. The likelihood that the target behaviour will be performed with little to no trainer prompt will depend on the type of reinforcement and overall reward offered for completing the task. Natural consequences within the participants’ social interactions with others are not strong enough for the individuals.

The inability to respond to and be successful in receiving reinforcement from certain social interactions can be indicative of developmental disabilities. This lack of positive reinforcement means individuals with developmental disabilities do not get the opportunity to learn the same social cues and, therefore, reinforcement is withheld and certain behaviour patterns will not strengthen or generalize.

Reinforcement can be any preferred item or activity that people find attractive or result in an increase in behaviour. (Mayer, Sulzer-Azaroff & Wallace, 2012). A reinforcer can also be an escape from an activity or demand being asked on an individual.

Reinforcement is a great way to shape and progress behaviour, but ultimately the goal of the current study was to generalize the behaviour of showering through natural reinforcers found in the environment. Fading is defined as the process of gradual removal of prompts as the behaviour continues to occur in the presence of the discriminative stimulus. (Miltenberger, 2008). This was done in the current study through fading the second verbal prompt and immediate verbal praise that was added into the environment.

Through a fading schedule, the added positive reinforcement of one-on-one time spent with the student researcher was diminished over the course of follow up to allow the behaviour of showering consistently to generalize to the natural environment

Assessments
Two assessments used by Fisher (2008) were the Activities of Daily living (ADL) and Instrumental Activities of Daily Living (IADL) checklist assessment scale. The Activities of Daily Living (ADL) assessment was devised by Kratz (1963) and was finalized over a 10 year span (as cited in Fisher & Doyle, 2008).
The assessments in the current study were completed by the client or completed by a caregiver/nurse. Fisher and Doyle (2008) found that ADL assessment has aided health care professionals in tracking the progression of dementia in elderly adults who are monitored in a variety of assisted community living situations. The drawback of the above described assessments is they often have to undergo modification to be utilized with different populations. Fisher and Doyle (2008) discussed some limitations of effectiveness of ADLs, and revised in the Instrumental Activities of Daily Living or IADLs. This assessment is taken further in an attempt to compile an accurate assessment in skills related to daily living, but is still in need of further research to maintain its accuracy (Fisher & Doyle, 2008). This assessment should also only be used as part of a broader assessment and not relied on as the sole assessment tool in monitoring the progression of not only individuals with dual diagnosis or developmental disabilities in supported community living and long term care facilities.

Self-Report

Self-report is often used when covert behaviours are being assessed (Miltenberger 2008). For example, thoughts and feelings an individual may experience. They are covert responses, which are difficult to measure objectively (allydog.com, 2015). Self-report is defined for the purposes of this study as the method of data collection that relied on participants to report their behaviour to the student researcher. This method was chosen because the data collected was not easily observable. (allydog.com, 2015). According to Coman and Richardson (2006) measuring self-report functioning has had a long history and widespread application. This proves it use and effectiveness in various environments. Coman and Richardson (2006), also noted that because data is collected based on the sole response given by participants, there is no way to assess the validity of their answers unless there is independent observer. This can be difficult when ethically it’s impossible to collect direct observation data. This is why in the current study there was an independent measure of validity through weighing of the clients’ shampoo bottles.

Permanent Product Recording

Permanent product recording can be used to measure whether the showering behaviour occurred or not. Often used in classrooms to assess work completion of students, this technique can be applied in this study as a less intrusive, objective way of checking the participants self-report of their showering behaviour. Respecting the privacy of the participants was very important in establishing trust and cooperation to complete the study. Also the practice of having an objective data collection sample aids in increasing the validity of a study.

Summary

The purpose of this study was to take what is known about the already established interventions used for ADLs, specifically showering and the given population of dual diagnosis within the residential setting, and apply it to effectively treat this aspect of hygiene, within a specific agency that cares for individuals with a dual diagnosis. Individuals with a dual diagnosis are often worked with, but this is not an over researched topic. Using reinforcement and prompts, the researcher attempted to increase showering behaviour in individuals with developmental disabilities and mental illness living in a supported independent living environment.
Chapter III: METHOD

Informed Consent Procedure

Informed consent was obtained on the week of November 8th, 2014. The Researcher Ethics Committee (REC-P) is the governing body of research at St. Lawrence College. Any research done in conjunction with St. Lawrence College programs in the community need to undergo an approval process, once approval from Researcher Ethics Committee (REC-P) was received. Clients were given a consent form (Appendix A) to read and sign, along with a verbal explanation of the contents of the form and procedure to be used. Clients were asked if they had any questions and given an opportunity to decline participation. Upon answering questions and giving approval for participation they signed the consent form and were given a copy to be kept in their file in the office. Where they could access it at any point, should they desire.

Participants

This study had four participants who were dually diagnosed according to the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V)(American Psychiatric Association, 2013). All the participants were within the ages of 20 to 60 years old. All participants were referred to the study due to inconsistencies in personal hygiene behaviour, specifically showering.

Client A is a 28-year-old female who experiences anxiety with Agoraphobia and an unspecified developmental disability. She also experiences seizures when not on medication and has Type II Diabetes. Client A’s is currently taking antidepressants, and anxiolytics.

Client B is a 43-year-old female who experiences anxiety, seizures, and has a global developmental disability. She is currently taking anxiolytics and anticonvulsants.

Client C is a 51-year-old male who experiences chronic schizophrenia and Neuroleptic Malignant Syndrome. His current medications are antipsychotics, antidepressants, anxiolytics.

Client D is a 25-year-old female who experiences Psychosis NOS, with Mild Developmental Disability. Her current medications are antipsychotics and antidepressants.

Design

The study used an AB, quasi-experimental, multi-subject design. It was not a true random sample because specific clients were referred by their primary workers. There were very few individuals who were open to participating in this study. For this reason a simple research design was chosen to limit confounding variables and to ensure minimal intrusiveness. To further minimize any use of direct observation in such a sensitive area such as showering, the clients’
shampoo bottles were weighed with their knowledge and they were given the choice to bring it down to the office or have them weighed in the kitchen of their apartments.

**Target Behaviour: Dependent Variable**

The clients were referred due to staff concerns of the consistency of their personal hygiene. The purpose of this thesis the target behaviour showering is defined as follows. A shower is considered complete when hair has been washed using shampoo and was dried using either a towel or hair drier. At least one article of clothing must be clean as measured by an absence of stains. A shower will not be counted if there is visible dirt on exposed skin.

Showering was assessed through self-reported data collection. Permanent product recording was used to verify clients’ self-report. As a non-intrusive means of assessing validity a weekly weighing of shampoo bottles was done with the clients’ knowledge. This was a way that the student research could double check the clients were participating in the recommended intervention.

**Independent variable**

The independent variables were positive reinforcement and prompts. Prompts were already established within the clients’ daily routines. Existing prompts given by primary staff, were accented with a second prompt delivered by the student researcher and a consistent reinforcement schedule was added to the task completion of showering. By adding a second verbal prompt and verbal praise upon confirmation of shower completion, it was hypothesized that there may be an increase in showering behaviour. There was also an added incentive with the additional reinforcement of weekly 60 minutes one-on-one time with staff.

**Positive reinforcement.** A positive reinforcement contingency was established using a check mark system and social mediated positive reinforcement (defined as reinforcement that is delivered by another person) in the form of verbal praise was delivered.

Clients showered in the morning prior to going to program, or when not required to go to program they were expected to shower before noon.

During phase one; participants were required to earn at least three checkmarks within five days in order to gain access to their preferred activity.

During phase two participants were required to earn at least five check marks within five days to gain access to their preferred activity. This was done to generalize the behaviour of showering daily.

To receive a check mark, clients must have a shower. Clients could earn a maximum of one check mark per day, as it was not required that the participants showered more than once a day.

To ensure that clients were accurately reporting their showering behaviour, shampoo bottles were weighed every Monday during baseline and intervention phases. A single page document (Appendix B) outlined who showered and the student researcher gave a check mark when participants reported having had a shower. Verbal praise was paired with every check mark. At the end of each week (five day period of Monday-Friday), access to a preferred activity was granted upon completion of the predetermined number of showers. The activity was 60
minutes of one-to-one time with staff. The preferred activity was determined through interviews with the primary care workers.

When clients successfully achieved the criterion level of check marks for completing the targeted showering behaviour, they received a predetermined reinforcer of an hour spent with staff.

The question “did you shower yet today?” was usually asked of clients as they came to the office for their morning medications. While this occurred most mornings there were a few times the question was posed outside the office when they were late coming for medications. To record answers, a table of clients’ numerical identifiers and days was constructed and filled in based on the “yes” or “no” response the client gave. ‘Yes’ was identified as a check mark and ‘No’ was given a small x. Data collection occurred Monday to Friday from 8 a.m.-12 p.m., providing there were no extenuating circumstances.

An additional round of social positive reinforcement in the form of verbal praise was delivered on completion of showering behaviour on a FR-1 schedule, so after every instance of correct showering behaviour clients received verbal praise.

**Intervention Procedures**

**Prompts.** Prompts are defined as verbal reminders from staff to the participants to complete a task that was outlined in their daily schedule. Prompts were delivered before clients left the office for various tasks; including prompts for showering, taking medications, and eating breakfast. The previously mentioned prompts were usually given by regular front line staff or by a relief staff, if regular staff was sick. An additional prompt was added by the student researcher before they left the office or was delivered at the door of participants’ residence to reinforce the importance of showering daily. The secondary prompt was phrased in a question posed to the clients to help prompt them to shower for said day on top of the prompt already given by primary staff prior to leaving for programming for the day.

For Client A, the staff would prompt for them to take a shower, which was generally ignored by the client. Staff would ignore client requests until participants showered, with the exception of emergency requests.

For Client B, the staff would prompt her to shower as part of the morning routine. She has experienced past falls in the shower, which created a negative showering experience and triggered non-showering behaviour. This resulted in attention from staff and peers.

For Client C, the staff would ask if he had a shower in the morning, the client would reply quickly that he bathed last night, and this would sometimes be true. Staff delayed client leisure activities until showering or bathing has taken place.

For Client D, the staff would prompt her to shower as part of her morning routine. She would not shower before program and this resulted in peer attention; also staff would often have to delay client leisure activities until a shower had been completed.

**Program Changes**

Over the course of the study there were some environmental and population factors that came into play. It was not until baseline data collection was under way that there was an
observed understanding of the compliance deficit in consistent personal hygiene behaviour. This led to a change in the present objective for this study, instead of the expectation of a shower every day during the first week of intervention the objective was change to: as long as the clients engaged in personal hygiene behaviour of a shower every other day, they were still eligible to attain the previously agreed upon reinforcement. After the observation of objectives changed, an increase in showering behaviour was observed through the self-report data collection the objective for week two was increased to daily showering activity. This was successful in three of the four participants receiving verbal praise and the agreed upon reinforcer. Unfortunately because of external emotional factors Client A had a change of reinforcement from hour of one-on-one time spent with staff to time spent alone with no demand on her. This change did not prove effective in increasing motivation for participation in this study, but was not enough to disqualify their results gathered.

Assessment Measures
A modified Functional Assessment Checklist for Teachers and Staff (FACTS) was used to determine the motivation behind not participating in showering each day (Appendix C). Due to limited social skills, time constraints and impaired intellectual understanding the assessments were indirectly filled out by student and verified by primary staff. The behavioural summaries are as follows: (Insert, Client summaries from FACTS!!)

The main assessment used to determine the gap in scheduling was a modified Functional Assessment Checklist for teachers and staff (FACTS; Anderson & Borgmeier, 2007). The FACTS was completed to determine if there was a skill deficit or motivation deficit for showering behaviour.

Also used in this study was clinical judgment based on staff testimonial about clients’ ability to complete showering behaviour; this suggested that the reluctance to engage in showering behaviour was due to a motivational deficit.

Facilitators. The program was designed to be delivered by agency staff. For the purpose of the current study and time constraints the student facilitator implemented the study ideally, the client’s primary care workers who interact daily with them would deliver the intervention after the student researcher’s involvement ended.

Setting and Apparatus
This study was completed in the office of the non-assisted living apartment building where the participants lived. The participants lived in a Supported Independent Living (SIL) program located within a local mental health agency. A computer was used to take baseline data. Microsoft Word was used to construct a table of the clients’ numerical identifiers before data collection began. Intervention data were encoded on paper in chart form. Copies of data collection sheets were kept in the office; also clients had a paper copy of their check mark sheet of their progress in their apartments The Ozeri Pro Digital Kitchen Scale in Chrome, this the small scale used to determine the weight of participants shampoo bottles on a weekly basis. A timer, usually a clock that was visible in the participants apartment or, if needed, the timer app on the student researcher’s cell phone, were used to help the participants know when their hour of activity time had finished.
Follow-up
The evaluation of the current study was done through a post-intervention or follow-up phase of three days where conditions returned to baseline. During follow up, baseline-level prompts were delivered, and only naturally occurring reinforcement was available.

Chapter IV: RESULTS
The positive reinforcement program was implemented for a total of 21 days and was shown to be effective in increasing four clients’ frequency of daily showering behaviour. All data collected during the treatment is charted in Appendix D. According to Appendix D Client A’s showering behaviour increased from 44.00% of the observed days during baseline to 100% during intervention phase one, and continued to stay the same with a small increase during the second phase of intervention.
As a measure of validity, the participants’ shampoo bottles were measured every Monday during the course of the study. The following results were found:

Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Baseline (oz.)</th>
<th>Intervention phase one (oz.)</th>
<th>Intervention phase two (oz.)</th>
<th>Follow-up (oz.)</th>
<th>% Change from Baseline to Intervention phase two</th>
<th>% Change from Baseline to Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client A</td>
<td>9.30</td>
<td>8.50</td>
<td>7.60</td>
<td>6.40</td>
<td>-18.27%</td>
<td>-31.18%</td>
</tr>
<tr>
<td>Client B</td>
<td>10.20</td>
<td>9.70</td>
<td>8.80</td>
<td>7.60</td>
<td>-13.73%</td>
<td>-25.49%</td>
</tr>
<tr>
<td>Client C</td>
<td>10.40</td>
<td>10.40</td>
<td>9.50</td>
<td>8.10</td>
<td>-8.65%</td>
<td>-22.11%</td>
</tr>
<tr>
<td>Client D</td>
<td>9.15</td>
<td>8.90</td>
<td>7.40</td>
<td>6.90</td>
<td>-19.13%</td>
<td>-24.59%</td>
</tr>
</tbody>
</table>

*Note:* Shampoo weight table demonstrates validity of showering behaviour over the course of this study. Shampoo weights were taken on Mondays during all phases. Over the course of intervention and into follow-up the weight of all participants shampoo bottles decreased, showing an increase in showering behaviour.

**Client A**

The FACTS assessment revealed Client A didn’t keep a consistent routine throughout the week. The setting event for the target behaviour of showering was a prompt from staff. This prompt was often ignored and this led to a consequence of removal of preferred activities until task was completed. This sometimes did not make a difference in the behaviour of Client A and a different approach was used during this time.

As shown in Figure 1, Client A’s showering behaviour maintained a 0% average during baseline, with no changes. During phase one of intervention, showering behaviour increased
from 0% in baseline to 60.00 % or three of the five days observed. The slope of Client A’s showering behaviour was calculated using $Y=Mx+B$. The slope of baseline is zero indicating there was no change in behaviour during baseline observation. During phase 1 the slope of the increase in behaviour was 0.3. During phase two the slope of the increase of the behaviour improved to 0.5. In Follow-up the slope of showering behaviour stayed consistent at 0.5.

![Graph showing Client A's showering behaviour](image)

**Figure 1:** Client A’s showering behaviour.

**Client B**

The modified FACTS assessment revealed the setting event for targeted behaviour was her morning routine. The trigger for the behaviour of not completing a daily shower was in the past there have been slips/falls in the shower sometimes due to her seizer disorder. This resulted in negative attention from staff in an attempt to change the behaviour.

As demonstrated in Figure 2, Client B’s showering behaviour stayed consistent over the course of the baseline phase. In phase one of the intervention, showering behaviour increased...
from zero of five days showered in baseline to two of five days or 40.00%. While in phase two, Client B’s showering frequency increased to three of five days (60.00%) showered. The slope in baseline was zero, while phase one, phase two and follow up slope is consistent with 0.5. Indicating a marginal increase in the targeted behaviour of showering but seemed to be followed by a stagnation on progress in follow-up.

Figure 2: Client B’s showering behaviour.

**Client C**

Client C helped the student researcher complete the modified FACTS assessment determining the motivation of not showering daily is maintained by partly because there was not a various rate of reinforcement and his bathroom was not being cleaned regularly. The lack of cleanliness reinforced his desire to not shower.

As shown in Figure 3, Client C’s baseline showering behaviour was consistent, as he only showered once a day over the course of baseline observation, and 33.33% of the days.
phase one of treatment showering increased to three of five days or 60.00%. Phase two of treatment started strong, as Client C engaged in daily showering behaviour effectively. The slope of increase in behaviour during baseline was 0.15. The slope of phase 1 increased to 0.5. The slope of phase 2 and follow up remained constant at 1 demonstrating an increase in showering behaviour.

![Figure 3.0 Client C’s showering behaviour.](image)

**Client D**

From the modified FACTS assessment completed by the student researcher and verified by staff, it was found that there wasn’t one specific setting event and more the trigger of the verbal prompt, “go take your shower” or “have you had a shower yet?” that elicited Client D not completing the target behaviour of showering. The consequences of this were activities or preferred task was delayed until shower was completed.
As shown in Figure 4: Client D’s baseline showering behaviour increased slowly as she only showered every third day at the beginning of baseline 30%. During phase one of intervention Client D continued to shower, increasing in number of times to 3 out of five days or 60.00%. Finally during phase two of intervention there was another increase and they were participating in the desired target behaviour of showering daily 80.00%. The slope baseline phase for Client D is 0.5. Phase one has a slope of 1 and the slope of phase two is 0.8. The slope of the follow up phase was, 0.5. Determining there was an increase from baseline through phase one and two which started to maintain in follow-up, but then started to decrease as added reinforcers were not maintained as the environmental prompts went back to baseline.

![Graph showing Client D's showering behaviour](image)

**Figure 4.0 Client D’s showering behaviour**

**Summary of Results**
Client A’s showering behaviour increased on average from 0 occurrences per week to 3 occurrences per week (Figure 1). Client B’s showering behaviour increased from 0 occurrences per week to 4 occurrences per week (Figure 2). Client C’s and D’s began showering daily at 5 occurrences per week after intervention (Figure 3 and 4, respectively).
Chapter V: DISCUSSION

Summary

The above research paired positive reinforcement and an additional prompt to increase showering with adults with a dual diagnosis. Initially some of the participants were resistant to participate in the study as it was uncomfortable to talk about their showering habits and have them tracked by the student researcher. Even after the benefits of the study were explained to the participants there was still some unwillingness from one of the participants. This was not immediately addressed as the student researcher wanted to see what the effect the other participants would have before intervening. There were also other factors such as social mediated peer pressure, for one participant during intervention medical instructions dictated that they shower daily before applying topical cream. The results obtained in this study revealed an increase in personal hygiene behaviour in Client B, Client C, and Client D but not in Client A or three of the four participants. During data collection of baseline the participants were resistant to contribute, personal hygiene behaviour increased slightly during the first week of intervention and continued to improve for most participants during phase two of intervention. This study exemplified that when consistently paring immediate praise with activities that the clients find reinforcing, there is potential for increasing personal hygiene rates in adults with dual diagnosis. The study reached projected targets through a modified intervention.

Context of the Current Research Literature

As discussed in the review of the relevant literature, positive reinforcement is a common and effective way to produce behaviour change for individuals with a variety of mental illnesses (Miltenberger, 2008). It has been successful with children and adults with varying abilities and mental illnesses and therefore has a high success rate. Activities of daily living traditionally assessed in older individuals to track their ability to maintain independence in everyday activities and living without assistance, individuals who live with a developmental disability and co-occurring mental illness often experience difficulty with activities of daily living. This study was done to assess the validity of the previous statement and help individuals with a dual diagnosis find ways to maintain their independence in daily activities. The current study provides evidence that using positive reinforcement, verbal praise, prompting and consistency as a valid approach to coax behaviour change to help improve quality of life through consistent participation in activities of daily living.

Limitations

Ethical Concerns. Based on the personal nature of showering it was unethical to obtain data via direct observation. The ethical concerns that presided over this study instead relied on self-report given by the participants to the student researcher. This study conducted on showering behaviour did not have a true random sample as clients were referred to the study by their primary care workers. It was also based on participants’ self-report of their own showering behaviour in an attempt to validate this, , the shampoo bottles were weighed;. For this reason it was difficult to determine the reliability of the self-report data.

Time constraints. Due to the length of time it took to obtain approval from the Research and Ethics Board there was a short timeframe for data collection and to introduce the behavioural intervention. Despite this limitation notable changes were still achievable.

Preference assessment. During activity time spent with staff, which was the predetermined reward for shower completion. It was observed that activity time was not as
reinforcing to all participants as previously indicated in pre-treatment interviews with primary staff.

Historically, monies were provided as a primary reinforcer for compliant behaviour shown by the clients in SIL. Unfortunately, this reduced the value of alternative methods of reinforcement, such as the use of one-to-one time offered in this study. In order to prevent this limitation in future studies, a formal preference assessment is recommended.

**Strengths**

There were many strengths of this study. Staff noticed an improvement in the overall hygiene of the participants due to their participation in the consistency of showering study.

Also the study could be conducted within an environment the clients were comfortable and familiar with. This ultimately helped with many factors; delivery of reinforcement, increased participation.

The intervention was effective with three of four clients; showering behaviour increased to either once daily showering or once every other day for the duration of treatment phases and follow up. This was a simple study that is easily replicated. The participants’ showering behaviour increased as the study progressed suggesting that one a routine was in place and consistency of reinforcement was delivered, participants could maintain progress with generalized reinforcement found naturally occurring in their environment.

**Multi-level Challenges Report to Service Implementation**

There are many varying challenges to working in the mental health field. Changing the routines of clients with a dual diagnosis can have adverse consequence on their progress. The aforementioned challenges happen at various levels including the client level, program level, organization level, and social level.

**Client Level** It can be challenging and unpredictable to work with clients who have a variety of mental health illnesses. When there is an occurrence of developmental disability paired with mental illness, structure and routine are very important to maintain consistency in clients’ lives. They expect and thrive on consistency. Motivation is also key to keeping clients on track with their programming. The introduction of the idea of increasing their showering habits was initially met with resistance from the clients because it was something new. Also, reinforcers used to shape consistency in their behaviour were met with less enthusiasm than expected. This too supports the need for proper reinforcer preference assessments to be done prior to the intervention.

**Program Level.** Increasing personal hygiene in adults with a dual diagnosis is important to maintain their standards of living. This study was added to their already established morning routine as to have minimal impact on their reactions to change in their lives. This put a brief strain on the front line support staff as they were already taxed in the duties assigned. It was, therefore, up to the student researcher to maintain the program change.

**Organizational Level.** A team of front line workers, doctors and other professionals support individuals with various mental health issues. This may seem easy to do but can often be a trial and error approach. There are many unique departments within FCMHAS that work
together as a team to support their clients. Behavioural support plans, including the plan to increase personal hygiene through positive reinforcement, are made, shared with the team as they work together to support clients towards independence and living independently with their conditions. Mental health organizations are constantly supporting mental health education initiatives to help society understand individuals with mental health.

**Societal Level.** Society views individuals with mental illnesses on a spectrum depending on the severity of the mental illness. Sometimes when a developmental disability is present people will often shy away from talking with an individual who have a dual diagnosis because they do not understand the individual’s history or that they indeed suffer from a mental illness. Society has come a long way from how we used to treat people who had mental illnesses, but there is still much to learn as they are still many misconceptions and stigma surrounding individuals with various developmental disabilities and mental illnesses.

**Recommendations for Future Research**

While the current study involved four individuals with a diagnosis of mental illness and developmental disabilities, further research should be conducted regarding the efficacy of the current intervention with individuals with one prominent disorder to compare the results. Additionally, as mentioned above the research should be replicated with other individuals of various developmental disabilities and mental illness populations and age groups with a wider sample. In further research, adding a control group to investigate which parts of the intervention was most effective.

Due to time constrains of the current trial, an increased time consideration for intervention should be taken into account for future studies. This will allow for more accurate results in an extended follow up, this would aid in determining the success rate of generalized reinforcers.

Upon reflection the modified Functional Assessment Checklist for Teachers and Staff (FACTS); Anderson & Borgmeier, 2007) This assessment was modified from March et al. (1999). It was barely adequate to assess the participants because of the severity of their developmental disabilities, it was difficult for them to fully understand the questions being asked in the assessment without rewording them, this was done by the student researcher. Primary staff were also consulted due to the difficulty in understanding the questions asked by the assessment.

**Contributions to the field of Behavioural Psychology**

This thesis supplied two contributions to the field of behavioural psychology; identified the gap in literature where activities of daily living are assessed in individuals who are older in age. This study aimed to assess the activity of daily living, specifically showering in individuals with a dual diagnosis. Additionally this study revealed more study is needed with a stronger validity measure and standardization of assessment measures to accurately ascertain the progress made by clients completing an ADL based behavioural program.

Secondly, this study has identified that further research is needed in the realm of ADL assessment and to help strengthen the consistency of treatment approaches used within the population of developmental disabilities. This was done not by direct data collection, but of the observations of the surrounding deficits and excuses made for clients not wanting to participate
in daily personal hygiene behaviour. This thesis though mildly successful in increasing personal
hygiene behaviour rates of clients with a dual diagnosis revealed that with the benefit of a
standard measure, specifically for the given population and a stronger reinforcer personal
hygiene rates should increase through improved showering behaviour may also generalize over
time.
References


**Appendix A: Consent Forms**

Guardian Consent form

**Project Title:** Increasing completion of Showering in adults with dual diagnosis.

**Principal Investigator:** J. Kaela Simpson

**Name of supervisors:** Sandra Henderson, Jordan Maile

**Name of Institution:** St. Lawrence College

**Name of agency:** Frontenac Community Mental Health and Addiction Services
Invitation

Your family member is being invited to take part in a research study. I am a student in my 4\textsuperscript{th} year of the Behavioural Psychology program at St. Lawrence College. I am currently on placement at Frontenac Community Mental Health and Addiction Services –SIL program. As a part of this placement, I am completing a research project (called an applied thesis). I would like to ask your family member for help to complete this project. The information in this form will help you understand my project. Please read the information carefully and ask all the questions you might have before you decide if you want your family member to take part.

Why is this study being done?

Activities of daily living are an important part of checking both mental and physical health over time. They are evaluated through various checklists that ask about the skills your family member uses every day. These checklists include telling me about their skills and what I see them complete in a day. I may also talk with their worker. Showering is an important part of health and upkeep of personal hygiene. This project will look at current showering habits of clients during the months of November 2014 to December 2014.

What will you need to do if you take part?

In order to participate in the study clients must have a working shower, and their participation in the study is completely voluntary, i.e., you can choose to be in the study or not to be in study. This project will look at showering behaviour of your family member and a few other people at your apartment building. If you agree for your family member to take part, they will:

- Fill out a sheet with a few simple questions regarding to your showering before the study starts and shortly after its completion. The questionnaire should take no more than 10 min to complete.
- Shower everyday
- Agree to have your shampoo bottle weighed once a week on Monday
- Agree to have their showering behaviour monitored for two months (November to December 2014). This will include being asked about your family members’ showering habits each day and responses will be recorded in a chart.
- Your family member will also have a copy of the chart to be kept in their room, so that when they reach five consecutive days of showering have occurred their can cash in your tokens (check marks).

What are the potential benefits of taking part? (If applicable)

One of the potential benefits of your family member taking part in the research study is improved overall health. Improved overall health is achieved by daily showering. Improved overall health may influence overall demeanor and may improve their mood. The chance of the above mentioned benefits are dependent on their participation and willingness to agree to the above mentioned treatment plan.

What are the potential benefits of this research study to others? (If applicable)
Information gained in this study may help improve the showering (hygiene) behaviour of other individuals who are similar to your family member, which may also improve their overall health and mood.

What are the potential disadvantages or risks of taking part?

Risks from participating in this research project are minimal but may include experiencing an increase in emotions such as frustration and slight increase in stress levels. This is because they will be asked to follow a different showering routine and someone will be monitoring their showering behaviour. Monitoring will be done through self-report from your family member or the staff and the use of weighing of shampoo bottles. No one will ever actually watch clients shower. Sometimes this may cause feelings of frustration or stress because someone will be monitoring their showering behaviour.

What happens if something goes wrong?

Everyone is different and may have different reactions to the requests. If your family member is experiencing any reactions to the requests during this study please inform staff on duty, myself, and/or my supervisor, Sandra Henderson, and we will address with the situation appropriately.

Will the information you collect from my family member in this project be kept private?

All information, including consent forms, will be kept in a locked cabinet for 10 years at Frontenac Community Mental Health and Addiction Services, in line with agency protocol. Any data kept on electronic file will be kept under password protected USB, and deleted after the completion of the study. Your family member will not be identified by name in any written reports, publications or presentations resulting from this project. A fictitious name or numeric code will be assigned to you and the residence.

Do you have to take part?

Taking part is voluntary. It is up to you and your family member to decide whether or not they take part in this research project. If you do decide they will take part, you will be asked to sign this consent form. If you do decide that your family member is to take part in this research project, they are still free to withdraw at any time without giving any reason, and without incurring any penalty or negative effects.

Contact for further information

This project has been approved by the Research Ethics Board at St. Lawrence College. The project will be developed under the supervision of Sandra Henderson my Agency Supervisor, and Jordan Maile my College Supervisor from St. Lawrence College. I really appreciate you cooperation, and if you have any additional questions or concerns, feel free to ask me at jsimpson21@student.sl.on.ca. You can also contact my college supervisor at jordan.maile@gmail.com or you may also contact the Research Ethics Board at reb@sl.on.ca

Consent

If you agree to have your family member take part in this research project, please complete the
following form and return it to me as soon as possible. A copy of this signed document will be given to you for your records. An additional copy of the consent will be retained at the agency [and in a secure location at St. Lawrence College, if applicable].

By signing this form, I agree that:

✓ The study has been explained to me.
✓ All my questions were answered.
✓ Possible harm and discomforts and possible benefits (if any) of this study have been explained to me and my family member.
✓ I understand that my family member has the right not to participate and the right to stop at any time.
✓ I am free now, and in the future, to ask any questions I have about the study.
✓ I have been told that my personal information and that of my family member participating will be kept confidential.
✓ I understand that no information that would identify my family member will be released or printed without asking me first.
✓ I understand that I will receive a signed copy of this consent form.

I hereby consent for my family member to take part.

<table>
<thead>
<tr>
<th>Guardian Name</th>
<th>Signature of Guardian</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Printed Name</th>
<th>Signature of Student</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Client Consent Form

Project Title: Increasing completion of Showering in adults with dual diagnosis.

Principal Investigator: J. Kaela Simpson

Name of supervisors: Sandra Henderson, Jordan Maile

Name of Institution: St. Lawrence College

Name of agency: Frontenac Community Mental Health and Addiction Services

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Why is this study being done?

Activities of daily living are an important part of assessing both mental and physical health over time. These checklists include you telling me about your skills and what I see you complete in a day. I may also talk with your worker. Showering is an important part of health and upkeep of personal hygiene. This project will look at current showering habits of clients during the month of November 2014 to December 2014.

What will you need to do if you take part?

To be a part of study, you must have a working shower, and taking part in the study is completely voluntary, i.e., you can choose to be in the study or not to be in study. This project will look at showering behaviour of yourself and a few other people at the residence operated by Frontenac Community Mental Health and Addiction Services. If you agree to take part you will:

- Fill out a sheet with a few simple questions regarding to your showering before the study starts and shortly after its completion. The questions should take no more than 10 min to complete.
- Shower everyday
- Agree to have your shampoo bottle weighed once a week on Monday
- Agree to have your showering behaviour monitored for two months (October to December 2014). This will include being asked about your showering habits each day and responses will be recorded in a chart.
- You will also have a copy of the chart to be kept in your room, so that when you know five consecutive days of showering have occurred you can cash in your tokens (checkmarks).

What are the potential benefits of taking part? (If applicable)

One of the potential benefits of taking part in the research study is improved overall health. Improved overall health is achieved by daily showering. Improved overall health may influence
overall behaviour and improve your mood. The chance of the above mentioned benefits rely on your participation and your willingness to agree to the treatment plan.

What are the potential benefits of this research study to others? (If applicable)

Information gained in this study may help improve the showering (hygiene) behaviour of other clients who are similar to you, which may also improve their overall health and mood.

What are the potential disadvantages or risks of taking part?

Risks from participating in this research project are minimal but may include experiencing an increase in emotions such as frustration and slight increase in stress levels. This is because you will be asked to follow a different showering routine and someone will be checking their showering behaviour. Checking will be done through self-report and recording of the shampoo bottles. No one will ever actually watch clients shower. Sometimes this may cause feelings of frustration or stress because someone will be checking your showering behaviour.

What happens if something goes wrong?

Everyone is different and may have different reactions to the requests. If you are experiencing any reactions to the requests during this study please inform a staff on duty, myself, and/or my supervisor, Sandra Henderson, and we will deal with the situation appropriately.

Will the information you collect from me in this project be kept private?

All information, including consent forms, will be kept in a locked cabinet for 10 years at Frontenac Community Mental Health and Addiction Services, in line with agency protocol. Any data kept on electronic file will be kept on a password protected USB, and deleted after the completion of the study. You will not be identified by name in any written reports, publications or presentations resulting from this project. A numeric code or fictitious name will be assigned to you and the residence.

Do you have to take part?

Taking part is voluntary. It is up to you to decide whether or not to take part in this research project. If you do decide to take part, you will be asked to sign this consent form. If you do decide to take part in this research project, you are still free to withdraw at any time without giving any reason, and without incurring any penalty or negative effects.

Consent

If you agree to take part in this project, please complete the following form and return it to me as soon as possible. A copy of this signed document will be given to you for your own records. An additional copy of your consent will be retained at the agency [and in a secure location at St. Lawrence College, if applicable].

By signing this form, I agree that:

- The study has been explained to me.
- All my questions were answered.
 ✓ Possible harm and discomforts and possible benefits (if any) of this study have been explained to me.
 ✓ I understand that I have the right not to participate and the right to stop at any time.
 ✓ I am free now, and in the future, to ask any questions I have about the study.
 ✓ I have been told that my personal information will be kept confidential.
 ✓ I understand that no information that would identify me will be released or printed without asking me first.
 ✓ I understand that I will receive a signed copy of this consent form.

I hereby consent to take part.

---

Participant Name ______________________________ Signature of Participant __________________ Date ____________

---

Student Printed Name ___________________________ Signature of Student __________________ Date ____________

Contact for further information

This project has been approved by the Research Ethics Board at St. Lawrence College. The project will be developed under the supervision of Sandra Henderson my Agency Supervisor, and Jordan Maile my College Supervisor from St. Lawrence College. I really appreciate you cooperation, and if you have any additional questions or concerns, feel free to ask me at jsimpson21@student.sl.on.ca. You can also contact my college supervisor at (jordan.maile@gmail.com) or you may also contact the Research Ethics Board at reb@sl.on.ca
Appendix B: Data Collection Form

<table>
<thead>
<tr>
<th>Client 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Client 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C: FACTS

Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part B

Step 6
Routine/Activities/Context: Which routine (only one) from the FACTS-Part A is assessed?

<table>
<thead>
<tr>
<th>Routine/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 7
Provide more detail about the problem behavior(s):

What does the problem behavior(s) look like?

How often does the problem behavior(s) occur?

How long does the problem behavior(s) last when it occurs?

What is the intensity/level of danger of the problem behavior(s)?

Step 8
ANTECEDENTS: TRIGGERS AND SETTING EVENTS

What are the events that predict when the problem behavior(s) will occur? (Predictors).

Identify the trigger generally:
1. In this routine, what happens most often just before problem behavior?
2. If you put this trigger in place 10 times, how often would it result in problem behavior?
3. Does problem behavior ever happen when (opposite of trigger or trigger absent)?

| Triggers |
|---------------------------|-----------------|-----------------|-----------------|
| ✓ Tasks                  | ✓ Reprimands    | ✓ Transitions    |
| __ Unstructured time     | __ Structured/non-academic activities | __ Isolated, no-one around |

Identify specific features of the trigger:

If tasks (e.g., group work, independent work, small-group instruction, lecture)...

Describe the task in detail (e.g., duration, ease of task for student), what features of it likely are aversive to the student and why is this hypothesized?

If unstructured time...

Describe the setting, activities, and who is around

If reprimand...

Describe who delivers the reprimand, what is said, and what the purpose of the correction is

If structured, nonacademic activities...

Describe the context, who is around, what activities are going on, what behaviors are expected?

If transitions...

Describe the activity that is being terminated and the one that is being transitioned to. Identify whether any of the activities are highly preferred or non-preferred, which are structured versus non-structured.

If isolated...

Where did the behavior occur? What features of the environment might be relevant?

Step 9
Are setting events relevant?
1. Is there something that, when present makes it more likely that the trigger identified above sets off the behavior?
2. If yes, is this event present sometimes and absent others? Does the behavior occur only when the event is present?

<table>
<thead>
<tr>
<th>Setting Events</th>
<th>Conflict at home</th>
<th>Hunger</th>
</tr>
</thead>
<tbody>
<tr>
<td>class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ Peer conflict</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ Change in routine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correction from adult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>earlier in day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework/assignment not</td>
<td></td>
<td>✓ Medication (missed or taken)</td>
</tr>
<tr>
<td>completed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 10
CONSEQUENCES
What consequences appear most likely to maintain the problem behavior(s)?

Identify the consequence generally:
In the routine identified, when the trigger occurs and problem behavior happens, what occurs next?
1. What do you do? What do other students do? What activities happen or stop happening?
2. Narrow it down: Take each consequence identified above:
   a. Would the behavior still happen if that consequence couldn’t occur (e.g., if peer attention, no other students were around?; if your attention, would the behavior still occur if you were not around?; if escape, would the behavior still occur if the task was easier?)
   b. Of the last 10 times you saw the behavior, how often did this consequence occur?

<table>
<thead>
<tr>
<th>Things that are Obtained</th>
<th>Things Avoided or Escaped From</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ adult attention</td>
<td>✓ hard tasks</td>
</tr>
<tr>
<td>peer attention</td>
<td>Other:</td>
</tr>
<tr>
<td>activity</td>
<td>reprimands</td>
</tr>
<tr>
<td>✓ money/things</td>
<td>peer negatives</td>
</tr>
<tr>
<td></td>
<td>physical effort</td>
</tr>
<tr>
<td></td>
<td>adult attention</td>
</tr>
</tbody>
</table>

Identify specific features of the Consequence

<table>
<thead>
<tr>
<th>Identify specific features of the consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>If adult or peer attention is obtained or avoided.</td>
</tr>
<tr>
<td>If an activity or request follows or is removed</td>
</tr>
<tr>
<td>If tangible items are obtained or removed</td>
</tr>
<tr>
<td>If sensory stimulation possibly occurs or is removed</td>
</tr>
</tbody>
</table>

SUMMARY OF BEHAVIOR

Identify the summary that will be used to build a plan of behavior support.

<table>
<thead>
<tr>
<th>Setting Events</th>
<th>Trigger</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Verbal</td>
<td>Not</td>
<td>Activities are sometimes delayed until shown is relevant.</td>
</tr>
<tr>
<td></td>
<td>accepted</td>
<td>showing</td>
<td></td>
</tr>
</tbody>
</table>

How confident are you that the Summary of Behavior is accurate?

<table>
<thead>
<tr>
<th>Not very confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very Confident</th>
</tr>
</thead>
</table>

Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part A

Step 1
Student/ Grade: Client 2
Interviewer: Date: Nov 21
Respondent(s): 

Step 2
Student Profile: Please identify at least three strengths or contributions the student brings to school.

Step 3
Problem Behavior(s): Identify problem behaviors

- Tardy
- Unresponsive
- Withdrawn
- Fight/physical Aggression
- Inappropriate Language
- Verbal Harassment
- Verbally Inappropriate
- Disruptive
- Insubordination
- Work not done
- Theft
- Vandalism
- Other
- Self-injury

Describe problem behavior:

Step 4
Identifying Routines: Where, When and With Whom Problem Behaviors are Most Likely.

<table>
<thead>
<tr>
<th>Schedule (Times)</th>
<th>Activity</th>
<th>Likelihood of Problem Behavior</th>
<th>Specific Problem Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>Breakfast</td>
<td>Low 1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7:45 AM</td>
<td>Change Clothes</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Meds</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Program</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Lunch</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Shower</td>
<td>1 2 3 4 5 6</td>
<td>6</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Chores</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Supper</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Bedtime Meals</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Bed</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>

List the Routines in order of Priority for Behavior Support: Select routines with ratings of 5 or 6. Only combine routines when there is significant (a) similarity of activities (conditions) and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each of the prioritized routine(s) identified.

<table>
<thead>
<tr>
<th>Routine # 1</th>
<th>Showers</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine # 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine # 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part B**

### Step 6
Routine/Activities/Context: Which routine (only one) from the FACTS-Part A is assessed?

<table>
<thead>
<tr>
<th>Routine/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Routine</td>
<td>Showers</td>
</tr>
</tbody>
</table>

### Step 7
Provide more detail about the problem behavior(s):
- **What does the problem behavior(s) look like?**
  - Client will not shower
- **How often does the problem behavior(s) occur?**
  - 4 out of 5 days in the week.
- **How long does the problem behavior(s) last when it does occur?**
  - 10 min
- **What is the intensity/level of danger of the problem behavior(s)?**
  - Low level intensity / minimal danger

### Step 8
**ANTECEDENTS: TRIGGERS AND SETTING EVENTS**
What are the events that predict the problem behavior(s) will occur? (Predictors).

**Identify the trigger generally**
1. In this routine, what happens most often just before problem behavior? __Staff prompt for shower__
2. If you put this trigger in place 10 times, how often would it result in problem behavior? __Yes__
3. Does problem behavior ever happen when (opposite of trigger or trigger absent)? __No__

<table>
<thead>
<tr>
<th>Triggers</th>
<th>Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td></td>
</tr>
<tr>
<td>Unstructured time</td>
<td>Structured/Non-academic</td>
</tr>
<tr>
<td>Reprimands</td>
<td>Transitions</td>
</tr>
<tr>
<td>Structured/Non-academic</td>
<td>Isolated, no-one around</td>
</tr>
</tbody>
</table>

**Identify specific features of the trigger**

- **If tasks (e.g., group work, independent work, small-group instruction, lecture):**
  Describe the task in detail (e.g., duration, ease of task for student), what features of it likely are aversive to the student and why is this hypothesized?

- **If unstructured time:**
  Describe the setting, activities, and who is around

- **If reprimand:**
  Describe who delivers the reprimand, what is said, and what the purpose of the correction is

- **If structured, nonacademic activities:**
  Describe the context, who is around, what activities are going on, what behaviors are expected?

- **If transitions:**
  Describe the activity that is being terminated and the one that is being transitioned to. Identify whether any of the activities are highly preferred or non-preferred, which are structured versus non-structured.

- **If isolated:**
  Where did the behavior occur? What features of the environment might be relevant?

Are setting events relevant?

1. Is there something that, when present makes it more likely that the trigger identified above sets off the behavior?
2. If yes, is this event present sometimes and absent others? Does the behavior occur only when the event is present?

<table>
<thead>
<tr>
<th>Setting Events</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correction/failure in previous class</td>
<td>Conflict at home</td>
</tr>
<tr>
<td>Peer conflict</td>
<td>Correction from adult earlier in day</td>
</tr>
<tr>
<td>✓ Change in routine</td>
<td>Homework/assignment not completed</td>
</tr>
</tbody>
</table>

Step 10

CONSEQUENCES

What consequences appear most likely to maintain the problem behavior(s)?

Identify the consequence generally:

In the routine identified, when the trigger occurs and problem behavior happens, what occurs next?

1. What do you do? What do other students do? What activities happen or stop happening?
2. Narrow it down: Take each consequence identified above:
   a. Would the behavior still happen if that consequence couldn’t occur (e.g., if peer attention, no other students were around?; if your attention, would the behavior still occur if you were not around? If escape, would the behavior still occur if the task was easier?)
   b. Of the last 10 times you saw the behavior, how often did this consequence occur?

<table>
<thead>
<tr>
<th>Things that are Obtained</th>
<th>Things Avoided or Escaped From</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ adult attention</td>
<td>Other: hard tasks</td>
</tr>
<tr>
<td>peer attention</td>
<td>Other: reprimands</td>
</tr>
<tr>
<td>activity</td>
<td>peer negatives</td>
</tr>
<tr>
<td>money/things</td>
<td>physical effort</td>
</tr>
<tr>
<td>adult attention</td>
<td>Other:</td>
</tr>
</tbody>
</table>

Identify specific features of the Consequence

Identify specific features of the consequence:

If adult or peer attention is obtained or avoided.

Define who delivers attention, what they say, and how long the attention typically lasts. What does the student do following this attention—is there a back-and-forth that occurs? Does behavioral escalation occur?

If an activity or request follows or is removed

Describe the specific activity including who else is present, what the activity consists of, and how long it lasts.

If tangible items are obtained or removed

Describe the specific item(s) obtained including who else is present and how long the student has access to the item.

If sensory stimulation possibly occurs or is removed

Describe the context, who is around, what activities are going on, what behaviors are expected?

SUMMARY OF BEHAVIOR
Identify the summary that will be used to build a plan of behavior support.

Setting Events
Morning routine

Trigger
Past skip/bad
in shower

Behavior
Not showering

Consequence
Negative attitude
room smells

How confident are you that the Summary of Behavior is accurate?

| Not very confident | 1 | 2 | 3 | 4 | 5 | Very Confident 6 |


Globalization

Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part A

Step 1
Student/Grade: [Client ]
Interviewer: ________________
Date: ________________
Respondent(s): ________________

Step 2
Student Profile: Please identify at least three strengths or contributions the student brings to school.

Can be outgoing, able to humour

Step 3
Problem Behavior(s): Identify problem behaviors

<table>
<thead>
<tr>
<th>Tardy</th>
<th>下调/Unresponsive</th>
<th>Fight/physical Aggression</th>
<th>Disruptive</th>
<th>Theft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Withdrawn</td>
<td>Inappropriate Language</td>
<td>Insubordination</td>
<td>Vandalism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verbal Harassment</td>
<td>Work not done</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verbally Inappropriate</td>
<td>Self-injury</td>
<td></td>
</tr>
</tbody>
</table>

Describe problem behavior: 

non-compliance to complete reasoning

Step 4
Identifying Routines: Where, When and With Whom Problem Behaviors are Most Likely.

<table>
<thead>
<tr>
<th>Schedule (Times)</th>
<th>Activity</th>
<th>Likelihood of Problem Behavior</th>
<th>Specific Problem Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meals</td>
<td>Low 1 2 3 4 5 High 6</td>
<td>doesn't want to</td>
</tr>
<tr>
<td></td>
<td>Breakfast</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program</td>
<td>1 2 3 4 5 6</td>
<td>doesn't complete</td>
</tr>
<tr>
<td></td>
<td>Lunch</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shower</td>
<td>1 2 3 4 5 6</td>
<td>refuse, plan</td>
</tr>
<tr>
<td></td>
<td>Chores</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meds</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supper</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dish</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meds</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bed</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>

List the Routines in order of Priority for Behavior Support: Select routines with ratings of 5 or 6. Only combine routines when there is significant (a) similarity of activities (conditions) and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each of the prioritized routine(s) identified.

<table>
<thead>
<tr>
<th>Routine # 1</th>
<th>Routines/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine # 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine # 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part B

Step 6
Routine/Activities/Context: Which routine (only one) from the FACTS-Part A is assessed?

<table>
<thead>
<tr>
<th>Routine/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Routine</td>
<td>Not Showering</td>
</tr>
</tbody>
</table>

Step 7
Provide more detail about the problem behavior(s):

- What does the problem behavior(s) look like?
- How often does the problem behavior(s) occur? *Daily*
- How long does the problem behavior(s) last when it does occur? *10-15 min*
- What is the intensity/level of danger of the problem behavior(s)? *Low*

Step 8
ANTECEDENTS; TRIGGERS AND SETTING EVENTS

What are the events that predict when the problem behavior(s) will occur? (Predictors).

Identify the trigger generally
1. In this routine, what happens most often just before problem behavior?
2. If you put this trigger in place 10 times, how often would it result in problem behavior?
3. Does problem behavior ever happen when (opposite of trigger or trigger absent)?

<table>
<thead>
<tr>
<th>Triggers</th>
<th>Tasks</th>
<th>Reprimands</th>
<th>Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstructured time</td>
<td>Structured/non-academic</td>
<td>Isolated, no-one around</td>
</tr>
</tbody>
</table>

Identify specific features of the trigger

- If tasks (e.g., group work, independent work, small-group instruction, lecture)… Describe the task in detail (e.g., duration, ease of task for student), what features of it likely are aversive to the student and why is this hypothesized?
- If unstructured time… Describe the setting, activities, and who is around
- If reprimand… Describe who delivers the reprimand, what is said, and what the purpose of the correction is
- If structured, nonacademic activities Describe the context, who is around, what activities are going on, what behaviors are expected?
- If transitions Describe the activity that is being terminated and the one that is being transitioned to. Identify whether any of the activities are highly preferred or non-preferred, which are structured versus non-structured.
- If isolated Where did the behavior occur? What features of the environment might be relevant?

### Are setting events relevant?

1. Is there something that, when present, makes it more likely that the trigger identified above sets off the behavior?
2. If yes, is this event present sometimes and absent others? Does the behavior occur only when the event is present?

<table>
<thead>
<tr>
<th>Setting Events</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correction/failure in previous class</td>
<td></td>
</tr>
<tr>
<td>Peer conflict</td>
<td></td>
</tr>
<tr>
<td>Change in routine</td>
<td></td>
</tr>
<tr>
<td>Conflict at home</td>
<td></td>
</tr>
<tr>
<td>Correction from adult earlier in day</td>
<td></td>
</tr>
<tr>
<td>Homework/assignment not completed</td>
<td></td>
</tr>
<tr>
<td>Hunger</td>
<td></td>
</tr>
<tr>
<td>Lack of sleep</td>
<td></td>
</tr>
<tr>
<td>Medication (missed or taken)</td>
<td></td>
</tr>
</tbody>
</table>

### CONSEQUENCES

What consequences appear most likely to maintain the problem behavior(s)?

#### Identify the consequence generally

In the routine identified, when the trigger occurs and problem behavior happens, what occurs next?

1. What do you do? What do other students do? What activities happen or stop happening?
2. Narrow it down: Take each consequence identified above:
   a. Would the behavior still happen if that consequence couldn’t occur (e.g., if peer attention, no other students were around)?
   b. Of the last 10 times you saw the behavior, how often did this consequence occur?

<table>
<thead>
<tr>
<th>Things that are Obtained</th>
<th>Things Avoided or Escaped From</th>
</tr>
</thead>
<tbody>
<tr>
<td>adult attention</td>
<td>hard tasks</td>
</tr>
<tr>
<td>peer attention</td>
<td>Other:</td>
</tr>
<tr>
<td>activity</td>
<td>reprimands</td>
</tr>
<tr>
<td>money/things</td>
<td>peer negatives</td>
</tr>
<tr>
<td></td>
<td>physical effort</td>
</tr>
<tr>
<td></td>
<td>adult attention</td>
</tr>
</tbody>
</table>

#### Identify specific features of the consequence

<table>
<thead>
<tr>
<th>Identify specific features of the consequence</th>
</tr>
</thead>
</table>
| If adult or peer attention is obtained or avoided. | Define who delivers attention, what they say, and how long the attention typically lasts. What does the student do following this attention—is their a back-and-forth that occurs?
| If an activity or request follows or is removed | Describe the specific activity including who else is present, what the activity consists of, and how long it lasts. |
| If tangible items are obtained or removed | Describe the specific item(s) obtained including who else is present and how long the student has access to the item. |
| If sensory stimulation possibly occurs or is removed | Describe the context, who is around, what activities are going on, what behaviors are expected? |

SUMMARY OF BEHAVIOR

Identify the summary that will be used to build a plan of behavior support.

Setting Events → Trigger → Behavior → Consequence

How confident are you that the Summary of Behavior is accurate?

<table>
<thead>
<tr>
<th>Not very confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very Confident</th>
</tr>
</thead>
</table>


Adapted by C. Anderson & C. Borgmeier (2007) from March et al. (1999.)
Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part A

Step 1
Student/Grade: Client 4
Interviewer: 
Date: Nov 21
Respondent(s): 

Step 2
Student Profile: Please identify at least three strengths or contributions the student brings to school.

Community

Step 3
Problem Behavior(s): Identify problem behaviors

<table>
<thead>
<tr>
<th>Tardy</th>
<th>Fight/physical Aggression</th>
<th>Disruptive</th>
<th>Theft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inappropriate Language</td>
<td>Insubordination</td>
<td>Vandalism</td>
</tr>
<tr>
<td></td>
<td>Verbal Harassment</td>
<td>Work not done</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Verbally Inappropriate</td>
<td>Self-injury</td>
<td></td>
</tr>
</tbody>
</table>

Describe problem behavior: [Blank]

Step 4
Identifying Routines: Where, When and With Whom Problem Behaviors are Most Likely.

<table>
<thead>
<tr>
<th>Schedule (Times)</th>
<th>Activity</th>
<th>Likelihood of Problem Behavior</th>
<th>Specific Problem Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>Wake &amp; Get Dressed</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td>8:50 AM</td>
<td>Breakfast</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Program</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Chores</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td>Laundry (10 AM)</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
<td></td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Dinner</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Supper</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Dishes</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Shower</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
<tr>
<td></td>
<td>Beds</td>
<td>Low 1 2 3 4 5 6</td>
<td>[Blank]</td>
</tr>
</tbody>
</table>

Step 5
List the Routines in order of Priority for Behavior Support: Select routines with ratings of 5 or 6. Only combine routines when there is significant (a) similarity of activities (conditions) and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each of the prioritized routine(s) identified.

<table>
<thead>
<tr>
<th>Routine # 1</th>
<th>Routines/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Showering</td>
<td>Inconsistent showering re. every 5th day</td>
</tr>
<tr>
<td>Routine # 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine # 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Efficient Functional Behavior Assessment: The Functional Assessment Checklist for Teachers and Staff: Part B

Step 6
Routine/Activities/Context: Which routine (only one) from the FACTS-Part A is assessed?

<table>
<thead>
<tr>
<th>Routine/Activities/Context</th>
<th>Problem Behavior(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Routine</td>
<td>Showersing Daily</td>
</tr>
</tbody>
</table>

Step 7
Provide more detail about the problem behavior(s):

- What does the problem behavior(s) look like?
- How often does the problem behavior(s) occur?
- How long does the problem behavior(s) last when it does occur? 10-15 min.
- What is the intensity/level of danger of the problem behavior(s)? Low

Step 8
ANTECEDENTS: TRIGGERS AND SETTING EVENTS
What are the events that predict when the problem behavior(s) will occur? (Predictors).
Identify the trigger generally
1. In this routine, what happens most often just before problem behavior?
2. If you put this trigger in place 10 times, how often would it result in problem behavior?
3. Does problem behavior ever happen when (opposite of trigger or trigger absent)?

<table>
<thead>
<tr>
<th>Triggers</th>
<th>Reprimands</th>
<th>Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td>Reprimands</td>
<td>Transitions</td>
</tr>
<tr>
<td>Unstructured time</td>
<td>Structured/non-academic</td>
<td>Isolated, no-one around</td>
</tr>
</tbody>
</table>

Identity specific features of the trigger

- If tasks (e.g., group work, independent work, small-group instruction, lecture)...
  - Describe the task in detail (e.g., duration, ease of task for student), what features of it likely are aversive to the student and why is this hypothesized?

- If unstructured time...
  - Describe the setting, activities, and who is around

- If reprimand...
  - Describe who delivers the reprimand, what is said, and what the purpose of the correction is expected?

- If structured, nonacademic activities
  - Describe the context, who is around, what activities are going on, what behaviors are expected?

- If transitions
  - Describe the activity that is being terminated and the one that is being transitioned to. Identify whether any of the activities are highly preferred or non-preferred, which are structured versus non-structured.

- If isolated
  - Where did the behavior occur? What features of the environment might be relevant?

Step 9
Are setting events relevant?
1. Is there something that, when present makes it more likely that the trigger identified above sets off
   the behavior?
2. If yes, is this event present sometimes and absent others? Does the behavior occur only when the
   event is present?

<table>
<thead>
<tr>
<th>Setting Events</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correction/failure in previous class</td>
<td>Conflict at home</td>
<td>Hunger</td>
</tr>
<tr>
<td>Peer conflict</td>
<td>Correction from adult earlier in day</td>
<td>Lack of sleep</td>
</tr>
<tr>
<td>Change in routine</td>
<td>Homework/assignment not completed</td>
<td>Medication (missed or taken)</td>
</tr>
</tbody>
</table>

Step 10
CONSEQUENCES
What consequences appear most likely to maintain the problem behavior(s)?

Identify the consequence generally:
In the routine identified, when the trigger occurs and problem behavior happens, what occurs next?
1. What do you do? What do other students do? What activities happen or stop happening?
2. Narrow it down: Take each consequence identified above:
   a. Would the behavior still happen if that consequence couldn’t occur (e.g., if peer attention, no
      other students were around); if your attention, would the behavior still occur if you were not
      around? If escape, would the behavior still occur if the task was easier?
   b. Of the last 10 times you saw the behavior, how often did this consequence occur?

<table>
<thead>
<tr>
<th>Things that are Obtained</th>
<th>Things Avoided or Escaped From</th>
</tr>
</thead>
<tbody>
<tr>
<td>adult attention</td>
<td>hard tasks</td>
</tr>
<tr>
<td>peer attention</td>
<td>reprimands</td>
</tr>
<tr>
<td>activity</td>
<td>peer negatives</td>
</tr>
<tr>
<td>money/things</td>
<td>physical effort</td>
</tr>
<tr>
<td></td>
<td>adult attention</td>
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</tbody>
</table>

Identify specific features of the Consequence

<table>
<thead>
<tr>
<th>Identify specific feature of the consequence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>If adult or peer attention is obtained or avoided.</td>
<td>Define who delivers attention, what they say, and how long the attention typically lasts. What does the student do following this attention—is their a back-and-forth that occurs? Does behavioral escalation occur?</td>
</tr>
<tr>
<td>If an activity or request follows or is removed</td>
<td>Describe the specific activity including who else is present, what the activity consists of, and how long it lasts.</td>
</tr>
<tr>
<td>If tangible items are obtained or removed</td>
<td>Describe the specific item(s) obtained including who else is present and how long the student has access to the item</td>
</tr>
<tr>
<td>If sensory stimulation possibly occurs or is removed</td>
<td>Describe the context, who is around, what activities are going on, what behaviors are expected?</td>
</tr>
</tbody>
</table>

SUMMARY OF BEHAVIOR
Identify the summary that will be used to build a plan of behavior support.

<table>
<thead>
<tr>
<th>Setting Events</th>
<th>Trigger</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waking up</td>
<td>Morning</td>
<td>No behavior</td>
<td>Negative peer interactions; delay client’s request until further program</td>
</tr>
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</table>

How confident are you that the Summary of Behavior is accurate?

| Not very confident | 1 | 2 | 3 | 4 | 5 | 6 | Very Confident |

## Appendix D: Raw Data Collection

<table>
<thead>
<tr>
<th>Client</th>
<th>Day</th>
<th>Baseline</th>
<th>Intervention (Phase 1)</th>
<th>Intervention (Phase 2)</th>
<th>Follow-up</th>
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Note: 0 = No Shower, 1 = Shower, Blank = No Data Collection

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