Behavioural Intervention Program

**Using Positive Reinforcement and Prompting to Increase Sharing Behaviour in a 5-Year-Old Boy During Circle Time**

**Client: Franky Naanoplay\***

**Setting: Regular kindergarten classroom in an elementary school**

**Field Supervisor: Henry Lanyard\***

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### Date: Friday, April 28, 2017

***CAUTION***

*While this report can be used informally to guide clinical work, it is not a formal psychological report, and was completed as part of a supervised student placement. It should not be placed on any official file, nor would it be appropriate to discuss its findings in official agency reports*.

**\**For reasons of confidentiality all names used in this report are fictional.***

**Honours Bachelor of Behavioural Psychology**



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**Behavioural Intervention Program**

**Client Name: Franky Naanoplay Date: February 24, 2017**

**Counsellor: Henry Lanyard**

**Program: Using reinforcement and prompting to increase the occurrence of sharing behaviour during circle time**

**Reason for Referral**

The student, Franky, was referred for behavioural assessment by his kindergarten teacher, Ms. Hatt. She cited multiple problems with his inappropriate play skills at school, including not sharing, not interacting with peers, and getting into fights due to his inability to share. Ms. Hatt initiated the referral after the Franky’s father returned her call about Franky’s aggressive behaviour. Mr. Naanoplay consented to this referral.

**Background Information**

The client is a 5-year-old boy named Franky Naanoplay, who is currently in a regular kindergarten class at St. Oilers Public School. He lives in a single-parent (father) household with two sisters. His father’s name is Frank Sr., his 7-year old sister is Jessykuh, and his 10-year-old sister is Andrya. The Naanoplay family lives in low-income housing in Kingstonia, Ontario. Franky does not own a lot of toys at home; so, when he is at school, he does not want to share the toys that he does have there. Franky’s problem behaviour generally occurs during circle time. Whenever a peer asks Franky to share with him/her, Franky refrains from sharing or becomes aggressive with his classmates. Franky has no history of clinical treatment or medication; however, his father has tried to get him to participate in appropriate play time at home with Jessykuh and Andrya. There are no concerns about Franky’s developmental, physical, and/or biological state; his developmental growth is age-appropriate for the stages of development. His father, two sisters, grandparents, kindergarten teacher, Ms. Hatt, and the social support network have all referred him to this behavioural program.

**Assessment Procedures Used**

**Functional Assessment:**

1. Functional Assessment Checklist for Teachers and Staff
2. GB Motivational Screening Tool
3. Naturalistic Observation (ABC)

**Baseline Assessment:**

1. Event Recording of Sharing Behaviour

**Target Behaviours**

**Sharing (Accelerate):**

Franky’s sharing behaviour is recorded each time he passes an object to another peer when asked or told, or when he does not grab an object from a peer. To pass an object, Franky picks up it up and places it in his peer’s hand with no excessive force, or he places the object in front of the other peer. Franky is to comply within 5 seconds of his peer asking for the object(s), or his teacher instructing him to share the object(s). Franky is not to take an object from out of his peer’s hand without first asking to have the object.

Sharing behaviour is not recorded when a peer gives Franky an object within 5 seconds of him screaming at, or hitting the peer. Hitting is when Franky uses a body part or object to contact another peer’s body using excessive force, causing bodily harm; the peer cries, verbalises extreme discomfort, and/or retaliates by hitting Franky back. The behaviour is not recorded when Franky throws an object at a peer in response to the peer asking Franky to share or pass the object.

An exception to this would be if Franky and his peer(s) are playing a game that requires Franky to throw an object. Ms. Hatt will model how to throw appropriately during a game. This exception would include a game of catch.

**Rationale**

The behaviour of sharing is very important for Franky because it will foster better interpersonal skills. The short-term benefits of improving Franky’s sharing are that he will have better interactions with his peer group, and thus, he will be able to make more friends. Long-term benefits would be significant because sharing is pivotal behaviour. Sharing can be applied to other behaviours that are used throughout human development such as collaborating with others, communicating with others, and verbally sharing ideas and knowledge with others. Franky’s ability to share would also be beneficial as he ages, because it would improve his ability to act amicably with others, understand others and how his actions affect them, and help develop other aspects of cognitive and social development.

**Assessment Procedures and Results**

**Functional Assessment**

1. **Functional Assessment Checklist for Teachers and Staff**

An interview was conducted with Ms. Hatt, Franky Naanoplay’s teacher, using the Functional Assessment Checklist for Teachers and Staff (FACTS; March et al., 2000; Appendix A) on Thursday, January 12, 2017. The FACTS data showed that Franky’s lack of sharing, physical aggression, non-compliance, and verbal aggression were the most frequently occurring behaviours. These behaviours occurred during circle time, which happened twice a day, for one hour in total, at 11:00 a.m. and 2:00 p.m. After conducting the FACTS, the antecedent for Franky’s lack for sharing is circle time; the primary function of his behaviour was attention; the secondary function of his behaviour was escape.

1. **GB Motivational Screening Tool**

The GB Motivational Screening Tool (GBMST; Barrerra & Graver, 2009; Appendix B) was used by Ms. Hatt on January 12, 2017. Based on the information provided by Ms. Hatt, the results concluded that the function of Franky’s behaviour appears to be attention. Escape was found to be the second most significant function of Franky’s behaviour, followed by tangible, sensory, and discomfort.

1. **Naturalistic Observation (ABC)**

Descriptive ABC analysis (Appendix C) was used on Friday, January 13, 2017. The counsellor, Henry Lanyard, used this to discover that Franky would display his lack of sharing behaviour, at least twice a day, during circle time. The target behaviour would be exhibited by one or more of the following: not passing a peer an object, grabbing an object from a peer, throwing one or more object(s) at a peer, screaming at and/or hitting a peer. Generally, the consequences of Franky’s lack of sharing behaviour resulted in attention from his teacher, Ms. Hatt, and/or his peers. Using the ABC chart, observations conclude that the main function of the target behaviour (lack of sharing) is social positive reinforcement through attention, and the secondary function is tangibles.

**Baseline Assessment**

1. **Franky’s Sharing Behaviour During Baseline**

Event recording/frequency (Appendix D) was used to collect data on the amount of times Franky shared with his peers during circle times because sharing is a discrete behaviour. Baseline data collection began on January 16, 2017 at 11:00am. Two observation periods were used to record data, each for 30 minutes, for five consecutive school days during circle time. The first observation period was between 11:00am-11:30am, and the second was between 2:00pm-2:30pm. Franky averaged 1.80 instances of sharing behaviour per hour (Appendix D). The hourly rate of Franky’s sharing behaviour was calculated by adding the number of total number of occurrences per day, and then multiplying that total by the total number of hours observed per day. As shown in Figure 1, there was no specific trend to Franky’s sharing behaviour; it fluctuated. Franky shared the most on January 20, 2017, at an hourly rate of 3.00; his behaviour did not exceed this hourly rate during baseline data collection.

**Hypotheses**

Review of FACT, GBMST, and ABC analysis indicates that the most common antecedent for Franky’s behaviour is circle time at school. The assessments show that the main consequence for engaging in his lack of sharing behaviour is attention from his teacher and/or peers. Due to Franky showing that he can share at least once per circle time, it is not likely that he has a skill deficit in this behaviour. Instead, the lack of reinforcement when sharing does occur may reinforce the negative behaviour. If the function of Franky’s behaviour is attention, the use of social reinforcement (praise) and prompting (verbal, gestural) should increase the instances of sharing.

**Goal and Objective**

Sharing (accelerate)

Franky will share at least 4 times per one hour when the opportunity is presented, during circle time. This will occur when a peer gestures and verbally asks Franky to share/pass an object, or when Ms. Hat instructs Franky to share an object with his peer(s).

**Objectives**

During each totalled 1 hour of circle time each day, Franky will share:

1. 2.00 times per hour
2. 2.50 times per hour
3. 3.00 times per hour
4. 4.00 times per hour

The objectives mentioned above will be achieved when Franky has reached the criterion for two consecutive circle times.

#### Literature Review

A lack of appropriate play skills in children has a strong correlation to a lack of positive social consequences (MacDonald, Sacramone, Mansfield, & Ahearn, 2009). According to Harris, Johnston, Kelly, and Wolf (1964), when immediate adult attention is given as a social positive consequence to a child, the desired behaviour increases dramatically. Most often, the social positive consequence used is verbal praise from an adult who is a part of the child’s daily routine (Rames-LaPointe, Hixson, Neic, & Rhymer, 2014). Children have been found to be more likely to engage in appropriate play skills when adults are engaging with them in these interactions (MacDonald et al., 2009). Rames-LaPointe et al. (2014) state that the skills learned through social positive adult interactions associated with appropriate play skills can be generalized to a variety of situations. Harris et al. (1964) indicate that desirable behaviours are contingent to a reinforcement schedule. Upon reviewing 26 studies, Jung and Saint (2013) report that the improvement of play skills results in more positive social interactions and less instances of inappropriate behaviour. Therefore, the use of social positive reinforcement for Franky’s sharing behaviour should be an effective method of increasing the behaviour and relative social interactions.

**Intervention Procedures**

**Positive Reinforcement**

Ms. Hatt will use positive reinforcement to encourage and reward Franky’s sharing behaviour during circle time. Upon completing the Children’s Reinforcement Survey (Cautella & Brion-Meisels, 1979; Appendix E) on January 12, 2017, Henry and Ms. Hatt discovered that Franky liked being told he did a good job, playing with toy cars, being Ms. Hatt’s helper and being first in line. Based on this data, social positive reinforcement was chosen as Franky’s primary reinforcer. Every time Ms. Hatt observes Franky sharing with a peer, she will verbally praise him (e.g. saying “Good sharing Franky”, or “Awesome job sharing Franky”). This reflects an FR1 schedule.

**Prompts**

When Franky is not sharing objects, he will be given a gestural prompt; if he fails to respond to the gestural prompt, he will receive a verbal prompt from his teacher. If the request is not followed, then Ms. Hatt will give a verbal prompt to stop the inappropriate play behaviour and instruct Franky to share/pass the object.

During circle time on Monday, January 23, 2017, Henry Lanyard started implementing intervention procedures with Franky. Intervention data was collected for 10 consecutive school days, from Monday to Friday, during circle times between 11:00am-11:30am and 2:00pm-2:30 pm. Franky was continuously reinforced (FR1) for his sharing behaviour with verbal praise. Henry used a frequency data sheet to record each time Franky exhibited sharing behaviour, and reinforcement was given. See Appendix F for Mediator Instructions.

**Intervention Results**

Positive reinforcement was used to increase Franky’s sharing behaviour. The intervention procedure was implemented over a 10-day period. Figure 1 shows graphed data of Franky’s sharing behaviour during baseline and intervention. The intervention phase of the graph shows an increase in sharing behaviour. His sharing behaviour improved almost immediately by the third day and accelerated to 4 instances during the fourth day of intervention (Figure 1). This is believed to be because Franky really likes being praised for doing a good job as per the Children’s Reinforcement Survey (Cautella & Brion-Meisels, 1979; Appendix E), and thus surpassed his first objective. His behaviour dropped to 1 instance and then began to steadily increase as each objective was met. The intervention results and data showed that sharing behaviour increased an average of 2.40 instances per hour – a 33.33% increase from baseline, which was an average of 1.80 instances per hour (Appendix G). Social validity of the program was represented because Franky also received social positive reinforcement from his peers as they wanted to play with him more; he made more friends this way. The counsellor, Henry Lanyard, saw great progress in Franky’s sharing behaviour, which garnered better social interactions. He suggested that the duration of future interventions should be maximized to ensure more opportunities for generalization.

**Program Changes**

Procedures do not require modification; however, an extension of intervention procedures would be preferable because they are working effectively. Franky only met the target behaviour twice during baseline, and it occurred more times during treatment; so, an extension of the program would continue to improve Franky’s sharing behaviour. Improving Franky’s sharing behaviour over an extended amount of time would allow the behaviour to become more natural. Also, extending this program would foster more time to generalize Franky’s sharing behaviour.

**Maintenance and Generalization**

Sharing behaviour could be generalized with Franky using his manners. Manners could be exhibited by sharing space (holding the door open for other people) or sharing and expressing gratitude (saying “thank you”). Franky’s sharing behaviour can also be generalized to his home life by sharing toys, age-appropriate chores, or food with his sisters.

In addition, Franky’s sharing behaviour can be maintained and generalised naturally at home when he shares with his siblings. His father could use positive reinforcement at home which would make Franky share more. This would encourage Franky to engage in appropriate behaviour in a more naturalistic environment. Gains made in sharing behaviour could also be maintained when Franky is allotted more responsibility (e.g. being a leader) based on how he interacts with his peers. Franky stated that he enjoys being first in line and helping the teacher in the Children’s Reinforcement Survey (Appendix E). Additionally, gains would be maintained through naturalistic reinforcement in the classroom because Franky learned that when he shares, he gains more friends; and thus, he will be more likely to share with his peers to create and maintain these friendships. Making more friends as time progresses will increase Franky’s social behaviour.

The intervention started with a FR1 schedule of continuous reinforcement until Day 3 because Franky surpassed his first objective, which was to share twice. An FR2 schedule of reinforcement was then implemented, and then shifted to FR3 to start fading out Ms. Hatt’s verbal prompts. Franky’s schedule of reinforcement then shifted from FR3 to VR2, VR3, and VR4. Ms. Hatt will fade her verbal prompts first because they are most intrusive. She will do this by decreasing the number of words in her sentence to just using “Franky” as a prompt, and then finally the cessation of the verbal prompt of “Franky”. Ms. Hatt will begin to fade her gestural prompts after verbal prompting by using delayed prompting until Franky shares on his own. With increased sharing behaviour, Ms. Hatt will be able to phase out her social positive



Figure 1. The hourly rate of Franky’s sharing behaviour during baseline and treatment.

reinforcement and Franky will receive more naturalistic reinforcement from his peers, which shows social validity.

**Summary and Recommendations**

This program was successful in increasing Franky’s sharing behaviour. The average of Franky’s sharing behaviour during baseline was 1.80 instances per hour; this average increased to 2.40 instances of sharing per hour during intervention. The positive change in average instances of sharing only increased by 33.33%. This is not reflective of the improvements made due to the short time-period allotted to treatment implementation.

A recommendation for further treatment would be for Franky to follow up with a counsellor to learn how to discriminate appropriate sharing from inappropriate sharing. For example, sharing toys with his peers would be appropriate, but sharing of food/drink or a used tissue would be inappropriate. Further treatment could also be conducted at home. Franky’s father, Frank Sr., could use positive reinforcement at home to increase Franky’s sharing with his sisters, which has been a difficulty. Also, a recommendation would be to increase the intervention time to allow for more data to be recorded when the final objective is reached to ensure that the behaviour continues to occur.

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**Appendix A:**

**Functional Assessment Checklist for Teachers & Staff (FACTS-Part A)**

Student/Grade: Franky Naanoplay/Kindergarten Date: January 12, 2017

Interviewer: Henry Lanyard Respondent(s): Ms. Hatt

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

Franky works well independently, he follows in class directions well, and he helps his peers with in class work (strong leadership skills)

**Problem Behavior(s**): **Identify problem behaviors**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ­­­­­\_\_\_ Tardy | \_\_\_ Fight/physical Aggression | | \_\_\_ Disruptive | \_\_\_ Theft |
| \_\_\_ Unresponsive | \_\_\_ Inappropriate Language | | \_\_\_ Insubordination | \_\_\_ Vandalism |
| \_\_\_ Withdrawn | \_\_\_ Verbal Harassment | | \_\_\_ Work not done | \_\_\_x Other |
|  | Verbally Inappropriate | | Self-injury |  |
| Describe problem behavior: Lack of sharing | |  | | |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Schedule (Times) | Activity | Likelihood of Problem Behavior | Specific Problem Behavior |
| 9am | Reading time | Low High  [1] 2 3 4 5 6 |  |
| 10am | Recess | 1 2 [3] 4 5 6 |  |
| 10:30am | Snack time | [1] 2 3 4 5 6 |  |
| 11am | Circle time | 1 2 3 4 5 [6] | Lack of sharing |
| 12pm | Lunch time | 1 [2] 3 4 5 6 |  |
| 12:30pm | Math | [1] 2 3 4 5 6 |  |
| 1pm | QDPA (Quality Daily Physical Activity) | 1 [2 ] 3 4 5 6 |  |
| 1:30pm | Writing | 1 [2] 3 4 5 6 |  |
| 2pm | Circle time | 1 2 3 4 5 [6] | Lack of sharing |
| 2:30pm | Snack | [1] 2 3 4 5 6 |  |
| 3pm | Gym | 1 2 [3] 4 5 6 |  |

**Select 1-3 Routines for further assessment: Select routines based on (a) similarity of activities (conditions) with ratings of 4, 5 or 6 and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each routine identified.**

**Functional Assessment Checklist for Teachers & Staff (FACTS-Part B)**

Student/ Grade: Franky Naanoplay/Kindergarten Date: January 12, 2017

Interviewer: Henry Lanyard Respondent(s): Ms. Hatt

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

|  |  |
| --- | --- |
| **Routine/Activities/Context** | **Problem Behavior(s)** |
| Circle time at school with peers | Lack of sharing with peers |

**Provide more detail about the problem behavior(s):**

|  |
| --- |
| What does the problem behavior(s) look like? Lack of sharing, can react aggressively towards peers  How often does the problem behavior(s) occur? During each circle time (twice/day)  How long does the problem behavior(s) last when it does occur? Up to 30 minutes  What is the intensity/level of danger of the problem behavior(s)? Low danger level, however can be physically aggressive |

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

|  |  |
| --- | --- |
| **Related Issues (setting events)** | Environmental Features |
| **\_\_\_** illness Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ drug use \_x\_ circle time  \_x\_ negative social \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ conflict at home \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ academic failure \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **\_\_\_** reprimand/correction **\_\_\_** structured activity  **\_\_\_** physical demands \_x\_ unstructured time  \_\_\_ socially isolated \_\_\_ tasks too boring  **\_x\_** with peers \_\_\_ activity too long  **\_\_\_** Other \_\_\_ tasks too difficult  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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

|  |  |
| --- | --- |
| **Things that are Obtained** | Things Avoided or Escaped From |
| **\_x\_** adult attention Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ peer attention \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ preferred activity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ money/things \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_ hard tasks Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ reprimands \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_x\_ peer negatives \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **\_\_\_** physical effort \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **\_\_\_** adult attention \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

### SUMMARY OF BEHAVIOR

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

|  |  |  |
| --- | --- | --- |
| **Setting Events & Predictors** | **Problem Behavior(s)** | **Maintaining Consequence(s)** |
| **Circle time with peers at school** | **Lack of sharing toys with peers** | **Attention from teacher** |

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

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

**What current efforts have been used to control the problem behavior?**

|  |  |
| --- | --- |
| **Strategies for preventing problem behavior** | Strategies for responding to problem behavior |
| **\_x\_** schedule change Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ seating change \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ curriculum change \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_x\_ reprimand Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ office referral \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_ detention \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Appendix B:**

**GB Motivational Screening Tool**

**Client:** Franky Naanoplay **Date:** January 12, 2017  **Interviewer:** Henry Lanyard

**Informants' Relationship to the Client: Current or Past Diagnoses:**

TeacherNone

**Behaviour Description (please define one only):** Lack of sharing

**How frequently does the behaviour occur? (circle the answer that best describes your observations)**

More than once a day Daily Twice a week Weekly Twice a month Monthly Less than once a month

[**1] 2 3 4 5 6 7**

**Setting Description:** At circle time in the classroom at school. Both morning and afternoon**.**

**Behavioural Intervention(s) being Implemented (if applicable):** No behavioural interventions are currently beingimplemented.

**Instructions:** The GB Motivation Screening Tool is a questionnaire designed to identify those situations which influence the occurrence of behaviour problems. To complete this questionnaire select one behaviour that is of particular interest / concern. Once you have very specifically identified the behaviour, read each question carefully and circle the answer that best describes your observations in regard to this behaviour.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**QUESTIONS ANSWERS**

1. Does the behaviour seem to occur when Never Almost Seldom Half the Usually Almost Always

you stop paying attention to the person in order Never Time Always

to attend to another person or task? 0 1 2 3 4 [5] 6

1. When the behaviour occurs, you usually Never Almost Seldom Half the Usually Almost Always

try to distract or calm the person with preferred Never Time Always

activities (leisure items, snacks, toys, etc.) [0] 1 2 3 4 5 6

If yes, please specify the item:\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Does the behaviour occur following a Never Almost Seldom Half the Usually Almost Always

request to perform a task? Never Time Always

0 1 2 3 4 5 [6]

1. The person engages in repetitive Never Almost Seldom Half the Usually Almost Always

"self stimulatory behaviours" such as Never Time Always

body rocking, hand or finger waving, object [0] 1 2 3 4 5 6

twirling, etc.

1. The behaviour occurs more frequently Never Almost Seldom Half the Usually Almost Always

when the person is in physical or psychological Never Time Always

discomfort. If yes, please specify: \_\_\_\_\_\_\_\_\_ [0] 1 2 3 4 5 6

1. The behaviour occurs in the presence of Never Almost Seldom Half the Usually Almost Always

others. Never Time Always

0 1 2 3 4 5 [6]

1. Does the behaviour occur if the person Never Almost Seldom Half the Usually Almost Always

does not have his or her favorite items or objects? Never Time Always

If yes, please specify item: \_\_\_\_\_\_\_\_\_\_ [0] 1 2 3 4 5 6

1. Engages in the behaviour to try to get Never Almost Seldom Half the Usually Almost Always

people to leave him / her alone. (S)he Never Time Always

wants to escape the person or the demands

placed on them. 0 [1] 2 3 4 5 6

1. The behaviour occurs regardless of what Never Almost Seldom Half the Usually Almost Always

is going on in his or her immediate area, and Never Time Always

independently of his or her surroundings. 0 1 2 3 4 [5] 6

1. When the person has medical or Never Almost Seldom Half the Usually Almost Always

psychological problems and these are treated, Never Time Always

does the behaviour problem decrease? [0] 1 2 3 4 5 6

1. Engages in the behaviour because (s)he Never Almost Seldom Half the Usually Almost Always

enjoys being reprimanded or receiving negative Never Time Always

attention. 0 1 2 3 4 5 [6]

1. Engages in the behaviour to get access Never Almost Seldom Half the Usually Almost Always

to items such as preferred toys, food, items, Never Time Always

or drink. If yes, please specify item: \_\_\_\_\_\_\_ [0] 1 2 3 4 5 6

1. Engages in the behaviour when he/she Never Almost Seldom Half the Usually Almost Always

does **not** want to do something. Never Time Always

0 1 2 3 [4] 5 6

1. Would the behaviour occur repeatedly in Never Almost Seldom Half the Usually Almost Always

the same way, for long periods of time, even Never Time Always

if no one else was around? [0 ] 1 2 3 4 5 6

1. The person has a history of recurrent Never Almost Seldom Half the Usually Almost Always

physical or psychological problems that Never Time Always

increase this behaviour. [ 0] 1 2 3 4 5 6

1. Engages in the behaviour to try to get Never Almost Seldom Half the Usually Almost Always

a positive or negative reaction from you Never Time Always

or a peer. 0 1 2 3 4 5 [6]

1. Engages in the behaviour when you or Never Almost Seldom Half the Usually Almost Always

a peer have something that (s)he wants. Never Time Always

0 1 2 3 [4] 5 6

1. Engages in the behaviour when (s)he Never Almost Seldom Half the Usually Almost Always

does **not** want to do **or** stop doing something. Never Time Always

0 1 2 3 4 [5] 6

19. Engages in the behaviour because there Never Almost Seldom Half the Usually Almost Always

is nothing else to do. The person is bored with Never Time Always

or under-stimulated by his or her surroundings. [0] 1 2 3 4 5 6

1. The behaviour occurs in cycles. Never Almost Seldom Half the Usually Almost Always

During a "high cycle," the behaviour occurs Never Time Always

frequently; during a "low cycle,” the behaviour 0 1 [2] 3 4 5 6

rarely occurs. These cycles are caused by physical

or psychological discomfort. If true, please

specify the source of the discomfort: \_\_\_\_\_\_\_\_\_

1. Engages in the behaviour to draw Never Almost Seldom Half the Usually Almost Always

attention to him or herself, or away from Never Time Always

others. 0 1 2 3 4 5 [6]

1. Engages in the behaviour when you Never Almost Seldom Half the Usually Almost Always

or a peer takes something away that (s)he Never Time Always

wants. 0 1 2 3 4 5 [ 6]

1. The behaviour occurs in the presence Never Almost Seldom Half the Usually Almost Always

of others. Never Time Always

0 1 2 3 4 5 [6]

1. Does it appear to you that the person Never Almost Seldom Half the Usually Almost Always

performs this behaviour because it is compelling Never Time Always

or satisfying? 0 1 2 3 [4] 5 6

1. Engages in the behaviour because (s)he is Never Almost Seldom Half the Usually Almost Always

in physical or psychological pain. Never Time Always

[0] 1 2 3 4 5 6

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SCORING SUMMARY:**

**Attention Tangible Escape Sensory Discomfort\***

**1. \_\_\_5\_\_\_ 2. \_\_\_0\_\_\_ 3. \_\_1\_\_\_\_ 4. \_\_0\_\_\_ 5. \_\_0\_\_\_**

**6. \_\_\_6\_\_\_ 7. \_\_\_0\_\_\_ 8. \_\_1\_\_\_\_ 9. \_\_5\_\_\_ 10. \_\_0\_\_\_**

**11. \_\_6\_\_\_ 12. \_\_0\_\_\_ 13. \_\_4\_\_\_ 14. \_\_0\_\_ 15. \_\_0\_\_\_**

**16. \_\_6\_\_\_ 17. \_\_4\_\_\_ 18. \_\_5\_\_\_ 19. \_\_0\_\_ 20. \_\_2\_\_\_**

**21. \_\_6\_\_\_ 22. \_\_6\_\_\_ 23. \_\_6\_\_\_ 24. \_\_4\_\_ 25. \_\_0\_\_\_**

**Total Score: \_\_\_29\_\_\_\_ \_\_\_10\_\_\_\_ \_\_\_22\_\_\_\_ \_\_\_\_9\_\_\_\_ \_\_\_\_2\_\_\_\_**

**Mean Score: \_\_\_5.8\_\_\_\_ \_\_\_2\_\_\_\_\_ \_\_\_4.4\_\_\_\_ \_\_\_1.8\_\_\_\_ \_\_\_0.4\_\_\_\_**

**Relative Ranking: \_\_\_1st\_\_\_\_ \_\_\_3rd\_\_\_ \_\_\_2nd\_\_\_ \_\_\_4th\_\_\_\_ \_\_\_5th\_\_\_\_**

**\*Note:** Discomfort refers to physical and/or psychological discomfort.

**Appendix C:**

**Naturalistic Observation (ABC)**

|  |  |  |
| --- | --- | --- |
| Antecedent | Behaviour | Consequence |
| 1.1 Franky chooses book | 1.2 Franky sits on carpet with book | 1.3 Franky sits quietly reading the book |
| 2.1 Franky is told it is recess time | 2.2 Franky struggles to get dressed and asks for teacher help | 2.3 Teacher helps Franky |
| 3.1 Peer approaches asks Franky to borrow toy at circle time | 3.2 Franky ignores peer | 3.3 Peer walks away and Franky keeps toy |
| 4.1 Franky takes lunch bag out of cubby | 4.2 Franky eats his lunch and talks to peers | 4.3 Franky has finished lunch |
| 5.1 Franky is asked to open math book by teacher | 5.2 Franky quietly opens book and completes math | 5.3 Teacher praises Franky |
| 6.1 Franky lines up to go outside | 6.2 Franky stands quietly in line | 6.3 Franky gets extra time outside |
| 7.1 Peer has toy in hand during circle time | 7.2 Franky forcibly removes toy from peer | 7.3 Teacher makes Franky apologize, Franky keeps toy |
| 8.1 Franky wants toy from peer | 8.2 Franky asks peer for toy | 8.3 Franky gets the toy |
| 9.1 Peer is not talking to Franky during circle time | 9.2 Franky throws toy at peer | 9.3 Peer cries; Teacher tells Franky not to do that |
| 10.1 Peer wants toy back | 10.2 Franky passes toy to peer | 10.3 Peer says thank you, and asks Franky to play too |
| 11.1 Franky interacts with peers at cubby area | 11.2 Franky helps peer to get her lunch bag out of cubby | 11.3 Franky is thanked by peer |
| 12.1 Franky goes into gym | 12.2 Franky plays in small group with ball | 12.3 Franky interacts with peers |

**Appendix D:**

**Franky’s Sharing Behaviour During Baseline**

**Name:** Franky Naanoplay **Teacher:** Ms. Hatt **Observer:** Henry Lanyard

**Setting:** Regular kindergarten classroom - during circle time

**Observation Periods:** two, 30-minute periods (11:00am-11:30am and 2:00pm-2:30pm)

Frequency data was collected during each 30-minute observation period, for a total of 1-hour per day.

Day 1: Monday, January 16, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 0 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (1+0) / 1 = 1.00

Day 2: Tuesday, January 17, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 0 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (0+1) / 1 = 1.00

Day 3: Wednesday, January 18, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 3
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+1) / 1 = 3.00

Day 4: Thursday, January 19, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 0 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (1+0) / 1 = 1.00

Day 5: Friday, January 20, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 3
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+1) / 1 = 3.00

**Total Average of Sharing Behaviour During Baseline:**

Number of occurrences overall during intervention: 9

Total number of hours during intervention: 5

9 occurrences / 5 hours / 1.00 = 1.80 instances

Therefore, the average rate of Franky’s sharing behaviour during baseline was 1.80 instances per hour.

**Appendix E:**

**Children’s Reinforcement Survey**

**CHILDREN’S REINFORCEMENT SURVEY SCHEDULE**

**Name**: Franky Naanoplay **Date**: Jan 12, 2017 **Age**: 5

**Sex**: Male **School**: Regular Public School **Grade**: Kindergarten

This is a list of different activities and objects. Explain how much you like each one by placing an ‘X’ in the appropriate box.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Dislike | Like | Like very much |
| 1. Do you like candy? |  | **x** |  |
| 1. Do you like raisins? | **x** |  |  |
| 1. Do you like milk? | **x** |  |  |
| 1. Do you like toy cars? |  |  | **x** |
| 1. Do you like colouring? |  | **x** |  |
| 1. Do you like stickers? |  | **x** |  |
| 1. Do you like computer games? |  |  | **x** |
| 1. Do you like reading? | **x** |  |  |
| 1. Do you like playing on swings? | **x** |  |  |
| 1. Do you like playing ball? |  | **x** |  |
| 1. Do you like being first in line? |  |  | **x** |
| 1. Do you like being the teacher’s helper? |  |  | **x** |
| 1. Do you like going to the library? | **x** |  |  |
| 1. Do you like people to tell you that you did a good job? |  |  | **x** |
| 1. Do you like extra play time? |  | **x** |  |
| 1. Do you like teaching things to other people? | **x** |  |  |

**Appendix F:**

**Mediator Instructions**

**Title: Increasing Sharing Behaviour**

**Client Name:** Franky Naanoplay

**Date of Birth:** January 2, 2012

**Date of Report:** February 13, 2017

# Goal

|  |
| --- |
| Sharing (accelerate)  Franky will share at least 5 times when the opportunity is presented during circle time. This will occur when a peer gestures and verbally asks Franky to share an object, or when Ms. Hatt instructs Franky to share an object with his peer(s). |

# Target Skill/Behaviour(s)

Sharing (Accelerate)

# Operational Definition(s)

Sharing behaviour is observed and recorded when Franky passes an object to another peer within 5 seconds of being when asked, or told by Ms. Hatt. Franky passes an object by picking it up, placing it in his peer’s hand with no excessive force, or places the object in front of his peer.

Franky is not considered to be sharing if he takes an object from out of his peer’s hand without first asking to have the object; when a peer gives Franky an object within 5 seconds of being screamed at, or hit by Franky; if Franky throws an object at a peer after being asked for it.

Hitting is when Franky uses a body part or object to contacts another peer’s body using excessive force, causing bodily harm; the peer cries, verbalizes extreme discomfort, and/or retaliates by hitting Franky back.

Franky may only throw an object to his peer(s) if engaged in a game requiring him to throw the object. Ms. Hatt will model how to throw appropriately during a game.

# Objective(s)

|  |
| --- |
| During each totalled 1 hour of circle time each day, Franky will share:   1. 2.00 times per hour 2. 2.50 times per hour 3. 3.00 times per hour 4. 4.00 times per hour   The objectives mentioned above will be achieved when Franky has reached the criterion for two consecutive circle times. |

# Intervention Schedule

|  |
| --- |
| The intervention will take place when the behaviour occurs during circle time between 11:00 am – 11:30 am, and 2:00pm – 2:30pm. |

# Location of Intervention

|  |
| --- |
| The intervention will take place in Ms. Hatt’s kindergarten classroom during circle time. |

# Mediators

|  |
| --- |
| Counsellor |

# Materials

|  |
| --- |
| Objects that Franky and his peers would like to play with during circle time such as toys and books. A watch or clock, frequency data sheet, and writing utensils will be required for the counsellor and teacher. |

# Procedure

During circle time, which takes place at 11:00am – 11:30am and 2:00pm – 2:30pm, Ms. Hatt will verbally praise Franky when she observes him sharing with a peer. Ms. Hatt will also use gestural reinforcement with Franky such as nodding, and smiling when he is sharing.

When Franky is not sharing, Ms. Hatt will give Franky a gestural prompt. If Franky does not respond to the gestural prompt, Ms. Hatt will give a verbal warning and allow Franky 5 seconds, before intervening and taking the object away.

|  |  |  |
| --- | --- | --- |
| Antecedents / SDs / Situations | Client’s Behaviour | Mediator’s Behaviour |
| A peer asks Franky to switch toy cars.  A peer is reading a book that Franky wants.  A peer is reading a book that Franky wants.  The children are playing a train game. | Franky switches cars with the peer.  Franky reaches for the book that the peer is reading.  Franky continues to reach for and then grabs the book from peer without asking.  Franky asks if he can play to and asks a peer for a train. | Ms. Hatt acknowledges Franky by verballing saying, “Good sharing Franky”, along with a ‘thumbs up’.  Ms. Hatt wags her finger at Franky for him to stop reaching.  Ms. Hatt tells Franky that was not nice, and to please give the book back to his peer, and ask for the book politely.  Ms. Hatt praises Franky for his politeness, and smiles at him. |

**Data Collection Method**

The counsellor and teacher will observe Franky during the two circle time periods during the day. The frequency of the behaviour will be recorded on a data sheet. The hourly rate will then be calculated and graphed.

**Appendix G:**

**Franky’s Sharing Behaviour During Treatment**

**Name:** Franky Naanoplay **Teacher:** Ms. Hatt **Observer:** Henry Lanyard

**Setting:** Regular kindergarten classroom - during circle time

**Observation Periods:** two, 30-minute periods (11:00am-11:30am and 2:00pm-2:30pm)

Frequency data was collected during each 30-minute observation period, for a total of 1-hour per day.

Day 6: Monday, January 23, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 0 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (0+1) x 1 = 1.00

Day 7: Tuesday, January 24, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 0 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (0+1) x 1 = 1.00

Day 8: Wednesday, January 25, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 2
3. Duration of Observation: 1 hour
4. Hourly Rate: (1+1) x 1 = 2.00

Day 9: Thursday, January 26, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 2 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 4
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+2) / 1 = 4.00

Day 10: Friday, January 27, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 0 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1
3. Duration of Observation: 1 hour
4. Hourly Rate: (1+0) / 1 = 1.00

Day 11: Monday, January 30, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 2
3. Duration of Observation: 1 hour
4. Hourly Rate: (1+1) / 1 = 2.00

Day 12: Tuesday, January 31, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 1 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1.5 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 1.5
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+0.5) / 1 = 2.50

Day 13: Wednesday, February 1, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 3
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+1) / 1 = 3.00

Day 14: Thursday, February 2, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 1.5 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 3.5
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+1.5) / 1 = 3.50

Day 15: Friday, February 3, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Observation Period | Time Started | Time Ended | Occurrences of Sharing Behaviour | Length of Observation |
| 1 | 11:00am | 11:30am | 2 | 30 minutes |
| 2 | 2:00pm | 2:30pm | 2 | 30 minutes |

1. Target Behaviour: Sharing
2. Total Occurrences: 4
3. Duration of Observation: 1 hour
4. Hourly Rate: (2+2) / 1 = 4.00

**Total Average of Sharing Behaviour During Intervention:**

Number of occurrences overall during intervention: 24

Total number of hours during intervention: 10

24 occurrences / 10 hours / 1 = 2.40

Therefore, the average rate of Franky’s sharing behaviour during intervention was 2.40 instances per hour.

**Percentage of Improvement in Sharing Behaviour:**

Treatment level - baseline level / baseline level x 100

2.40 - 1.80 / 1.80 x 100 = 33.33%

Therefore, the percentage of improvement for Franky’s sharing behaviour was 33.33%.