



# Overview

## Participants

Our research involved testing our interface with industry professionals as well as a practicing behavioural interventionist.

## Method

For each test, we gave the participant the same scenario so that we could see how they try to achieve their goals through the application and where it may be improved.

## Scenario

You're in the middle of a session with your client Michelle Douglas. You notice that she's exhibiting some hitting behaviours in this session.

It happens whenever you try to move on to another activity and take away her toy. She doesn't appear sad, but just angry each time. This has occurred 3 times and you wish to record it to your Trail app.

# User Experience vs User Interface Issues

## User Experience Issues

- Counterintuitive interaction designs
- Hierarchy and presentation of important interactions
- Confusing graphs in analytics
- Inconsistent language between app and behavioural intervention industry
- Takes time to learn app fully

## User Interface Issues

- Cohesive colour throughout the app
- Confirmation message after a successful action
- Clarity around data presented
- Inconsistencies on how to save data

# Proof of Issue

Having **“record”**, **“calendar”** and **“analytics”** better represents the main tasks of the application.

- Industry Professional

**“Problem & Desired”** These terms are more commonly used by BI’s when assessing a client.

- Behavioural Interventionist

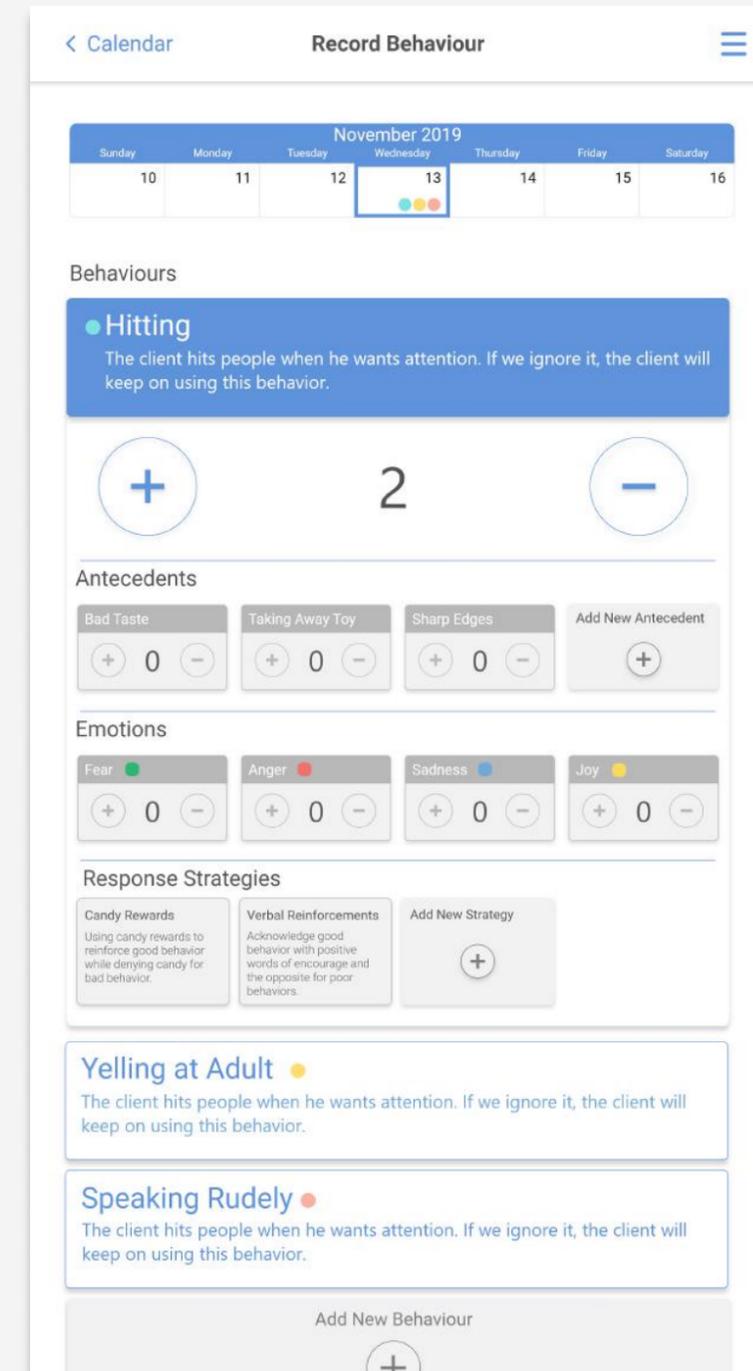
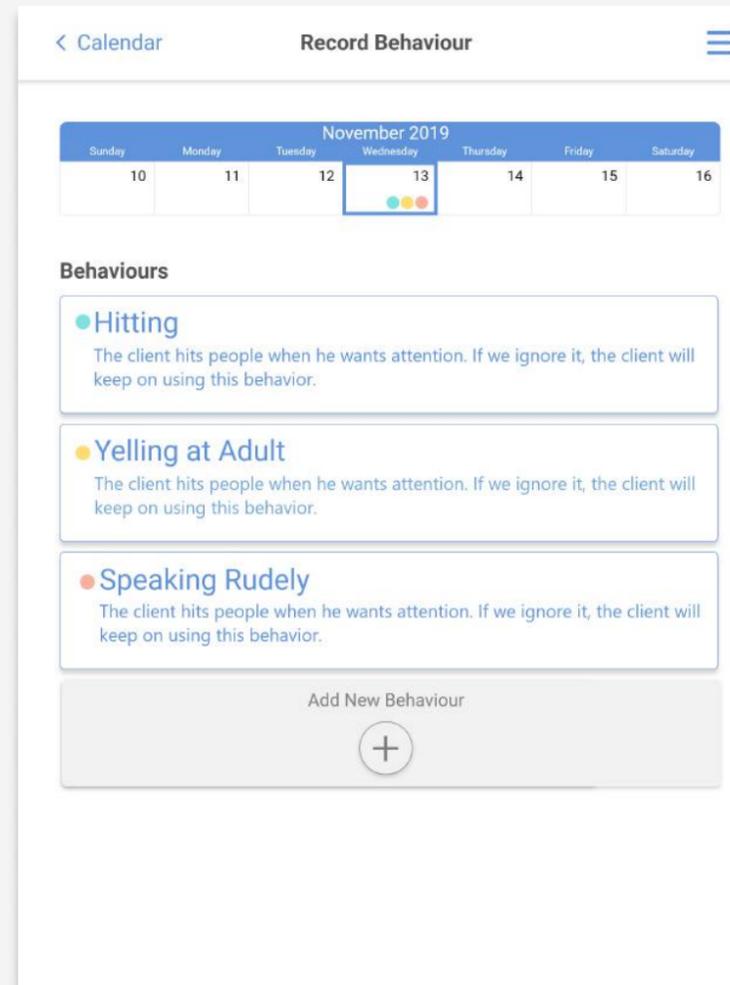
# Recommendations From Our Industry Critique

## 1 Recording Behaviour

Make the main navigation “Record”, “Calendar”, “Analytics” to better represent the main task of the application: recording a behaviour

The new “Record” page is the same as the current recording behaviours pages but is now the first thing the BI sees

Add save button and notification to the recording behaviours flow to emphasize the “saving” of a recording and reassure the user that their data has been saved



# Record Behaviour

Before

After

Record Behaviour

November 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10	11	12	13	14	15	16

Behaviours

- Hitting**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.
- Yelling at Adult**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.
- Speaking Rudely**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.

Add New Behaviour

Record Behaviour

November 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10	11	12	13	14	15	16

Behaviours

- Hitting**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.

+ 2 -

Antecedents

- Bad Taste: + 0 -
- Taking Away Toy: + 0 -
- Sharp Edges: + 0 -
- Add New Antecedent: +

Emotions

- Fear: + 0 -
- Anger: + 0 -
- Sadness: + 0 -
- Joy: + 0 -

Response Strategies

- Candy Rewards: Using candy rewards to reinforce good behavior while denying candy for bad behavior.
- Verbal Reinforcements: Acknowledge good behavior with positive words of encouragement and the opposite for poor behaviors.
- Add New Strategy: +

- Yelling at Adult**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.
- Speaking Rudely**  
The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.

Add New Behaviour

Michelle Douglas

Record Calendar Analytics

Wednesday, November 13th 2019 Save

Behaviours

- Hitting**  
The client hits people when he wants attention.
- Yelling**  
The client yell at people when he wants attention.

- 2 +      - 3 +

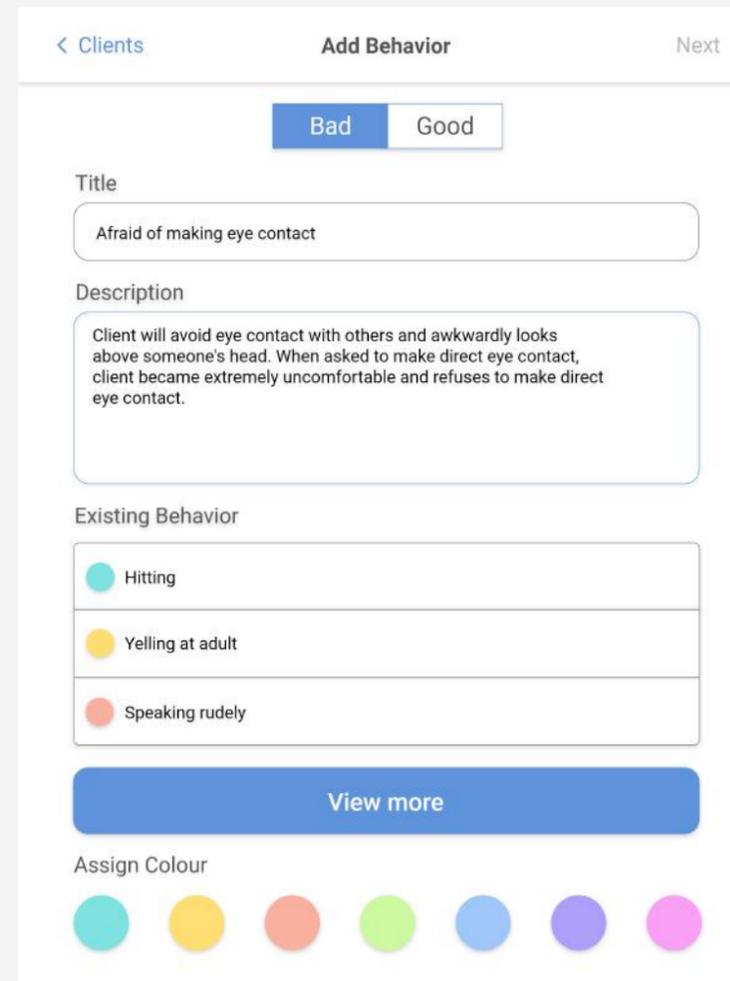
Add New Behaviour

# Recommendations From Our Industry Critique

## 2 Goal & Starting Behaviour

The “Goal Behaviour” and “Starting Behaviour” terms are too vague and don’t work for every case.

Example: For a client who already exhibits a good behaviour to begin with either term could makes sense semantically and can cause confusion



< Clients Add Behavior Next

Bad Good

Title  
Afraid of making eye contact

Description  
Client will avoid eye contact with others and awkwardly looks above someone's head. When asked to make direct eye contact, client became extremely uncomfortable and refuses to make direct eye contact.

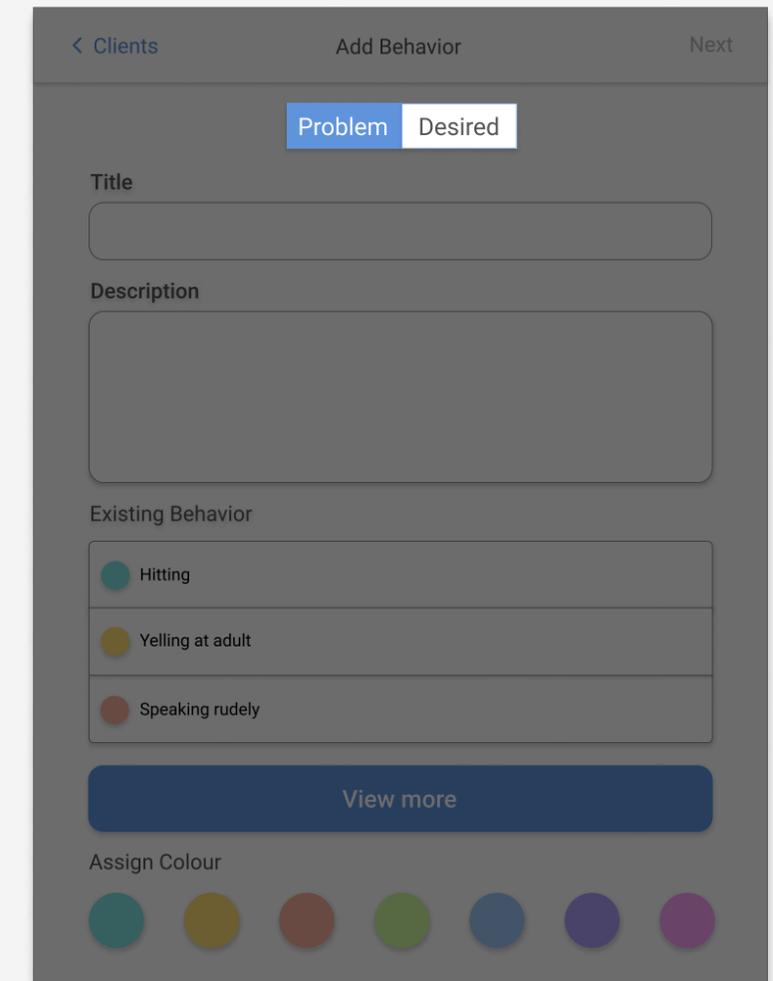
Existing Behavior

- Hitting
- Yelling at adult
- Speaking rudely

View more

Assign Colour

Color selection: cyan, yellow, orange, lime green, light blue, purple, pink



< Clients Add Behavior Next

Problem Desired

Title

Description

Existing Behavior

- Hitting
- Yelling at adult
- Speaking rudely

View more

Assign Colour

Color selection: teal, olive green, brown, forest green, blue, dark purple, magenta

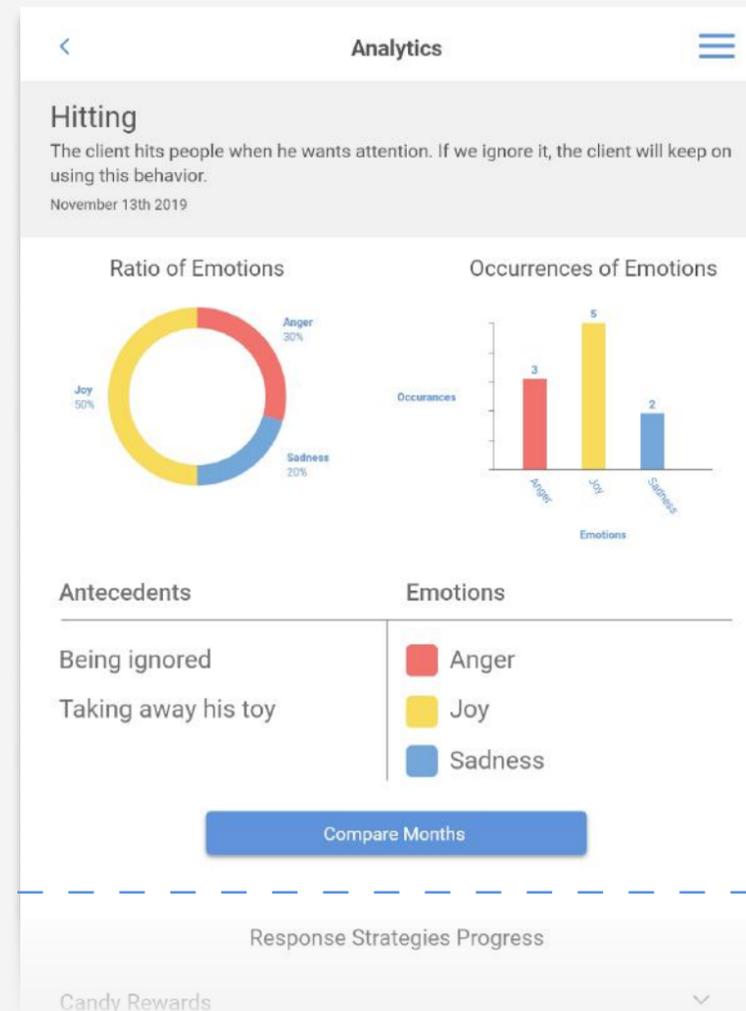
# Recommendations From Our Industry Critique

## 3 Analytics Page

Make sure the colours used before are used here as well to convey the meaning better across pages

Use time for the x-axis and occurrences for the y-axis to show a trend over time

Creat the ability to select behaviours to show on the graph from a list



# Analytics

Before

After

Michelle Douglas

Calendar Analytics

November 2019

Behaviours

- Hitting
- Yelling at adult
- Speaking rudely
- Extreme facial
- Typing/shoveled
- Throwing food

Michelle Douglas

Calendar Analytics

Month

Goal Behaviours

Starting Behaviours

- Hitting people
- Yelling
- Speaking Rudely

Analytics

### Hitting

The client hits people when he wants attention. If we ignore it, the client will keep on using this behavior.

November 13th 2019

Ratio of Emotions

Occurrences of Emotions

Antecedents

- Being ignored
- Taking away his toy

Emotions

- Anger
- Joy
- Sadness

Compare Months

Response Strategies Progress

Candy Rewards

Verbal Direction

↑ 35% Increase

Inform of Upcoming Activities

Michelle Douglas

Record Calendar Analytics

### Behaviours List

- Hitting people  
Client hits people hard and laugh at them without any reason
- Yelling at adult  
Client yells at people when he feels lonely
- Eye contact  
Client will avoid eye contact with others

Frequency

Select behaviours from the list

Michelle Douglas

Record Calendar Analytics

### Behaviours List

- Hitting people  
Client hits people hard and laugh at them without any reason
- Yelling at adult  
Client yells at people when he feels lonely
- Eye contact  
Client will avoid eye contact with others

2019

Month Day

Frequency

Month	Frequency
Jan	120
Feb	101
Mar	90
Apr	85
May	87
Jun	83
Jul	75
Aug	80
Sept	77
Oct	77
Nov	30
Dec	28

# Clients Page

Before

Michelle Douglas

- Hitting
- Yelling at adult
- Speaking rudely to people

Last opened 11/13/2019

Marvin Leonardo

- Unable to follow instructions
- Very often climbing on things

Last opened 11/07/2019

Stewart Keane

- Likes to throw away toys
- Is ignorant

Last opened 11/06/2019

Shannon Ling

- has problems on communicating with

Last opened 11/01/2019

After

Michelle Douglas

- Hitting
- Yelling at adult
- Speaking rudely to people

Last opened 11/13/2019

Marvin Leonardo

- Unable to follow instructions
- Very often climbing on things

Last opened 11/13/2019

Stewart Keane

- Throws away toys
- Yelling

Last opened 11/13/2019

Shannon Ling

- Running away

Last opened 11/13/2019

Jonathan Li

- Hiding under tables
- Avoiding eye contact when talking

Last opened 11/13/2019

# Calendar Page

Before

After

< Clients Michelle Douglas

Calendar Analytics

November 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

November 13th 2019

Hitting Yelling at adult Speaking rudely

Record Behaviour

October 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Record Start

< Clients Michelle Douglas

Record Calendar Analytics

November 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

November 13th 2019

Hitting Yelling at adult Speaking rudely

Record Behaviour

October 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Start of record

# Upcoming Changes

Change the phrasing of the terms in emotion section to more of an action phrase.

< Clients Add Behavior Next

Problem Desired

Title

Description

Existing Behavior

- Hitting
- Yelling at adult
- Speaking rudely

View more

Assign Colour

Emotions

- Fear
- Anger
- Sadness
- Happy

Instead of using “good” and “bad” behaviours, change to “desired” and “problem” behaviours. These terms are more commonly used by BI’s when assessing a client.

# Upcoming Changes

Add a template for common behaviour.

Giving Behavioural Interventionists the ability to add custom emotions.

Add template for response strategies.

The screenshot shows a mobile application interface for tracking behaviors and emotions. The header includes a back arrow, the text "Calendar", the name "Michelle Douglas", and a menu icon. Below the header, there are navigation options: "Record", "Calendar", and "Analytics". The date "Wednesday, November 13th 2019" is displayed, along with a "Save" button. The main content is divided into several sections: "Behaviours", "Antecedents", "Emotions", and "Response Strategies".

- Behaviours:** Two behavior cards are shown. The first is "Hitting" (blue background) with a description "The client hits people when he wants attention." and a count of 2. The second is "Yelling" (grey background) with a description "The client yell at people when he wants attention." and a count of 3. Each card has minus and plus buttons to adjust the count.
- Antecedents:** Three antecedent cards are shown: "Bad Taste", "Taking Away Toy", and "Sharp Edges", each with a count of 0. There is also an "Add New Antecedent" button with a plus sign.
- Emotions:** Four emotion cards are shown: "Fear", "Anger", "Sadness", and "Joy", each with a count of 0. Each card has minus and plus buttons to adjust the count.
- Response Strategies:** Two strategy cards are shown: "Candy Rewards" and "Verbal Reinforcements". There is also an "Add New Strategy" button with a plus sign.

# Citation

<https://images.app.goo.gl/GBhafE1AsbWUvgZH7>

<https://www.hiclipart.com/free-transparent-background-png-clipart-stztm/download>

