

# Working Effectively in Classrooms: Considerations for Practical, Acceptable, and Effective Functional Analyses and Interventions

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# Purpose of the presentation

- To consider how teacher and student behaviours can teach us how to work more effectively in schools
- To discuss how these behaviours can guide us to
  - Improving the effectiveness and efficiency of functional assessments and analyses
  - Improving the effectiveness, consistency, and acceptance of our interventions

# What students tell us...

- Student: “This environment isn’t working for me!”
- “...unless you were *planning* for me to behave badly and not acquire any new skills.”
- So our job is to help fix the environment so it **does** work.

# What teachers tell us...

- Teacher: “This kid needs an intervention now!”
- Teacher: “You’ve been here for days and you still haven’t helped me.”
- The functional behaviour assessment part of what we do is sometimes difficult for teachers to understand.
  - Particularly if they are desperate for help or have been dealing with the problem for a long time.

# FBA Considerations

- We need to ensure that teachers understand the FBA rationale and process
  - Why we do it
  - What it entails
  - How long it is likely to take

# FBA Considerations

- We also need to ensure that
  - We determine whether an individualized FBA is necessary
  - We determine “how much” FBA is needed
  - We make the process as valid – and as efficient – as possible

# FBA: Do they need it?

- The purpose of an FBA is to develop an effective individualised intervention plan.
- However, an important consideration is conducting the FBA is whether an individualised plan is actually needed.
- When approaching challenging behaviour at school, we should always consider **classroom environment** first.

# FBA: Do they need it?

- Is the target child the only child with substantial behaviour problems?
- Are there good classroom management strategies in place?
  - Many “problem children” disappear when
    - Classroom expectations are clearly defined.
    - Feedback on behaviour is provided consistently.
    - Meeting expectations results in frequent positive reinforcement.



# FBA: Do they need it?

- The Good Behaviour Game (Barrish, Saunders, & Wolf, 1969) is an excellent classroom management strategy that is
  - Evidence-based
  - Easy to teach
  - Easy to use
  - Resistant to integrity failures

# FBA: Do they need it?

- Here's something else that student behaviour sometimes tells us...
- Student: "I am capable of more than you give me credit for."

# FBA: Do they need it?

- When considering classroom environment, it also is important to ensure
  - The curriculum focuses on helping children attain new skills (not just reducing problem behaviour).
  - Expectations are set at the right level.
  - The classroom activities are engaging and varied.
- Don't be afraid to **show** teachers what kids are capable of doing when the instruction is right.

# FBA: How much is needed?

- If you're sure the classroom environment is arranged well, but some children still struggle with problem behaviour, an FBA will help you determine why those behaviours occur.
- Three strategies
  - Indirect assessment
  - Descriptive assessment
  - Functional analysis

# FBA: How much is needed?

- Most behaviour analysts aren't in a classroom long enough to see the full range of behaviours and environmental events that may be important to a particular child's behaviour.
- Interviews with teachers and assistants, despite the limitations of these methods, can be invaluable in capturing details and patterns we are unable to directly observe.

# FBA: How much is needed?

- Informant assessments can also be helpful in developing rapport and letting the teacher know you are working together.

# FBA: How much is needed?

- As behaviour analysts, we know that indirect data are not enough.
- Descriptive assessments allow us to directly observe contingencies as they occur
  - Just be aware of the limitations of correlational data!
- They also can be useful in
  - Suggesting when a functional analysis (FA) might not be necessary
  - Helping identify what the stimuli for a functional analysis should look like

# FAs in schools

- If a combination of indirect and descriptive assessments hasn't provided a solid hypothesis about the function of behaviour, then you need to consider an FA.
- Here's the first thing you need to know about FAs in schools
  - **They are very difficult to do**
  - especially if you want them to be valid and you don't want them to make the teacher hate you.



## FA: Is it valid?

- Many behaviour analysts conduct the FA themselves, often in room separate from the classroom.
  - And there are good arguments for doing so
  - Increasing control, improving procedural integrity, reducing the influence of extraneous variables
- ...but can we accurately capture natural contingencies with unnatural arrangements?

## FA: Is it valid?

- “By the book” condition arrangements (i.e., Iwata, Dorsey, Slifer, Bauman, & Richman, 1994) may be unlikely to capture the nuances of setting events and reinforcers in the classroom.
- This could increase the likelihood of false positive (or false negative) results.

## FA: Is it valid?

- To avoid potential threats to external validity, consider teacher-conducted FAs in the classroom.
- And remember to consider descriptive assessment data to inform the FA protocol.
  - i.e., let the teacher respond how she normally would
- However....

# What teachers tell us...

- Teacher: “You want me to reinforce the problem behaviour? I thought you were going to get rid of it!”
  - Use the Hanley (2012) allergy analogy!
- Teacher: “Are you kidding me?”
  - Multiple 10-min sessions might not sound like much until you try to do them whilst also teaching and managing 27 other kids...
  - We have to make the FA as efficient as possible!

# FA: Is it efficient?

Teachers are busy people with many things to do...

...so we need to make the FA “fit” within ongoing activities.

# Trial-based FAs

- Trial-based FAs involve a series of brief probes that include control and test contingencies (Sigafoos & Sagers, 1995; Bloom, Iwata, Fritz, Roscoe, & Carreau, 2011).

For example:

- 2 min of control contingency (reinforcer freely available)
  - 2 min test assessment (reinforce target behaviour)
- Engagement in the target behaviour terminates the segment (except in the alone condition).
- Data are presented as the percentages of control and test trials with target behaviour.

# Trial-based FAs

- Trial-based FAs are potentially beneficial in classroom contexts because
  - they may take less time than other types of FAs.
  - they can be embedded into naturally occurring activities.
  - they don't require extended exposure to contingencies for problem behaviour.
- There is a growing literature on trial-based FAs (see Rispoli, Ninci, Neely, & Zaini, 2014 for a review)
  - but all participants had developmental disabilities

# Austin, Groves, Reynish, & Francis (2015)

- Participants were three typically developing primary school children who were identified by their teachers as engaging in high rates of problem behaviour.
  - Dylan (8 yrs old, Year 3): off-task
  - Joe (7 yrs old, Year 3): calling out
  - Jacob (5 yrs old, Year 1): calling out
- All data were collected in the classroom during ongoing activities and all procedures were implemented by a teacher or instructional assistant.



# Austin, Groves, Reynish, & Francis (2015)

- Each trial-based sequence was delivered in a control-test arrangement.
  - Max 2 min per segment (shorter if target behaviour occurred)
  - 10 sequences per condition
- Given the results of informant and descriptive assessments, only adult attention, peer attention, and escape from demands were tested as putative reinforcers.

# Austin, Groves, Reynish, & Francis (2015)

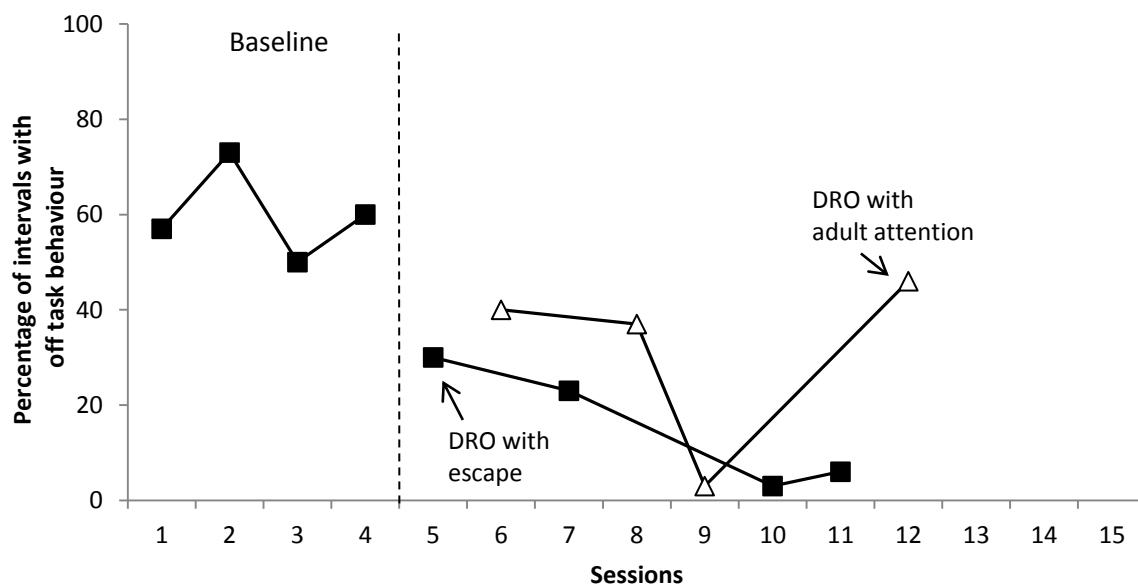
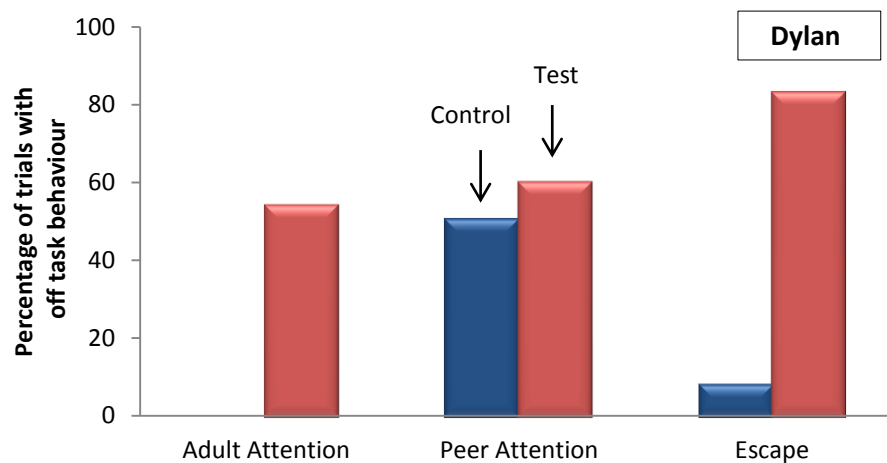
- Adult attention
  - Control: Teacher was seated by the participant and gave constant, non-contingent attention
  - Test: Teacher walked away from the student and attended to another child; when target behaviour occurred, the teacher returned and gave 30 s of attention
- Peer attention
  - Control: Preferred peer was seated by the participant and gave constant, non-contingent attention
  - Test: Teacher called the peer away; when target behaviour occurred, the peer returned and responded naturally

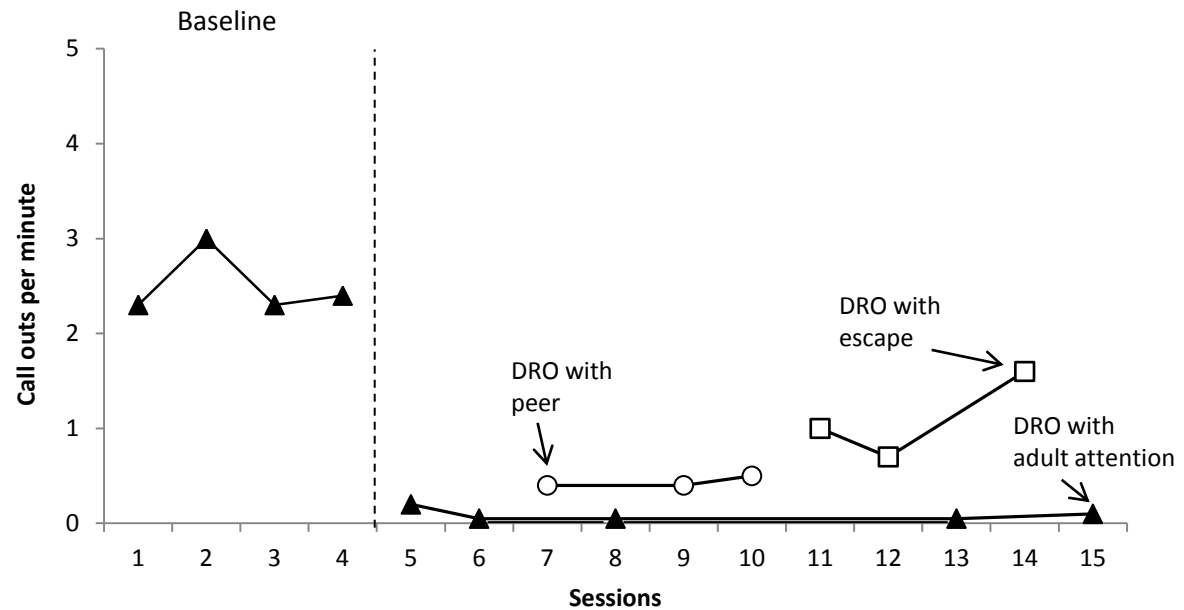
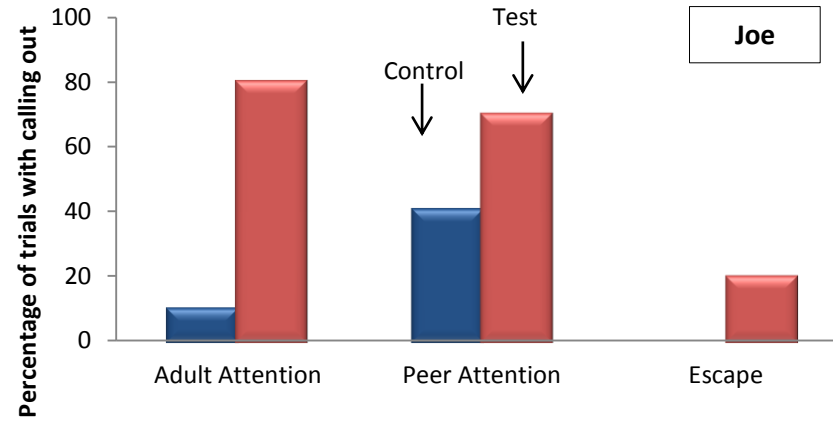
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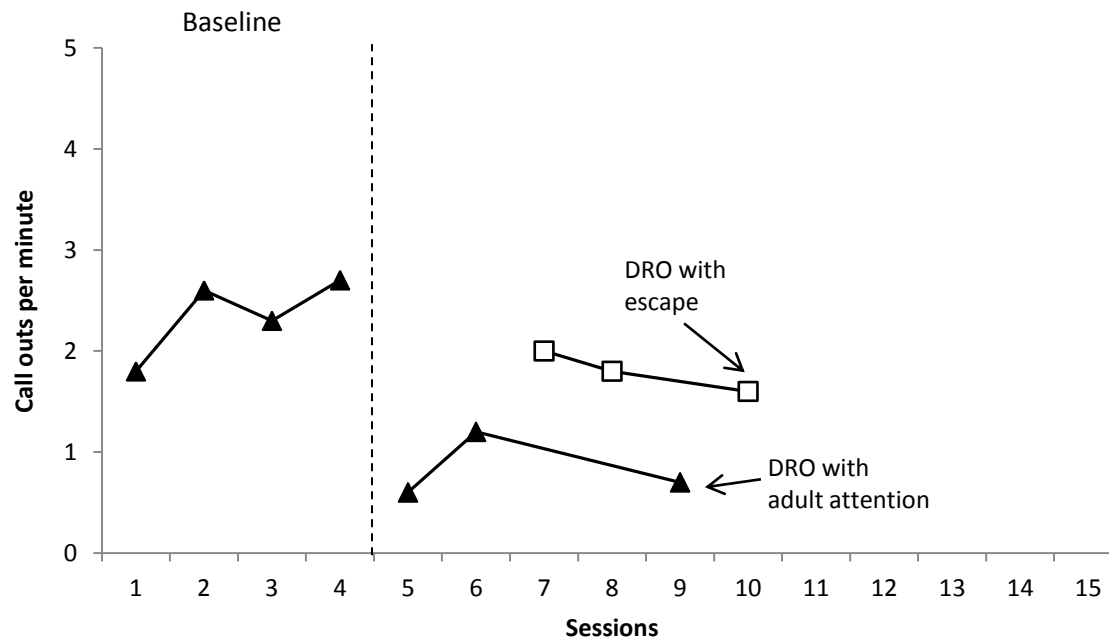
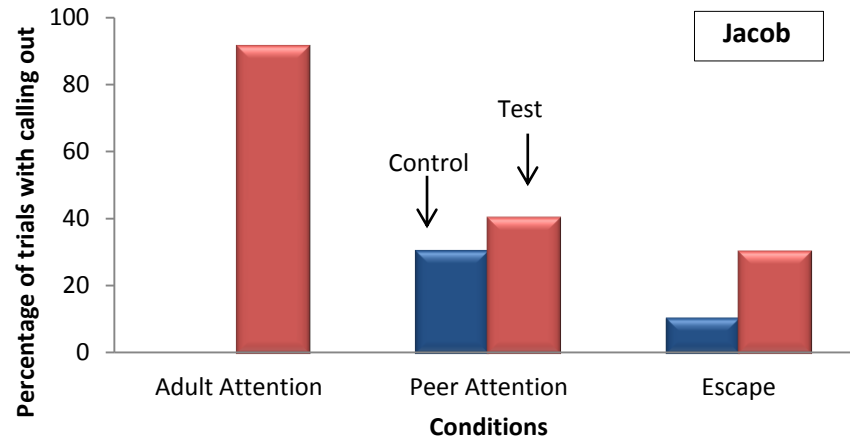
- Escape
  - Control: No work demands were placed on the child, but a moderately preferred task was provided
  - Test: Teacher told the child to stop the activity and begin a non-preferred work activity; when target behaviour occurred, the teacher picked up the work and walked away from the child for 30 s (to “look at” the work)

# Austin, Groves, Reynish, & Francis (2015)

- We validated FA results by comparing treatments indicated (and not indicated) by the FA.
- All treatments involved DRO 2 min with different consequences for zero responding
  - DRO (teacher attention): access to 30 s of teacher praise
  - DRO (peer attention): 30 s of time with a preferred peer
  - DRO (escape): 30 s “stretch break” away from desk
- Each sessions lasted 10 min and contingencies were communicated to children at the start of each session
  - a timer was used to help children count down the intervals.







# What about interventions?

- Now that we have a handle on the functions of behaviours, we can recommend individualized interventions that address these functions.
- So it's all smooth sailing from here...



# What teachers tell us...

- Teacher: “I’ve already tried that.”
  - Acknowledge the teacher’s expertise and her good ideas.
  - Be sure your interventions are developed in collaboration with the teacher.
  - Explain the importance of consistency and treatment integrity.
  - Get the teacher to monitor integrity.

# What teachers tell us...

- Teacher: “That’s too difficult to do.”
  - Again, be sure your interventions are developed in collaboration with the teacher.
  - When integrity is low, re-training is not always the best solution.
  - Remember: A great intervention that never gets implemented is not a great intervention.

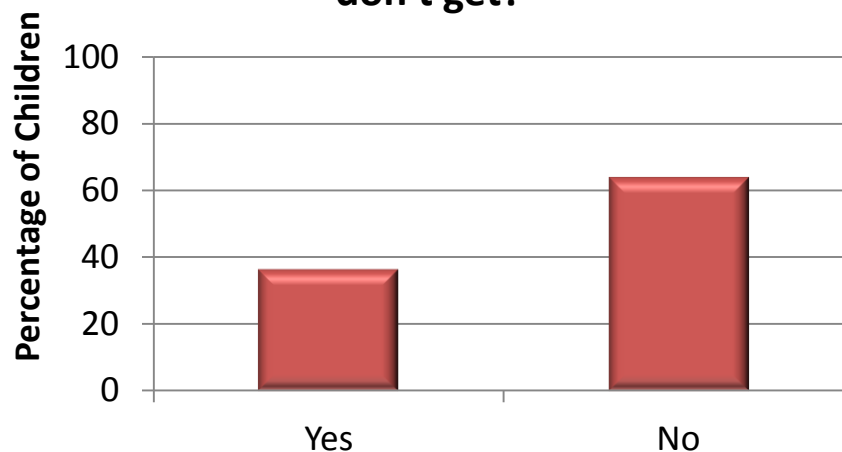
# What teachers tell us...

- Teacher: “Individualised interventions are not fair to other children.”
- Teachers often raise concerns about how our interventions are perceived by other children.
  - What message do they send?
  - Will others behave badly to get the same rewards?

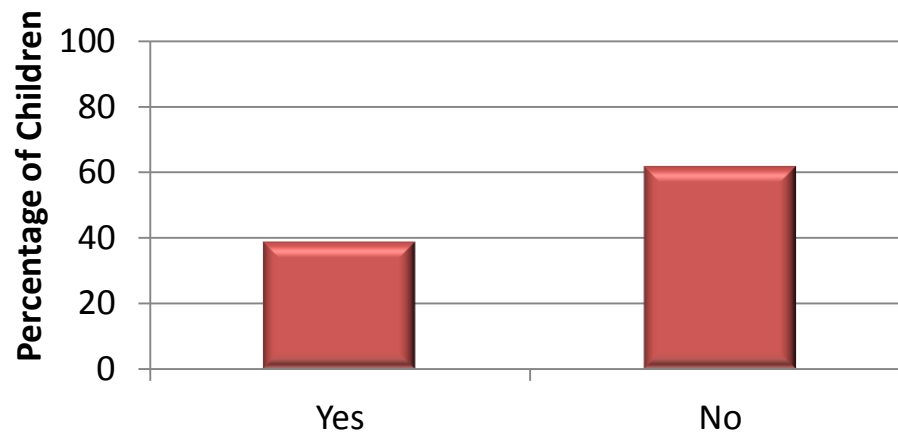
# Austin, Angelakis, Sewell, & Watson (in preparation)

- We interviewed 193 children (4 -11 years of age) recruited from eight classrooms across five primary schools in Wales and England.
- Within each class, 1 or 2 children had an individualised reinforcement or reward programs that allowed access to preferred items or activities that
  - other children did not get OR
  - other children received on a leaner schedule

### Do others receive rewards that you don't get?

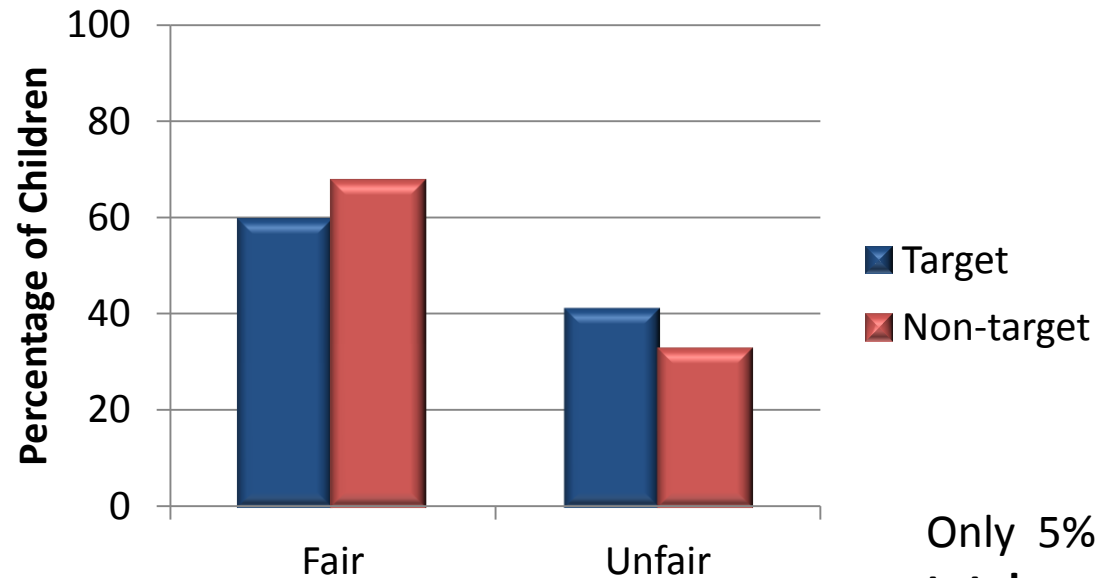


### Referring to Target Children



Only 14% (n = 27) of the **total** sample were referring to the target children.

## Are other children's rewards fair or unfair?



$$\chi^2 (1, N = 70) = .484, p = .329$$

Only 5% (n = 11) of the **total** sample thought target children's rewards were unfair.

- When asked WHY target children received rewards that other children do not get, most children acknowledged it was because the target child was different
  - “because we don’t be naughty and they do and that’s why they got a special list. We’re not really naughty”
  - “because he has anger problems”

- For those who reported that target's rewards were UNFAIR, two primary themes emerged
  - They get things that I want
    - “Other children might want to do those jobs, too”
  - We should all be treated the same
    - “Everybody should get the same”



- For those who reported that target's rewards were FAIR, one primary theme emerged
  - ***Because they need it***
    - “Some children need something different”
    - “If they didn't have it, they would hurt us. The chart helps them have better behaviour and we don't like to get hit.”
- These responses show that, in general, children are sensitive to the individual needs of their peers.

# Conclusions

- The bad news: Working in schools is hard work!
- The good news: Students and teachers can provide invaluable data that will make us better behaviour analysts.

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