

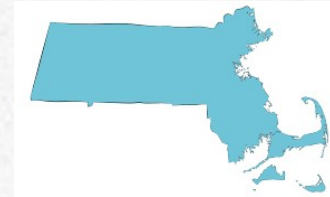


The Various Functional Currencies of Reinforcement:

Don't be afraid to give them what they want

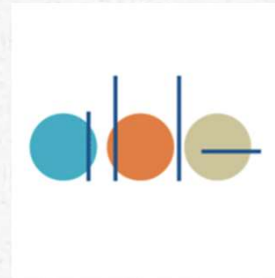
Katie Allen M.S. BCBA

A Bit About Me



o BCBA :

- o East Van Behaviour Analysis Ltd.
- o ABLE Developmental Clinic /Arcus Community Resources
- o PHSA



What you can expect

- o I'm going to demonstrate how to use
 - o A socially inappropriate reinforcer
 - o TO INCREASE
 - o A socially inappropriate behaviour.



Preference

- o What a person likes that can be placed in a hierarchical order
- o I like these and will eat either of them if available
- o I would eat both, but if I had to choose I would choose this one



Reinforcement

- Future probability of a behaviour increases due to stimuli manipulation contingent on behaviour
- I like both of these and would eat them but I will work to have this one but not the other.



Preference vs Reinforcer

o Reinforcer

- o Varies between individuals
- o Reinforcers are based on known preferences
- o Demonstrates by impact on behaviour that it is valuable and will be worked for

o Preferences

- o Varies between individuals
- o May be preferred but not a reinforcer
- o Only describes what is liked, not what will be worked for

Assessment

o Preference

- o Determines a hierarchy of items
- o Suggest what may serve as a reinforcer
- o Free operant
- o Forced Choice
- o MSWO

o Reinforcer

- o Experimentally demonstrates effectiveness of a reinforcer
- o Increasing a free or restricted operant behavior

Types of Reinforcement

- o Planned or Unplanned
 - o Positive: Addition of a stimulus
 - o Negative: Removal of a stimulus
- o “Of course I don’t reinforce his swearing...I give him a real piece of my mind about it!”
- o “She doesn’t like spinach...it makes her gag”

Does it matter if it works?

- o The distinction between positive and negative reinforcement: Use with Care
 - o Baron, A., Galizio, M. The distinction between positive and negative reinforcement: Use with care. *BEHAV ANALYST* 29, 141–151 (2006).
- o There is a tendency for clinicians to use positive reinforcement before negative reinforcement
 - o Does chocolate need a function?
 - o Who wants anything called negative, must be bad

What does matter with R+

- ◊ Timing of Delivery
- ◊ Schedule
- ◊ Amount
- ◊ Intensity

Positive Reinforcers

- o Unique
- o Individualized
- o What are some things we try to attain at Costco?

Negative Reinforcers

- o Unique
- o Individualized
- o What are some things we try to avoid at Costco?

Other dimensions of R₊

- o Appropriate or Pro-social
- o Inappropriate or Anti-social
- o Naturally occurring
- o Effective reinforcers are currency in an ever-changing macro economy

Pro-Social

- Gwennies
- Ikea kitchenware
- Nail polish
- Viewing a cat eat
- Graphs
- Mattress store
- Facts



Socially Inappropriate

- Access to stereotypy
- Pranks
- Potty talk
- Being bossy



Naturally Occurring Reinforcers

- Poopy talk
- Medical concern
- Reprimands
- Time in the principals office



Most Commonly Tried Reinforcers

- o High-fives/tickles
- o Positive social praise
- o Foods
 - o Treats
 - o Goals towards Healthy
- o Toys
 - o Stimmy
 - o Goal towards functional/educational

A logo with the words "Free High Fives" in a black, cursive script. The word "Free" is smaller and positioned above "High", which is above "Fives".

Free High Fives

Idiosyncratic

- o Assessment
 - o FA conditions
- o Treatment
 - o Using the knowledge of known reinforcers and applying them in an idiosyncratic fashion to change behaviour
- o Our treatments need to be as unique as our clients
- o Least Restrictive Most Effective



Case Example

Stats

- o 14 year old boy diagnosed with
 - o Autism
 - o Congenital Brain Malformation
 - o Effects impulse control
 - o Seizure Disorder

Pre-treatment

- o Lived with Mom and Sister
 - o Elopement attempts
 - o Aggression
 - o Holes in walls
 - o Injured SEAs at school until unable to attend
- o Admitted to APU for 6 months
 - o 4:1 staff
 - o Physical restraint
 - o Time out
 - o Most time in bedroom
 - o 24 hour access to screen and snacks

Treatment Setting

- o 2:1 staffed Behaviour Support Home
- o Private living space
- o Weekly access to BCBA
 - o Junior Behaviour Consultant
 - o Team Leader
 - o Nurse Clinician

Impressions and Plan

- o Observed client at APU
- o Established a behaviour plan
 - o Aggression
 - o Property Destruction
 - o Screen time
 - o Mock Behavior

Initial Plan

- o Extinction for minor behaviors
 - o Mock Behaviour: hit wall, stomp foot, verbal threat, touch hair, “near miss”
 - o Low intensity
- o Prompt to room for major behaviour
 - o 1 min calm
- o DRO check marks for screen time
- o DRA for extra goodies and privileges

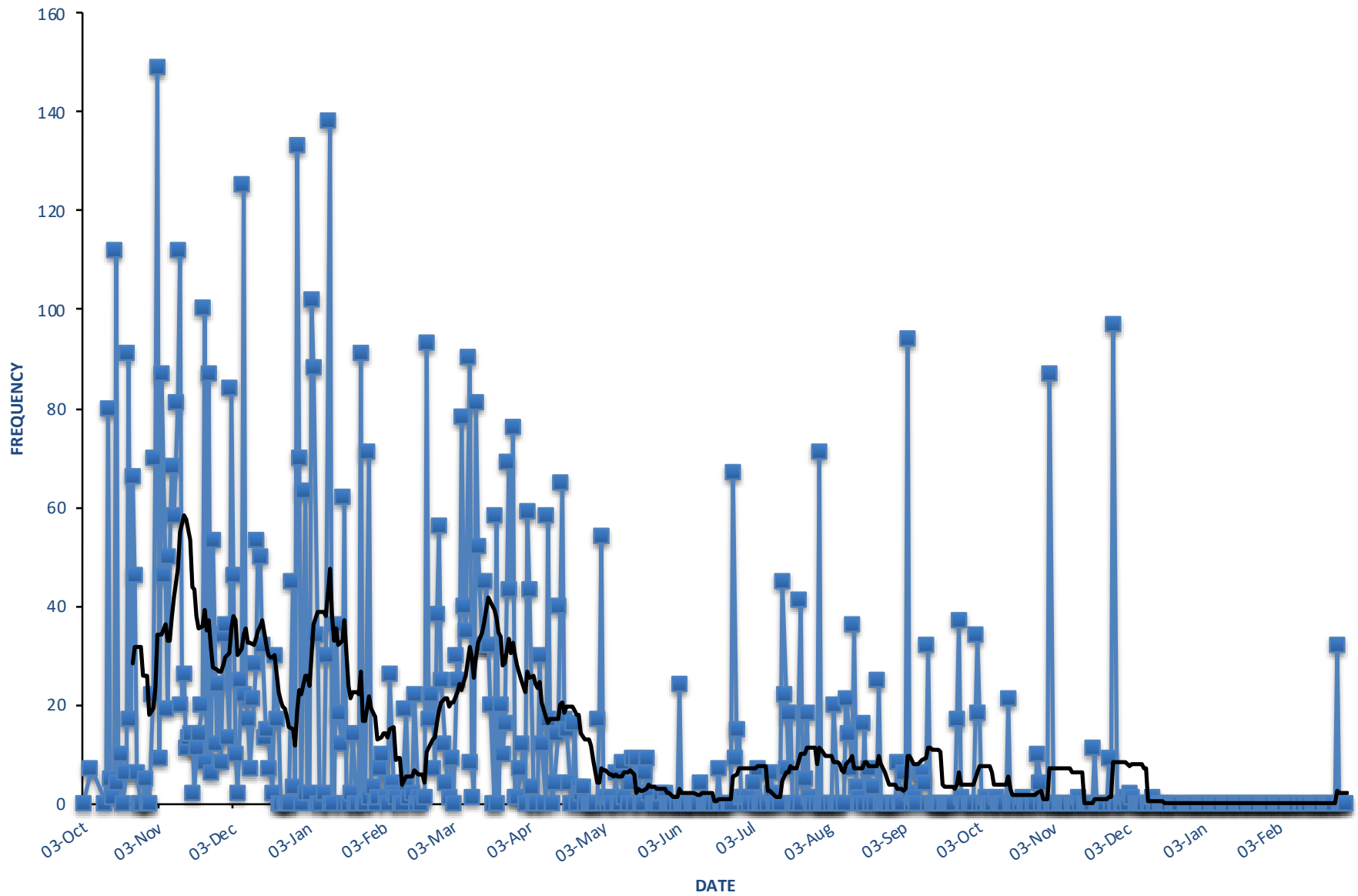
Outcome

- o Extinction Burst Fail!!
 - o 50+ Aggression per day
 - o 60+ Property Destruction per day
- o Destruction as Leisure Activity
- o Craving the negative attention and achieving it
 - o “Look at what I did, I broke the wall”
 - o Unable to focus on pro-social activities if anti-social behaviour is possible
- o History of watching “naughty videos on youtube”
 - o Reluctant to take this away from him

New Plan

- o Environmental Modifications
 - o Bullet-proof the house
 - o Walls
 - o Floors
 - o Ceilings
 - o Doors
 - o Pipes, outlets
 - o Feathers, Feathers, Feathers
- o The Environment needed to allow us to ignore the behaviour

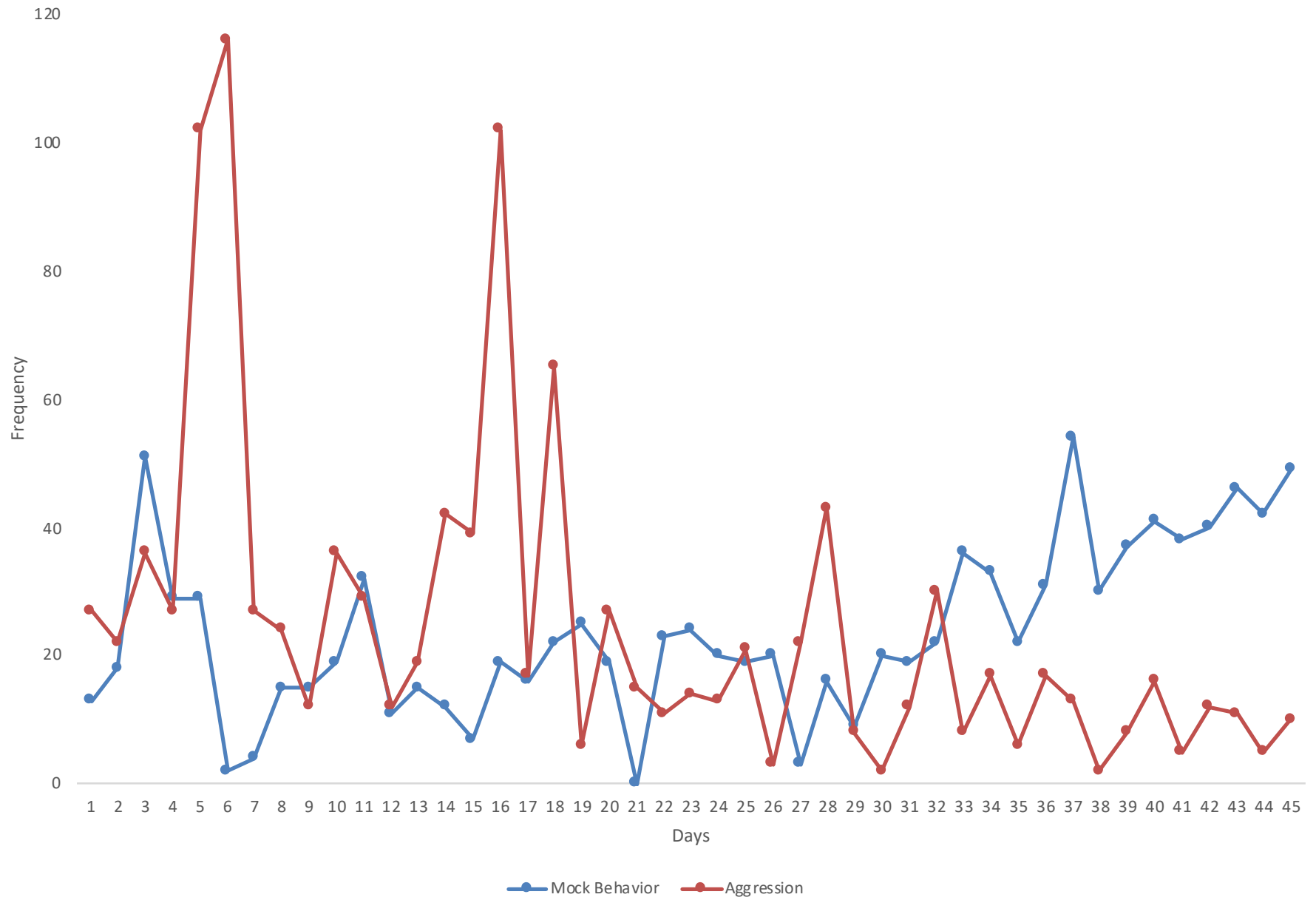
PROPERTY DESTRUCTION



New Plan

- o Add warning for mock behaviour
- o This is your warning, if you do it again you'll need to do 1 minute calm in your room
 - o Neutral
 - o Consistent
 - o Matter of fact
 - o Contingent
- o Major behaviour still results in direction to room for 1 min calm

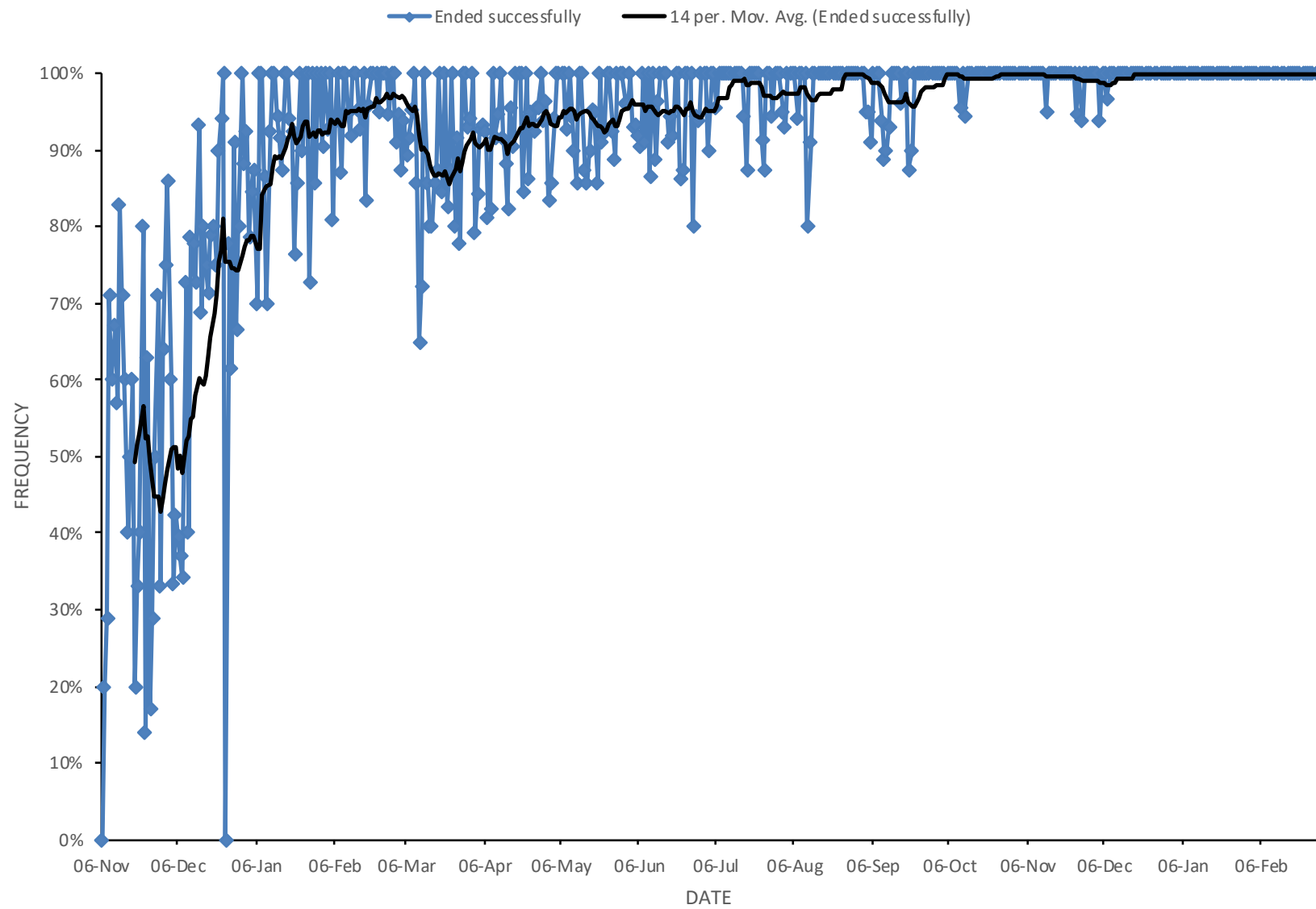
Initial Effect of Warning



Other Clinical Changes

- Screen time program
 - Earn screen time and golden tickets
- Focus on terminating screen time in absence of challenging behaviour
 - Guided access
 - Successful termination results in head start to earning next screen session
 - Creating predictability around when the screens are coming back makes it easier to end it

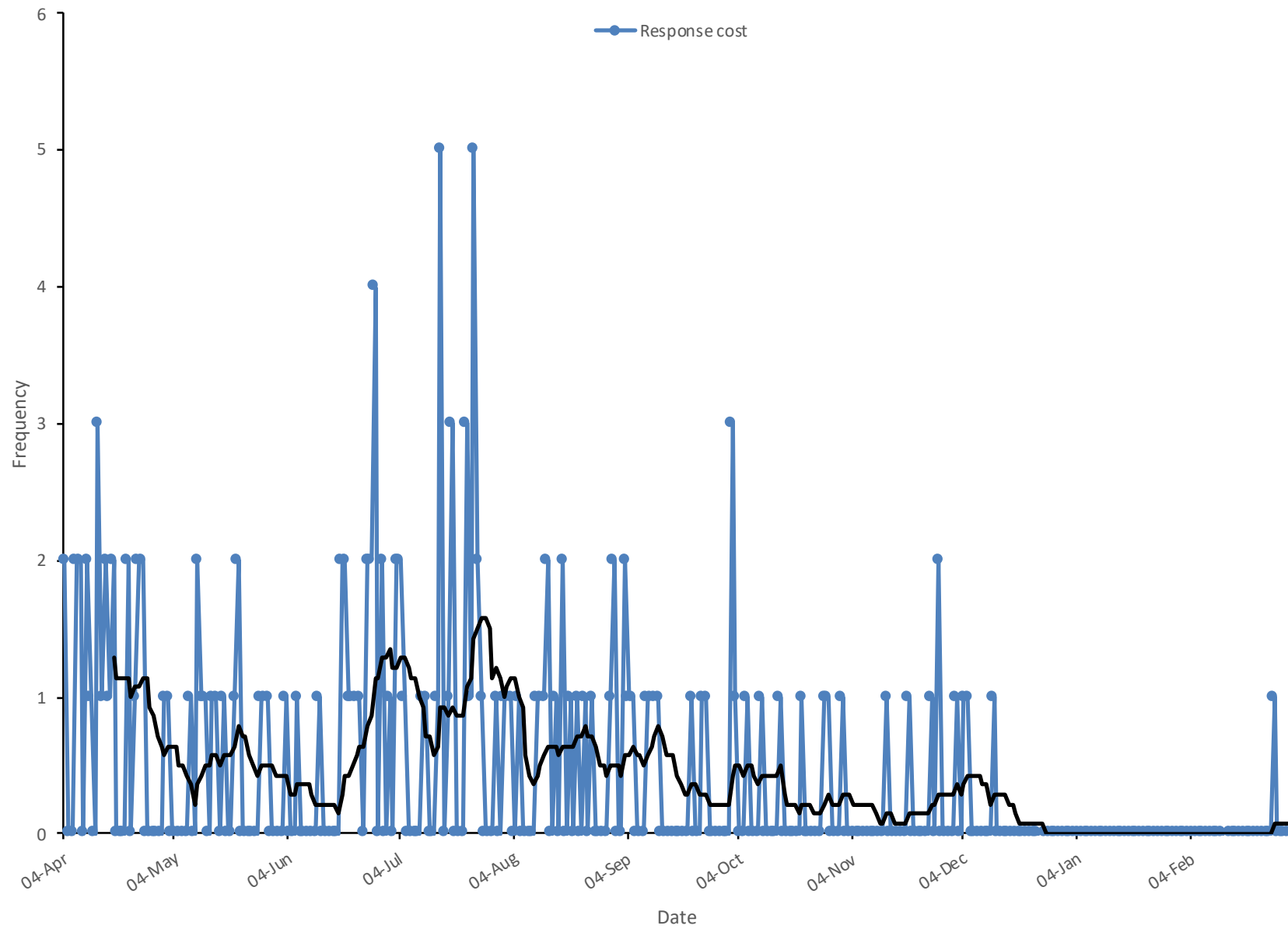
SCREEN TIME



Other Clinical Changes

- o Golden tickets
 - o Earned screen time can be banked
- o Addition of Response cost of golden tickets
 - o If after directed to room challenging behaviour occurs, golden tickets are removed

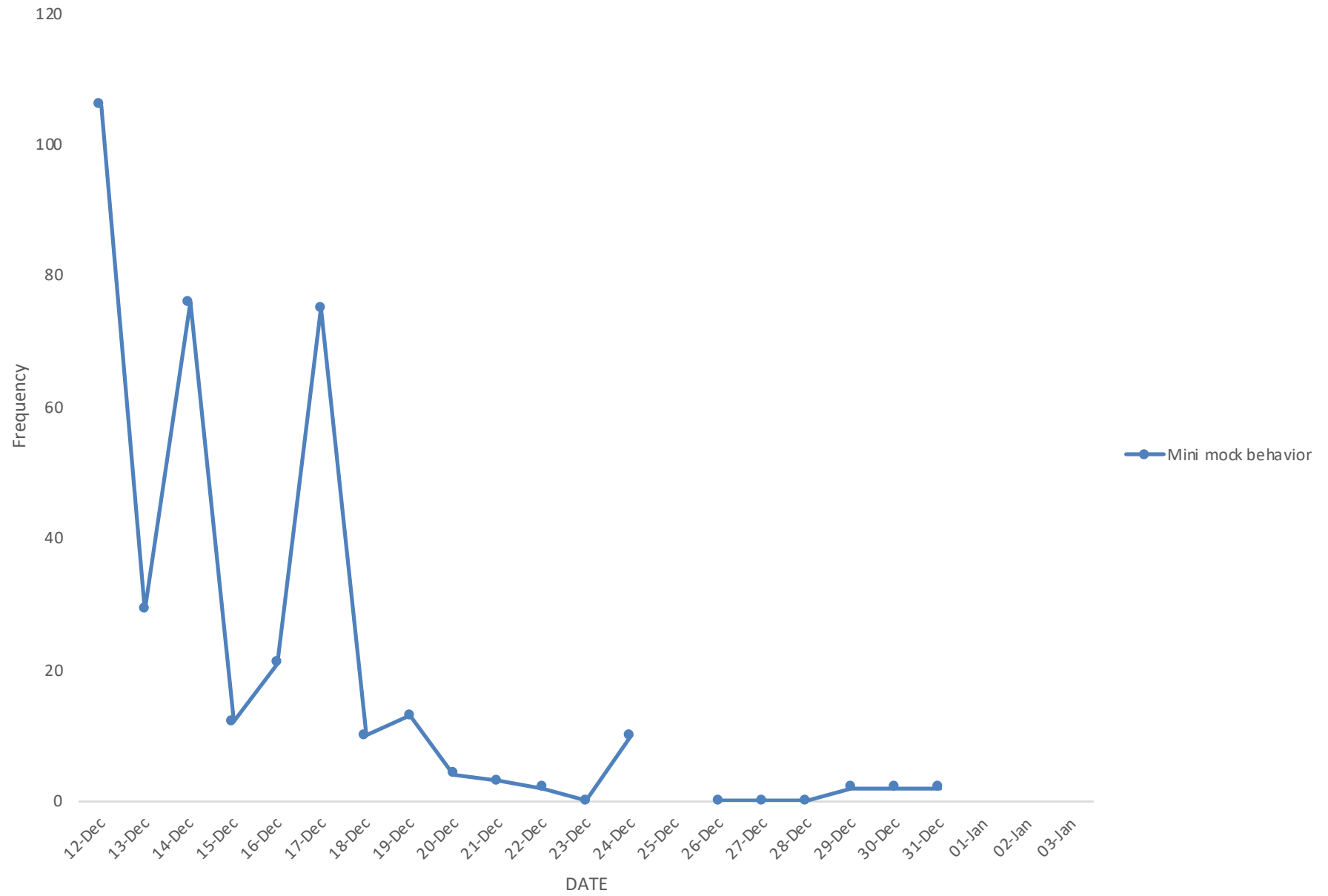
Response Cost Golden Tickets



Other Clinical Changes

- o Development of mini-mock
 - o Grey area
 - o Staff intermittently responding
 - o Warning
 - o “No thank you”
 - o Ignore
 - o Results in increase in behaviour
- o Added mini-mocks to the warning contingency

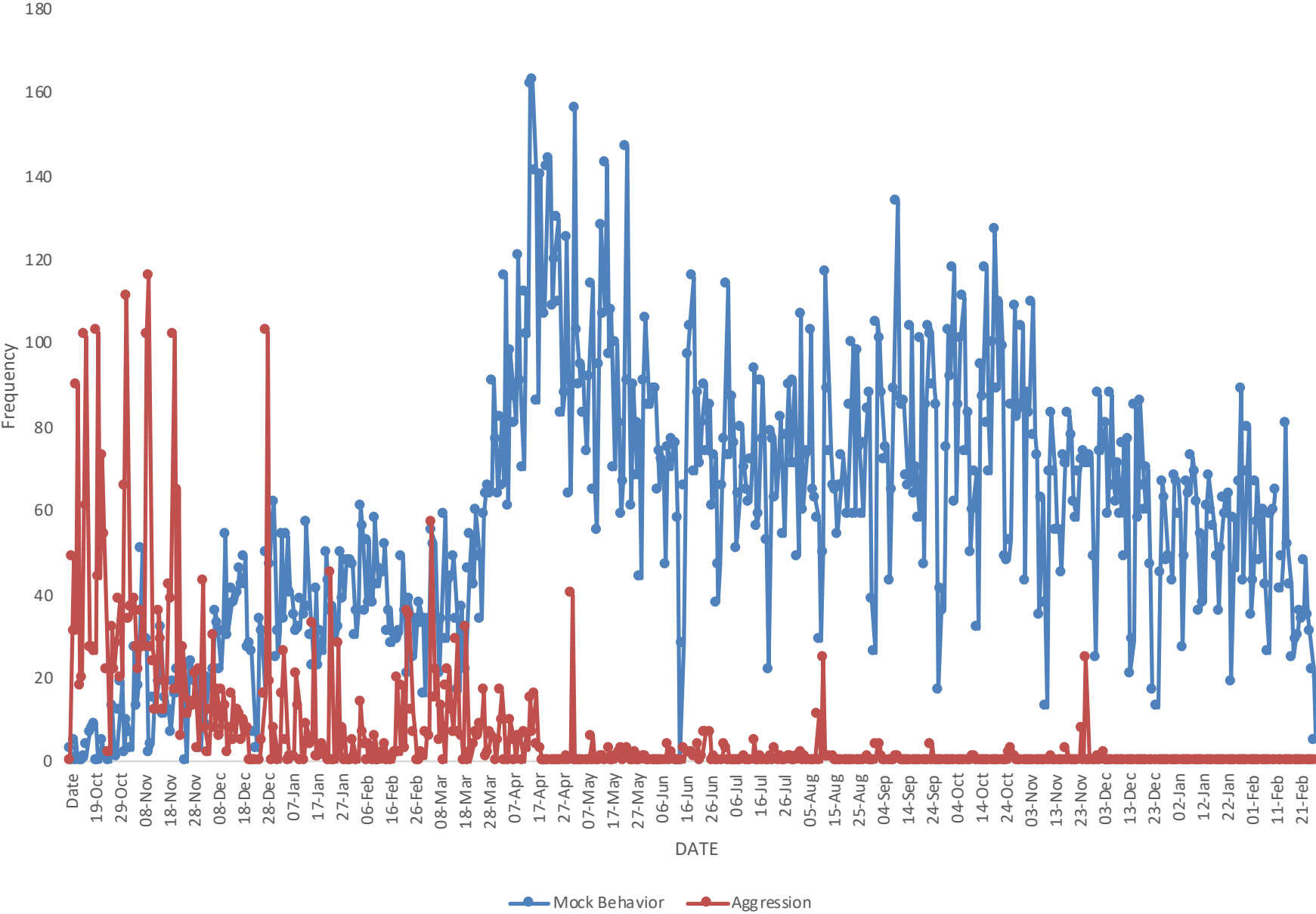
Mini mock Behavior



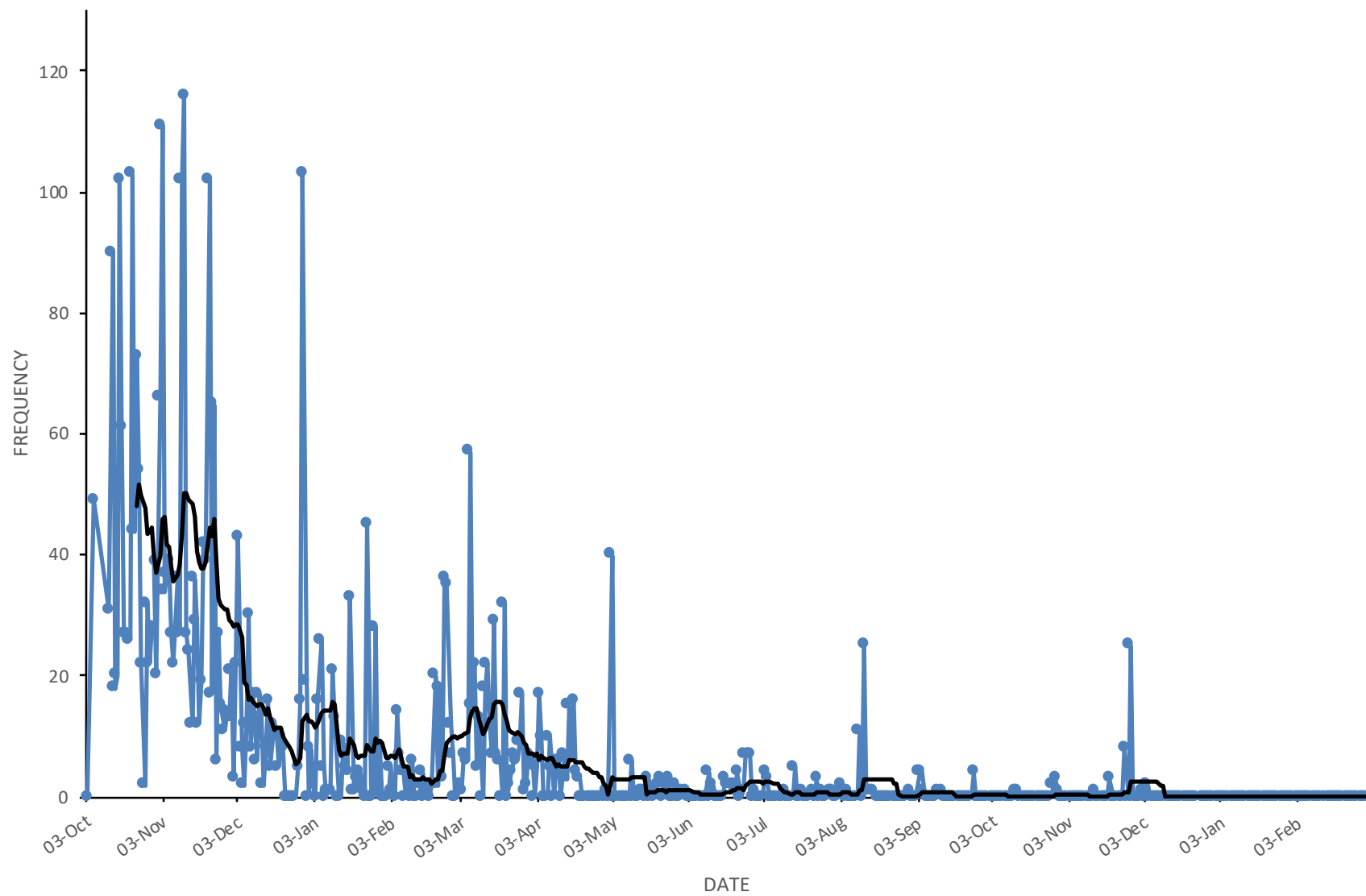
Reinforcing Mock Behavior

- o Mock Behaviour = Warning
- o Aggression = decreased staff attention/cue to room
- o 2nd Mock Behaviour in a minute = decreased staff attention/cue to room

Interaction between Mock Behavior and Aggression



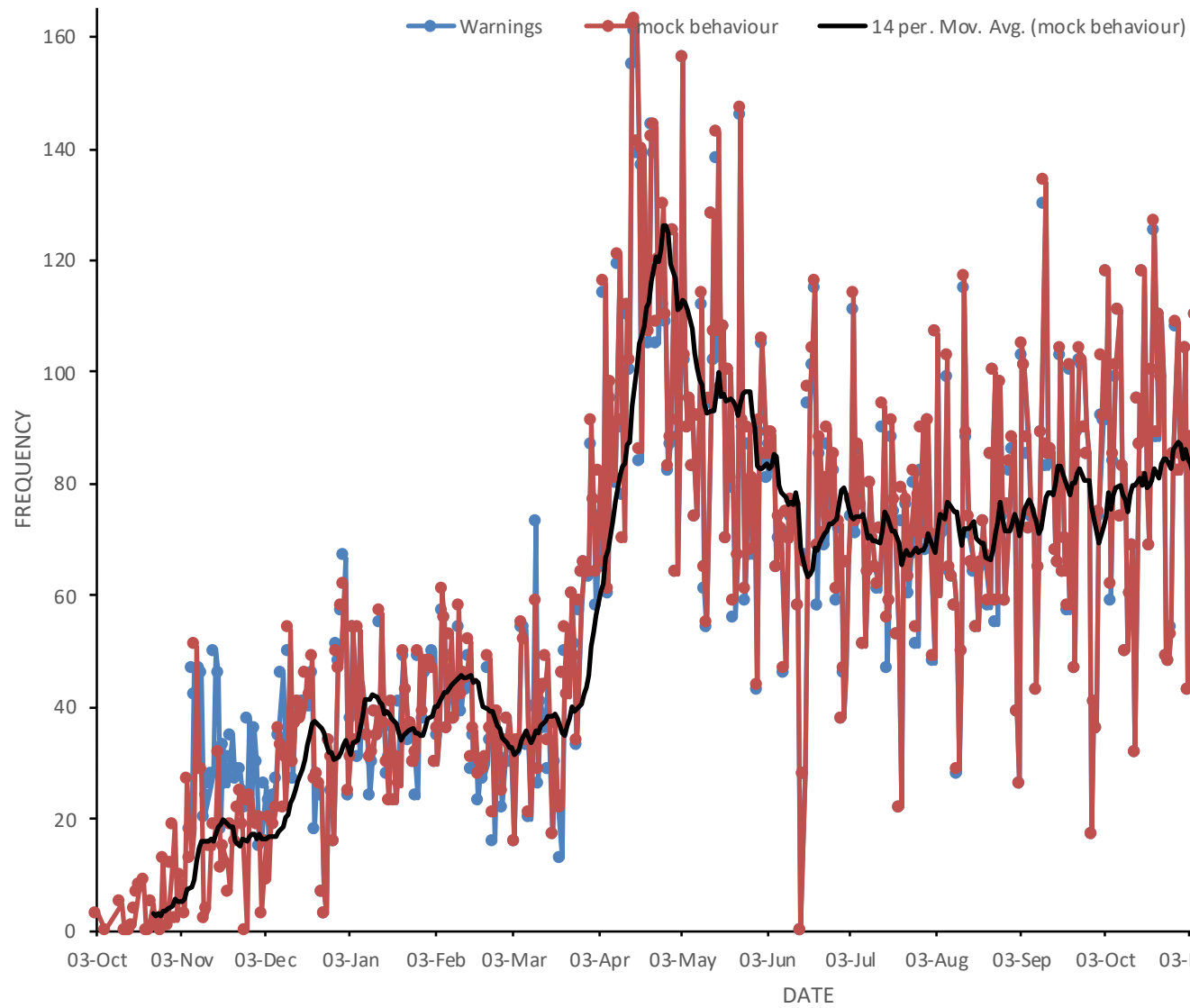
Aggression



Mock Criteria Change

- o Mock behaviors increased
 - o No longer going on outings
 - o Spending all time doing mock behaviour within the parameters of the program
- o Change criteria to 10 mocks in an hour = 1 min calm in room
- o Increase community outing protocol to encourage more time outside

WARNINGS Vs. Mock Behaviour





Discussion

Outcomes

- o The reinforcement of one behaviour resulted in a decrease of another behaviour
 - o Response class of behaviors
 - o Matching Law

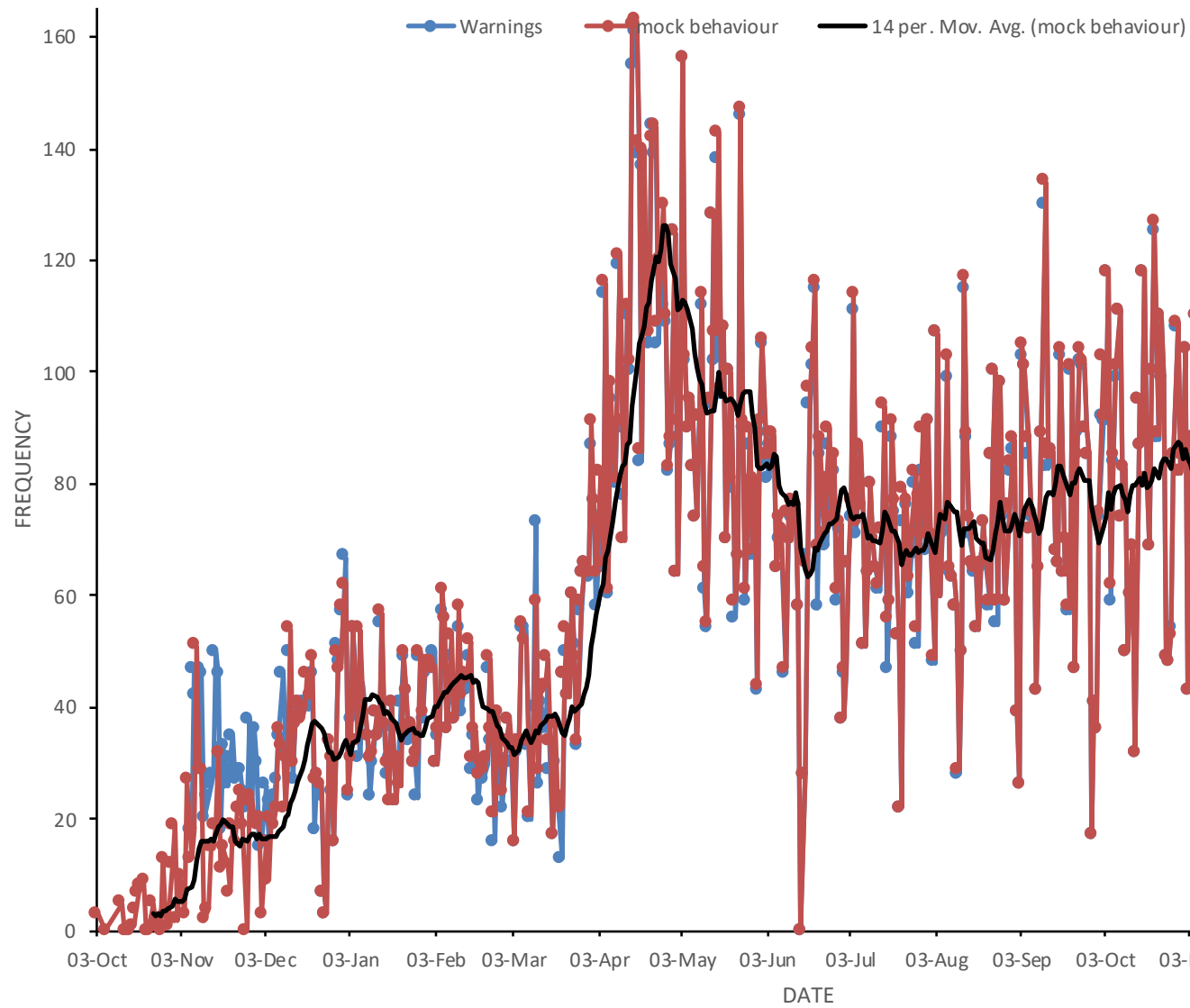
Response Class

- o Response Class: a group of responses of varying topography, all of which produce the same effect on the environment.
- o This means the **responses** physically look different even though they have the same effect on the environment
 - o Mini Mock
 - o Mock
 - o Major

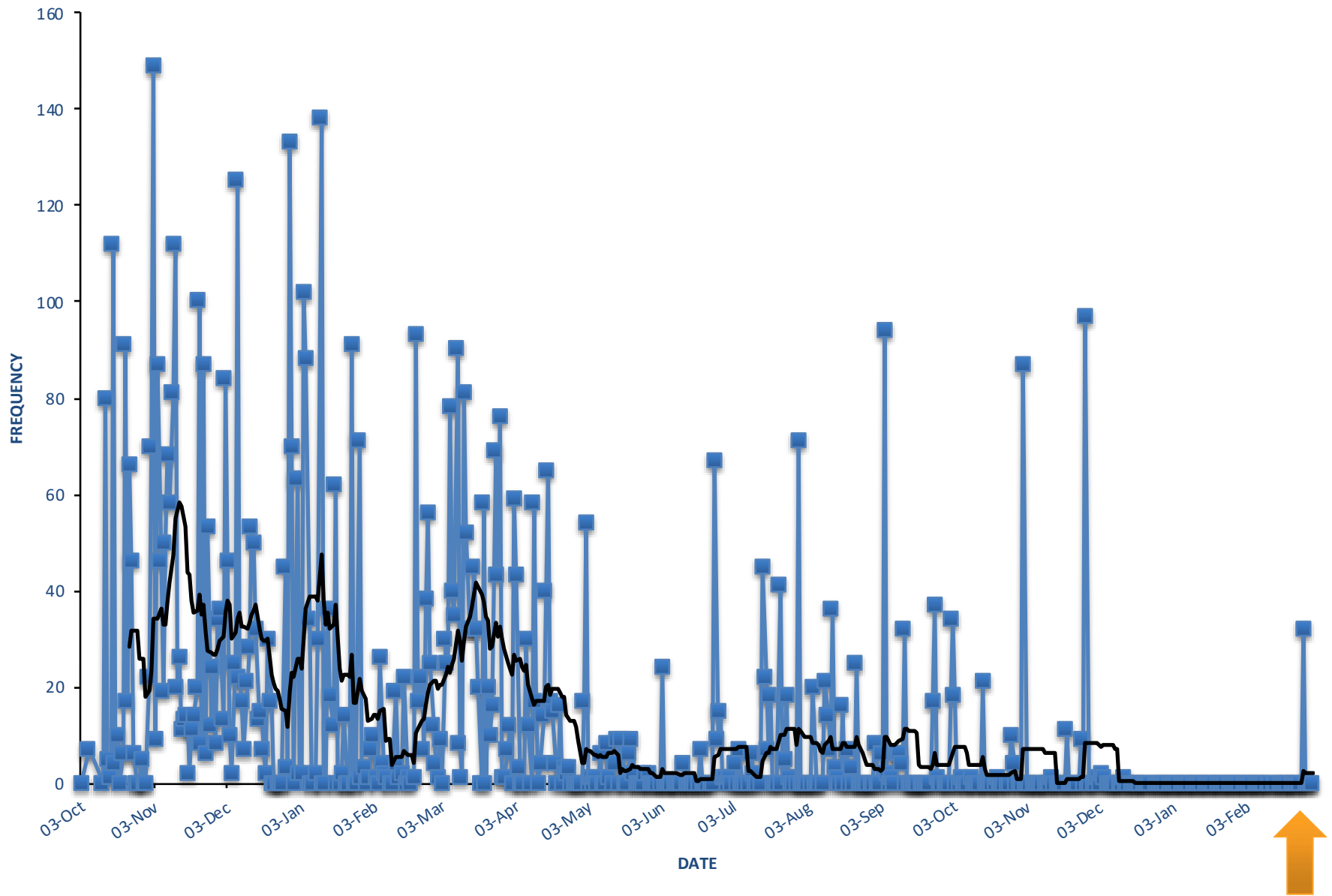
Matching Law

- According to matching law, organisms distribute their behaviour between two or more concurrent schedules of reinforcement.
- Mock behaviour is associated with high and steady rates of reinforcement whereas challenging behaviour rarely, but does sometimes result in reinforcement

WARNINGS Vs. Mock Behaviour



PROPERTY DESTRUCTION



Community Inclusion

o Pre-treatment

- o Isolated at inpatient psych department
- o 1 community outing per week

o Post-treatment

- o Daily outings
 - o Bookstores
 - o Restaurants
 - o Pools
 - o Walks
 - o Large parties
- o Overnights with parents

Case Summary

- Major challenging behaviour has been reduced to near zero rates
- Mock Behaviour is maintained at moderate rates as a strategy to keep rates of major behaviour low
- With low rates of challenging behaviour the client has been able to perform and succeed

Case Summary

- o There are inherent qualities in the stimulus of the “warning” that are reinforcing
 - o Based contingent on naughty behaviour
 - o It states disapproval
 - o Borderlines on trouble but no punishing consequence given (loss of screen time, or 1 min calm in room)
- o Rates of mock behaviour and respective warning delivery seem to fluctuate based on client needs and how much reinforcement he is needing on a daily basis

Case Summary

- Other forms of appropriate reinforcement are given daily but do not seem to serve the same function as the inappropriate reinforcement (warning)
 - Seen as more conversational but not transactional
- Behaviour will escalate up the response class of behaviors if warning is not delivered contingent on mock behavior

Considerations

- The use of an inappropriate reinforcer (warning) is being used to purposefully INCREASE an inappropriate behaviour to successfully decrease a major challenging behaviour that was interfering with the individuals ability to access natural reinforcement in the form of community inclusion, peer and family relationships, and a general healthy lifestyle. Quality of life has been improved in all domains.

Considerations

- Individuals have the right to the least restrictive and most effective intervention
- The intervention is effective and is not restrictive

Take Away

- o Interventions need to be individualized and evidenced based
- o Implementation of strategies needs to be idiosyncratic to the exact variables and contingencies at play for each individual
 - o Do not shy away from delivering the reinforcers that the data is showing you whether they be planned, naturally occurring, appropriate, or inappropriate
- o Create the intervention that will be the least restrictive most effective and deliver the quality of life to the individual.



Thank You

Katie Allen M.S. BCBA