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## Enhancing executive function and self-regulation in young children

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## Enhancing executive function and self-regulation in young children

### Abstract

Presentation made at the American Psychological Association 2015 Convention, 6-9 August 2015, Toronto, Canada

### Keywords

regulation, executive, young, children, function, enhancing, self

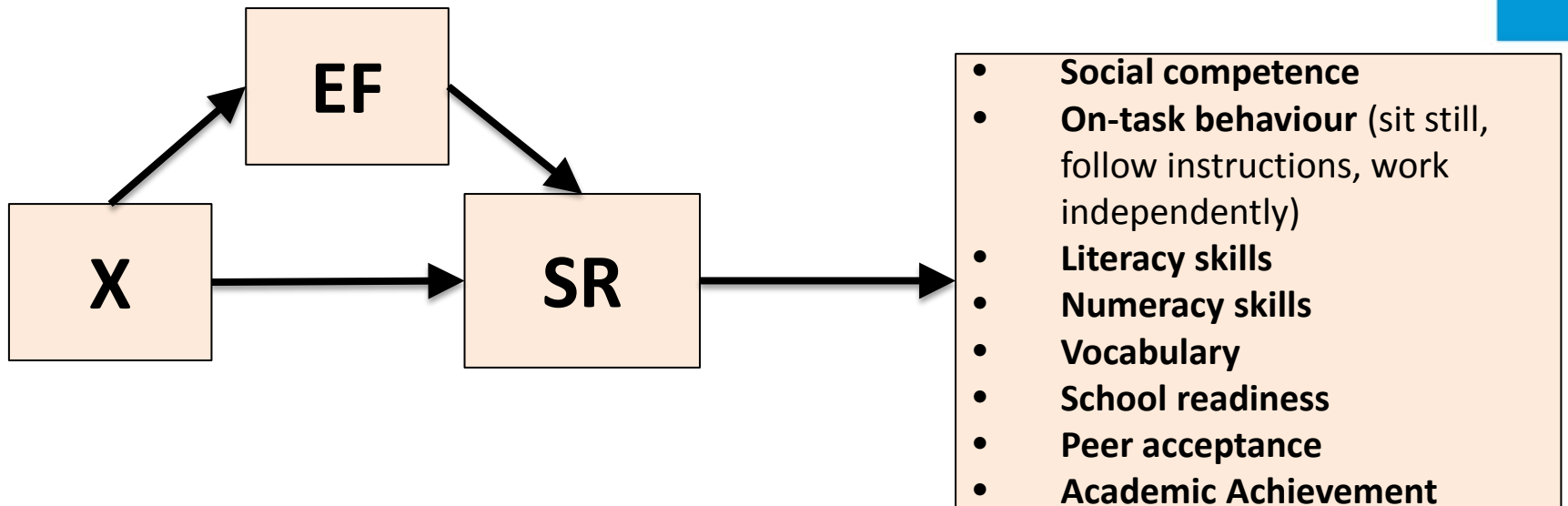
### Disciplines

Education | Social and Behavioral Sciences

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# Enhancing Self-Control (Solving for X)



## Susceptibility to change

- research suggests EFs can be improved via training
- may have positive impacts on SR

## Evidence that:

- EF training can help stem impulsive drinking (Houben et al., 2005)
- Inhibitory improvements can reduce problematic eating, drinking, smoking behaviours (Houben et al., 2011; Houben & Jansen, 2011)

# EF & SR Interventions

- Tend to be:
  - Computerised ‘brain training’ programs
  - Expensive
  - Non-routine
  - Individually completed
  - Not tailored for the early years...

...however, suggestion that intervention in the early years could lead to more stable and lasting change.

# Quincey Quokka's Quest



Through the swamp, now halfway,  
When Quincey heard someone say,  
"To keep on going on this track,  
Play my game or be my snack."

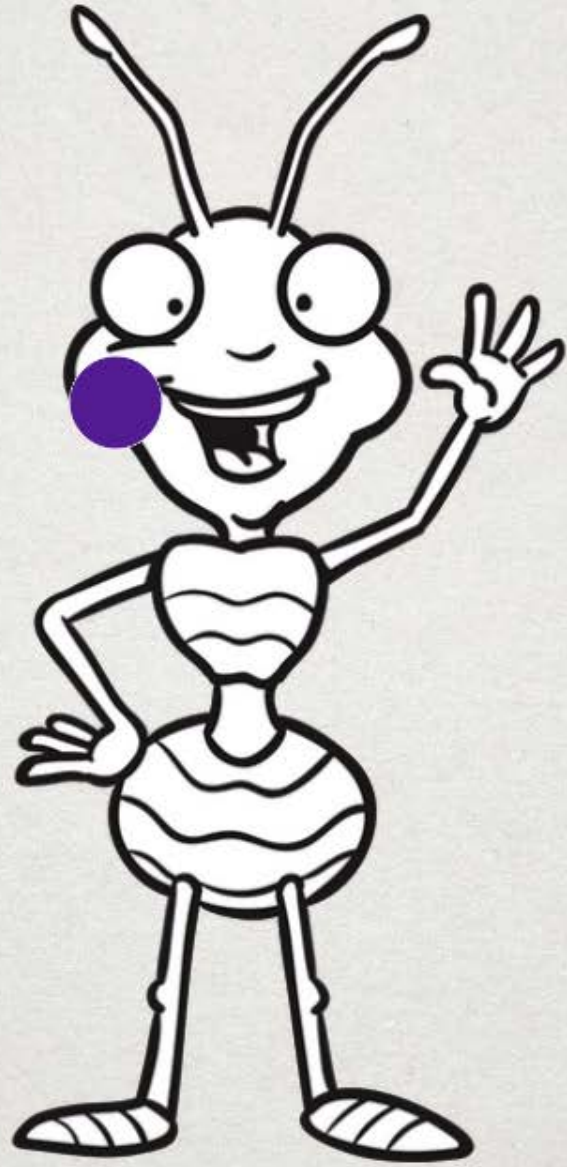
If it's snake, say it's frog,  
As you cross this murky bog,  
And if it's frog, you say snake;  
Do it backwards for your sake!"

**Wesley Wedge-  
Tailed Eagle's  
"Say The  
Opposite"**

**Instructions:** For this activity, select a path across the swamp and tell the child they will need to follow this path playing the 'opposite game'. You can also choose whether you want the child to name each animal (i.e., frog, snake) or make their sound (i.e., ribbit, hiss). To play, point to each frog and snake along the path, one by one, having the child say either the opposite name (if you are playing the name game; e.g., for a snake say 'frog') or the opposite sound (if you are playing the sound game; e.g., for a frog say 'hiss'). To increase the difficulty, have the child name the animals faster and faster.











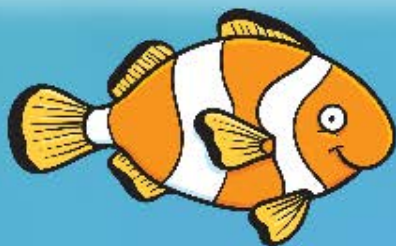
4500

Let's try some more. This time you will see fish and sharks.

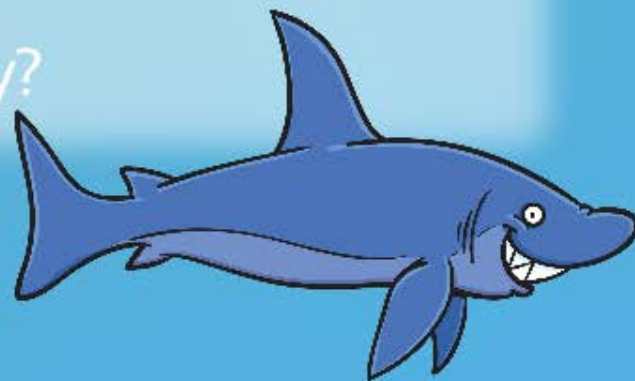
Remember to catch the fish as quickly as you can by tapping the screen when you see them.

Let the sharks swim away by not pressing anything.

Are you ready?



Continue



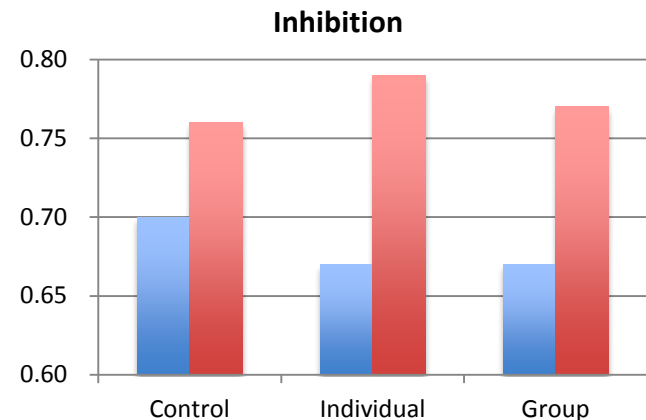
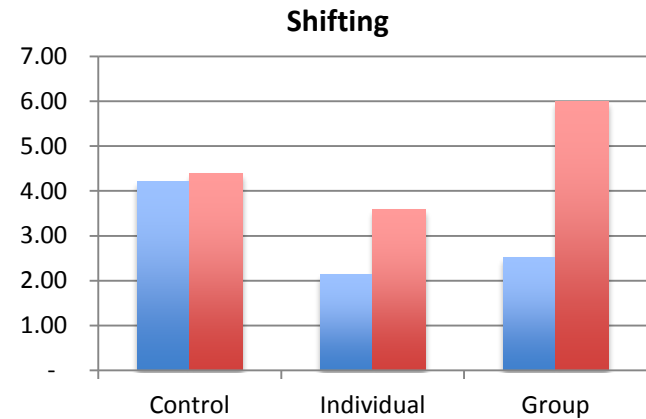
Retry



# Quincey Quokka's Quest

## Results:

- *Shifting*: Significant increase after individual reading and group reading, compared to control
- *Working Memory*: Significant increase for all groups, including control (development + benefits of reading)
- *Inhibition*: Significant increase after individual reading and group reading, compared to control
- *Self-Regulation*: Individual reading appeared to be a significant protective factor in ratings of conduct and externalising problems





Thank you for your attention