



# Character-Based Advergame Influences on Young Children's Snack Choices and Consumption Patterns

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## Introduction

- Rate of childhood obesity is over 16% , with an additional 15% at risk for obesity (McGinnis, Gootman, & Kraak, 2006; Ogden, Carroll, Kit, & Flegal, 2014).
- Media consumption via newer technologies, such as tablets, is increasing in children under age eight (Common Sense Media, 2013).
- Advergames, a videogame used to sell a product, are a new venue for marketing to children and often "sell" children unhealthy foods (Calvert, 2008).
- Popular media characters are ubiquitous and sometimes used in marketing unhealthy foods to children (Calvert, 2008).
- Little known about if children's snack choices can be improved if a popular character is used to brand healthier products via apps.
- Purpose:** to examine if children's snack choices and consumption patterns could be influenced if a popular character, Dora the Explorer, was used to brand snacks that were either healthier or less healthy in an app advergame.



## Hypotheses

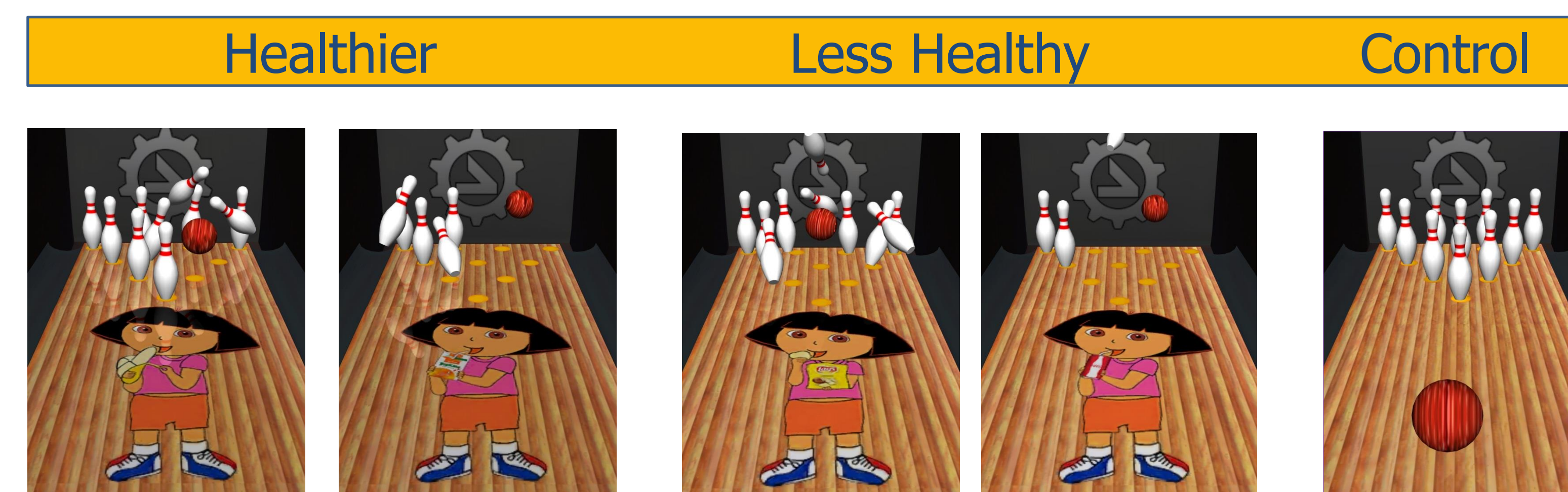
- Children in the healthier advergame condition will choose healthier snacks than those in the less healthy advergame condition, with a no-character exposure control group mean falling in-between those two condition.
- Children who recall seeing Dora in the advergame will select the type of snacks, either healthier or less healthy, that she holds in the game.
- Children who do not recall seeing Dora in the advergame will choose snacks based on their own preferences.

## Method

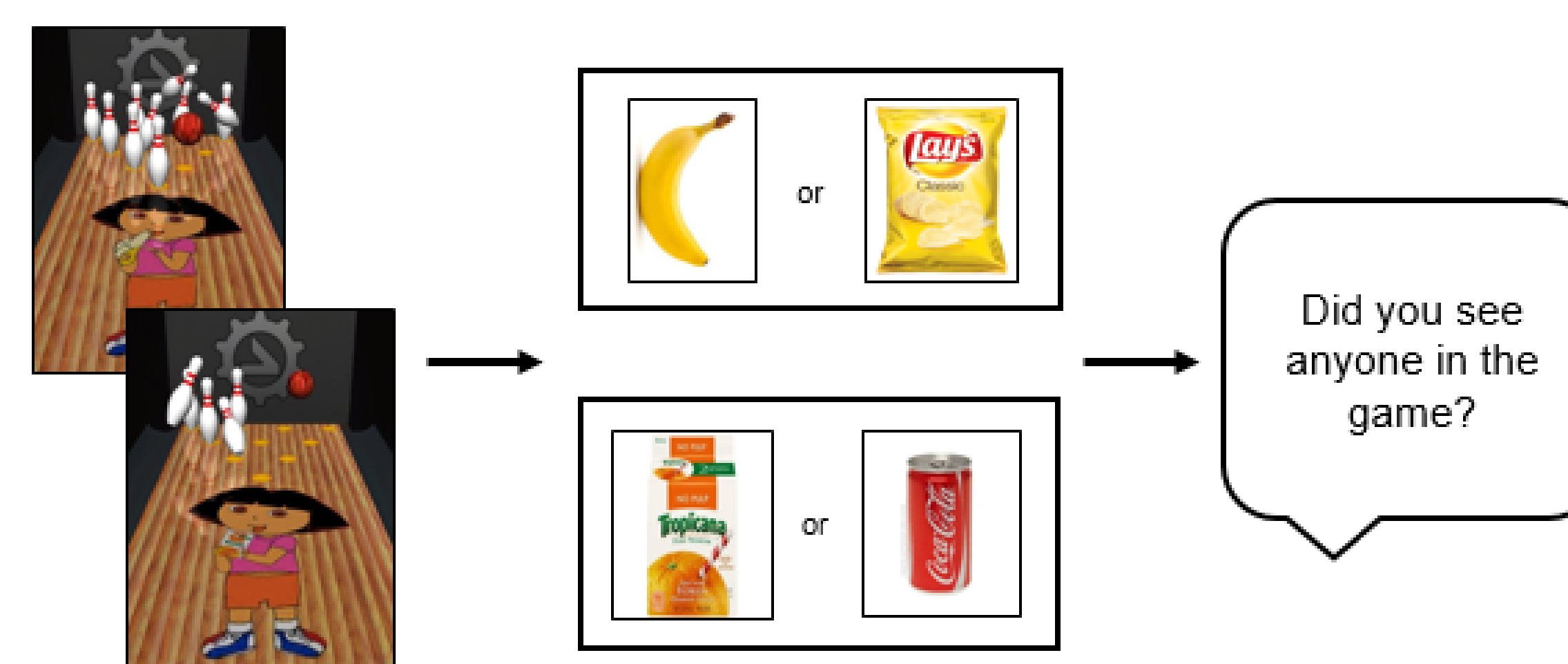
- Preschool children (ages 4-5;  $n = 132$ ) played an adapted iPad bowling app which featured popular media character, Dora the Explorer, holding healthier or less healthy snacks.

## Procedure

- Children were randomly assigned to one of the two treatment conditions or the control group.

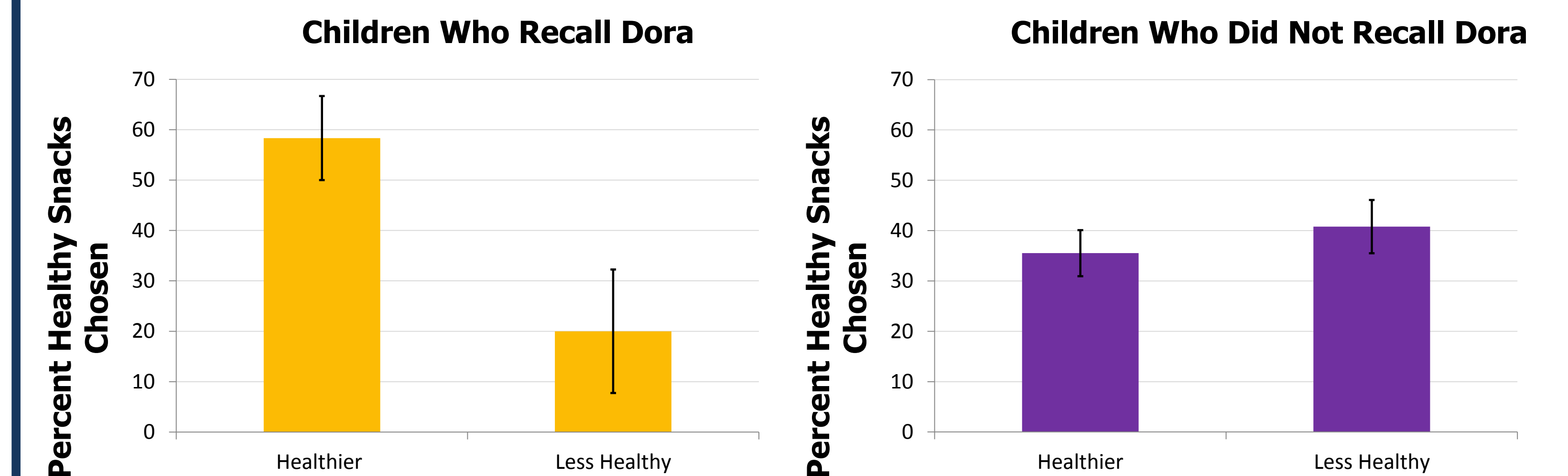


- Children played the app twice, which took approximately 10 minutes.
- After app play, all children made a drink and food selection and were asked if they saw anyone in the game, and if so, who it was.
- An example of the procedure in the healthier condition is below:



## Results

- Children who recalled seeing Dora ( $n = 11$ ) selected and consumed the kinds of snacks that she was depicted with in the app advergame, as seen below.
- Children who did not recall seeing Dora ( $n = 76$ ) showed no preference, in selection or consumption, for the snacks Dora was holding in the app advergame, as seen below.



## Discussion

- Children's snack decisions and consumption patterns can be influenced positively and negatively when they are able to recall exposure to a popular character in the app, but non-conscious processing did not impact snack decisions or consumption.
- Playing the app advergame required more cognitive resources than expected, and only a minority of children were able to recall seeing Dora. This outcome suggests that more repetition of the marketed message may be needed to improve recall.
- Marketing power of popular characters can be utilized to lead to better marketing policies in which characters brand healthy foods; such practices could combat the obesity epidemic and improve the health of our nation's children.

## References

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McGinnis, J., Gootman, J., & Kraak, V. (Eds.). (2006). *Food marketing to children and youth threat or opportunity?* Washington, DC: National Academies Press.  
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## Presentation Forum & Acknowledgments

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