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2023

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Recommended Citation

Darrell, Joe; Hamell, Abby; Veretelnikov, Vanessa; and He, Eva, "A Bug's-Eye View: Examining the Impact of The Bug Squad Exhibit at a Local Children's Museum." (2023). *Research Days Posters 2023*. 26.
https://orb.binghamton.edu/research_days_posters_2023/26

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“A Bug’s-Eye View: Examining the Impact of The Bug Squad Exhibit at a Local Children’s Museum”

Joseph Darrell, Abby Hamell, Eva He, Vanessa Veretelnikov



INTRODUCTION

Our research question: “**How do children, ages 2-12, at a local children’s museum interact and engage with the new exhibit, *The Bug Squad*? How does this influence the parent’s decision to return?**”



“Do you believe your child/children enjoyed this new exhibit?”

- In the survey (n=65), a total of 52 parents/guardians indicated that their children loved the *Bug Squad*.
- Similarly, the remaining 13 expressed that their children liked the *Bug Squad*.

“So many learning opportunities! They loved the bugs moving & all of the science!”

“How likely are you and your children to return to the Bug Squad?”

- With the same survey total (n=65), 43 parents/guardians indicated that they definitely will return, 15 stated they most likely will, 6 indicated that they might return, and 1 said that they are not likely to return.

“This is like my new favorite room”

DISCUSSION

Quantitative results from surveys challenge the qualitative results from the observations:

Observation Results Show:

- Elements such as the *Pollinator* that allowed for use beyond its purpose, observed that children showed extended engagement and used their imagination to create new games.
- Elements that were limited to their purposes, such as the *Mantis Camo* and *Drone Cockpit*, were used aimlessly and children showed little to no engagement. Engagement with these elements increased among older children. Playing aimlessly and for less than five seconds was a recurring theme.
- Girls showed more engagement towards the projected butterfly than the boys.
- Parents encouraged their children to engage with elements longer.

Survey Results Show:

- Most of the data showed that parents and children loved the exhibits and would love to come back.
- This could be biased because customers only fill out surveys when they either really love, or really dislike an aspect of the product.

METHODS

The Qualitative Aspect: Observation

- twice: each from 10-11:45 am (busiest hours)
- Took notes on the description of each child, how long kids stayed at each element, which elements were more/less engaging, how kids interacted with each other and their parents, how kids played, etc. (Observational Research)

The Quantitative Aspect: Survey

- 6 questions: 4 multiple choice and 2 open-ended

Scan QR code for survey



- Descriptive coding: Use of short words/phrases to summarize the observation notes and find patterns in the data

RESULTS

Quantitative Data indicated that the *Bug Squad* is highly enjoyed by both children and parents, but

Qualitative Data revealed that children are quick to move between various elements of the exhibit and show indifference towards less engaging elements.

IMPLICATIONS

Results reveal:

- Elements that increase engagement involved and allow for motor skills, communication, and use beyond its purpose.
- So...
- Children's museums should focus on incorporating elements that are instinctual and involve gross motor skills to ensure elongated play and satisfaction among children and their parental guardians.
 - Elements that are not familiar to children take longer to grasp one’s attention.



Thank you to Dr. Simpson and Dr. Myers for all your help and support!

