

#MorePlayToday Story

Project Inception

After conducting numerous conversations with millennial parents, Hasbro learned that caregivers are increasingly concerned with the balance between technology and play in their child's life. Parents are concerned about the impact technology and play can have on their child's cognitive, social, physical health and development. With Hasbro's purpose being to make the world a better place for children and their families, they felt it was imperative to sponsor research on this issue, as to better understand how different types of play serve the developmental needs of children.

With this goal in mind, in 2015 Hasbro began looking for an independent academic research Center to design a comprehensive study to better understanding how play affects children's development. After an extensive search, Hasbro found Boston Children's Hospital's Center on Media and Child Health (CMCH), whose mission *to educate and empower children and those who care for them to create and consume media in ways that optimize children's health and development*, synergized well with Hasbro's purpose. After outlining the independent research agreement to ensure the proposed study would be conducted independently and meet the highest academic standards, CMCH began work on what became known as #MorePlayToday.

Study Design

In order to best design the #MorePlayToday study, CMCH first conducted an in-depth literature search to see what academic research already existed on children's play and how play affects their development. This extensive work culminated in a white paper, *The State of Play*, which organized the studies by their findings on how play affects children, including their cognitive, social, emotional and physical development. The paper launched the #MorePlayToday section of the CMCH website, cmch.tv and was published on the site in order to be accessible to both researchers and families.





The State Of Play also highlighted major gaps in research, most notably that there wasn't a single study that was longitudinal and captured children playing in their natural environments. Most of the studies were short-term and conducted in laboratory or contrived settings. Understanding the need for more rigorous longitudinal research on play and how it affects children, the CMCH research team, under the leadership of the Center's founder and director, Dr. Michael Rich (a world-renowned expert in the field of media related health concerns, and a pediatrician at Boston Children's Hospital) and direction of the team's senior research scientist, David Bickham, PhD., designed the #MorePlayToday research study. This ambitious study is the first of its kind and set about to follow children between the ages of 2 ½ and 8-years-old in the U.S. and Mexico, to evaluate how different types of play affect the developmental outcomes of children.

An additional, unique feature of the study's design is its pioneering methodology. The CMCH team employed Ecological Momentary Assessment, or EMA, along with surveys and validated scientific tests in order to attain an unparalleled, comprehensive data set. For the EMA portion of the study, parents reported on their child's activities (including play and media use), physical environment, and social setting via EMA questionnaires delivered 8 random times a day through a smartphone application. Additionally, at the end of each survey, parents were prompted to do a 360° video pan of their child in real time, if they had reported that their child was engaged in play. This provided the research team with a naturalistic picture of how children play which cannot be duplicated in a laboratory or staged research setting.

Initial Findings

The study was conducted with two different cohorts of children, one in the United States and the other in Mexico. Between both sites, 327 children were enrolled in the study and data collection was carried out between 2016 and 2018. Preliminary analysis on the rich data set revealed the following:

- Board and card games were associated with school readiness and other positive outcomes
 - The research found that board and card games were associated with school readiness in children in both the U.S. and Mexico.
 - Board and card games were also associated with a larger vocabulary in the U.S., and with less aggression, less sadness, fewer attention problems and more positive social behaviors (such as being more thoughtful and considerate of others) in Mexico.
- Active play was associated with less sadness:
 - \circ In both countries, active play was associated with less sadness, anxiety and fearfulness.
 - In the U.S., active play was also associated with less aggression and fewer attention problems.
 - In Mexico, there was also an association with more positive behaviors and more school readiness.
- <u>Play with adults was associated with better memory:</u>
 - The research found that in the U.S., the more frequently children played with adults in the household and directed the play, the better their memory became.
- Letter and number play were linked to school readiness and other positive behaviors:
 - \circ The research found that letter and number play were associated with school readiness in both countries.
 - \circ ~ In the U.S., both letter play and number play were associated with less sadness.





• Additionally, in Mexico, letter and number play were associated with more social competence (such as respect and empathy), and to a lesser extent, less aggression.

Prescription for Play

Based on the initial findings, in both the U.S. and Mexico, the CMCH team concluded that the prescription for happy, school-ready kids is more letter play, more number play, more board game play, more active play, and more play with their parents. Additionally, the study findings thus far bring to light how important it is for parents and educators to understand that children's play is more than just fun; the study results show that play is linked to better cognitive development, social-emotional development and executive functioning in children.

Additional Analysis and Future of Play

Study findings from #MorePlayToday have been selected and presented at international and national conferences, and resulting manuscripts are under review for publication in academic journals. The #MorePlayToday website at cmch.tv re-launched in July of 2019 with updated information and resources for parents and caregivers hoping to help their children optimize their play. And in October 2019, Dr. Michael Rich will discuss results from #MorePlayToday and how the study's findings relate to current pediatric practices, as part of his keynote address to to the American Academy of Pediatrics.

#MorePlayToday is a multi-year research initiative with a robust data set. Moving forward, CMCH will be measuring data against current benchmarks, looking for trends over time. Continued data analysis includes examining the two-years of data longitudinally, to better identify the effects of play on children's cognitive and social development.

While CMCH and Hasbro are excited to share initial findings from the study, and better help families optimize children's play, analysis of the study is very much underway. CMCH will continue to share updates as they identify additional links between play and children's development, and will post more information on the project website: CMCH.TV/MorePlayToday. It is the hope of both Hasbro and Boston Children's Hospital's Center on Media and Child Health that #MorePlayToday will help caregivers best guide children's play in ways that optimize their health and development.



