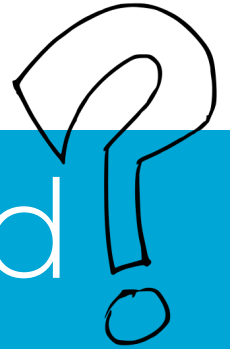


Is play a luxury or a need?



Index

- 👁 Introduction
 - Can play be a luxury?
 - Can I play with you?
 - Why write this whitepaper?
- 👁 What do we mean by “play”?
 - Definition
 - How do we describe something ludic?
 - Play and child development
 - Play to solve situations
- 👁 Science and thinking behind the value of play
 - What some educators and thinkers think about play and its influence on children
 - Pedagogy of Play
- 👁 Play and disabled children
 - A reflection
- 👁 Some references

Intro- duction

Article 31

States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.

States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.

1989 (UNICEF)

Can play be a luxury?

Through play we socialize, have fun, learn and develop skills in our brain that can only be developed by playing. Playing is something natural. None of us can imagine the life of any child without carefree recreation. We even continue to play as we grow older, and our brain continues to benefit from this play.

Although it may seem absurd, many children cannot play, even if they want to. For children with disabilities, it can be challenging to play with other children. They lack options and resources. Their lives unfold differently. For these children, playing becomes a luxury.

Few toys are 100% inclusive and those that come close are too expensive. Today, for some children, play is





Can I play with you?

This question takes us back to childhood. When we arrived at a park for the first time, at school, or when we changed groups of friends, that was the question.

At IRISBOND, we want **all the children** to ask this question.

With this report, we intend to show how difficult it is for many disabled children to play. It can be because of an economic problem or lack of options. Play is relevant for all children.

And it is worth it bringing this information closer to understanding the reality of these children and their families and empathizing with their situation, and forcing the change in toy stores and research: **what happens in the brain of a child who cannot play with their hands because of a physical condition?**

“Children today have too many toys”. NOT ALL OF THEM. Some children do not play.

A child who has no toys can create them. A child can build a spacecraft with the soap container, take some paper balls and wool and make animals, or find chalk come up with their own drawings, games and a thousand more things. This way, children develop their imagination little by little, by sharing experiences, negotiating with their companions or just by having fun.

But what happens when children cannot use their hands or communicate due to circumstances beyond their control? Just as Stephen Farfler, a paraplegic watchmaker, built a self-propelled chair on a three-wheeled chassis in 1655, we at IRISBOND call on the most imaginative and creative minds in the world and in the toy industry to develop toys adapted for these children who have special needs, and thus, ensure that all children can play.



We have read in a report of the UNESCO that “play is vital” because “it conditions the harmonious physical, intellectual and affective development of a child. A child who does not play is a sick child. A child who is prevented from playing will fall ill, physically and mentally.”



So, when we don't give some children the option to play, are we condemning them to being sick children?

What do we mean by
play?



Definition of Play in the Oxford
Advanced American Dictionary:

1. [intransitive, transitive] to do things
for pleasure, as children do; to enjoy
yourself, rather than work

Etymology of Play in the Wiktionary:

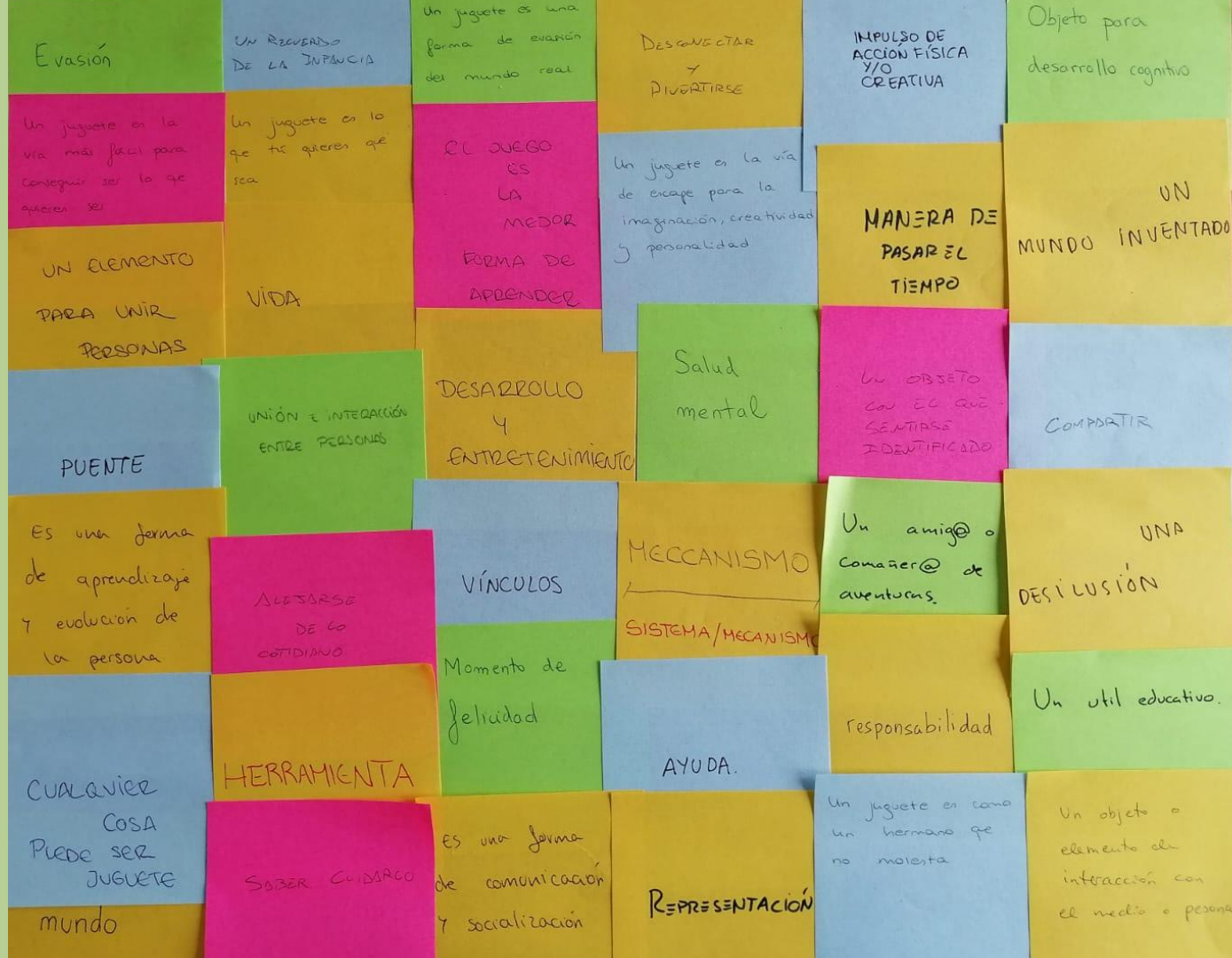
The noun is from Middle English
pleye, from Old English plæg, plega,
plæga (“play, quick motion,
movement, exercise; (athletic) sport,
game; festivity, drama; battle; gear for
games, an implement for a game;
clapping with the hands, applause”),
deverbative of plegian (“to play”).



Esto es lo que significa un juguete para un grupo de estudiantes de entre 18 y 22 años.

//

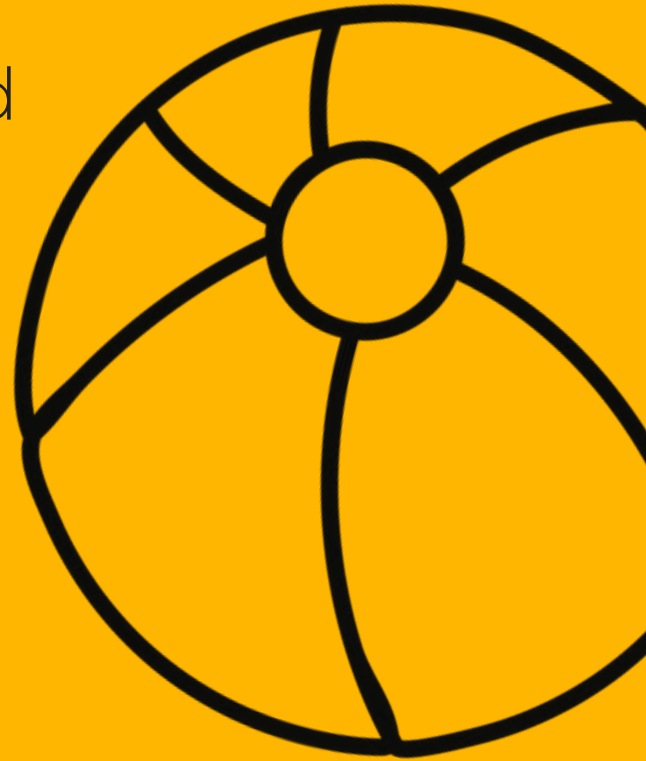
Here's what it means to play, according to a group of students between 18 and 22 years old.



Play is responsible for part of the emotional, physical and intellectual development of a child

Play is a cultural phenomenon as well as a **biological function**. In fact, it's not only human children that play. Animals play instinctively, too.

In animals, we can see all the ceremonies around play., how they invite or provoke one another to play. As an example, my own dogs play when we return home from the morning walk and after eating. It is a ritual they never miss and in which you notice that they are having fun. They are already ten years old and still doing it. **And they do not need anyone to suggest them to play.**



75% of a child's brain development happens shortly after birth.



Stuart Brown is the founder (1996) & President of the National Institute for Play in the USA. He has dedicated much of his career to the study of human play: what it is, how it affects our health, and the devastating consequences if it is suppressed. His early scholarly research on violence, along with thirty-five years of clinical practice, independent research, and rich relations with scholarly experts on play have convinced him that we are “built to play and built by play.” His research shows play is not only ‘for the fun of it’, but has a lot to do with human development and intelligence.

The drive to play is as fundamental as our drives for food and sleep.

According to research (Fisher 1992) play is related to:

1. The creative resolution of problems
2. The social behavior
3. Intelligence quotients
4. The capacity for integration and leadership

It also increases the rate of early development from 33% to 67%, improving adaptation and language, and reducing social and emotional problems.



Play for problem solving

Nate Johnson, a teacher of auto mechanics at a high school in Long Beach, California, noticed that many of his students couldn't solve different problems or fix cars. He began observing his students and discussing with them to understand their skills. He concluded that the students who had more trouble solving problems had not worked with their hands when they were younger.

Nate Johnson and the neurologist Frank Wilson help NASA when they need a hand in NASA's Jet Propulsion Laboratory. Even NASA rejects cum laude Harvard grads or Cal-Tech profiles if they do not have experience working with their hands or fixing things.

Play connects the hands with the brain.

What do we do with children who cannot use their hands when playing?



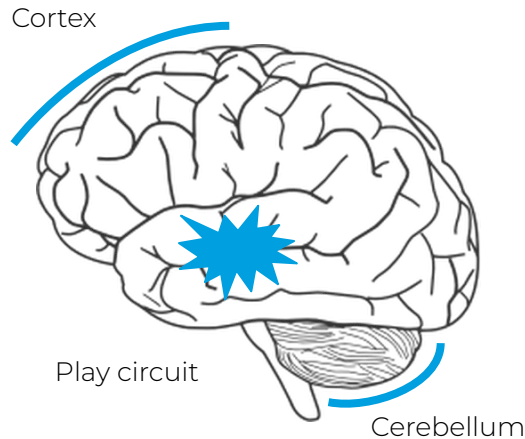
Science and thinking behind the value of play



Jaak Panksepp

Estonian-American neuroscientist and psychobiologist who identified 7 biologically inherited primary affective systems that respond to primary emotions (in brackets):

1. Seeking (enthusiasm)
2. Rage (anger)
3. Fear (anxiety)
4. Lust (sexual excitement)
5. Care (nurturance)
6. Panic (sadness)
7. Play (social joy)



Like all mammals, we have a biological motivation to play buried in the midbrain, an ancient part of the human brain, waiting for us to activate it.

When elements of the environment activate the neurons of the play circuit, we feel the motivation to interact with those elements. If we see a ball or meet a friend, we focus on that stimulus and react: throw the ball or play with our friend.

The instinct to play is, therefore, biological and produces happiness.

Friedrich Fröbel

Fröbelian pedagogical theories are based on two principles:

1. Promote the integral development of the child from childhood through education. That is why there must be a preschool level.

2. Favor and not deny the natural inclinations of the child with education:

- a. Do not impede their movements, and encourage playful activities. Games are equivalent to the work and exercise of the adult.
- b. Allow touch. Touch is a sense that brings knowledge. It is better to recognize geometric shapes by touching them than just by seeing them.
- c. Encourage taking objects apart to understand the construction of things: moving from the whole to the parts and integrating them back into a whole.
- d. Entrust the mission of taking care of something: the sense of property teaches us to respect the objects and possessions of others. For example, 'keep your things in your drawer and respect others'.
- e. Ask everything. Children are curious by nature. A kindergarten must have the walls covered with maps, plans, zoological and botanical charts, historical characters, paintings with moral scenes, heroic actions, natural landscapes, etcetera.

Friedrich Fröbel o Froebel was born in 1782, in Oberweißbach, Turingia and died in 1852. He was a German pedagogue, who laid the foundation for modern education based on the recognition that children have unique needs and capabilities. He also created the concept of the kindergarten and coined the word, which soon entered the English language as well.

Jean Piaget

Jean Piaget developed a structuralist theory of play based on research on the mental functions of children. According to his theory, children:

1. **Sensorimotor stage. From birth to age two.** Sensorimotor stage. From birth to age two. A functional play or based on exercise. Children repeat movements with simply the objective of seeing immediate results to the actions: walk, throw, scream, hide. They improve sensorial development, coordination, balance, environmental comprehension, la overcoming, and interaction, among other benefits.
2. **Pre-operational stage. From two to age 6.** More playing and pretending. Symbols exemplify the idea of play without the actual objects involved. In this stage, children develop imagination and creativity, take roles, and develop language, among others.
3. **Concrete operational stage. From six to age 12.** It is the stage of games with rules. All children understand from the beginning what to do and that there are rules to follow. They learn, among others, to win and lose, respect others, respect the rules, and strengthen their memory, attention, reflection, and patience.

Jean Piaget was a Swiss psychologist, epistemologist, and biologist. He made relevant contributions to childhood research. Piaget believed that the function of thinking and intellectual development is an extension of the biological process of the adaptation of the species, which has two ongoing procedures: assimilation and accommodation.

Play is the work
of the child.

Maria Montessori

Maria Montessori

Her philosophy is the teaching methodology in many public and private schools worldwide. She used the word “work” instead of “play”.

- a. In 1898, at the First Pedagogical Conference of Turin, she spoke about the urgent creation of special classes and institutions for children with learning difficulties and exposed the relationship between juvenile delinquency and abandoned children.
- b. Children, thanks to their work, become adults.
- c. Children take their “work” seriously because it is what helps them to become the best adults.
- d. Work – practice and repetition- is what children need to do to achieve their objectives.
- e. So we should let children “work” with authentic tools instead of plastic toys and introduce them to real life instead of playgrounds.
- f. Children ought to have the freedom to choose their work, and they need time to improve their skills.

She was born in 1870 in Italy, in a Catholic bourgeois family. She was a doctor, educator, psychiatrist and philosopher, as well as a humanist, feminist activist, Italian suffragette. At the age of 26 she became one of the first female doctors in Italy. As an educator we know her for the philosophy of education that bears her name and her writings on scientific pedagogy.

A project to explore: Pedagogy of Play (PoP)



Taking into account the documented base of the benefits of play for the correct development of the brain and better learning in children, the Pedagogy of Play Project was born.

This project started in 2015 at the International School of Billund. Thanks to a research grant from the Lego Foundation, teachers, together with the Zero Project (a research team from the Harvard Graduate School of Education), can participate in working groups aimed at analyzing and finding ways for this hypothesis of learning by playing.

The results of the studies are published in the Lego Foundation and on the ISB website. In 2017, PoP started to grow in South Africa and the United States. All teachers and researchers continue to work together in the search for game-based learning models.

Play & disabled children



Stuart Brown says that adults are missing from this cover of the New York Times. At IRISBOND, "We say that children with disabilities, especially of motor skills, are also missing."



17 de febrero de 2008

What happens when a child cannot play?



But is it possible for a child **NOT** to play? **It is**

Maybe it is because **there are no** adapted toys...

Or maybe because they are too **expensive**...

It is known that animals that had little play when young are deficient in regulating their aggressive urges when adults

(Potegal & Einon, 1989)

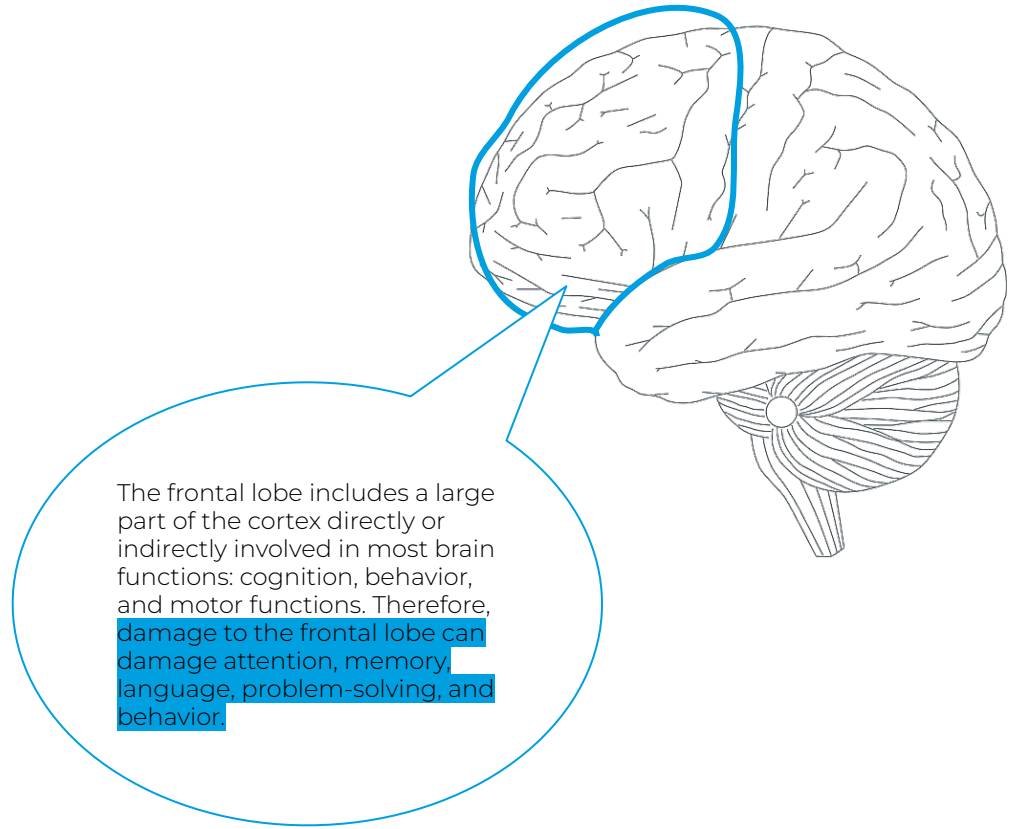


We need to understand what happens when there is no play, understanding that the verb “play” has a broad meaning

Stuart Brown thinks that if we imagine life without play, we have to understand that it would not be only a life without sports or games. It is much more. Without the activity of play theater, books, art, movies, music, dancing, jokes, or stories would disappear. There would be no irony or comedy, not even the act of playing. Play, from a broad perspective, is what brings color to life. Without playing, life would be dull and tasteless.



Based on animal research, we learn that thanks to playing, the regulatory functions of the frontal lobe develop earlier and better, allowing us to inhibit anxiety and impulsivity. By playing, we learn to stop, look, listen and feel. And thus, we improve the capacities for self-reflection, imagination, empathy, and creativity. With these skills, children acquire the flexibility that permits them to adapt to the future and design goals and ways to achieve them.



According to Stuart Brown, being moderately to severely deprived of play during the first ten years of life could result in **poor early childhood development**, leading to depression, difficulty adjusting, decreased self-control, and a greater tendency to fragile and superficial interpersonal relationships. And even addiction. Childhood play deprivation is present in interviews conducted during a study with some of the most violent criminals in the USA.

In the US and UK, outdoor play **has decreased by around 71%** in one generation.

We can say that poverty and the scarcity of opportunities to play are already endemic, especially in depressed urban areas.

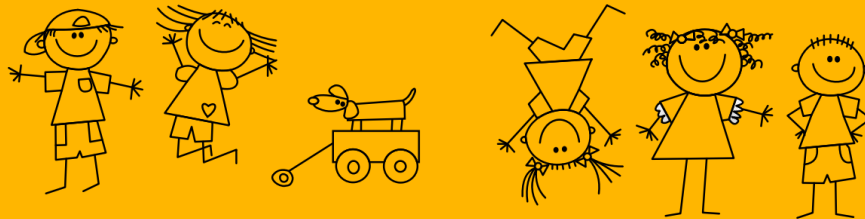
Where does this take us?

According to **Joe Frost**, reduction, changes, or play deprivation in the last 50 years is provoking a public health crisis today and a risk to social well-being that can last for several generations. Joe Frost is an American researcher who has published or partaken in more than 19 books about play.

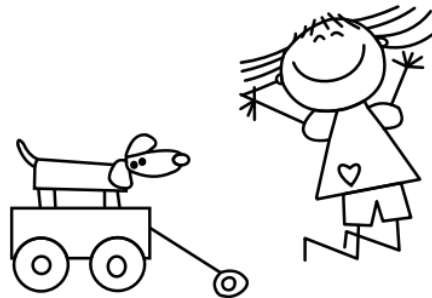
What about children who cannot
play or have physical difficulties
doing so?

When children **DO NOT** play:

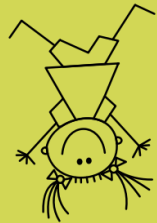
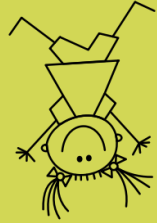
1. **Creativity** suffers, and this implies that they reduce the ability to solve problems.
2. **Independence** also suffers. When playing, children make decisions without the intervention of an adult.
3. Lesser play means **shyer** and more incapacity to accept mistakes.
4. And together with the previous point, sociability also decreases. These children grow up in a more isolated way and are **more individualistic**.
5. They are more **emotionally insecure** and have worse personalities due to the lack of moments of recreation and release of tension.



“Children learn as they play.
More importantly, in play,
children learn how to learn.”



O. Fred Donaldson



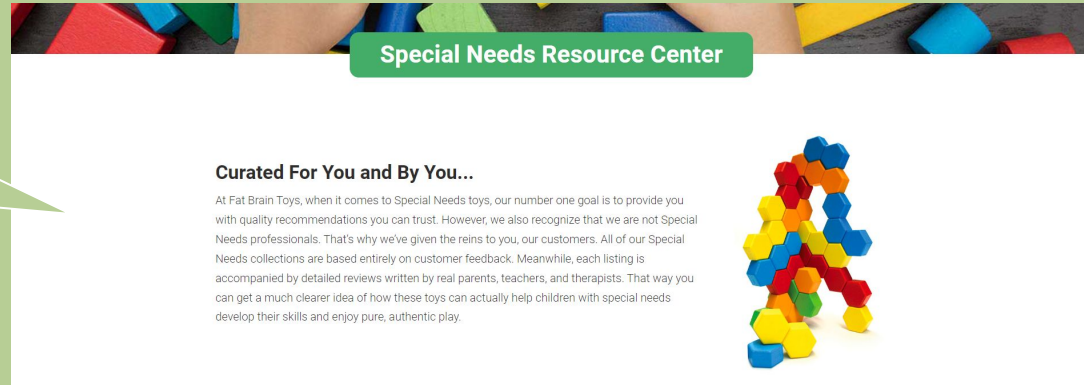
If we are all born with the ability to play, getting children with motor disabilities, for example, to play, isn't it as simple as looking for what stimuli activate those game circuits that Jaak Panksepp defined?



Without adapted toys, children with physical or motor disabilities typically spend less time exploring and playing with toys and more time looking at them. Because if they are not adapted, they can not do anything with them, even if they want to.

Brooks-Gun & Lewis 1982; Loovis 1985.


However, we also recognize that we are not Special Needs professionals... All of our Special Needs collections are based entirely on customer feedback



Special Needs Resource Center

Curated For You and By You...

At Fat Brain Toys, when it comes to Special Needs toys, our number one goal is to provide you with quality recommendations you can trust. However, we also recognize that we are not Special Needs professionals. That's why we've given the reins to you, our customers. All of our Special Needs collections are based entirely on customer feedback. Meanwhile, each listing is accompanied by detailed reviews written by real parents, teachers, and therapists. That way you can get a much clearer idea of how these toys can actually help children with special needs develop their skills and enjoy pure, authentic play.



Today, in 2022, 40 years later, there are few adapted toys, or little variety, and little science and research around these needs and their solutions.

Toys have the function of stimulating cognitive development. That is why toys need to adapt to the different abilities of children, not the other way around. They have to respond to their movements, emit a response when the child manipulates them, and include imagination or fantasy during playing time as necessary.



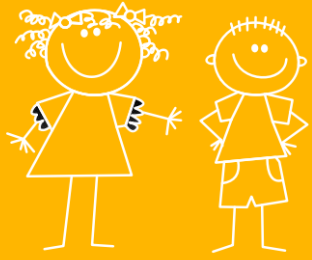
Not all children are identical, and not all children play the same. Therefore, toys cannot be all the same.

Most of the toys that we recognize today as inclusive are toys that consider other races or even some physical conditions, but that does not mean that they are adapted for children with disabilities. They only represent some children.



Why does a child who needs a wheelchair have to play with a doll in a wheelchair? It would be better to think about toys adapted to their condition. Toys to play in a wheelchair.

Are we paying enough attention to children with physical conditions that have difficulties playing without adapted toys?



All children have
the right to play!
All of them!

Some references

[Play Deprivation Can Damage Early Child Development](#)

[The child's right to play](#)

[Lego Foundation research about play](#)

[Learning through play: a review of the evidence](#)

[Towards a Pedagogy of Play](#)

[Why we play](#)

[The purpose of PoP](#)

[Toy play in infancy and early childhood: normal development and special considerations for children with disabilities](#)

[The importance of play](#)

[Learning to cope through play](#)

[Scientists Say Child's Play Helps Build A Better Brain](#)

[Accessible And Representative Toys Key For Development Of Kids With Disabilities](#)

[El juego cooperativo para prevenir la violencia en los centros escolares](#)

[Una metodología para la utilización didáctica del juego en contextos educativos](#)

[El niño y el juego: planteamientos teóricos y aplicaciones pedagógicas](#)

[¿Qué pide un niño para ser feliz?](#)

[Guía Aiju 3.0](#)

Books

1. [Play: How it shapes the brain, opens the imagination, and invigorates the soul](#)
2. [Homo ludens](#)

TedTalks & videos

1. [Stuart Brown](#)
2. [The decline of Play: Peter Gray](#)
3. [Learning Through Play](#)
4. [Emily Turner on The Power of Play](#)
5. [Jugar... ¡Un asunto muy serio! Importancia del juego en el desarrollo infantil](#)
6. [Tim Brown: Tales of creativity and Play](#)
7. [La importancia del juego para el desarrollo de los niños con discapacidad](#)

Thanks!



www.irisbond.com