

How Interactive Play Contributes to a Healthy Lifestyle

‘Turning the digital allure into something constructive’



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A lot can be gained in terms of public health and wellbeing, with help of the Yalp interactive playsets. This white paper will put special attention on a variety of relevant public policy themes, in relation to movement, exercise and interactive play.

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The 4 Levels of Interactive Play

The play industry allows for up to 4 levels of interactive play. The powerful effects and results through interactive play are only truly applicable to interactive playsets in category 4. The playsets from the first three levels have greater similarities to traditional playsets.

Level 1. Light is the only dynamic aspect of the particular playset.



Level 2. Both light and sound represent the dynamic aspects of the particular playset.



Level 3. The playset has both light and sounds, but also an internet connection. The information-flow is merely one-way.



Level 4. Playsets which allow for a two-way information flow. Actual interaction.



Level of intelligence playset

Introduction

How the Digital Allure Leads to Society Being Exercise Depraved... and What To Do About It.

We spend a lot of our free time behind the TV or computer. These days, it is normal for kids to have mobile phones, game consoles, and almost unlimited access to entertainment from a very young age. This trend is only growing, with the average child under the age of 18 spending about 2 hours per day behind some sort of gaming console.

These games are designed to be highly entertaining and immersive. However the excitement and addictive effect of engagement with a computer is similarly achieved through interactive play. Outdoor interactive play allows for healthy exercise, social interaction, and other benefits of just being physically active while soaking up the sunshine and fresh air. This way, the digital allure gets transformed into something constructive.

Interactive play tailors to the entertainment demands of today's children, while also ensuring their physical, social and mental developmental needs are met.

Physical movement with an electronic buddy

The developers at Yalp want children to enjoy their play equipment as much as possible. However, it is a mistake to assume that interactive play is successful, merely due to the integration of electronics. The true power of interactive play lies within the excitement of achieving higher levels, exceeding ones boundaries, and the continuously renewed content.

These aspects are combined with the positive aspects of outdoor play, including social development, healthy exercise, physical exertion and community involvement. Interactive play can be done alone, with the interactive playset as a 'play buddy,' but also with many children at once. Due to the growing familiarity and pervasiveness of technology in our society, the experience of interactive play is seeing a strong support base from all sides of the public.

Interactive outdoor play most certainly means that users totally exert themselves in order to win the match, or enjoy the games as much as possible. A great side effect being that children get their daily exercise without needing any further incentive.



30 years ago		Present
2	TV channels	60
no	Game Console	yes
no	Mobile phone	yes
no	Internet	yes
no	PC/laptop/tablet	yes
no	Social media	yes

The pervasion of electronics in daily life

An Exercise Deficiency

More Exercise and Play in Healthy Communities

Health Problem Prevention through Movement

The positive effects of movement and exercise on public health issues such as obesity or social development are well known. But ample movement yields even more positive results. For instance, a successful educational track record is often linked to getting enough exercise. Regardless, a large amount of kids do not get outdoors often enough, and get far too little exercise. This drastically jeopardises their physical health, but also negatively impacts their school results and working future. This is a serious issue. Kids need to get at least 60 minutes of physical exertion a day. This is the acknowledged (European) norm. Almost half of all children under the age of 16 do not meet this norm.

This exercise deficiency is especially prevalent in urban areas, with little space for outdoor play. And that while the amount of physical activity in public area is directly related to the availability of play areas and permanent play equipment. Hence, it is of dire importance that we facilitate our public area with inspiring sports and play equipment.

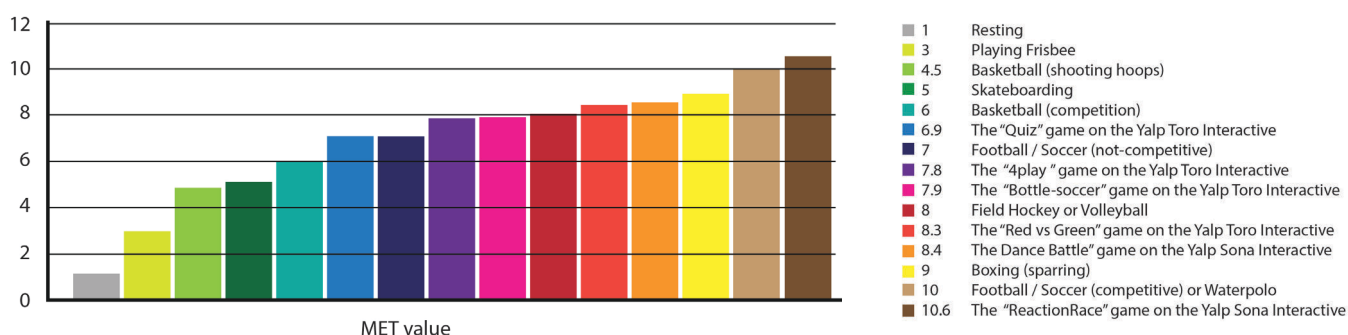
High Exercise Intensity

Interactive playsets all greatly exceed their traditional counterparts in terms of exercise intensity. The actual research statistics below show the movement intensity of the Yalp Sona interactive playset (www.yalp.nl/en/sona), and Yalp Toro (www.yalp.nl/en/toro), in comparison to other sports. MET stands for Metabolic Equivalent, and is a unit of measure within physiology. One MET is equal to a person's metabolic rate while sitting / resting. The Yalp Sona "ReactionRace" game achieved more than 10 MET points, which makes it more active than biking (MET 4.5), Basketball (MET 6), running (MET 6.2), or non-competitive Football (MET 7).

Jantje Beton is a Dutch foundation, which aims to make proper outdoor play possible for all children. In 2013, they helped realise an impactful research, which revealed that: "At least half of all children would play outdoors more often if it would be less boring. Almost half would watch less TV and play less video games if outdoor play would be more fun. Four out of 10 children find their current play areas boring - including playgrounds with swings, slides and other traditional play equipment. This especially goes for kids in urban areas and older children.



Kids would love to think about improving play area with their municipalities, and talk about how to make outdoor play more fun. However they are hardly asked at all."



Traditional VS Interactive Play

Of course a large group of children and teenagers still seek the outdoors for sports and play. Traditional playgrounds and sports arenas still serve a wonderful and important purpose. It ought to stay this way. But also the group of kids that do not seek exercise and outdoor play by themselves can be enticed to do so through interactive playsets. Not just moving about, but active exercise is what ultimately leads to the desired benefits and reduction of public health issues. Increasing the prevalence of outdoor play, through placing interactive playsets, is a tangible and effective way in which the administration can meet its public health aims. A healthy community can lead to reduced healthcare costs in the long run as well.

Beneficial on the short term, as well as into the future.

Development through Play

The Municipality Leading in Educative Play

Play contributes to the motor, social and cognitive skills of growing children.

Playsets are first and foremost designed to be as much fun as possible. But outdoor play is crucially important at the same time. Research repeatedly shows that discovery and play enhances brain capacity and development; especially in younger children. An inspiring play area with equipment that is specifically designed with this in mind, stimulates motor, social and cognitive development in children. These developments occur with both traditional and interactive play, however the latter does allow for certain aspects to be developed even better.

Imagination is one of these important aspects. Traditional playsets such as castles or monkey bars allow for this, but what about interactive playsets? Interactive playsets are created to allow 'free play.' This means that children are able to make up their own rules, while not being stifled or limited by the playset itself. Through repeated focus groups, we have looked at how children create their own rules, and how they intuitively fill in the game play. With interactive playsets, children are allowed the optimal freedom to play the games as they wish. Accordingly, children have been found to play the interactive playsets with remote controlled cars, and even their dogs. Interactive playsets teach children **social skills and social collaboration**. And since children require to move a lot while playing interactive playsets, their **motor skills** are developed effectively. Ultimately, there is a difference between "being allowed to move" and "learning how to move." The latter does not just revolve around the amount of exercise hours, but also around how movement comes about. **Learning how to move** involves getting certain instructions of how to move, and how much to move. This could include "run to the green area," or "shoot at the lit square." Interactive play allows for children to move beyond their comfort zones, and teaches them how to move through audio-feedback, specific commands and instructions.

Interactive play allows for the focus on **cognitive development**, while not losing sight of fun and free play. Interactive playsets contain fully customisable software, which means specific audiences or ages can be tailored to with ease. Examples:

The Yalp Sona, which has been placed at many primary schools, but also elderly homes and special care facilities.

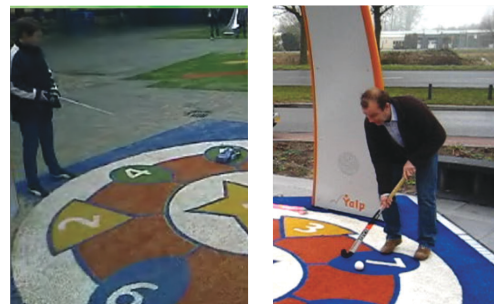
The Yalp Memo, which contains games that teach topography, maths and spelling. The Yalp Sona also teaches maths, or Chinese (for Western children).

Expanding Boundaries through Play

The unpredictable nature of interactive playsets is another factor that allows for learning to occur. There are various ways to play each game, while playing on a slide or swingset remains exactly the same. Since every interactive playsets receive automatic, and continuous renewal of game, they always remain new, unpredictable and challenging.

The interactive playsets are able to ride current trends, such as sporting events or music crazes. Through the built-in internet connection, the owner is treated to new games on a regular basis, without the need to do anything at all. This way your interactive keeps the end users challenged, entertained and intrigued.

Interactive playset developer Rob Tuitert says:
"Kids are incredibly creative and uninhibited. They sometimes use playsets in entirely different ways than they were originally designed for."



Check out the Yalp International Youtube channel: watch the Yalp Sona being played in all kinds of surprising ways!

Inclusion

How Municipalities can Tailor to All Children.

Creating Opportunity for Deprived Children in a Playful Manner

The term 'deprived' describes a child that seems to have a certain disadvantage when it comes to learning (math or languages), in comparison to peers. Play allows for such children to develop themselves in a fun manner, without the need to feel different than their classmates. A 'disadvantage' can also entail a physical issue. Not all playsets are equally accessible, while all children deserve and desire to play. Thankfully, interactive playsets allow for any and all children to be included in the game play - whether alone or together with all of their friends.

Learning Disability

Learning disabilities ought to be combated as early as possible; preferably in primary school. For many children, such support is needed as early as preschool, and also need to be extrapolated into after school programs. Catching up with learning disabilities can be done effectively with the help of playful aid. Accordingly, play through physical movement allows the brain to generate extra cells, which allows for better information retention. Moreover, interactive playsets with their educative game selection includes a focus on language (spelling and vocabulary), maths (counting and coordination in space and time), motor skills (specific movement instructions) and social development (collaboration and joint problem solving). Depending on the specific product, interactive playsets are able to support child development in various playful ways, while of course keeping the core curriculum leading.

The Yalp Memo is being evaluated by PhD-student Fenne van Doorn of Delft University of Technology (TU Delft).

She is researching the effects of the Yalp Memo in terms of engagement, fun and education value. This is done through the "Co-Method" research method, which means data is gathered by children. The research started in 2014.



Inclusion for Disabled Children

Play is important to each and every child. Not all playsets, however, are equally accessible. In order to guarantee the total inclusion of all children, various customisations are often necessary with traditional playsets. But this also means these playsets often give less play value to non-disabled children. In the end, allowing disabled children to play together with non-disabled children is most desirable. An interactive playset is easily customised for children that have trouble seeing or hearing. The same goes for children with a mental or physical handicap. The Yalp Sona (as shown below) has a 100% freely accessible play floor, and allows children in wheelchairs to enjoy the playset in conjunction with their non-disabled friends.



Movement Stimulation in Attention Areas

The final group of children we are looking at for now, are those living in attention areas. On average, these children get much less exercise than their peers in other living areas, as shown by an extensive research by the TNO Research Institute in 2005. In the researched areas, only 3% of children met the previously mentioned European norm for sufficient exercise. What also became clear, is that children from immigrant families have higher obesity rates, than autochthonous children. It is becoming increasingly important that municipalities pay special attention to the amount of exercise and play areas for this demographic as well.

Economic Prosperity and Wellbeing

Economic Prosperity and Quality of Life in All Communities

Fitter People are Happier People

The availability of play areas have a positive effect on home valuation (Visser en Van Dam, 2006). An English study (Play England, 2010) points out that the availability of playsets also lead to higher levels of education and income. Play England concludes that every British Pound invested, results in about a 150% ROI (£ 1.5). These results carry strong implications, and prove that investment in play does pay off. Why is this? Mainly, getting people outdoors and playing together, strongly improves social cohesion and the quality of life for everyone in the area. It creates the positive vibe that everyone desires in a safe and upbeat neighborhood.

Play and Sports Areas as a Means to a Higher Quality of Life in Living Areas

Playgrounds serve an incredibly important function in communities and living areas. Playgrounds often become the natural meeting spots for residents (including adults). Play areas will only become truly successful when they inspire people to enter them on a daily basis, and if they are up to date. The choice to place an interactive playset becomes easy, when knowing they appeal to children, adults, and even teenagers. As such, they are always received with great enthusiasm by all demographics, in all areas. We recommend asking residents for input during the design and creation of the play areas. Residents are a useful source of information, and are ultimately the ones using the areas.

Meeting Spots for Teenagers

It is very difficult to tailor to the needs and wants of teenagers, which starts as soon as they outgrow elementary playground facilities. For centuries, young adults and teenagers have been meeting one another outdoors, and often conglomerate on squares and other areas. This includes play areas. More often than not, this results in neighborhood complaints and irritations. The solution to all of this, is the creation of an area that inspires teenagers, and actually gives them something to do. Something they actually like doing. Reducing neighborhood complaints and irritations improves the quality of life for all residents, and all demographics.



The Yalp Fono is a solution towards the creation of inspiring meeting areas, with a robust outdoor DJ-table at its core. Music and DJ-ing is something very much alive with today's youngsters. The Yalp Fono brings the DJ-table back to its roots: the streets. The Yalp Fono challenges and stimulates teenagers to share, play and perform their music on the streets, all the while enjoying socialising with their friends.

Senior Longevity

Keeping our Elderly Mentally Revitalised and Physically Fit

When considering interactive play, senior wellbeing is perhaps not the first thing that comes to mind. Regardless, it is becoming of increasing importance that our growing number of senior citizens stays physically fit. Getting sufficient exercise and movement improves balance and coordination. It thereby increases their independence. Current senior policies aim to ensure that seniors stay independent as long as possible. In order to achieve this, preventative exercise routines are to be acquired and given by care facilities. Placing the proper senior exercise equipment in public areas, at care facilities, or through housing corporations give these places a new societal function. These areas are able to help seniors get more fresh air, move about more, and create social contacts. Municipalities and developers can play an important role in creating such senior exercise areas.

Interactive Exercise Equipment in Public Area

Getting sufficient exercise is important, also for seniors. We would probably all agree on this. but what



is the true value of interactive exercise equipment in all of this, and what are the options? At this moment in time, there is merely one interactive product available on the market that allows for two-way interactive information sharing (Level 4 - as described on page 2). **This is the Yalp Sona.**

This piece of equipment has been made especially appealing to senior citizens, and is easily accessed through wheelchair. Actual fun, and even music are a few effective ways to get seniors up and about. The Yalp Sona contains both elements. It turns out that music has an amazingly effective and lasting impact on people with dementia. Music not only helps seniors (with or without dementia) break through passivity, but also revitalises them mentally. People with dementia are more prone to depression. Outdoor movement and exercise are shown to be both preventative and healing in this regard. Playing on the Yalp Sona with grandchildren is also shown to be a favorite. As such, multiple generations can all enjoy the sonic play arch together. The Yalp Sona is fun, and enhances social cohesion across and within all generations.

Preventative and Healing Exercise

Of course, certain physical limitations arise due to old age. Nevertheless, there is still much to be gained in terms of balance, strength, and hand-eye coordination. And it works. Since 2009, Yalp has been regularly experimenting with especially designed 'Design For All' (DFA) play and exercise

Senior Longevity

equipment in elderly homes and health care facilities. Thanks to the positive results, Yalp has sought and been realising interactive solutions since 2013.



In Practice...

The Value of Interactive Play - According to 4 experts:

Hengelo Municipality decided to play not one...but four interactive football walls (Yalp Sutu), in order to meet their public health policy aims. And it works! The very first Yalp Sutu was installed in 2009, and even four years after date, it still gets played for many hours every day. Wimjoost Licht - Hengelo Municipality says: "I had to learn a lesson. Be aware of the tendency to always think the past was better than the present. It is important to go with the times, and to study it. Doing so quickly reveals that the times have changed, and different problems require different solutions. Even though the game of football (soccer) has barely changed, the environment and society children live in these days definitely has."



Almere, The Netherlands is the home of Syncope Primary School. The Municipality was involved in the realisation of the Yalp Sona on its schoolyard, a few years back. Lia Meijer-Quint of Almere Municipality explains: "At first I was quite hesitant about placing electronics in the outdoors. This turned out to be completely fine. Meanwhile the Yalp Sona has been there for quite some time. During the construction I saw the reinforced steel frames, behind which the electronics were safely tucked away. This construction gave as a lot of confidence, and indeed we have never had any issues what so ever."

In 2013, Amsterdam chose for a new (at the time) interactive playset called the Yalp Fono; an outdoor DJ-table for teenagers. Acquiring the Yalp Fono was done with the city public health policy aims in mind. Just like any other city in The Netherlands, the city district is having a hard time inspiring teenagers to get outdoors and live an active lifestyle. And when they do go outside, it's even more difficult to ensure they spend their time constructively. The Yalp Fono is shown to be a great solution towards these issues. Oscar Hulscher, Policy maker Amsterdam explains: "In The Netherlands, sports arenas quickly turn into hangout spots. This ruins it for the people that do want to play a game of football or basketball. It can also lead to a negative image of the neighborhood. The Yalp Fono fixes this, by giving the every type of group something they like. Now those that just want to hang can do so, while actually making music for those playing sports. It is the missing link between the playground and the sports arena."



At the HilverZorg elderly home, the Yalp Sona helps seniors revitalize both mentally and physically. Supervisor Hanneke Overhage shares her experience: "Residents can take a walk in our garden, which is a safe environment. The Sona has been the perfect complement to our garden, and we all really enjoy it. Today, we entered our yard and started the morning off with dancing and exercising with the Sona. Afterwards we played a few games on the bowling greens, and some basketball. And how do you think our residents reacted? 'Can we do this again next time?'"

Lovely isn't it...?"

Summary

How does Interactive Play Contribute to an Enjoyable and Healthy Lifestyle?

Interactive play probably won't result in people no longer watching TV...but thankfully it gives tremendous enjoyment and benefit to playing children, and thereby to you as a council attempting to improve public health in your area.

The Benefits of Interactive Play:

- Interactive play meets the digital evolution that society is undergoing today. Interactive play entices children and teenagers to seek the outdoors, while meeting their newly found and ever-increasing demands for entertainment.
- A lack of play area results in a lack of exercise and physical activity. Create inspiring play environments, and ensure these meet the requirements of today's younger generations.
- Interactive play is equal to highly physically exertive sport activities (high MET-values).
- Interactive playsets are fully customisable for specific demographics and ages. Thanks to continuously renewed content and game play, they remain novel and up to date.
- The interactive playsets give thorough movement instructions, which results in ample exercise for children and the development of advanced motor skills.
- Moving about and exercise is crucial for seniors. Interactive exercise outdoors prevents ailments and extends quality of life.
- Economic Prosperity: a fit and active society is not just good on the short-term, it saves tremendous healthcare and economic costs on the long-term as well.



Would you like to know more about Interactive Play?

This white paper was written by Yalp. Yalp has many years of experience in the creation of inspiring interactive playsets, and distributing these globally. American, Asian, European, and Middle Eastern children all play these safe, robust and highly enjoyable playsets. These playsets have been found highly effective in meeting public health policy aims of municipality all over the world. Please contact us, or your local dealer for more information.

You can find us, and your closest dealer at:

info@yalp.nl | www.yalp.nl/en/

