



The name of this report is not a coincidence. The LEGO® brand name, created in 1932, is based on the Danish term, Leg Godt, meaning 'play well' and reflects our deep commitment to inspire and develop children through play.

Since the very beginning, our mission has been clear: to give children the chance to shape their own world through the wonder of inventive play and the pride of creation – at home, at school, anywhere. Sixty years on from when the LEGO® brick was patented, and 40 years after we created the first LEGO Minifigure, our belief in every child's right to play well is as strong as ever.

In commissioning the LEGO Play Well Report, our aim is to help us all better understand what the simple, instinctive act of playing means in 2018: the way it's evolved, the benefits it brings to the individual and families, the barriers that get in the way and how we can protect it.

The findings don't always make easy reading, but they are consistently enlightening – not only for the LEGO Group but for parents, educators and policymakers alike. Crucially, they give children and parents a voice in the discussion around the importance of play and highlight what needs to be done to preserve the benefits and promote the power and pleasure of play.

More than at any other time in modern history, playtime is under threat. Not because children have lost the ability to play – far from it. In fact, inspired by the blurred lines between the digital and physical worlds, today's children are seamlessly merging what's real and what's virtual, reinventing play in ways people of my own generation could never have envisioned. What we are learning is that there are endless opportunities for children's imaginations to run wild equally in the real or the virtual world.

The difficulties come because the time, space and permission children need to play is constantly under pressure. There is also a growing disconnect between children and adults when it comes to the styles of play they enjoy and value the most. The benefits of play are often undervalued in our preschool and education systems too, losing out to more formal curricula and learning. And in our busy modern lives, families often default to more structured, pre-planned 'play by appointment' ideas rather than just enjoying the spontaneous thrill of inventing play on the spot.

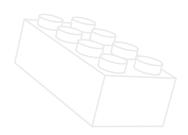
More importantly, we're in danger of overlooking something fundamental: that child play and playing together as a family is not only great fun, it's vital to a child's ability to develop core life skills like confidence, communication, creativity and critical thinking. These abilities are also crucial to their wellbeing and success as adults.

One of the report's most significant findings is that perceived happiness and wellbeing increase when adults and children play together regularly. What could be more important than that? As a family-owned business, we want to do everything we









can to get more families playing together more often – whether that's by constantly re-inventing the products we offer or by promoting the important role of play in healthy child development and lifelong learning.

The LEGO Group's mission to inspire and develop the builders of tomorrow will always be based around the LEGO brick and the unrivalled joy that comes from creating things for real. As for how children, our biggest role models, fuel their imaginations and where their creations take them – across physical and digital spaces – the world has never been bigger or more exciting.

Child, adult or just a big kid at heart, that's worth celebrating. And protecting.

Niels B. Christiansen,

N. Chili









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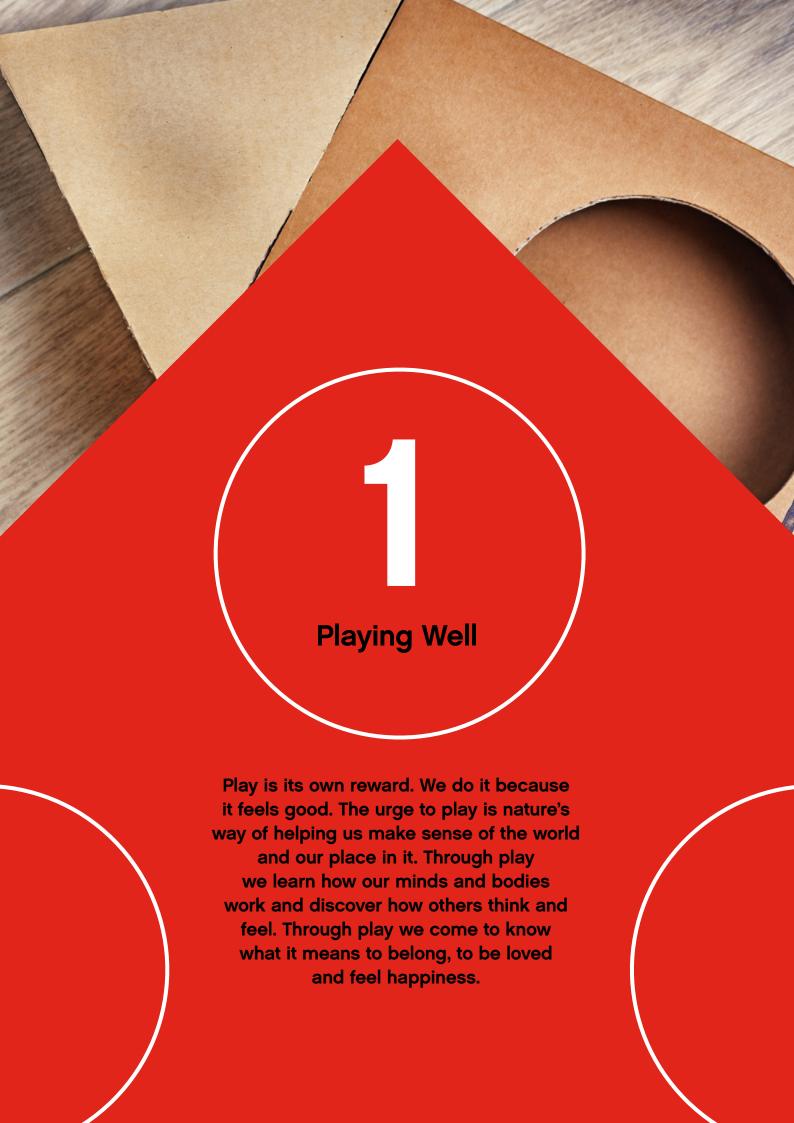
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Playful relationships throughout our lives hone our social skills and refine our emotions. Empathy, humour, confidence and resilience help us bond with our families and friends, find our place in the community and manage the stresses and uncertainties of life. And in a rapidly changing and unpredictable world these human skills, forged through play, have become the foundations of happy and successful lives. So, while it might appear to have no obvious purpose beyond pleasure, play is the engine behind human development.

Play has been reimagined as a dynamic, overlapping, frictionless experience that brings the real world, imaginary play and digital experiences together as one.

In uniting these play worlds across time and space, children today are mastering the art of finding new moments and forms of play. In this report, we call this 'fluid play'.

Like their parents, today's children are also struggling to find time in their busy lives for play. The accessibility and ease of digital games and apps through phones, tablets and computers, however, allows them to extend their physical play experiences and make more moments in their day playful.





With these changes comes a concern amongst parents that screen time is displacing traditional, physical play. Unlike their children, digital technology was largely absent from their own childhoods. They have had to learn to be digital and worry that technology makes play a passive experience, stifles imagination, stops children thinking for themselves and isolates them from family and friends. While these may be legitimate concerns, helping parents feel less anxious and more informed about digital play is essential if families are to enjoy more shared moments playing together.

Rather than being absent from their children's digital worlds, parents can help shape their children's play experiences and balance their screen time with other forms of play. A more nuanced understanding of the role technology plays in the development of life skills, learning and child development is an essential first step in demystifying the digital layer in fluid play. This report encourages parents to feel comfortable enough to join their children in play, however they choose to do it.

# Sharing play is where the real benefits for children and parents come.

When children co-view television with their parents, they are more likely to learn words, and test higher on cognitive abilities, than if they watch alone<sup>12</sup>. This tells us that screen-

based play can have a positive impact if parents are willing to join in.

The LEGO® Play Well Report is an important step forward in our understanding of modern play; the way we do it now and how it impacts on individuals, families and society. What emerges from the research is a surprising new narrative, one that offers valuable insights into the benefits of fluid play and the ways in which families can benefit more from it. It also affirms the critical importance of play in making happier humans and creating better, more tolerant, societies.

# Playing well has never mattered more.







### **Meet the Contributors**

### Dr Elena Hoicka

### Senior Lecturer in Psychology in Education

Dr Hoicka is a cognitive development research specialist, and a world-renowned expert in the role of play in the early development of humour and creativity.

Dr Hoicka's current research explores the role of screen-based play in the development of creativity and storytelling abilities in children.



### Jessica Joelle Alexander

#### **Parenting Expert**

Jessica Joelle Alexander is a parenting expert, bestselling author and international speaker. Her book "The Danish Way of Parenting: What the Happiest People in the World Know about Raising Confident Capable Kids" has been published in over 25 countries.



Assistant Professor at the Department of Psychology at Tsinghua University, and Research Lead at Tsinghua University

Lifelong Learning Lab, China

Dr Wu's work focuses on child development.

She is widely published and is currently leading several research projects in the area of children's social development and creative learning. Dr Wu's studies explore how culture, parenting, environmental factors and children's individual differences interact together to influence the development of social cognition and creativity.





### **Bo Stjerne Thomsen**

Head of the LEGO Foundation Centre for Creativity, Play and Learning

Bo heads up the Centre for Creativity, Play and Learning, working across the LEGO Foundation, LEGO Group and LEGO Education to support the long-term impact of play on children's creativity and learning. He has published several works on creativity, play and learning, and he sits on the Advisory Board for the Torrance Center for Creativity, the Cambridge Centre for Play in Education, Development and Learning, and the Tsinghua University Lifelong Learning Lab in Beijing.



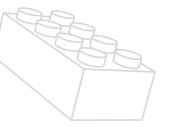


in nine countries - China, Denmark, France, Germany, Russia, Saudi Arabia, Mexico, the United Kingdom and the United States of America - during February and March 2018.

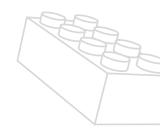
The findings presented in the report build from 12,972 responses from parents and children; 9,249 parents of children who were aged between 18 months and 12 years responded to a bespoke 20-minute online survey. The study also includes 3,723 responses from children aged between five and 12 whose parents had completed the main survey. The first 15-minutes were answered by the parent, with the remaining five minutes answered by their child, undirected by their parents.

The questionnaire was designed using simple language and both questions and responses were written in local dialects to ensure comprehension of both the research questions and responses. This allowed parents and children to articulate their own experience without leading bias. Open-ended questions to parents yielded qualitative insights adding depth to report findings.

Parents were representative of the general population on age and gender within the countries polled. Participants were also selected from a range of household incomes and educational backgrounds to avoid sampling bias.







### The questions we asked were themed around four key areas:

The benefits of play for children, parents and family life

Preferences and barriers to play



The importance of lifelong learning through play

The role of play in developing the skills children need for the future





are forged in their brains each second<sup>3</sup>. The most rapid period of learning and development a human being will ever experience takes place now and by the end of it, a 'blueprint' for the adults they will become has been laid down.

## **Play Makes People**

During the first 18 months of life children master control of their bodies, coordination, communication and basic emotional responses.

Gestures and sounds are learned through playful mimicry of those around them. Speech is not taught to children but emerges through imitation of sounds and actions they hear and watch, and have imprinted on them since birth. Children learn motor skills through long bouts of repetitive play and visualisation and handeye coordination play. Though basic, these skills are the foundations for the accelerated growth that follows.

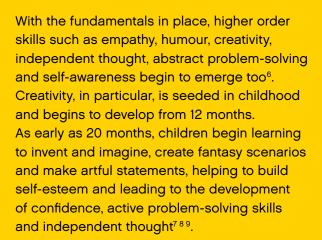
With core skills in place, the brain begins developing executive skills such as memory, problem-solving, planning and reasoning. At around 24 months, children embark on the complex journey towards the creative, imaginative social beings they will become as adults4. Confidence and self-esteem begin to become important as children move from playing alongside others to actively playing and collaborating with them. Basic friendships and social skills begin to emerge. Resilience develops too as children learn to manage the stresses, anxieties and uncertainties of life5. These core skills, once mastered, become foundational as the structures and neural clusters knit together early in life, activated by play and sensual discovery.



Play is an integral aspect of how young children learn. It also gives children opportunities to make friends, and have fun with their families. Even in adulthood, being playful, or having a positive sense of humour, is linked with better mental health.



**Dr Elena Hoicka,**Senior Lecturer in
Psychology in Education



Children inherently have the urge to curiously question and explore things. If you promote play, they will later find it easier to acquire or develop such life skills.

Parent, Germany





What is clear from research is that to thrive during this vital early phase of their lives, children need care and constant stimulation through play. Powerful links exist between childhood experience and the development of balanced and robust individuals with healthy minds and bodies<sup>10 11 12</sup>. Neuroscience is helping us see into this process, showing how play activates the DNA that triggers the phases of human growth. If children fail to get enough play, they may miss key developmental milestones and find it hard, if not impossible, to make up the ground later in life<sup>13</sup>. A rich and diverse mix of physical, creative, emotional, social, digital and cognitive play in these early years is vital and ensures children make the most of these rapidly occurring but often fleeting opportunities for growth<sup>14</sup>.

Constructive play offers a great opportunity for children to develop physical and cognitive skills and to improve their fine muscle movements. They gain experience in testing their own hypotheses about the world, as well as learning to solve problems about the ways and sequences of fitting pieces together. Gradually, they also learn to cooperate with others; taking turns, playing games, devising contests, and resolving peer conflicts. All of these perform a vital role in children's developmental outcomes.



**Dr Zhen Wu,**Tsinghua University,
China



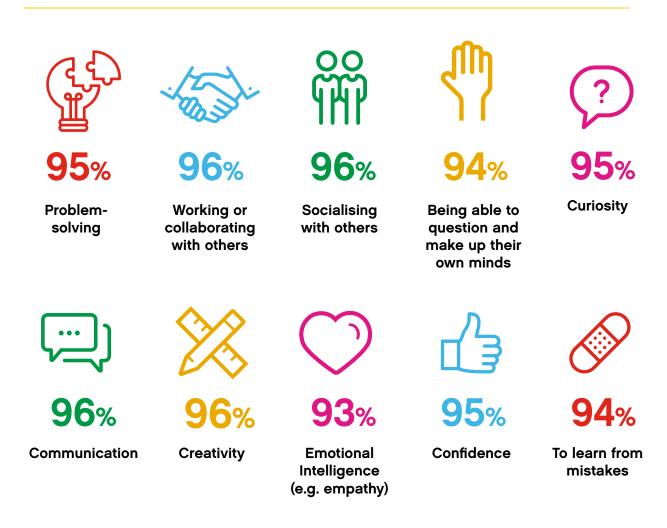
Play opens [my children] up to the world and helps them understand day-to-day life.

Parent, France



The research shows that today's parents are increasingly aware of the power play has to shape their child's personality, skills and emotional intelligence in the early years. More than 9 in 10 parents believe play is essential to their child's wellbeing, happiness and development. They recognise play helps build the skills that lead to academic success, but also how play helps foster creative, sociable, emotionally-resilient adults.

### Parents recognise how play can help children develop a number of different and important skills



As we grow older we can lose some of our playfulness. The transition from childhood into adolescence sees a significant tailing off in imaginative skills and with it, access to some of the long-term benefits of a playful mindset<sup>15</sup>. It is widely accepted in both education and in the field of child development that a playful mindset is the cornerstone of successful learning throughout our adult lives as well as in childhood<sup>16</sup> <sup>17</sup>.

In the study, 8 in 10 parents believe children who play regularly achieve more in higher education and go on to get better jobs. 8 in 10 parents also believe play helps children learn, whether at home, in kindergarten or in school. In fact, 8 in 10 parents say learning through play is one of the most beneficial educational techniques for developing their child's skills, ahead of reading books (7 in 10), classroom teaching (6 in 10), interacting with friends (7 in 10) and surfing the internet (2 in 10).

Children too believe in the power of play to help them learn. 8 in 10 say they learn more and learn better when it feels like play, again whether at home or in the classroom.

Play makes learning fun, so it's no surprise that early years, and even elementary curricula around the world are based on play. While learning core skills such as English and Maths is extremely important, couching these in a playful setting can make children want to learn. This desire to learn could transfer to later life, creating inquisitive mindsets in adulthood.



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Psychology in Education







Parents increasingly feel that life skills and playful teaching should be part of a child's schooling from the earliest possible opportunity. Many schools are already bridging the skills divide with more contemporary, blended curricula where life skills are integrated with STEM learning to allow both of these vital areas to develop in tandem as part of child-centred learning. So-called STEAM-based learning (the 'A' for 'Arts') adds art, music and creativity to the traditional STEM curriculum.

Most children, through schooling or from caregivers, are encouraged to focus on academic development, but are not always provided with the exposure and support necessary to develop other, less academic but still very important skill sets such as social emotional skills.

Parent, United States





93%

Of parents think play should be used as a tool for child development and learning in schools



91%

Of parents think play has a role in helping their child to succeed in school



Of parents think children who play more will achieve greater success in higher education and work later in life



83%

Of children say they learn better when it feels like play



Learning to innovate, motivate and problem-solve within science, technology, engineering, and mathematics is now considered essential<sup>19</sup>. Knowledge without transformative, creative thinking skills attached, is becoming less relevant as we move further into the fourth industrial revolution. Skills and knowledge, working in tandem, lead to innovation and problem-solving. Innovation is increasingly seen as the driver of social change and economic growth, with countries such as China and Saudi Arabia making creativity a priority throughout their education systems.

Many educationalists, governments and NGOs are now enthusiastic advocates of play as a way of helping children develop and enhance these important life skills. The integration of play-based learning into preschool settings and classrooms can be an effective way of transforming learning outcomes for children so fewer struggle with learning methods that do not work for them<sup>20</sup>.

A child is naturally primed to learn through play. The aim in education should be to create schools where children are encouraged to trust their instincts and continue using play as a tool for learning, growth and personal growth. This natural energy for playing should be affirmed in childhood by parents, teachers and schools but also maintained into adulthood for lifelong learning<sup>21 22 23</sup>. The development of individuals, families and society depends on it.



# **Play Makes Families**

#### The Benefits of Shared Play

While there are many ways of being part of a family, the benefits of play remain powerful and transformative – whatever form the family takes. Shared play, whether with friends, siblings, parents, carers or other adults, doesn't just benefit a child's development. It has many additional socio-emotional benefits for parents and families too<sup>24</sup>.

Whether it's outdoor play, role-playing games, imaginative play, digital play or a fluid mix of play types, families who play together regularly are happier, less stressed and healthier than those who lead low-play lives. The research has established clear links between the levels of happiness families feel and the amount of time spent playing together. 9 in 10 families who spend more than five hours playing together each week describe themselves as happy.

This figure falls to 7 in 10 families where less than five hours of family play happens each week. While the reasons for this decrease may be linked to longer working hours and less available time for play, the findings suggest that the more we play, the happier we become.

Quality playtime really brings us together and allows us to share special moments, which makes us both happy and enriches us emotionally and educationally.

Parent, Denmark

Play creates high-quality memories for me and my kids while helping shape their personalities.

Parent, China





+5 Hours **88**%

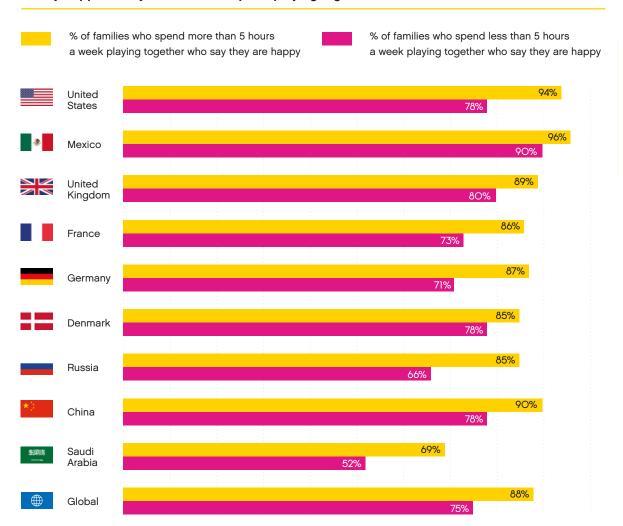
Of families who spend more than 5 hours a week playing together who say they are happy.



-5 Hours **75**%

Of families who spend less than 5 hours a week playing together who say they are happy.

#### Family happiness by time families spend playing together



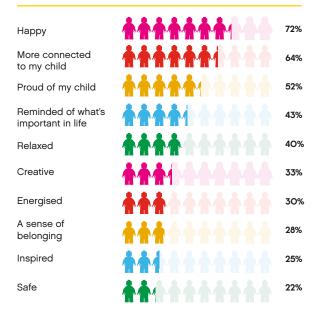


Play Makes Families

When asked how they feel when they play with their children, 9 in 10 parents choose positive emotions such as 'happiness', 'pride' and 'inspired'.

9 in 10 parents also say play is fundamental to their own happiness, and makes them feel relaxed, energised and more creative. The same number say play also strengthens family relationships, builds trust and helps them know their children better. The study suggests children agree. 9 in 10 say it makes them feel happy when their parents play with them, and believe play helps them relax and switch off from more formal agendas at school. This is echoed in academic work in the field<sup>25</sup>.

### The emotions parents say they feel when playing with their child



Q6. How do you feel when you play with your child? Base: All parent respondents n= 9249

Regular shared play also helps children build on the core skills developed in early childhood. Imaginary play, construction toys, musical games and art are particularly helpful in ensuring that these skills continue to develop as a child grows towards adulthood<sup>26</sup>.

Family play has also been shown to develop higher order interpersonal, emotional and social skills<sup>27</sup>. Playful, supportive and open relationships with parents and siblings build significant amounts of trust, empathy and tolerance, but also help foster creative risktaking and innovation. Family play further reduces anxiety in children. It provides a safe way for them to 'test drive' their emerging personalities and flex newly-acquired creative, cognitive and emotional powers.

Trust, empathy and tolerance are considered particularly significant and desirable in the emerging societies of the future. Interpersonal empathy leads to not only greater tolerance within families and cultures but also to much wider intercultural benefits for societies and global wellbeing<sup>28</sup>.

Quality play is when I play on my child's terms, and the game is joyful and educational at the same time. It means a time in the day where we can bond and develop a closer relationship and we can relax together through play.

Parent, Denmark

Flaytime is a moment of sharing laughter, pleasure and exchanges.

Parent,

France

Quality play means the play that helps my child's mental and psychological growth, encourages self-esteem and builds confidence.

Parent. Saudi Arabia

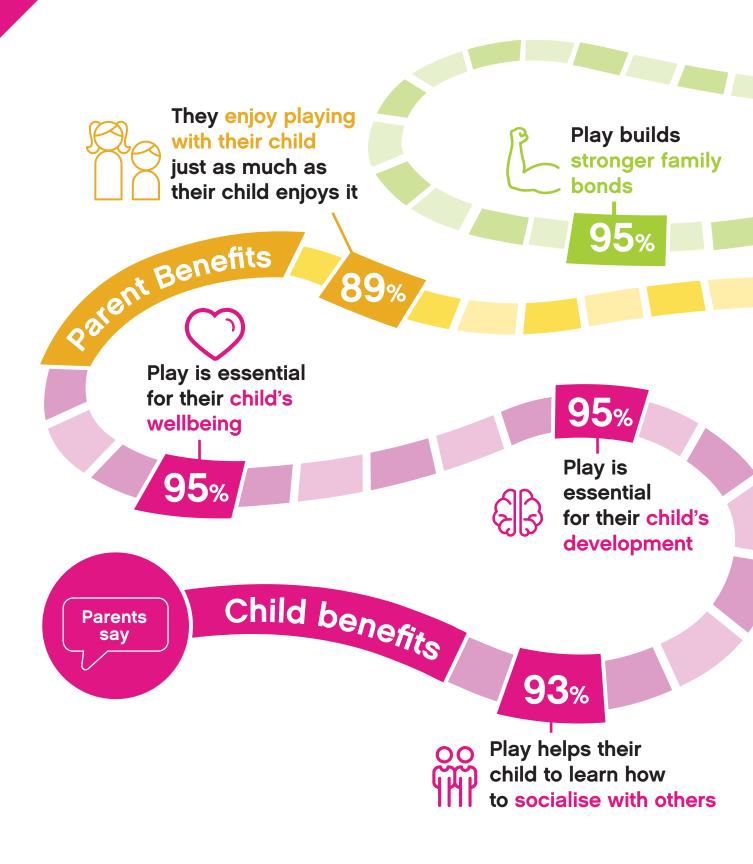
Quality play helps stimulate her mind and imagination to wander, and inspires her to be inquisitive while forming a deeper bond between us.

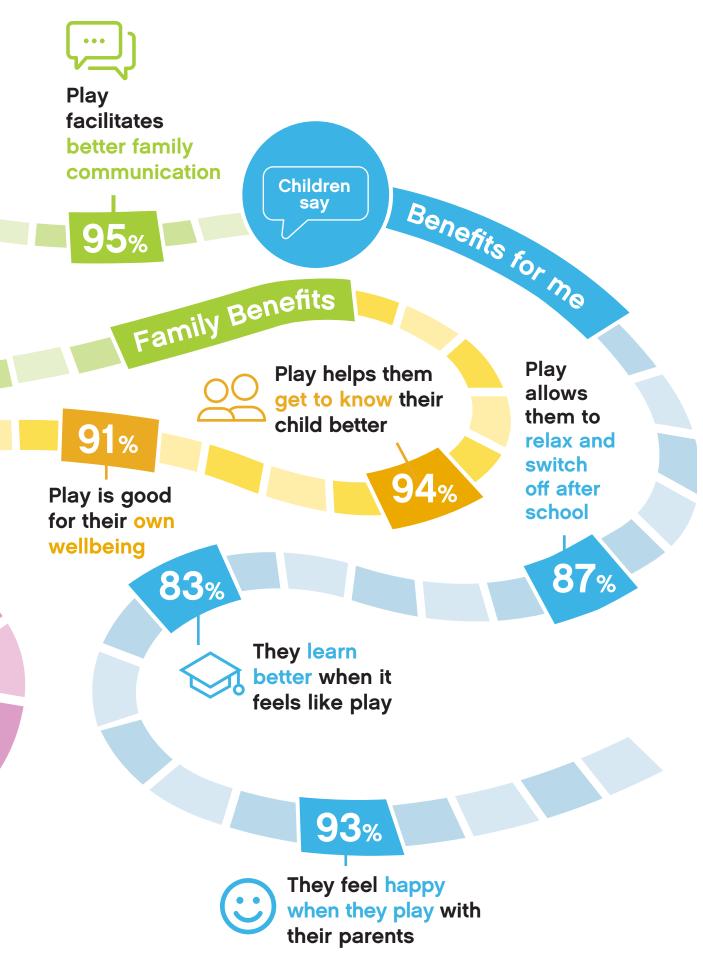
Parent, United Kingdom It brings us closer together and my kids can enjoy the time and learn at the same time.

Parent, China



Play is associated with a range of benefits, not only for the child but for the parent, and the family unit as a whole.







During play children practice social skills and social interactions in a setting where the stakes are low.

Through play, children learn to come up with ideas with others, share, cooperate, and think about other people's perspectives. And if they get it wrong, that's ok – it's just play – it could become a learning opportunity.



**Dr Elena Hoicka,**Senior Lecturer in
Psychology in Education

While family play is good for children it has profound socio-emotional benefits for parents too. 9 in 10 families say play strengthens family bonds and helps parents connect with their child's emerging personality, keeping them energised and involved as their children grow. This, in turn, makes a child feel valued and validated, raising self-esteem and self-confidence<sup>29</sup>.

Family play has a longer-term impact on creativity and wellbeing for parents. In a world where they increasingly recognise the need to stay agile, flexible and resilient themselves, play is also the permission many parents need to reconnect with their inner child. As they play with their children, parents rediscover their own playful natures.

The study shows that while the pressures of adulthood often turn us away from play as we get older, many of us are all still big children at heart. We enjoy playing as adults and like being around playful people. 9 in 10 parents say they enjoy playing with their child just as much as their child enjoys it, while 7 in 10 buy toys that they enjoy as much as their children will do!

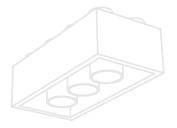
When we play, we have a good time together, learn together, and gain confidence in each other as friends.

Parent, Mexico



#### The De-Stressing Effects of Play

Given the demanding nature of modern living, perhaps the most positive impact of family play is the way it reduces stress and improves wellbeing and happiness. 9 in 10 parents say they gain valuable perspective on their own lives when they play with their children and that they are able to unpack their day and let go of daily stresses. 8 in 10 children also say that play helps them switch off and relax after a day at school. As stress can significantly restrict a child's socio-emotional development, regular family play helps ensure children are primed for growth<sup>30</sup>.



Research suggests that people who are more playful have a positive outlook and sense of humour, have less stress, depression, and anxiety. When unexpected things happen in our lives, we have a "fight or flight" response, with stress leading us to become aggressive or to flee. However, it has been suggested that a playful mindset may help us to rethink the things that happen and find a different perspective on events and positives in the situation.



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#### Parents say playing with their child....



Enables them to be more refreshed



Helps them to de-stress and unwind



Puts their **life** in perspective

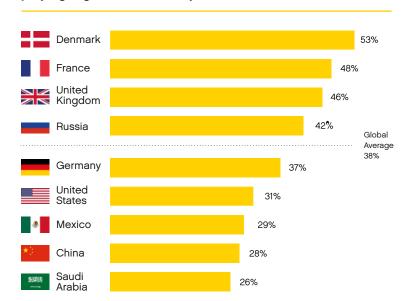
Family play, especially imaginary role-play games, abstract thinking, play with construction toys, painting and interactive digital play, also enhance creativity<sup>31</sup>. Creativity is often cited as a key ability for the growth and development of societies of the future. It is closely linked to innovation and problem-solving – the twin drivers of economic growth in many economies<sup>32</sup>.

#### The Play Gap

Though parents recognise the many benefits of play, finding the time for it is getting harder. A play deficit exists in homes around the world with children losing out to low-play lifestyles. 4 in 10 parents globally say they do not spend enough time playing as a family.

1 in 10 (10%) play for less than two hours. Though still high, this figure nevertheless suggests a majority of families around the world are making time for play in their lives – they just want more of it.

### % of parents who say they do not spend enough time playing together as a family

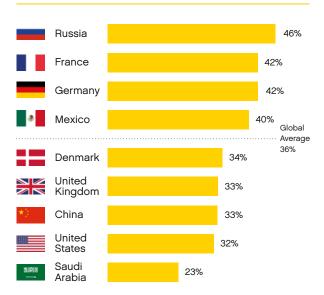


O3. Do you think you spend enough time playing together as a family? – No, we do not spend enough. Base: All parent respondents n= 9249; All parent respondents n= 9249, USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017

### Top barriers to playing more as a family

I just don't seem to have enough time in the day	36%
I have too much work to do / working long hours	33%
I have too much <b>housework</b> to do	31%
My child spends too much time on technology (e.g. video games, phone, internet)	21%
I spend too much time <b>on technology</b> (e.g. phone, internet, video games)	19%

### % of parents who say a lack of time in the day is the key barrier to more play



Q10. Which of the following, if any, do you think are preventing you from playing more as a family? Base: All parent respondents = 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017



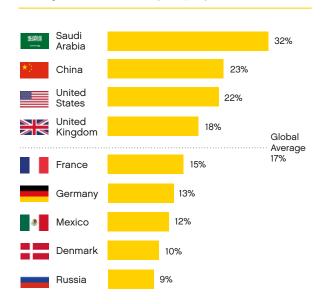
Children develop core skills such as creativity, empathy and self-control through free play. They cannot be measured with a grade or a test score, yet they are fundamental to a child's future success and happiness as adults.



Even if you only get 30 minutes a day [to play], it's worth every minute if you learn something new about each other and make memories...and a memory can be made in a moment.

Parent, United Kingdom

# % of children who say they don't have enough time in the day to play



O40. Do you think the following things are true or false – True. All child respondents n= 3723; Mexico: 418, United States: 419, United Kingdom: 417, France: 419, Germany: 414, Denmark: 410, Russia: 408, China: 406, Saudi Arabia: 412, boys: 2059, girls: 1663, 5-8 years old: 1841, 9-12 years old: 1882

Almost half of all children (4 in 10) surveyed say their parents are too busy for play, while 2 in 10 children say they have little or no time for play in their own busy lives. This contrasts with over 8 in 10 who want more family play with their parents.

The reasons for this gap between the amount of play families get and the play they want have their roots in our fears about the future and changes in our lifestyles. With uncertainty over the kinds of jobs and futures their children can expect now a major concern, many parents and educators are focused on traditional testing, extra classes and afterschool activities aimed at enhancing academic success. In doing so, they leave less room in children's lives for free, unstructured, self-directed play.

'Organised fun' has structure, goals and is often overseen by parents and teachers but is not experienced as play by children. It is the feelings of autonomy and self-determination fostered through unstructured play that helps children grow and evolve<sup>33 34</sup>.

The more we over-schedule children's lives, the less likely they are to de-stress and process what they have experienced in their day. Play isn't about accomplishing something or creating an adult-led activity that leads to measurable "learning". Play is learning. The key to great family play is allowing ourselves to be totally "in the moment", without any expectations.

Learning to play together as a family is a skill we can all learn. It means giving up a little piece of ourselves, so we can engage with our children and their world. When parents are open to being led by the child's imagination, children feel acknowledged, valued and validated for who they are. This is the foundation of high self-esteem. When parents allow themselves into their child's play space – without an agenda – and genuinely have fun themselves, the positive effects come naturally.

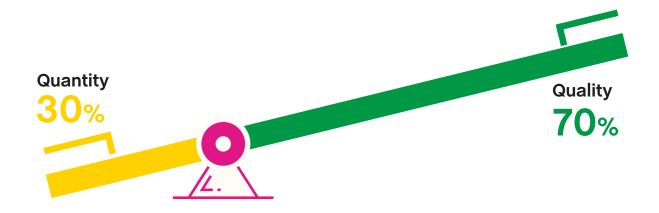
If we think of play as "we time" not "me time" and strive to carve out a space for it, it becomes easier to disconnect from the distractions of the world and reconnect with our children. When you consider the proven benefits of play, it may be the most important 'homework' there is.

Next time you are considering enrolling your child in another "educational" activity consider that if your own busy lifestyle stresses you, your child will mirror your anxiety. Breathe, relax and put out some toys or go outdoors somewhere beautiful and just let them play. Play is not the lazy choice. We may all soon discover that play was always the most educated and educating choice of all.



### **Quality Counts**

This study shows parents associate quality play with being fully immersed, without distractions, in their child's play world. Whether it happens online or offline, 7 in 10 parents around the world say the quality of play matters more than the amount of time they spend playing. Making time for creative, collaborative and imaginative play, free of distractions, is something parents want but find hard to achieve.



Q7. Which statement do you most agree with? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017.

Quality play means not just sitting with your child, instead actually interacting...and not being distracted, giving them 100% of your attention.

Parent, United Kingdom It is better to dedicate just 5-10 minutes to your child but...be fully with them, not just physically but also emotionally, and to "switch off" from all the adult thoughts and problems.

Parent, Russia When asked to rate the greatest barriers to quality playtime, 2 in 10 parents blame the time they spend on technology and the same amount blame the time their child spends using the same technology. When asked if they feel their social media and app usage gets in the way of playtime, 6 in 10 parents agree that their own habits prevent more playtime, while 5 in 10 also say their child's social media habits eat into valuable quality playtime. An increasing love of digital play amongst children and the ever-present distractions of email and smartphones (6 in 10 parents say they are easily distracted when playing) can help explain today's low-play lifestyles.

Quality playtime is when we have time to let the game take us wherever it wants. When we are not stressed or have an agenda. For example, when we go for a walk and play with things we come across on the way or when my daughter takes the lead and we follow her in the game.

Parent, Denmark







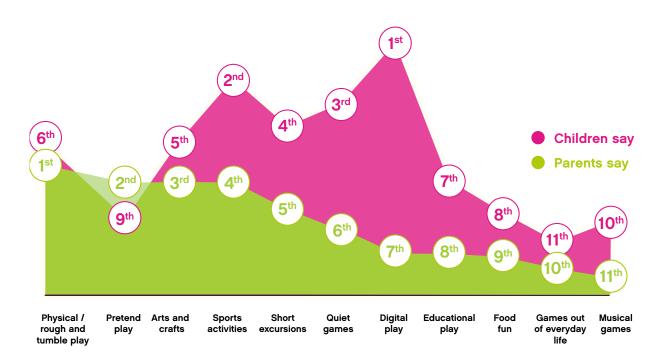
### The Changing Face of Play

When it comes to their favourite kinds of play the study shows the generations think differently. This can divide families when it comes to how they spend their valuable free time together. While parents preferred imaginative, tactile, make-believe games in their own childhoods, their children chose digital play over all other types.

Digital play comes 12 percentage points higher than any other pastime and 8 in 10 children say it is their favourite form of play. This digital play includes all forms of screen time including watching the TV, films or YouTube videos, browsing the internet, playing online games or apps, playing computer games or taking pictures.

Despite their concerns over technology (7 in 10 parents believe screen-based play stops children thinking for themselves), 6 in 10 parents are already using technology in games they are playing with their children, perhaps in an attempt to continue playing in the same way as their children do. 8 in 10 parents also admit that such digital play can be both creative and rewarding for children and families and 6 in 10 say they enjoy using technology when they play with their children and that digital play brings the family closer together.

# There's a generation gap when it comes to how adults and children rank their favourite play activities:



While they might prefer digital play, most children enjoy a balanced mix of play in their lives. Sports activities such as bike rides, football, dancing and swimming and quiet play activities like board games, puzzles and play that involves building things, still feature high on the list of favourite play activities in every country surveyed. Other play activities that rank highly across the countries surveyed involve short excursions to the park or museums, taking part in arts and crafts, as well as physical or rough-and-tumble play like hide and seek, playing on swings or playing tag.

Modern technology and the internet is giving my child more access to knowledge easily and in a fun way.

Parent, Saudi Arabia



#### The Future is Fluid

Many of the concerns parents have around digital play are similar to those that came with the arrival of other new technologies in children's lives through the ages. From the introduction of TVs, computers, console games, apps and mobile phones, to today's fluid digital experiences, children have always sought out new ways to make life playful.

In response to changing lifestyles, busier schedules, smaller living spaces and easier access to technology, children are using digital platforms more intuitively than ever before. In the process they have mastered the art of moving fluidly and frictionlessly from one play environment to another. This has opened up new opportunities for characters and stories to live in different play worlds anytime and anywhere a child wants them to. Children are creating bigger, more sophisticated and more rewarding experiences through fluid play than ever before.

Technology today allows children to still be creative and scientifically knowledgeable but learn in a fun way.

Parent, United Kingdom Today's kids are more technologically savvy and this makes them adapt quickly to the current environment.

Parent,

As parents rediscover their own playful natures and embrace these new forms of play, they are allowing more quality, shared moments to happen with their children. Fluid play can be seen as simply the next chapter in the evolving story of family play.

Another concern about digital play among surveyed parents is around children becoming less social. However, the findings reveal that 8 in 10 children surveyed prefer playing with parents or friends to playing alone and 7 in 10 prefer playing face-to-face with friends in the same room rather than through online interaction. These findings indicate that children value, and still prefer, in-person play experiences compared to solitary play, whether it is physical or digital. It tells us digital play does not necessarily displace other forms of play, nor the genuine desire to socialise. Done right, it adds a new and exciting layer to a child's play world and the benefits this brings.

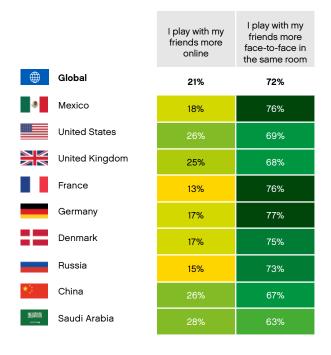


### The Digital Divide

Parents are, however, often still reticent to join in with digital play and seek to limit and control its influence in children's lives. Digital, screen-based play has become a source of confusion and tension for parents as well as a barrier to shared family play<sup>35</sup>.

This tension often manifests as parental guilt around technology and digital play. There is a lack of strong, detailed advice around the effects of screens on our children's growth and development and what 'good' digital play is – a knowledge gap that must be addressed if more fluid play is to happen in the lives of families.

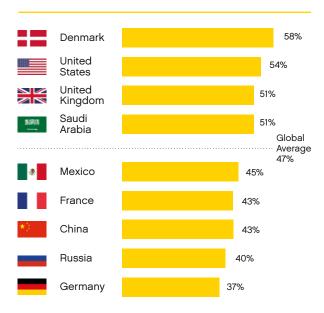
# Children play with their friends more face-to-face in the same room than online



Shading denotes lowest to highest across the 9 markets. The lowest score is in yellow and the highest in dark green.

# Q41. Do you play with your friends more online or in face-to-face in the same room? All child respondents n= 3723; Mexico: 418, United States: 419, United Kingdom: 417, France: 419, Germany: 414, Denmark: 410, Russia: 408, China: 406, Saudi Arabia: 412, boys: 2059, girls: 1663

# % of children that spend more than three hours a week on technology



Q11. Thinking about an average week, how much time do you think your child spends doing the following? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017

Technology can be both a help and a hindrance and needs to be used in the right way at the right time. Children's ability to learn can be hampered or enhanced by technology depending on how it is fostered.

Parent, United States Digital play is not going away. Parents should take a more active role in their children's digital play lives, not ignore them. By researching and learning about age-appropriate games and apps that foster creativity and allow fluidity from digital space to real space is a good start. Many of the same principles apply in digital play as in other forms of play. Physical and digital play may be different spaces, but they are increasingly working together to create a bigger, more holistic play experience.



**Jessica Joelle Alexander,**Parenting Expert

Digital play can have a positive impact on the way children can learn words, how to make objects, maths skills, and scientific facts. The key is choosing the right kind of digital play. Does the app look like it's teaching something useful? Is it aimed at the right age group? Does your child come away from the app wanting to try out what they have experienced in the real world?



**Dr Elena Hoicka,**Senior Lecturer in
Psychology in Education

Much remains to be known about how screen time links to children's psychological flourishing and developmental outcomes. Given that engaging in computers, tablets, smartphones or televisions is unavoidable today, we need a critical cost-benefit analysis to determine how to set a limit of digital time use for children.



### Online Safety - A Shared Responsibility

The study found that while online behaviours are maturing, 9 in 10 parents agree that online child safety is still a significant concern. Children are learning to 'self-police' when it comes to digital spaces, working with parental boundaries and rules for digital play. 9 in 10 children say their parents set ground rules for their online presence and go to them if they have concerns while playing online. Regardless of this positive trend in digital behaviours, continuing to issue 'best practice' on how to set and negotiate digital house rules will enable parents to navigate and embrace digital playgrounds more effectively. The learning here is ongoing; parents and children, policymakers and educators should review digital child safety on a regular basis.

### Children say

If I have any problems when I play online, I go to my parents



My parents have rules for how much I can go online and what I can do



Q34. How much do you agree/ disagree with the following statements? Base: All child respondents n= 3723; girls: 1664, boys: 2059; Mexico: 418; United States: 419; United Kingdom: 417; France: 419; Germany: 414; Denmark: 410; Russia: 408; China: 406; Saudi Arabia: 412 (Net T2B: Agree)

### Types of Fluid Play

Helping families to create the right mix of skills to thrive in the economies of the future means prioritising play as a tool for growth, learning and happiness. To do this, parents should look to their children and begin rethinking their ideas of what play should be in a changing world.

Parents have an important role to play. Giving them the information they need to make active choices may encourage them to embrace more fluid ways of playing together and help bridge the divide between digital and traditional play, opening up for more family play moments. While this report adds to an otherwise narrow body of research exploring the idea of fluid play in the lives of families around the world, we welcome more research and development for a more nuanced and sophisticated understanding of how play of all kinds affects our lives.

### **Adults say**

Online child safety is important when my child plays online



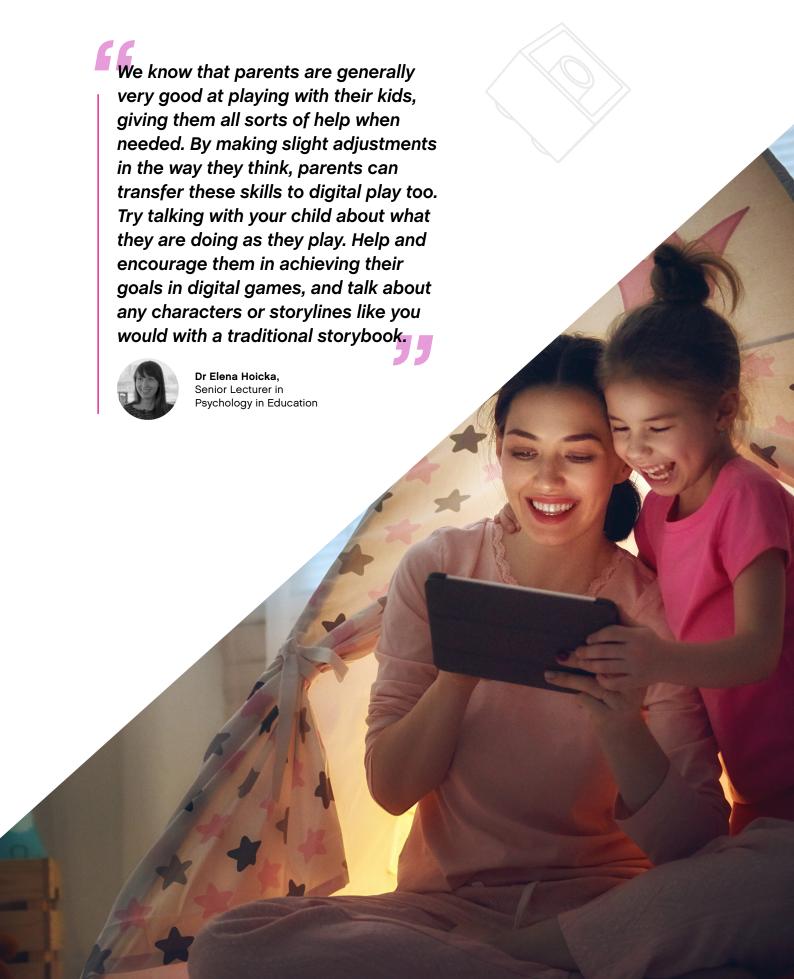
I talk to my child about the games they play / things they do online



My child comes to me if they encounter a problem while playing online



Q16. How much do you agree/disagree with the following statements? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net T2B: Agree)





Play Makes Families

Child development experts agree on the need for a diverse repertoire of play styles in childhood to help develop and hone a complete range of skills: motor skills, hand-eye coordination, social skills, creativities of all kinds and children's imaginations.

Developing a better understanding of the types of play in our children's lives, how to tap into them and allow digital layers to trigger more fluid play, is a first step towards making active choices about family play. What emerges from the research is a richer sense of how children play now. Different parenting styles exist, governed by their own values and sense of what good play is for. The report suggests that by embracing fluid ways to play, families can bring more play into their lives. Wherever it happens, digital or physical, the benefits of play can be better understood by looking at the type of activity.



### Social play

Online and offline games that allow people to connect and experience 'friendly competition', interaction and co-operation build social skills. Games where children collaborate promote empathy and social bonding, as well as a humour and wellbeing.



### Storytelling play

Games where children create plot lines and are proactive in deciding the fate of characters are more beneficial than ones where they passively consume story lines. Imagination, creativity and empathy can be further activated through digital storytelling. This self-determination in play empowers children to improve confidence and self-esteem.



### Critical thinking games

Play based on solving problems, puzzles and critical thinking helps children understand their own thought processes. These puzzle-based games online often ask players to explore an environment, question what they see and generate new knowledge rather than simply react to events on screen.



### Fantasy play

Imaginative games that ask players to immerse themselves in a role activate both creativity and imagination. This type of play helps children move beyond themselves and explore being 'other'. This builds empathy and self-awareness as well as being entertaining and exciting for children.

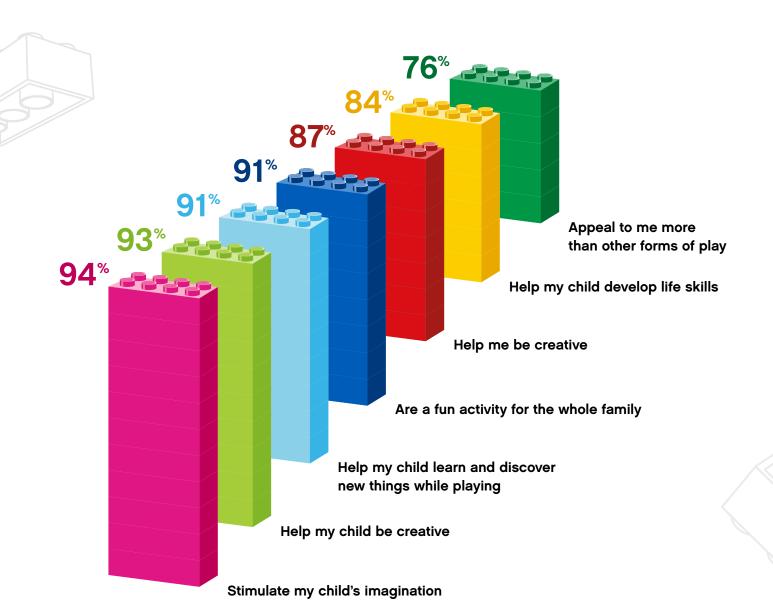


### **Constructive play**

Where play involves making, doing, testing, exploring, and working towards new goals – whether online or in the real world – the benefits are significant. The sense of progress and achievement as a child completes a challenge, and the high levels of creativity and problem-solving needed, helps foster intrinsic motivation, self-determination and a growth mindset.









# Play Makes a Better World

Fast-paced social, economic and technological changes are transforming the way we live, work and play in the Fourth Industrial Revolution.

Success in tomorrow's world will undoubtedly be built on a new mix of STEAM and character-based or life skills, such as communication and problem-solving, so children and adults remain adaptable, creative and resilient to the dynamic changes that characterise life in the new 'emotion economies'. In this study, 8 in 10 parents recognise the need for a different skill set to the one they learned as children.

7 in 10 parents also believe their children will increasingly be in competition with machine

automation and ever-cheaper forms of artificial intelligence, as the structural impact of new technologies on jobs becomes more visible.

This is mirrored in the recommendations of think tanks, educationalists, governments and NGOs around the world.

According to the World Economic Forum, employers are increasingly looking for individuals with strong non-cognitive skills. While these life skills are mainly complementary to cognitive skills such as memory, logic and problem-solving, they are growing in importance.



Our findings imply that as technology races ahead, low-skill workers will reallocate to tasks that are non-susceptible to computerisation – i.e. tasks requiring creative and social intelligence. For workers to win the race, however, they will have to acquire creative and social skills.

Oxford University
Martin Business School,
"The future of employment:
How susceptible are jobs to
computerisation?"

Social skills, teamwork, strength

- because of increasing
digitisation...such skills are
indispensable.

Parent, Germany



In the age of the internet, collaboration, leadership and communication skills are highly valued. These skills are more important than technical competence in many instances.

Parent, China





Creativity has risen to become amongst the most sought after of the essential life skills. Studies by the World Economic Forum highlight the rapid change in the perception of creativity as an essential skill, moving from 10th place on the list of Top 10 Skills for success in 2015 to projected 3rd place by 2020.

### Top 10 Skills

	In 2015		In 20	20
1.	Complex Problem-solving	1.	_	Complex Problem-solving
2.	Coordinating with Others	2.	<b>^</b> 2	Critical Thinking
3.	People Management	3.	<b>^</b> 7	Creativity
4.	Critical Thinking	4.	<b>▼</b> 1	People Management
5.	Negotiation	5.	<b>▼</b> 3	Coordinating with Others
6.	Quality Control	6.		Emotional Intelligence
7.	Service Orientation	7.	<b>1</b>	Judgement and Decision Making
8.	Judgement and Decision Making	8.	<b>▼</b> 1	Service Orientation
9.	Active Listening	9.	<b>V</b> 4	Negotiation
10.	Creativity	10.	•	Cognitive Flexibility

Source: Future of Jobs Report, World Economic Forum

Creativity will help in every single life situation, making children more adaptable to life's challenges.

Parent, United Kingdom Curiosity and creativity are important for children to learn new knowledge. This is very important as it is the motivation to explore new knowledge.

Parent, China 67%

Of parents say their child will have to compete with robots in the future for their jobs.



### The New Skills Mix

Rapid social and technological changes demand a mix of traditional STEAM-based literacies, such as science, technology, engineering and mathematics, with deeper social and emotional intelligences such as critical thought, problem-solving, communication and creativity. Parents understand the need for a new mix but are not always able to provide it. Globally, 8 in 10 parents say life skills are essential for success while 7 in 10 say STEM knowledge is also important. However, despite acknowledging its importance, 2 in 10 parents say they don't feel prepared to foster those skills for their children in the home.

Thelieve we are raising and educating our children towards a reality we don't even yet know ourselves. Thus, the actual upbringing is a paradox, as we are often inspired by our own upbringing.

Parent, Denmark

All children are born eager to explore, experiment, and create using whatever is available to them. It's more important than ever that we, as adults, nurture that curiosity by providing ample opportunities for children to experiment and to try out new and creative ideas – both in and out of school. These opportunities enrich their everyday lives, allowing them to practice and develop skills that are critical for thriving in the 21st century; skills like problem-solving, creativity, critical thinking and communication. Having a broad range of skills has become far more important than being able to memorise large quantities of information, in preparing our children for a future where flexibility and innovation will be needed, for the individual and society.



**Bo Stjerne Thomsen,**Head of the LEGO Foundation Centre for Creativity, Play and Learning

### The Skills Lag

While STEM skills are still a high priority within education in most countries, there has been a general recognition that knowledge-based learning needs to be complimented by more creative, entrepreneurial and problem-solving skills. As education adapts to the rapid transformation of our societies, a lag has developed between the STEM-based skills taught in schools and the life skills children need to thrive and compete.

Most countries and economies now recognise creativity, communication, collaboration, imagination, innovation and empathy as essential drivers of growth. These life skills are joining the list of 'must have' additions to

the raft of 21st century skills, with initiatives being undertaken to foster them. Asked to list the life skills most closely associated with future success and happiness for today's children, the top responses in our study were: Confidence, Communication and Creativity. Though individual countries prioritise different skills, these three skills are close to the top of all lists and represent a core skill set.

Creativity, in particular, is being prioritised in countries like China and Saudi Arabia where it is strongly linked to research and development, innovation in business, finding solutions to complex business challenges and social innovation that lead to economic prosperity.

Children have to, in the first place, have confidence in themselves to be able to communicate with others, and to achieve success in life. Because with confidence comes communication, interaction with others, sharing, and making decisions.

Parent, United States

To succeed in the future a child must have knowledge, creativity, and an ability to communicate well.

Parent, Saudi Arabia Creativity helps develop children's divergent thinking which will increase our innovation capabilities in the future.

Parent, China

The survey also reveals that parents perceive children as naturally creative and also believe it is a skill that should be nurtured and preserved into adulthood, claiming it is important to children's future success. 8 in 10 parents see themselves as creative whereas 9 in 10 see their children as creative. 7 in 10 parents also believe creativity can be taught and 9 in 10 believe creativity is activated through play with educational and construction toys. The creativity gap between parents and children found globally in this study is also reflected in the literature on creativity and child development. The decreases in creativity are often associated with the transition away from the supportive home environments to schools where a child's fear of getting things wrong and the focus on knowledge over creativity can often stifle their instincts36.

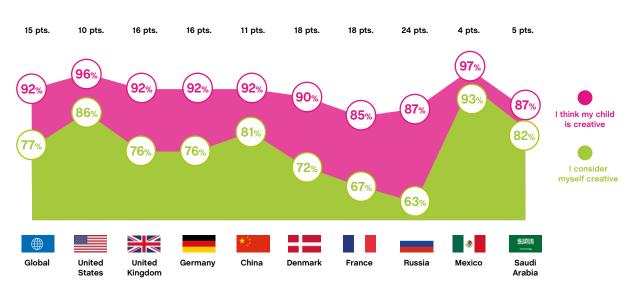
Our education systems need to better equip children for their future instead of focusing on developing their skills within a narrow set of academic disciplines. The world is changing more quickly than ever before, and children will grow up facing many new and uncertain circumstances; the key to their success and wellbeing will be the ability to think and act creatively.



**Bo Stjerne Thomsen,** Head of the LEGO Foundation Centre for Creativity, Play and Learning



### % difference of parents who consider themselves creative vs. those who consider their child creative



Q26. How much do you agree / disagree with the following statements? – I consider myself creative Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net: T2B: Agree) // Q26. How much do you agree / disagree with the following statements? – I think my child is creative. Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net: T2B: Agree)

### Play Makes a Better World

Though building the dynamic workforces of tomorrow has become a key initiative in many countries – and a talking point in the global business media – there are many far-reaching benefits to society of a more emotionally-agile population. What starts with individuals and grows through shared play into family benefits, ripples outwards into communities and societies<sup>37</sup>.

The function of creativity and other life skills isn't simply to help innovate for economic gain, but to socially innovate and improve society. Issues of poverty, inequality and social division are rife across the world. Solving these complex problems, building more tolerant and equitable societies, relies on social as well as technological innovation.

Parents that say children can be taught how to be creative

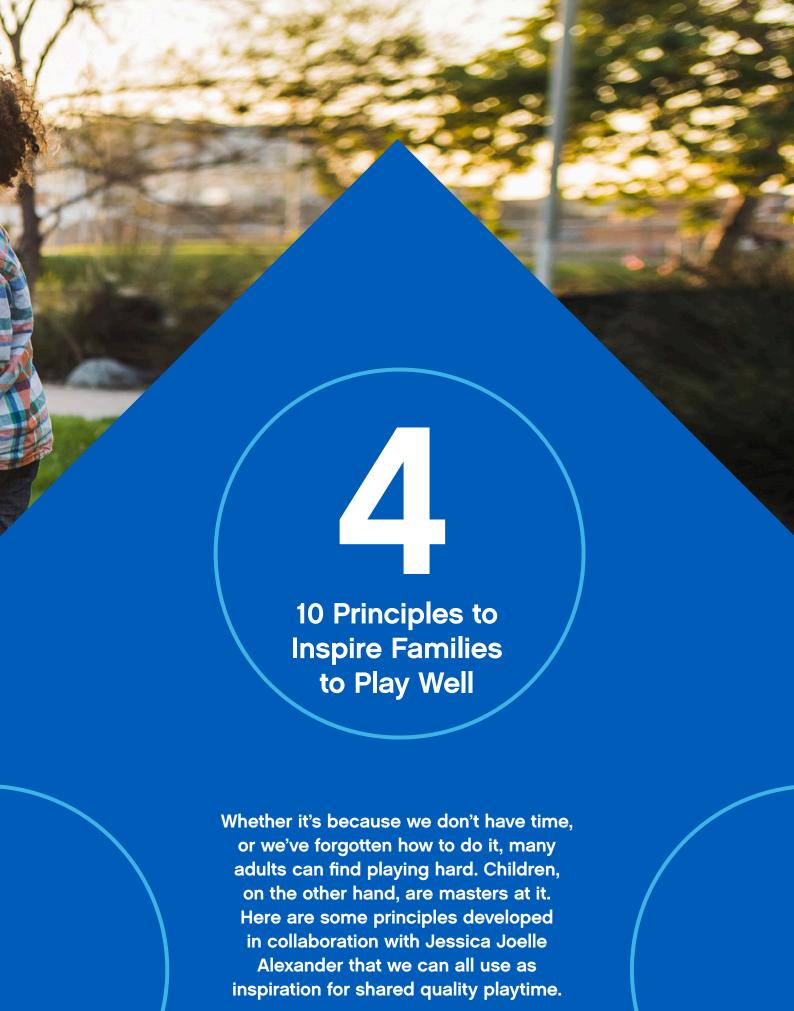


Tackling these endemic issues around the world requires more pro-social behaviours – ones that involve sacrifice, co-operation, collaboration and co-creation for the good of society, not simply to benefit the individual.

Playing well, and maintaining a more playful mindset through life, makes the world a better place. There is strong evidence emerging that populations that are more emotionallyliterate, have greater self-knowledge and more developed social skills, create more tolerant and inclusive communities<sup>38</sup> <sup>39</sup>. Tolerance and greater cultural awareness flow from awareness, empathy and the reflexive understanding of others<sup>40</sup>. Social innovation grows from creativity, confidence and strong leadership - all qualities nurtured through play41. The questions arising from this report and the research around the benefits to society of more tolerant and empathetic people are how play can be fostered in children to help grow fairer, more open, inclusive and pro-social communities in future.







# Principles to Inspire Families to Play Well

### Challenge Your Mindset

Start by challenging the way you think. Play is not the lazy choice. The benefits of play are profound for children, families and society. Believe in them and commit to making play a priority, be it in the physical, digital or both worlds.

# 2 Encourage Free Play

The less structured and supervised play is, the more rewarding children find it. Give a few inspirational directions but let children direct the action. Free, self-directed play empowers children, so they develop confidence, autonomy and self-esteem.

# Kickstart with Physical Play

A small amount of physical play can help parents get into the right mindset for play, especially after a long day at work. Just ten minutes of an activity that gets hearts pumping and creates laughter helps families to connect in a way that is fundamental to family play.

### Variety is key

There are many ways to play:
physical, creative, emotional,
social, digital and cognitive.
Balance and variety is
essential to develop
a breadth of skills.
Encourage your child
to pick from a menu
of multi-sensory play activities
– active social play, online
storytelling played out in real life,
critical thinking and puzzle games,
fantasy and constructive play.

## Go with the Flow

Flow is a psychological state we get to when we play well. We become highly creative, lose sense of time and experience deep contentment and learn most easily. When play starts to unfold easily and effortlessly, note what you were doing...then do more of it the next time you play.

10 Principles to Inspire Families to Play Well

# Think Creativity over Mess

Most of us like to keep the house neat and tidy, but that can mean we are hiding away vital playthings. Children don't see mess, they see a stimulating environment full of tools to help them be creative. Adopting this view should help us leave out toys and craft supplies more easily, even at times when we struggle to see nothing but mess!

# Embrace Mistakes

If your child makes a mistake when you are playing a game together online, or building something in the real world, don't tell them or fix it straight away, let them figure it out for themselves. Ask them why they are correcting it in the certain way. Help to support and not direct, it will work to build resilience and a growth mindset.

### **Be Silly**

Children like seeing parents being silly. Choose a real-life or imaginary person, film or TV character together and play it out with your child. Funny voices, mimicry and physical actions help children flex their imaginations and storytelling abilities and helps you explore emotions together and better get to know your child's world.

Plan a Family Playdate – and Keep It!

Children love having something to look forward to, so plan a family playdate together, even if it's just 15 minutes before dinner. Let them call the shots by choosing the layout, snacks, games to play or movies to watch. Planning the date themselves will encourage them to be creative and train their decision-making skills.

# **Gamify Chores**

We all have to do chores – even kids – but they don't have to be boring. A simple way to make them more fun is just

to put on some music and turn
dusting or folding into a dance
party. Or add an element of
competition by trying to beat the
clock as you all join in to clear
away the dishes, turning chores
into precious bonding time.





### The Future of Play

The Global Insights team at the LEGO Group immerses itself in the daily lives of families all over the world, continuously repainting the picture of the play landscape of today. As the team spends time with children and parents and observes their ever-changing attitudes and behaviours, it sees glimpses of how the future of play may look.

Play will continue to be a cornerstone of the lives of children and families, and the tools for play (including toys) will continue to evolve to suit the time, spaces and places available. We already see many physical stores evolving into more interactive and playful environments for example, and self-driving cars may well redefine the role of play in the planet's most popular mode of transportation.

Technology and digital developments also play an important role in the future of play and technology like Artificial Intelligence (AI) and Augmented Reality (AR) has only just started to show its potential in changing how we play, learn, and interact. In the next decade we see technology moving out of our hands and into the background. Voice assistants have already shown that we can be less dependent on the phones in our pockets, and we expect these intuitive forms of interaction to continue to evolve as we transition to a "post-app" world.

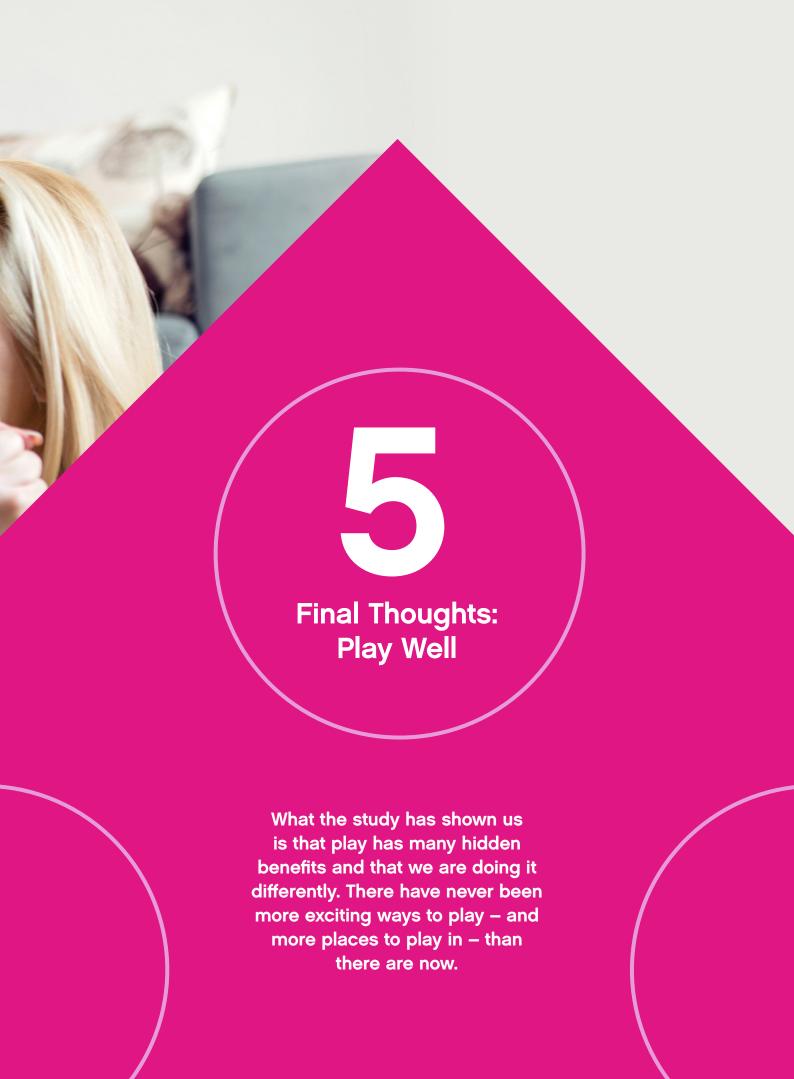
This data-driven future allows play experiences to boost inclusivity by adapting to individuals, changing the way we tell stories and communicate. These changes allow children greater control over the world around them. At the LEGO Group, we are very conscious that this vision of the future can only become a positive reality if we are sensitive to, and take meaningful steps to address, the potential negative impact of these technologies on children's rights, interests and wellbeing. Collecting and handling consumer data correctly is a key strategic priority within the LEGO Group and we will continue to uphold and advocate for the same strict safety and quality standards implemented across our physical and digital play environments.

The LEGO Group feels a responsibility in actively shaping the future of play, enabling families and children to connect through valuable play experiences. This includes aiming for the most positive version of the future where we focus on inclusivity and equality, and utilise the best in digital developments to further enhance the physical LEGO® play experience. We will do this in a way that is true to the original idea of the LEGO System in Play and guided by children, our role models. The LEGO brick will continue to play a critical role in inspiring and developing the builders of tomorrow, now with even more endless possibilities to do so through fluid play.

We also see that the emerging generation, Gen Alpha, wants to contribute to building its own future, hacking and customising play experiences to suit its changing worlds. This sort of freedom and creativity is a positive sign that the future is in good hands.

The LEGO Group Global Insights team





Final Thoughts: Play Well

We have revealed how play can shape our happiness and wellbeing as individuals, as families, and in society more widely. While we don't always engage enough in it, we like it, value it and want more of it, not just during childhood, but throughout our lives.

As we adapt to new ways of living and working, play keeps us agile, fluid, creative and able to cope with the uncertainties we face. It builds self-esteem, confidence, better relationships and develops our minds and bodies too. And let's not forget that play is, above all, fun.

Getting more play in our lives begins with a change of mindset. Believing in the transformative powers of play and prioritising it in our busy lives are two steps we can all take to ensure we make the most of the opportunities for happiness, learning and growth that come with it. Becoming familiar with the fluid landscape of modern play is a good way for adults to begin relearning how to play.

Though the research into digital and fluid play is in its infancy, there are early signs it has a positive impact on child development, learning and creativity as part of a balanced mix of play types. While further research is needed to help us understand the right balance of digital play and how it affects child development, children are already giving us clues about the future. Hacking their own learning, customising their play worlds and seamlessly moving between real and virtual spaces, they are showing us that the story will continue to evolve and change, just as it always has done, to meet the needs of each new generation.

Children will continue to lead the way.

As adults we must commit to protect and prioritise play.

Because our children's future depends on it.

Because you and your family deserve it.

Because society needs it.

Play Well.









# **APPENDIX A.** Key Findings by Country

### The impact of family play on parents

	Global	Mexico	United States	United Kingdom	France	Germany	Denmark	Russia	China	Saudi Arabia
I enjoy playing with my child as much as my child enjoys it	89%	94%	90%	91%	87%	87%	84%	84%	97%	86%
Playing with my child gives me a chance to be silly	86%	83%	95%	94%	77%	92%	91%	94%	80%	70%
Playing with my child helps me to de-stress and unwind	86%	92%	88%	88%	86%	82%	80%	75%	95%	86%
Playing with my child helps me bond with them and strengthens our relationship	96%	96%	97%	97%	97%	96%	96%	98%	99%	89%
Playing with my child helps me put life in perspective	89%	94%	94%	94%	83%	83%	85%	89%	96%	86%
Playing with my child helps me feel less stressed for the rest of my day	84%	91%	88%	87%	80%	80%	73%	76%	96%	84%
I sometimes put my child in front of a screen to distract or entertain them	64%	55%	68%	71%	56%	48%	65%	69%	76%	64%
I buy my child toys to keep them busy, so I can have free time to myself	47%	36%	56%	51%	46%	41%	34%	42%	57%	61%
Spending time playing with my child enables me to be more refreshed	83%	85%	87%	86%	88%	80%	83%	64%	92%	84%
Playing with my child gives me a chance to be creative	90%	94%	94%	92%	85%	90%	89%	84%	93%	87%
When I play with my child, I often feel distracted (by emails, texts, housework etc.)	61%	64%	66%	67%	54%	48%	55%	54%	77%	65%
Play is essential for my child's overall well-being	95%	96%	96%	97%	96%	95%	95%	97%	98%	87%

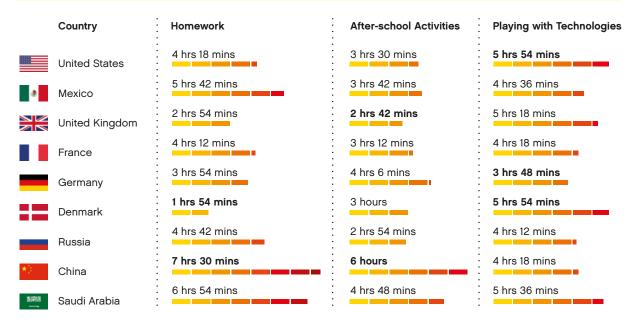
Shading denotes lowest to highest across the 9 markets. The lowest score is in yellow and the highest is in darkest green.

O12. How much do you agree/disagree with the following statements? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net T2B: Agree)



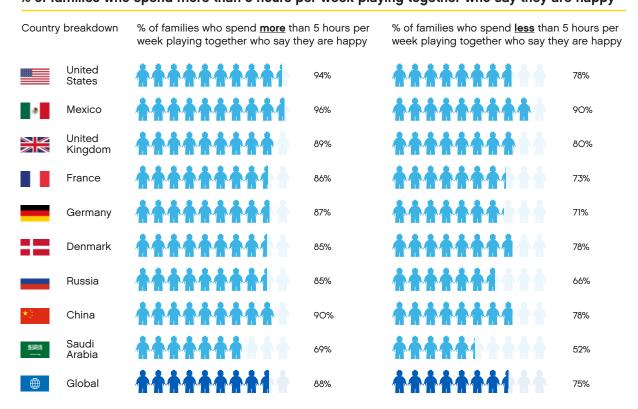


### The average amount of time children spend on the following activities in a week



O11. Thinking about an average week, how much time do you think your child spends doing the following? Base: All parent respondents = 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017

### % of families who spend more than 5 hours per week playing together who say they are happy

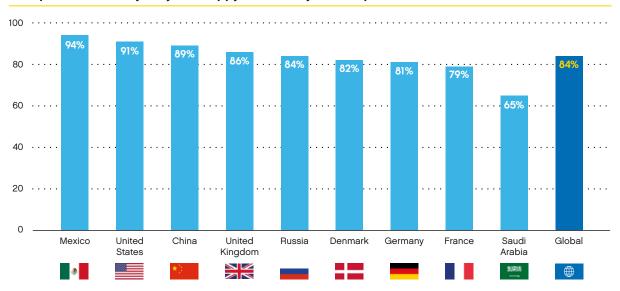


Q13. In general, how happy are you as a family? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net T3B: Happy)



### APPENDIX A. Key Findings by Country (Cont.)

### % of parents who say they are happy as a family (Net: Top 3)



Q13. In general, how happy are you as a family? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net T3B: Happy)

### The amount of time families spend playing together in a typical week

	Global	Mexico	United States	United Kingdom	France	Germany	Denmark	Russia	China	Saudi Arabia
More than 10 hours a week	36%	28%	49%	37%	23%	28%	26%	27%	63%	42%
More than 5 hours a week, but less than 10	33%	47%	32%	36%	27%	36%	34%	28%	25%	33%
More than 2 hours a week, but less than 5	20%	18%	13%	18%	30%	24%	23%	29%	10%	18%
Less than 2 hours a week	7%	5%	3%	6%	15%	9%	12%	10%	2%	4%
Very little, or none	2%	1%	2%	2%	4%	2%	3%	5%	0%	1%
NETs: More than 5 hours a week	69%	76%	81%	73%	50%	64%	59%	55%	88%	75%
NETs: Less than 5 hours a week	30%	24%	18%	26%	49%	35%	38%	44%	11%	23%
N.B Percentages which do not add  Shading denotes lowest to highest across to 100% are due to rounding.  the 9 markets. The lowest score is in yellow										

Q2. How much time does your family spend playing together in a typical week? All parent respondents n= 9249, USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017. N.B Percentages which do not add to 100% are due to rounding

and the highest is in darkest green.

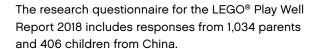
### Parents recognise how play can help children develop a number of different and important skills

	Global	Mexico	United States	United Kingdom	France	Germany	Denmark	Russia	China	Saudi Arabia
Problem Solving	95%	98%	96%	96%	94%	95%	96%	93%	98%	90%
Working / collaborating with others	96%	98%	97%	97%	94%	97%	98%	96%	98%	91%
Socialising with others	96%	98%	98%	97%	95%	93%	97%	97%	98%	90%
Being able to question and make up their own minds	94%	97%	95%	95%	89%	96%	94%	89%	97%	88%
Creativity	96%	98%	97%	98%	95%	97%	96%	98%	98%	91%
Communication	96%	98%	97%	98%	95%	97%	98%	94%	98%	90%
Curiosity	95%	97%	96%	96%	96%	97%	95%	96%	97%	82%
Emotional Intelligence (e.g. empathy)	93%	97%	96%	94%	88%	93%	95%	93%	95%	89%
Confidence	95%	98%	97%	97%	92%	97%	95%	92%	98%	90%
To learn from mistakes	94%	96%	97%	96%	93%	95%	93%	92%	96%	90%

Shading denotes lowest to highest across the 9 markets. The lowest score in yellow and the highest in darkest green.

Q24. To what extent do you agree/disagree that 'play' can help children develop the following skills? Base: All parent respondents n= 9249; USA 1045, UK 1038, China 1034, Mexico 1042, France 1025, Germany 1024, Saudi Arabia 1014, Denmark 1010, Russia 1017 (Net T2B: Agree)

# **China**



### The State of Play in China

Play is at the heart of Chinese family life. Though Chinese families have less time for play than other countries surveyed, they value play more highly than any other country with 99% saying it is important to play with their children.

Play is seen as a way of strengthening emotional bonds and helping parents and children de-stress and reconnect at the end of the day. Chinese families also see family play as a way of enhancing relationships (99%), helping parents put life in perspective (96%), building trust (99%) and teaching children how to socialise (98%). And 90% of Chinese families who play together for more than 5 hours a week describe themselves as happy. Less than 5 hours a week, and the figure falls to 78%.

#### **Barriers to Play**

Though 97% of parents in China recognise the importance of play for their family's cohesion and wellbeing, behaviours do not yet always reflect this. Parents and children in China face more time pressures than other countries surveyed. Chinese children spend an average of 7 hours 30 minutes a week on homework, the highest of any country surveyed, with more time in after-school clubs and activities too (an average of 6 hours per week). This is significantly higher than the global average of 4 hours and 40 minutes of homework and 3 hours and 48 minutes spent on after-school activities a week.

Despite their busy lives, only 28% of Chinese parents say they don't get enough family play, 10 percentage points below the global average. In contrast, and perhaps because of their busy schedules and high levels of homework, Chinese children rate 6 percentage points above the global average (17%) of children saying they do not have enough time to play in their busy schedules. Only Saudi Arabian children say they have less free time for play.

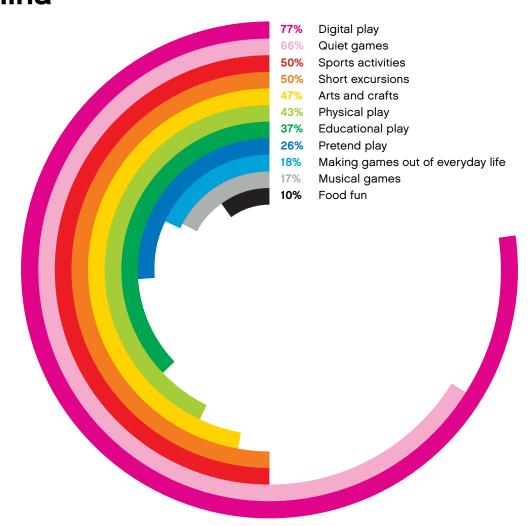
### 21st Century Skills

Asked to rank the key 21st century skills, Chinese parents highlight creativity, communication and confidence as the most essential for future success and wellbeing. Creativity has been the focus of government and cultural initiatives in China, aimed at helping the country become an entrepreneurial and innovative powerhouse in the coming decades<sup>42</sup>. In response, Chinese educators are changing their approach to teaching and learning, acknowledging the importance of creativity as a precursor of innovation and entrepreneurism. In line with this shift, more Chinese parents say life skills are important for their child to develop compared to the amount of parents who say STEM skills are important - although the two rank closely at 82% and 79%. Though 97% of Chinese parents feel that spending time as a family is important to teach their child new skills, 32% do not feel equipped to help their child develop the future skills needed.

### Digital and Play

Though digital play sits at the top of Chinese children's list of favourite play, it ranked lower than other countries surveyed at 77% against a global average of 85%.

## Children's preferred play activities China



Chinese families believe that technology is, essentially, a positive force in people's lives with 88% saying it can help bring families together, the highest of all countries polled and 29 percentage points above the global average. Despite this, and although below the global average of 72%, 66% of Chinese parents believe technology makes children less able to think for themselves.

#### **Learning and Play**

Though Chinese families do not have as much time for play, they believe play to be the path to better and more effective learning. 95% of Chinese parents believe play should be used in school as a tool for learning, supported by 94% of children who say they learn better when it feels like play. 92% of Chinese children believe that teaching should be fun. 95% of Chinese parents further perceive construction toys, such as LEGO bricks, as useful tools for developing creativity and learning.

### Denmark



The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,010 parents and 410 children from Denmark.

#### The State of Play in Denmark

Danes love to play with 79% saying it is very important to play with their child. They just don't get to do it enough. While 95% of Danish parents recognise the profound benefits of play, saying it is fundamental to their children's wellbeing, 53% say they don't have enough family play in their lives. This is the highest of all countries polled, 15 percentage points higher than the global average.

Perhaps because of this, levels of happiness in Danish families are lower than countries such as Mexico, China and the United States. 85% of families who play for more than five hours a week say they are happy compared to 78% of families who play for less than five hours a week. When play does happen, parents say it strengthens bonds and allows them to feel more connected and creative (89%), to be silly (91%) and to de-stress and unwind (80%).

#### **Barriers to Play**

Time and technology are the twin barriers of play in the lives of Danish families. Danes are time-poor and increasingly experience low-play lifestyles. 34% of parents admit to not having enough time in their busy lives for play. 47% of Danish children say their parents are too busy to play, with only 10% of children saying they don't have enough time to play themselves. Though Danish children are the least over-scheduled of any country in the study, with only 1 hour and 54 minutes of homework a week and three hours of after-school activities, they still get less play overall than children in most other countries.

The high use of technology is also seen as a significant barrier to play. Danish children are opting

for digital play over other forms, averaging nearly 6 hours per week, with 34% of Danish parents ranking their child's digital habits as a barrier to playing more. This is 13 percentage points higher than the global average. 46% of Danish parents also admit their own social media use prevents them from playing with their child more.

#### 21st Century Skills

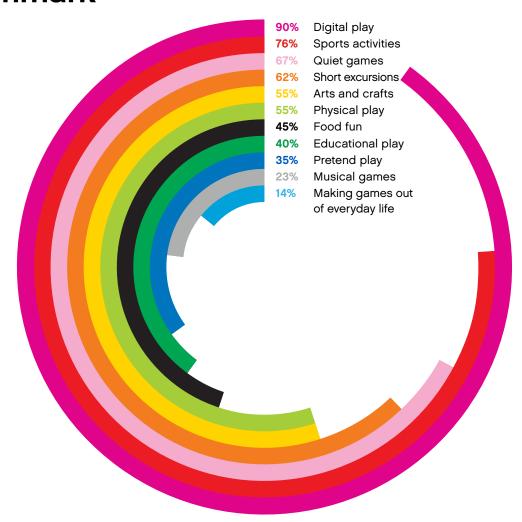
In Denmark, the focus of parents is on interpersonal skills such as emotional intelligence, being able to socialise well and independent thinking – the top three 21st century skills parents see as important for their child's future success and wellbeing.

Though creativity does not rank amongst the top three most desirable attributes for success, it is, nevertheless, considered vitally important in Danish life. While only 27% of parents in Denmark believe creativity is significant to their children's future success (13 percentage points below the global average), 90% believe being creative with their children is important. 82% of parents in Denmark say life skills are important compared to 69% believing STEM subjects to be as useful.

#### Technology and Play

Danish families have a complex relationship with digital technologies. They recognise the benefits of technologies whilst also having concerns about its influence over their children's lives. Like most countries surveyed, there is a growing digital divide between the generations. Danish parents have a mistrust of digital technology, with less than half (49%) saying it brings families closer together. Danish children, meanwhile, are enthusiastic users of digital tech with 90% saying it is their preferred way to play, the highest of any country polled.

## Children's preferred play activities **Denmark**



Danish parents have the fewest rules about play in the digital and online spaces with 82% of children reporting their parents regulate online access and activities. This compares to a global average of 90%. The Danes also rank lower than any country when asked if digital play hinders independent thinking in their own children at 60%, lower than the global average of 72%. Despite their reservations about the impact of digital on their family life, 86% of Danish parents say digital play can be creative for children. Although there are large generational tensions over digital play, 92% of children say they like playing with their parents and 75% enjoy face-to-face play, one of the highest responses of surveyed countries and 3 percentage points above the global average.

#### **Learning and Play**

Danish parents believe play is an important tool for learning in school and at home. 93% say play should be used in schools to help children learn with 74% of children saying playful teaching in school helps them learn more effectively.

98% of Danish parents believe play helps build collaborative skills and develops communication and social skills. Though not ranked as high in importance compared to other countries, 96% of parents say play is important for the development of creativity in their children.

### **France**

The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,025 parents and 419 children from France.

#### The State of Play in France

Compared to other countries in the global survey, France has a low-play culture. Some 78% of parents say it is very important to play with their child, and the same amount recognise play as fundamental to their child's happiness and wellbeing but still find it hard to make time for it in their busy lives. 48% of parents and 15% of children say they are too busy to play, and 48% of parents also say they are not spending enough time playing together as a family - the most dissatisfied of all the countries polled. When they do find time, 94% of French children, the highest of all polled, say that playing with their parents is fun. There is also a clear link between the level of family happiness and hours played together: 86% of families that play together for more than 5 hours a week say they are happy compared to the 73% of families that play for fewer hours a week.

#### **Barriers to Play**

The play deficit in France is, as in the other European countries surveyed, the result of busy lifestyles. Long working hours, hectic social lives, housework and the distraction of technology all impact on the amount of free time French parents have for family play. French children, comparatively, do not have over-scheduled lives. Of all the countries polled, French children have some of the lowest amounts of after-school activities (3 hours

and 12 minutes). Even China, with the highest polled levels of child homework and after-school activities, manages more family play than families in France.

#### 21st Century Skills

French parents highlight confidence, curiosity and learning from mistakes as key 21st century skills for success and wellbeing. Confidence, particularly, is ranked highest and most desirable by French parents at 73%, compared to curiosity at 49% and learning from mistakes at 45%.

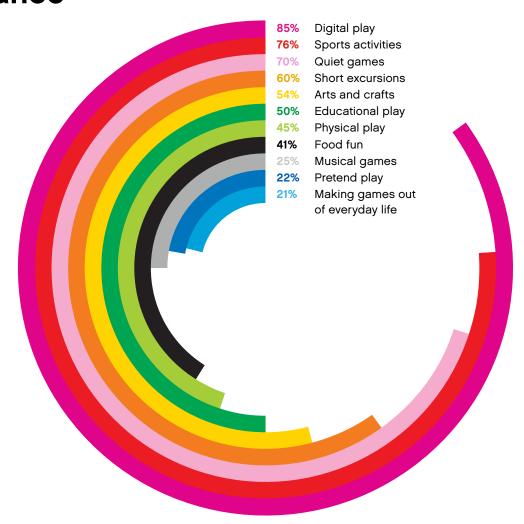
While French parents do not consider creativity as the most crucial skill for the future success of their child, 87% say it is important to spend time being creative. Although high, this is the lowest of all countries surveyed and 5 percentage points lower than the global average. With 17% of French parents saying they are not equipped to teach 21st century skills there is a widening skills gap emerging in France. Only China at 32% of parents and Russia at 21% say they are less equipped than French parents to help children develop the essential skills they need.

#### **Technology and Play**

Along with all other countries polled, digital is the favourite play type of French children at 85% agreement.

In terms of their use of technology, French children are near the bottom of the poll at just over 4 hours per week of digital play. They prefer face-to-face play and have the lowest levels of online group

## Children's preferred play activities France

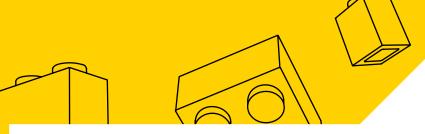


play of all the countries included in the study with just 13% of French children saying they play with friends more online than face-to-face. French parents remain relatively untroubled by the internet and digital play in the children's lives. As one of the lowest figures polled, 68% say they have concerns that screen-based play makes children less able to think for themselves.

#### **Learning and Play**

Despite the relatively low levels of play in their lives, 83% of French children say they learn more effectively when play is used as a learning tool. 84% say they learn new things through play while 82% say they learn better when teachers make lessons playful. Their parents agree with 94% believing playful teaching methods in school should be used to build core skills and competencies. A further 63% agree that regular play will help their children succeed in higher education and work later in life; while this is still high, it is the lowest of all countries polled and below the global average of 82%.

### Germany



The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,024 parents and 414 children from Germany.

#### The State of Play in Germany

The majority of German parents (97%) believe play is fundamental to a child's development and happiness and 89% feel it also boosts parental happiness. The benefits of family play for Germans include building memories (97%) and trust (96%), as well as helping parents unwind (82%) and be silly (92%) with their children. German parents say play also helps them bond (96%), makes them feel more creative (39%) and proud of their children (56%). German children echo their parents' positive view on play, with 93% saying playing with their parents makes them feel happy and 89% saying it helps them relax and switch off from school, above the global average by 2 percentage points.

#### **Barriers to Play**

Like all countries surveyed, the greatest barrier to play is lack of time. Some 37% of German parents say they are not spending enough time playing as a family (the global average is 38%). 42% say they don't have enough free time for play compared to a global average of 36%. Only Russian parents have less time for play. When they do engage in playtime, 48% of German parents admit to being easily distracted by emails, smartphones and household tasks, although this is lower than all markets.

German children, on the contrary, do not struggle to manage over-scheduled lives in the way children in other countries do. Only 13% say they do not have enough time for play compared with the global average of 17%. However, at 41%, German children score lowest of all polled countries against a global

average of 62% when asked if their parents allow them to play just for the fun of it, not to learn new things.

#### 21st Century Skills

Confidence, independent thinking and communication are the three skills considered most essential for a successful future by German parents. Only German and Danish parents have independent thinking among their top three. They clearly value the ability to challenge the status quo, take risks, and make up their own minds. Independent critical thought is often valued highly as it promotes community and diversity<sup>43</sup>.

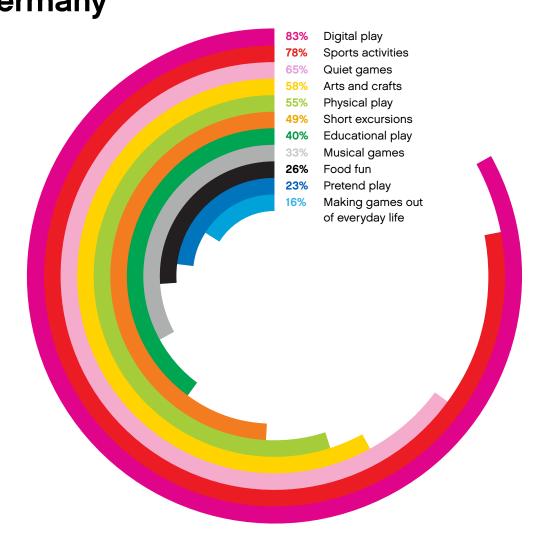
The greatest difference between the perceived importance of life skills and STEM skills to children's future is found in Germany. 82% of German parents believe developing life skills is essential for future success and wellbeing while 63% believe a mastery of STEM subjects is important.

However, in contrast to most other polled markets, German parents believe creativity is less essential to success and wellbeing than other qualities such as critical thinking and confidence – and cannot easily be taught (only 65% agree it can be taught compared to a global average of 71%). Regardless of this, 90% still believe it is important to spend time on being creative, only 2 percentage points below the global average of 92%.

#### **Technology and Play**

Like other countries around the world, digital play tops the list of children's favourite ways to play in Germany. The technology habits of German children are more controlled than other countries, with the lowest amount of time spent on devices of any country surveyed, at just 3 hours and 48 minutes per week. German parents are less concerned that

# Children's preferred play activities **Germany**



their children's preference for digital play prevents them thinking for themselves, at 63% agreement against a global average of 72%. This contrasts with 80% of Americans and 83% of Mexican parents. However, digital technologies are viewed less positively than in many other countries, with just 40% of German parents believing technology brings families closer together against a global average of 59%. They also rank second lowest when asked if digital play can be creative (59% against global average of 77%).

#### **Learning and Play**

Most Germans think play is a powerful tool for learning. Some 90% of parents say it can be used to help teach children new things, while 81% of those surveyed believe children that play more, both in institutions and at home, are successful later in academic studies and the workplace, in line with the global average of 82%. However, 79% of German parents believe strongly that learning through play is the most beneficial technique for strengthening their child's skill set, with only Mexico ranking higher in a belief that play can aid skill development. 80% of German children, too, say they learn better when play is involved.

### **Mexico**

The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,042 parents and 418 children from Mexico.

#### The State of Play in Mexico

Mexican families love to play. They recognise the benefits of play and make efforts to prioritise it in their lives. Across all countries polled, they have the highest overall perception that play is an essential tool for developing 21st century skills. They also strongly believe play helps strengthen family ties (96%), enhances family wellbeing (95%), de-stresses (92%), and helps them feel more refreshed (85%). Some 96% of families who spend more than five hours a week playing together say they are happy, compared to 90% of those who play for less than five hours a week. In fact, Mexican families have the highest overall levels of happiness of any country surveyed at 94%, above the global average of 84%.

#### **Barriers to Play**

Mexican parents enjoy a wide range of play activities with their children. Though 54% say they get enough play in their lives (10 percentage points above the global average), they want more. A lack of time in parents' busy lives is the greatest barrier to play. 29% of Mexican families say they don't spend enough time playing together and 40% of parents say they don't have enough time for play. However, only 12% of children in Mexico say they don't have time for play, despite having amongst the highest levels of homework and after-school activities of the nine surveyed countries. This is a strong indication that the benefits of play are recognised and highly prioritised.

Second highest after Denmark, 81% of Mexican parents say the quality of play is more important than the quantity. Though play is something both parents and children say they should commit to, 64% of parents say they are easily distracted by emails and smartphones during family playtime.

#### 21st Century Skills

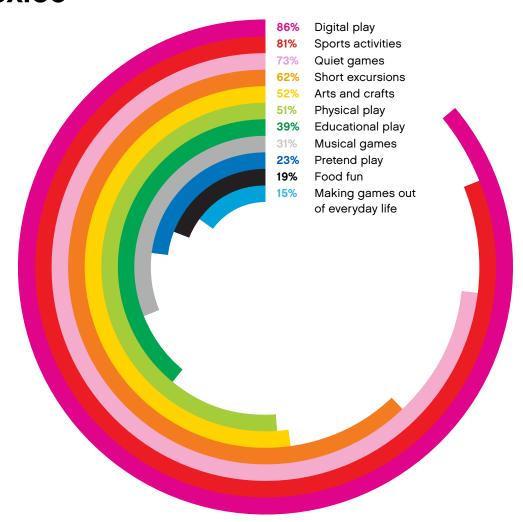
There is a strong belief that play develops key social, cognitive and emotional skills. Mexican parents say confidence, good judgment and communication are the top three skills required for a successful future. They also rank highest of all countries polled when it comes to the importance of life skills and STEM learning to their children's futures. At 95% and 92% respectively, there is a strong sense that balancing traditional knowledge and 21st century skills is essential.

Though creativity does not rank amongst the top three desirable attributes for success, it is, nevertheless, vitally important in Mexican life. 98% of parents say being creative is one of the most important skills a child can have and nearly all parents (97%) believe their children are creative, the highest of any country surveyed. In agreement with Russians and only beaten by the Danes, 70% also see creativity as something that should be used not only for fun and recreational purposes, but also in more serious work relations.

#### **Technology and Play**

Mexican children love digital play, sports and quiet play. Like all of the countries surveyed, digital play tops the list of their favourite ways to play at 86%, with only Danish and Russian children ranking higher at 90% and 88% respectively.

## Children's preferred play activities **Mexico**



Though 72% of parents say technology helps them connect with their children's lives – the global average is just 59% – Mexican parents remain the most worried by the impact of technology on their children's lives. 83% believe technology stunts their children's ability to think independently, against a global average of 72%.

#### Learning and Play

Children in Mexico say play is a powerful tool for learning. 92% believe they learn new things when they play with their parents – equal with China at the top of the poll. 89% say play helps them learn more and learn better. Mexican parents agree. Some 91% say learning and teaching should be fun and the country tops the rankings at 83%, calling out learning through play as the best way children can learn in pre-school and school settings.

### Russia

The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,017 parents and 408 children from Russia.

#### The State of Play in Russia

While most parents in Russia value the benefits of play, many families lead low-play lives. Parents recognise play as essential to a child's happiness (98%) and wellbeing (97%), as well as strengthening family bonds (98%) and helping them learn to socialise (94%). However, 44% of Russian parents spend less than five hours a week playing. This means more parents are spending less time playing than any other country surveyed except for France. Despite the low-play lifestyles, Russia sees the biggest difference of all markets when looking at the happiness of families who play more – 85% of families who play for more than five hours a week say they are happy compared to 66% of families who play for less than five hours a week.

#### **Barriers to Play**

Many Russian parents say they are time-poor. Work schedules and housework mean they are not as present in their children's lives as parents in other countries, with 46% of Russian parents saying that having little or no time stops them from playing more. This level of parental time pressure contrasts strikingly to their children's view. Only 9% of Russian children say they are too busy to play, the lowest level of all countries surveyed. It is therefore unsurprising that most Russian children (88%) say they would like their parents to play with them more, the second highest of all countries. Russian children also spend more time playing alone than in most countries (6 hours per week), with the exception of the United States, where children play alone for 7 hours.

#### 21st Century Skills

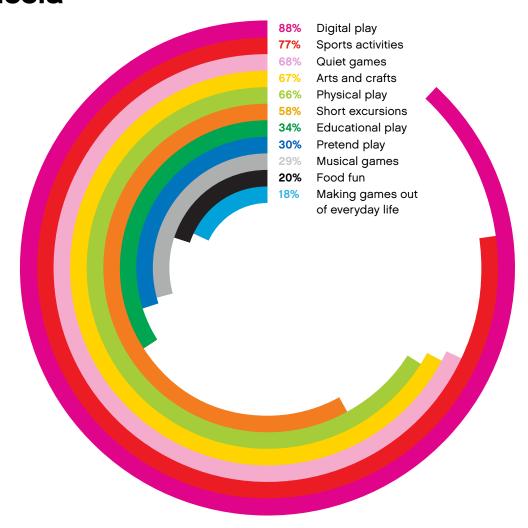
Though Russian parents are aware of the need for children to develop life skills, they consider them slightly less important than other countries such as the United States and Mexico. 80% of Russian parents believe creative and life skills are important for their children's future success, compared to the 74% who say knowledge such as STEM subjects is important. There is a strong belief that play develops key social, cognitive and emotional skills. Russian parents believe that confidence, good judgment and communication are the essential skills leading to a successful and sound future.

While creativity does not rank as high an essential skill for the future it is, nevertheless, considered important. 80% of Russian parents believe life skills such as creativity and critical thinking are key to a child's future success and 94% of Russian parents say it is important to spend time being creative. The study also revealed a significant creativity gap between Russian parents and their children. 87% of parents say their children are creative while just 63% of parents say they feel creative. This 24 percentage point gap is the highest of all the countries studied. Though 95% of Russian families believe it is their responsibility to develop their children's life skills, 21% of Russian parents believe they are not able to help their children develop them against a 14% global average.

#### Technology and Play

Russia remains amongst the least engaged of all the countries in terms of digital play. Despite 88% of Russian children saying digital is their favourite form of play they spend less time on it than any other country except Germany, (4 hours and 12 minutes per week).

## Children's preferred play activities **Russia**



Russian parents, like many others around the world, remain concerned about the effects of technology, with 71% believing technology hinders their children's ability to think independently and only 33% saying technology can bring their family together, the lowest of all countries surveyed. Just 58% believe digital play can be creative, again the lowest of all countries polled compared to the global average of 77%.

#### **Learning and Play**

Almost three quarters (73%) of Russian parents acknowledge the skills needed for success in the new age are changing. Some 96% of Russians say play is important for their children's learning. Though classroom teaching and book-based learning feature most prominently in their list of essential useful learning tools, 90% say play should be used more in schools as a tool for child development, while 81% of Russian children say they learn better when it feels like play.

### Saudi Arabia



The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,014 parents and 412 children from Saudi Arabia.

#### The State of Play in Saudi Arabia

Saudi Arabia is a country in transformation. Though they are less likely to prioritise family play than other countries, 87% of Saudis still say play is essential for their child's wellbeing, while 87% say toys simulate their children's creativity.

Though finding time for family play is hard for busy Saudi families, they also believe playing with children is less important than parents in other countries surveyed. Only 64% say it is very important to play with their children with 24% of Saudi parents saying it is not important. Despite this, 86% of Saudi families say that play, when it does happen, helps them put their lives in perspective and helps them relax, and 69% of families who play for more than five hours a week also say they are happy. However, when play falls to below five hours a week, the lowplay lifestyle in Saudi Arabia does impact on overall family happiness, with only 52% of these parents reporting that their families are happy. This is the absolute lowest of all countries polled - the closest being Russia at 66% when playtime falls below 5 hours a week.

#### **Barriers to Play**

Time is the most significant barrier to play for Saudi families. Children, in particular, struggle to find time in their busy schedules for unstructured, unsupervised play. 32% of children say they are too busy for play, the highest of all countries polled and 15 percentage points ahead of the global average. 30% of Saudi children spend more than

10 hours a week on homework, and only below China, they spend 4 hours and 48 minutes on after-school activities. Despite this, only 26% of parents say they do not spend enough time playing together as a family, which is the lowest of all markets.

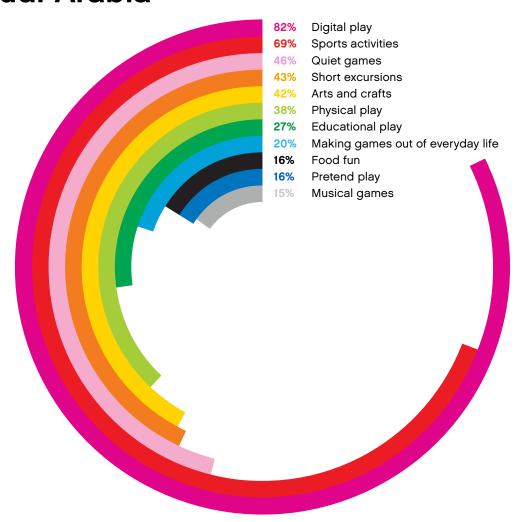
In terms of the quality of the play experience, Saudi parents challenge the norms. Just 51% of parents say quality matters over quantity, 33 percentage points lower than Denmark, which is the highest ranking and 16 percentage points lower than China, which is the lowest ranking after Saudi Arabia.

#### 21st Century Skills

Asked to rank the most important 21st century skills for future wellbeing and success, Saudi parents chose creativity, confidence and learning from mistakes. Like China, the government in Saudi Arabia has placed a renewed focus on creativity in schools to prepare children to spearhead the Kingdom's innovation and entrepreneurship in the future<sup>44</sup>. In line with government initiatives around creativity, 57% of Saudis rate creativity as the most important 21st century skill for their children's future – the highest of any country polled.

Despite recognising the value of creativity, Saudi parents are least likely to agree that life skills and STEM subjects are important for their children to succeed in the future. Some 58% of parents say life skills are important, while 57% say their children need STEM subjects to thrive in the economies of the future, compared to the global average of 80% and 72% respectively.

## Children's preferred play activities Saudi Arabia



#### **Technology and Play**

While digital play still dominates at 82%, children in Saudi Arabia also highly enjoy sport (69%) and quiet games (46%). Though children enjoy technology, 80% of Saudi parents believe it hinders them thinking for themselves but 68% say technology can bring families closer together.

Saudi children like technology and use it creatively to play with friends in online spaces. Though the majority play with friends and siblings face-to-face, 28% say they play with friends they know online too. This is the highest of all the countries surveyed and 7 percentage points ahead of the global average.

#### Learning and Play

84% of Saudi parents say play helps children become more successful academically and in the workplace. Yet despite this, they are less likely than other countries to say play should be used in schools as a teaching aid at just 67%, compared to the global average of 93%. In contrast, 84% of Saudi children say they learn new things more effectively when school is made playful.

## **United Kingdom**



The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,038 parents and 417 children from the United Kingdom.

#### The State of Play in the United Kingdom

Most parents in the United Kingdom believe play is fundamental to a child's happiness (97%). Not only do they value play but seek to make it the centre of family life. The tension within British families is that it is getting harder to achieve. Lack of time and children's fondness for screen-based play eats into family playtime. As a result, British families are amongst the most dissatisfied with the amount of play in their lives, with 46% of parents saying they do not have enough family play in their lives. Despite this, 86% of British families say they are happy. This is roughly in line with the global average but lower than countries such as Mexico and the United States, at 94% and 91% respectively.

British parents are clear about the benefits of play with 97% saying it creates stronger bonds with their children, 94% agreeing it offers them a better perspective on life and 88% saying family play helps them de-stress and unwind. British parents further see play as essential to helping children learn social skills (97%) and problem-solve (96%). Children from the United Kingdom also say play helps them to relax and switch off after school (88%).

#### **Barriers to Play**

The most significant barriers to play for British families are time and technology. Busy lives mean a third of parents do not have time in their day for regular play. These findings mirror other European countries, such as France and Germany, where time restraints also exist. Children are also feeling time-poor with 18% saying they do not have enough time for play.

Children in the UK spend a relatively high proportion of their time playing alone compared to other polled countries at 5 hours and 36 minutes per week. British children average just over five hours of screen time per week, fourth highest after the US, Denmark, and Saudi Arabia. 17% of parents also say the time they spend on technology is a barrier to them playing with their child. Yet despite their preference for techbased activities, 68% of British children still prefer to play with their friends face-to-face compared with 25% who prefer online shared play.

#### 21st Century Skills

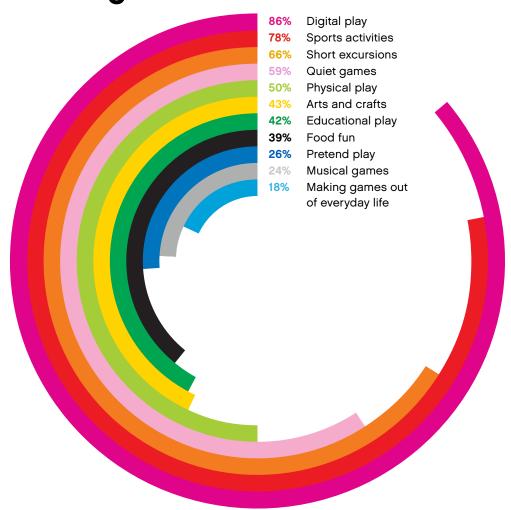
There is a tangible sense that parents in the United Kingdom are responding to the changing world around them by prioritising life skills in their children's lives. Confidence, communication and socialising are considered the top three 21st century skills that children will need for the future according to British parents, closely followed by problem-solving.

British parents are relatively ambivalent about creativity. It features low on the list of desirable and learnable attributes. Just 33% rank it within their top five most important skills and only 59% believe it is teachable – this is the lowest level of all countries polled. However, 90% still underline that creativity is an important skill to spend time cultivating. Despite their indifference to creativity, British parents believe life skills matter more than STEM skills, at 81% and 69% respectively.

#### **Technology and Play**

Technology is a tension within many British families. For children in the UK, it is their favourite play activity (86%), followed by sport (78%) and short excursions (66%).

# Children's preferred play activities United Kingdom



The digital bias is exacerbated by British children's preference for high levels of weekly technology use (5 hours and 18 minutes). Despite parents listing the time they spend on technology as a barrier to them playing more, 77% of UK parents believe the very technology that they use themselves stops children thinking independently and isolates them.

#### Learning and Play

96% of parents in the United Kingdom believe that play is an important tool for child development and learning in schools, with 78% agreeing learning

through play is the most effective educational technique ahead of reading (71%), interacting with friends (72%), traditional teaching (59%), and browsing online (21%). 84% of parents say playful learning as children leads to greater success in higher education and the workplace in later life. And 82% of children agree that playful teaching in school helps them learn more and learn better.

### United States of America

The research questionnaire for the LEGO® Play Well Report 2018 includes responses from 1,045 parents and 419 children from the United States of America.

#### The State of Play in the United States

American families love play, appreciate the benefits it brings and make time for it in their lives. Some 89% of parents say it is very important to play with their child and 96% of Americans see play as fundamental to a child's happiness and wellbeing. Though US households are busy, play is nevertheless, a valued part of family life. 81% of US families play for more than five hours a week, which is in line with the global average (69%), with 94% of these families saying they are happy compared to the 78% of families who play for less than five hours a week. American parents also value play for the vitality, fun and creativity it brings into the household while it also helps parents gain valuable perspective on their lives (94%).

#### **Barriers to Play**

Like most other countries, parents in the United States say a lack of time is the greatest enemy of play. 31% of parents say they do not have enough time to play with their children regularly each week. This is lower than the global average of 38%. However, 22% of children say they do not have enough time for play, amongst the three highest in the survey and just below Chinese children at 23%, who have the most scheduled activities in their lives. American children comparatively do not have excessive amounts of homework or other obligations in their lives. Their lack of family playtime may also be by choice. Of all children surveyed, American children spend more time on solo and digital play per week (spending 7 hours and nearly 6 hours respectively).

#### 21st Century Skills

Problem-solving, confidence and communication come top in the poll of essential 21st century skills amongst US parents.

Creativity comes in equal fourth place with listening in the list of essential 21st century skills. 91% of American parents believe creativity is one of the most important skills a child can develop, with 96% believing their children are creative and 94% agreeing it is important to spend time on nurturing their creativity.

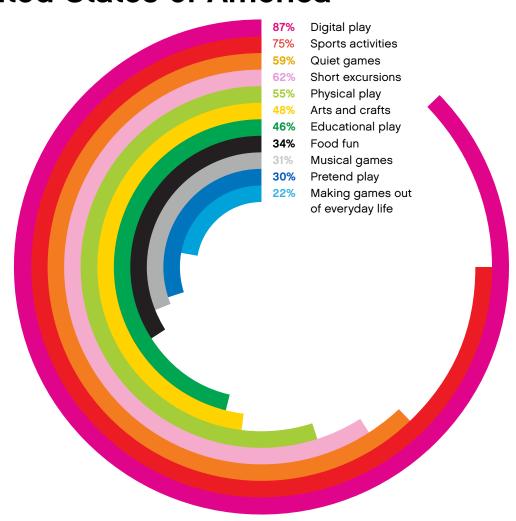
American parents place great significance on a balance of STEM and life skills. Most, however, believe life skills are more important to their child's future than STEM at 88% and 79% respectively.

#### **Technology and Play**

In line with other countries surveyed digital play tops the list of children's favourite play at 87%. Sport and quiet games rank 2nd and 3rd.

Technology is seen as both an enabler and a tension in the lives of US parents. While 88% say digital play can be creative, 80% of parents remain concerned technology stops children thinking for themselves.

## Children's preferred play activities United States of America



#### Learning and Play

For American families, play is a path to learning, attainment and success as adults. 95% of American parents believe play should be used in schools and playgroups to help embed core soft skills. 93% say playing more helps children achieve more in higher education and sets them up for success in later life. American children agree. 83% say they learn more when things are made playful.



### Notes and Bibliography

Albert, R. (1996) Some reasons why childhood creativity often fails to make it past puberty into the real world. New *Directions for Child and Adolescent Development*. 72(4), 43-56.

Bateson, P., & Martin, P. (2013) *Play, Playfulness, Creativity and Innovation*. Cambridge: Cambridge University Press.

Bazelgette, P. (2017) The Empathy Instinct: *How to Create a More Civil Society*. London: Hachette.

Burdette, H. & Whitaker, C. (2005) Resurrecting Free Play in Young Children: Looking Beyond Fitness and Fatness to Attention. Affiliation and Affect. *Archives of Journal of Pediatrics & Adolescent Medicine*. 159(1), 46-50.

Bruce, T. & Hakkarainen, M. (2017) *The*Routledge International Handbook of Early
Childhood Play. London: Routledge.

Cobo, C. (2013) Skills for innovation: envisioning an education that prepares for the changing world. The Curriculum Journal. 24(1), 67-85.

Danby, S., Fleer, M., Davidson, C. & Hatzigianni, M. (2018) Digital Childhoods Across Contexts and Countries, in Danby S., Fleer M., Davidson C. & Hatzigianni M. (eds) *Digital Childhoods. International Perspectives on Early Childhood Education and Development.*Singapore: Springer.

Deardorff, D. & Arasaratnam-Smith, L. (2017)

Intercultural Competence in Higher Education.

London: Routledge.

Fabes, R., Hanish, L. & Martin, C. (2003) Children at Play: The Role of Peers in Understanding the Effects of Child Care. *Child Development*, 74(1), 1039-1043.

Fantuzzo, J., & McWayne, C. (2002) The relationship between peer-play interactions in the family context and dimensions of school readiness for low-income preschool children. *Journal of Educational Psychology*. 94(1), 79-87.

Frey, C. & Osborne, M. (2013) The future of employment: How susceptible are jobs to computerisation? Retrieved from: https://www.oxfordmartin.ox.ac.uk/downloads/academic/The\_Future\_of\_Employment.pdf

Ginsburg, K. (2007) The importance of play in promoting healthy child development and maintaining strong parent-child bond. *Journal of American Academy of Pediatrics*. 119(1), 182-191.

Hoicka, et al. (2017) Humor and preschoolers' trust: Sensitivity to changing intentions. *Journal of Experimental Child Psychology*. 154(1), 113-130.

Hughes, B. (2003) Play Deprivation, Play Bias and Playwork Practice, in Brown, F. (ed.) *Playwork – Theory and Practice*. Buckingham: Open University Press

Hurwitz, S. (2005) To be successful—let them play! *Child Education*, 79(2), 101-102.

Isenberg, J. & Quisenberry, N. (2012) A Position Paper of the Association for Childhood Education International PLAY: Essential for all Children, *The Journal of Childhood Education*. 79(1), 33-39.

Jinqiu, Z. & Xiaoming, H. (2004) Parent Child co-viewing of television and cognitive development of the Chinese child. *International Journal of Early Years Education*. 12(1), 63-77.

Keegan, R. (1996) Creativity from childhood to adulthood: A difference of degree and not of kind. New Directions for Child and Adolescent Development. 72(4), 57-66.

Kervin, L., Verenikina, I. & Rivera, C. (2018) Digital Play and Learning in the Home: Families' Perspective, in Danby, S., Fleer, M., Davidson, C. & Hatzigianni, M. (eds.) Digital Childhoods. International Perspectives on Early Childhood Education and Development. Singapore: Springer.

Lester, S. & Russell, W. (2008) Play for a Change: Play, Policy and Practice - a review of contemporary perspectives. London: Play England.

Macintyre, C. (2017) Enhancing learning through play: a developmental perspective for early years settings. London: Routledge.

Moore, R. (2017) Childhood's Domain: play and place in child development. London: Routledge.

Roberts, J. (2014) Creativity: An Essential Component in STEM Learning. Retrieved from www.wise-qatar.org/ edudebate-julia-roberts-stem-creativity-teachers.

Russ, S. (2014) Pretend play in childhood: Foundation of adult creativity. Washington, DC: American Psychological Association. Schwab, K. & Samans, R. (2016) The Future of Jobs. Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution. The World Economic Forum.

Shonkoff, J. & Phillips D. (eds). (2000) From Neurons to Neighborhoods: The Science of Early Childhood Development. Washington, DC: National Academy Press.

Singer, D., Golinkoff, R. & Hirsh-Pasek, K. (2006) Play = Learning: How Play Motivates and Enhances Children's Cognitive and Social-Emotional Growth. Oxford: Oxford University Press

Skaug, S., Englund, K., Saksvik-Lehouillier, I., Lydersen, S. & Wichstrøm, L. (2018) Parent–child interactions during traditional and interactive media settings: A pilot randomized control study. *Scandinavian Journal of Psychology*. 59(1), 135–145.

Strouse, G., Troseth, G., O'Doherty, K. & Saylor, M. (2018) Co-viewing supports toddlers' word learning from contingent and non-contingent video. *Journal of Experimental Child Psychology*. 166 (1), 310-326.

Thompson, R. (2014) Stress and Child Development. *The Future of Children*. 24(1), 41-59.

Van Hoorn J., Nourot, P., Scales, B. & Alward K. (2003) *Play at the Center of the Curriculum* (3rd ed.). New Jersey: Merrill Prentice Hall.

Van de Werfhorst, H. (2014). Changing societies and four tasks of schooling: Challenges for strongly differentiated educational systems. *International Review of Education*. 60(1), 123-144.



### **Endnotes**

- Jinqiu, Z. & Xiaoming, H. (2004) Parent Child co-viewing of television and cognitive development of the Chinese child. *International Journal of Early Years Education*. 12(1), 63-77.
- 2 Strouse, G., Troseth, G., O'Doherty, K. & Saylor, M. (2018) Co-viewing supports toddlers' word learning from contingent and non-contingent video. *Journal of Experimental Child Psychology*. 166 (1), 310-326.
- 3 Center on the Developing Child (2009) Five Numbers to Remember About Early Childhood Development (Briefing). Retrieved from https://developingchild. harvard.edu/ science/key-concepts/brain-architecture/
- 4 Singer, D., Golinkoff, R. & Hirsh-Pasek, K. (2006) Play = Learning: How Play Motivates and Enhances Children's Cognitive and Social-Emotional Growth. Oxford: Oxford University Press.
- 5 Ginsburg, K. (2007) The importance of play in promoting healthy child development and maintaining strong parentchild bond, *Journal of American Academy of Pediatrics*. 119(1), 182-191.
- 6 Ginsburg, K. (2007) The importance of play in promoting healthy child development and maintaining strong parentchild bond, *Journal of American Academy of Pediatrics*. 119(1), 182-191.
- 7 Keegan, R. (1996) Creativity from childhood to adulthood: A difference of degree and not of kind. New Directions for Child and Adolescent Development. 72(4), 57–66.
- 8 Bruce, T. & Hakkarainen, M. (2017) The Routledge International Handbook of Early Childhood Play. London: Routledge.
- 9 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: a Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-65.
- 10 Burdette, H. & Whitaker, C. (2005) Resurrecting Free Play in Young Children: Looking Beyond Fitness and Fatness to Attention, Affiliation, and Affect. *Journal of Pediatrics & Adolescent Medicine*, 159(1), 46-50.
- 11 Ginsburg, K. (2007) The importance of play in promoting healthy child development and maintaining strong parentchild bond, *Journal of American Academy of Pediatrics*. 119(1), 182-191.

- 12 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: a Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-65.
- 13 Plomin, R. & Asbury, K. (2005) Nature and Nurture: Genetic and Environmental Influences on Behavior. Annals of the American Academy of Political and Social Science. 600(2), 86–98.
- 14 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: a Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-65.
- 15 Kervin, L., Verenikina, I. & Rivera, C. (2018) Digital Play and Learning in the Home: Families' Perspective, in Danby, S., Fleer, M., Davidson, C. & Hatzigianni, M. (eds.) Digital Childhoods. International Perspectives on Early Childhood Education and Development. Singapore: Springer.
- 16 Kervin, L., Verenikina, I., & Rivera, C. (2018) Digital Play and Learning in the Home: Families' Perspective, in Danby, S., Fleer, M., Davidson, C. & Hatzigianni, M. (eds.) Digital Childhoods. International Perspectives on Early Childhood Education and Development. Singapore: Springer.
- 17 Hurwitz, S. (2005) To be Successful—Let Them Play! Child Education. 79(2), 101–102.
- 18 Van Hoorn, J., Nourot, P., Scales, B. & Alward K. (2003) Play at the Center of the Curriculum (3rd ed.). New Jersey: Prentice Hall.
- 19 Roberts, J. (2014) Creativity: An Essential Component in STEM Learning. Retrieved from www.wise-qatar.org/ edudebate-julia-roberts-stem-creativity-teachers.
- 20 Hurwitz, S. (2005) To be Successful—Let Them Play! Child Education. 79(2), 101–102.
- 21 Kaufman, J. & Sternberg, R. (2010) The Cambridge Handbook of Creativity. Cambridge: Cambridge University Press.
- 22 Bateson, P. & Martin, P. (2013) Childhood play and creativity. In *Play, Playfulness, Creativity and Innovation*. 2(2), 89-102. Cambridge: Cambridge University Press.

- 23 Hurwitz, S. (2005) To be Successful—Let Them Play! Child Education. 79(2), 101–102.
- 24 Van Hoorn, J., Nourot, P., Scales B. & Alward, K. (2003) Play at the Center of the Curriculum (3rd ed.). New Jersey: Prentice Hall.
- 25 Ginsburg, K. (2007) The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*. 119(1), 182-191.
- 26 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: A Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-655.
- 27 Fantuzzo, J., & McWayne, C. (2002) The relationship between peer-play interactions in the family context and dimensions of school readiness for low-income preschool children. *Journal of Educational Psychology*, 94(1), 79-87.
- 28 Bruce, T. & Hakkarainen, M. (2017) The Routledge International Handbook of Early Childhood Play. London: Routledge.
- 29 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: A Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-655.
- 30 Shonkoff, J., & Phillips D. (2000) From Neurons to Neighborhoods: The Science of Early Childhood Development. Washington: National Academy Press.
- 31 Kaufman, J. & Sternberg, R. (2010) *The Cambridge Handbook of Creativity*. Cambridge: Cambridge University Press.
- 32 Pece, A., Simona, O. & Salisteanu, F. (2015) Innovation and Economic Growth: an Empirical Analysis for CEE Countries. *Procedia Economics and Finance*. 26(1), 461-467.
- 33 Hughes, B. (2003) Play Deprivation, Play Bias and Playwork Practice, in Brown, F. (ed.) *Playwork Theory and Practice*. Buckingham: Open University Press.
- 34 Moore, R. (2017) Childhood's domain: Play and place in child development. London: Routledge

- 35 Kervin L., Verenikina I., & Rivera C. (2018) Digital Play and Learning in the Home: Families' Perspective, in Danby, S., Fleer, M., Davidson, C. & Hatzigianni M. (eds). Digital Childhoods. International Perspectives on Early Childhood Education and Development. Singapore: Springer.
- 36 Orth, U. (2018) The Family Environment in Early Childhood has a Long-term Effect on Self-esteem: A Longitudinal Study from Birth to age 27 Years. The Journal of Personality and Social Psychology. 114(2), 637-655.
- 37 Kaufman, J. & Sternberg, R. (2010) The Cambridge Handbook of Creativity. Cambridge: Cambridge University Press
- 38 Markus, R. & Kitayama, S. (1991) Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*. 98(2), 224-253.
- 39 Van de Werfhorst, H. (2014) Changing societies and four tasks of schooling: Challenges for strongly differentiated educational systems. *International Review of Education*. 60(1), 123-144.
- 40 Markus, R. & Kitayama, S. (1991) Culture and the self: Implications for cognition, emotion and motivation. Psychological Review. 98(2), 224-253.
- 41 Cobo, C. (2013) Skills for innovation: envisioning an education that prepares for the changing world. *The Curriculum Journal*. 24(1), 67-85.
- 42 In China, Innovation Cuts Both Ways. (2017) Retrieved from: https://www.forbes.com/sites/stratfor/2017/10/24/inchina-innovation-cuts-both-ways/ [Accessed 16th July 2018]
- 43 Nelson-Laird, T. (2005) College Students' Experiences with Diversity and Their Effects on Academic Self- Confidence, Social Agency, and Disposition toward Critical Thinking. Research in Higher Education. 46(4), 365–387.
- 44 Ministry of Education Kingdom of Saudi Arabia. (2017) Education and Vision 2030. Retrieved from: https://www. moe.gov.sa/en/Pages/vision2030.aspx [Accessed 12th June 2018]



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