# Are We Brave Enough to Let Our Children Play?

Raising Singaporean Kids for a Better Tomorrow









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This paper is dedicated to the child in all of us, dreaming of a better future for our children's children.

This white paper has been by written by members of the early childhood education faculty at the Singapore University of Social Sciences, together with the inspiring team at IPC children's charity Playeum and Samantha Tan (@askteachersam), our SUSS alumnus.

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This white paper has been written for a general audience of parents, caregivers and educators in Singapore and it aims to catalyse conversation about how we could enable our children to have more playful everyday lives in our homes, neighbourhoods, schools and communities. The information presented here is a synthesis of literature published across different disciplines such as anthropology, cognitive science, education, philosophy and psychology. The paper highlights the importance of certain types of play experiences that children may be missing out on, and how we could begin to redress this lack of play or playfulness in our society with simple actions.

## Avoiding A Potential Health Crisis in Singapore

An increasing proportion of Singaporean children seem to be at risk of several health issues because childhood has become overly structured and 'curated' in our communities. We argue in this paper that this health risk for children (infancy through age 12) exists mainly due to the loss of physically active and creative free play experiences where adults are co-players and responsive (not directive) facilitators.

In our anxieties over preparing children for a competitive world, we may have become overly serious about hot-housing our children in academic skills and overlooked the need to introduce to our children the joys of learning through everyday experiences, thereby supporting their development as dynamic, moving, feeling, and creative human beings.

An emerging body of local research reminds us to protect children's overall mental and physical well-being, not just for their own sakes but for the future of our society:

- Singaporean children generally do not get enough sleep, have excessive daily screen time and are far too sedentary for healthy development (Chia, Tay & Chua, 2019; Chen et al., 2019; Lim et al., 2022)<sup>1</sup>.
- Electroencephalogram (EEG) readings showed that infants who were exposed to longer screen time were cognitively less alert, and this may affect longer term brain function and development (Law et al., 2023).
- Data from the Singapore Longitudinal Early Development Study (SG Leads)<sup>2</sup> showed that 15 per cent of children aged three to six spent more than 21 hours a week on TV and other electronic devices. Among this group, 64 per cent of the time spent on such devices was not in the presence of parents.
- For children with neurodevelopmental conditions, increased screen use could exacerbate emotional and/or behavioural difficulties (EBDs) by interfering with sleep quantity and quality (Lin et al., 2019)<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup>Chia et al., 2019: Parent-reported data showed that 12.6% met none of the World Health Organisation's (WHO) 24-h guidelines while 9.6% of preschool children met all the WHO guidelines. 70.7%, 56.9% and 26.5%, of preschool children respectively, achieved the sleep, physical activity and screen media use guidelines within a 24-h period.

Chen et al (2019): only 5.5% of children aged 5.5 years met integrated 24-Hour Movement Guidelines and 11.2% of the children met none of the movement guidelines. Accordingly, a substantial proportion of children did not meet individual guidelines, which was particularly frequent with regard to sleep.

Lim et al, 2022: reported 63% of a sample of 136 five-year-olds having less than the recommended 10 hours of sleep; with the sample spending an average of 140 minutes on digital devices daily; and an average of 47 minutes outdoors playing (less than the recommended 60 mins of moderate to vigorous physical activity).

- 1 in 10 teenagers suffer from at least one mental health disorder including symptoms such as depression, anxiety and loneliness, hyperactivity and aggression (Seah & Ng, 2023). These conditions would have taken years to manifest, so one could surmise that the foundations of teenage mental health are built in the early years of childhood.
- The prevalence of myopia in Singapore is among the highest in the world, with up to 20 percent of children having high myopia (compared to 10 percent a decade ago), and children with myopia are getting younger (Ng & Tang, 2024). High myopia puts one at risk of many eye disorders later in life. Global guidelines for myopia prevention recommend children to be exposed to natural light outdoors for at least 2 hours every day.
- Child obesity rates in Singapore have increased, possibly exacerbated by the pandemic with the proportion of students who were overweight in schools increase from 13% to 16% in 2021, compared to 2017 (Tham, 2023). This is not just about children having unhealthy foods, but also to do with how we help children develop healthy mealtime habits (e.g., self-regulation, awareness of satiation, unrushed eating, enjoyment of a variety of tastes and textures).

As our society becomes more affluent and educated, has childhood in Singapore become less healthy for children's overall development and their lifelong pursuits?

## Loss of Play-full Childhood

Across many cultures, childhood has traditionally been associated with carefree and play-filled moments and episodes regarded as essential for children's learning and development (Roopnarine et al., 2014). Before screen devices became ubiquitous in some societies, children's play experiences used to be varied, highly tactile, whole-body, complete with all of its child-like social complexities where children would call names, snatch toys from each other, quarrel and be friends again the next moment, fall and have bumps and scrapes but feel invincible after.

The nature of children's self-initiated play experiences has narrowed in part because of our societal attraction to technological gadgets. Children's everyday play experiences have changed in urbanised contexts where we fear 'stranger danger' and will not let children out of our sight. There are few spaces/places where parents feel safe letting their children go to on their own, and this includes public playgrounds that may be located a few blocks away from home.

Children's creative and imaginative play opportunities have reduced when modern societies started placing greater importance on didactic, academically focused learning activities in the 21<sup>st</sup> century (Bergen, 2009; Elkind, 2008; Gray, 2011; Lillard et al., 2013)

<sup>&</sup>lt;sup>2</sup>The Singapore Longitudinal Early Development Study is ongoing, into its third wave of data collection - https://fass.nus.edu.sg/cfpr/sgleads/

<sup>&</sup>lt;sup>3</sup>While there has not yet been published data confirming such correlations in Singapore children, a recent largescale birth cohort study in Canada has reported that preschoolers with more than 2-hours of screen-time/day had a 7.7-fold increased risk of meeting the criteria for ADHD diagnosis, in other words, increased screen-time in preschool is associated with worse child inattention behaviours (Tamana et al., 2019).

In a longitudinal sociological study of children under age 13, researchers found that American children ages 6 to 8 spent 18% more time in school, 145% more time doing schoolwork at home, 168% more time shopping with parents, 55% less time conversing with others at home, 25% less time playing in 1997 than they did in 1981 (Hofferth & Sandberg, 2001). The study also found children reportedly feeling less rested waking up in the mornings, experiencing a lot more tension and strain in the 1990s as compared to the 1980s.

While we do not have similar comparisons with Singapore children's longitudinal data, qualitative changes have been documented to show how individuals have experienced vastly different childhood experiences growing up in Singapore in the 1950s through the early 2000s, with everyday experiences that have been shaped by the nation's growing economic affluence over the last 60 years (Koh & Singapore Children's Society, 2019).

The tuition industry, referred to by our former Prime Minister as a 'minor national obsession' (Government of Singapore, 2012), is evidence of the change in our young children's childhood experiences. The Household Expenditure Survey indicates that households in Singapore spend about SGD 1.1 billion on tuition, a sharp rise from SGD 650 million 15 years ago (Cheng, 2019). According to a survey by The Straits Times and Nexus link, 70% of parents and 40% of parents with preschool children send their children for tuition (Davie, 2016).

In view of the qualitative changes taking place in Singaporean childhood, and hard data on rising rates of childhood obesity, myopia and depressive disorders (Ng & Tang, 2024; Seah & Ng, 2023; Tham, 2023). We should ask ourselves these questions:

- Is our obsession with academic performance and our over-protective actions hurting children over time?
- Are our children at risk of falling apart emotionally because we do not let them prepare themselves for the bumps in the road of life?
- Are they becoming less socially adept or have fewer opportunities to think aloud and debate ideas because we have fewer playful moments with them?

## Loss of Joyful Human Connectedness

Over time, children in our technology-enabled environment seem to have gotten used to having fewer in-person communications and this might have been worsened by conditions during the pandemic. Put them in a room together and they are comfortable playing networked games on their mobile devices or texting each other on their phones rather than turning and talking to the person next to them.

It is not uncommon for primary and secondary school children in Singapore to have highly structured childhoods, with days filled with school, after-school tuition or enrichment programmes, and training in a sport. And even our younger children are spendinglongerhours in institutional settings like childcare programmes or kindergartens where they are often required to follow adults' instructions and are herded from activity to activity, with few opportunities to exercise choice, autonomy or learn responsible decision making. Much learning can occur when children are given the permission to make a playful mess and say 'I have an idea!' or 'Let's try this!". Brains are built when children have supportive adults who give them permission to play, learn to express their ideas, listen to others' ideas, make decisions (e.g., how to use their time), to initiate and test out ideas that matter to them or reflect on who they are (or want to become) or imagine their own futures.

In the last few decades, there has been a revolution in our scientific understanding of young children's mental capacities that debunk more traditional findings about babies and children being defective adults who are irrational, egocentric or even amoral (Gopnik, Meltzoff & Kuhl, 1999; Gopnik, 2009). Science is beginning to show evidence of babies' abilities to observe and analyse, think about possible cause and effect ("what if..." or "if I do this... maybe ..."). With this growing body of research about how young minds work, we should re-think the ways in which we educate and care for children across ages because our old assumptions about children's minds should no longer be the starting point for parent-child relationship building or educational efforts.

In what follows, we suggest that one of the ways to re-balance modern-day childhood in Singapore is to encourage our children to engage in everyday, creative free play (indoors or outdoors). Such child-initiated free play, with minimal but responsive adult guidance and support, can provide the necessary context for children to engage in physical play that is fun, social and creative yet allows for children to explore and at the same time strengthen emotional and behavioural self-regulation.

## Play is a Necessity for Animals and Humans Alike

In ancient Greek culture, 'play' took on various forms including word play, ritual and music. One of the earliest mentions of children's natural ability to play (*paidia*) and of play as a significant avenue for education (*paideia*) and character development can be found in Plato's Laws Book 1 (643BC). Plato's recognition that children's play might be educational was radical for his time. He thought it important to acknowledge children's wholesome interests (e.g., to be a good carpenter) and to guide them towards sustaining or fulfilling those interests into adulthood.

I must define the nature and power of education...the man who is to be good at anything must have early training;—the future builder must play at building, [...] and the carpenter to measure and use the rule,—all the thoughts and pleasures of children should bear on their after-profession.[...] And we must remember further that we are speaking of the education, not of a trainer, or of the captain of a ship, but of a perfect citizen who knows how to rule and how to obey; and such an education aims at virtue, and not at wealth or strength or mere cleverness (Plato, translated by Jowett, 2013)

Anthropologists have also explained how play is a fundamental way of human interacting with the world, is naturally multidimensional, and that play is older than culture (Hamayon, 2016; Huizinga, 1970). We have always played, and through play we developed culture and whole civilisations have evolved.

Across animal and human species, play has a function that goes beyond entertainment (Carlisle, 2009). Play activities are voluntary and motivating – a type of exploratory learning considered to be fairly low-risk and low-cost, but highly essential to overall development into adulthood (Graham & Burghardt, 2010; Gopnik & Walker, 2013).

Animal play has been studied in the past century, with some interesting results that may be helpful for us as we understand play as a human necessity. Gordon Burghardt, an ethologist and evolutionary biologist has defined play as behaviour that is: a) voluntary, b) non-functional, c) often characterised by repeated but varied movements, and d) occurring only when the animal is healthy, safe and well-fed (2011).

The benefits of play seem to differ from species to species because of the existence of diverse play behaviours. Play likely has an adaptive value – helps young animals practise the skills needed for their later survival. But researchers have found other benefits – play provides much-needed novelty and joy, promotes physical strength, group bonding and social skills (Graham & Burghardt, 2010; Toomey, 2024). There is no singular utilitarian reason for every kind of playful action, and there does not need to be. All that scientists can surmise is that play brings joy to animals. And by the same logic, play brings much-needed joy to humans too. We don't need play in childhood to serve a specific learning or academic purpose.

Distinct from animals, young humans engage in a kind of exploratory play called "pretend play" (also known as "socio-dramatic play" when a few children pretend together). Earlier researchers had theorised that pretence could be attributed to children's inability to differentiate between fantasy and reality (e.g., Freud, 1922); but more recent research has shown otherwise, that children may be more intentional and aware than we thought (e.g., Flavell, Flavell & Green, 1987; Whoolley & Ghossainy, 2013). And learning to play in such a way is children's natural way of learning-to-learn.

A well-known and oft-quoted passage from Russian psychiatrist Lev S. Vygotsky sums up the importance of socio-dramatic play in children's lives –

"In play a child is always above his average age, above his daily behaviour; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form; in play it is as though the child were trying to jump above the level of his normal behaviour" (1978,p.102)

When permitted and supported by adults, pretend play can benefit children's cognitive, physical, emotional and social development, and does not require special toys or a lot of time and space. All a child needs is whatever is readily available (including everyday objects, or found items such as twigs and leaves), great dollops of imagination, often sweetened with a dose of humour. (*See Box 1 Pretend Play – Window into A Child's Mind*)

Besides pretend / dramatic play, Sarah Smilansky's classic theory included these other broad types of play that children often engage in: 'practice play' (exploring physical attributes of objects in the environment), 'constructive play' (building, shaping, manipulating objects and materials alone or with others); and 'games with rules' (organised form of cooperative play that uses imagination and creativity) (Rees-Edwards, 2022). Another classical play theorist, Mildred Parten explained that children progressed from more individual to more cooperative types of play experiences as they mature or become more skilful: 'unoccupied play' (practising and mastering motor control), 'solitary play', 'onlooker play', 'parallel play', 'associative play' and 'cooperative play' (Rees-Edwards, 2022).

We are advocating for children to be given opportunities to play without adult instruction or direction. But such child-led play would require enough time and repeated opportunities for children to devise mental scripts, ideas, plots and characters. And when children become better 'players', they create more complex stories and connections in their minds thinking about how the world works or how things could work better. The more instructions children receive from us, the less creative they tend to be because they think the adults have already given them the right answers (Gopnik, 2009).



#### Box 1: Pretend Play – Window into A Child's Mind

For time immemorial, objects have been central in human culture. In their everyday lives, many young children use objects to engage in imaginative and pretend play. Even when they do not have commercially made toys such as dolls or stuffed animals, children often "play with" objects that are readily available in their surrounding environment. They could use an empty milk bottle to pretend to feed an imaginary baby in their arms; or use a discarded small box to pretend they are talking on a mobile phone.

Jean Piaget, a Swiss psychologist known to have pioneered the study of children's play as an integral part of their cognitive development, suggested that children used play to assimilate their everyday experiences into their existing cognitive schema (which we can now think of as mental structure or neural network). He was known to have detailed phases in children's play actions-cum-thinking: (a) infants engage in "practice play" with repetitive actions with objects; (b) they then progress to pretend and makebelieve play before they engage more in (c) games with rules (mostly in elementary observational child school). Piaget's research gave rise to many studies of play development throughout the latter part of the 20th century into present day. Most of all, we now know that children's play is very much an activity of the mind, supporting children's ability to interact and understand others (Bodrova & Leong, 2013)

More recently, with advancements in brain imaging, neuroscience researchers have confirmed that pretend play strengthens neural connections in the brain areas associated with developing social understanding and empathy (the "pSTS", or posterior superior temporal sulcus) (Aanestad et al, 2021).

Pretend play is most prominent between three and five years (Gopnik & Walker, 2013). It marks a cognitive milestone where objects and actions can symbolize other things, and literal interpretation isn't necessary. Through pretend play, children demonstrate their ability to engage in counterfactual reasoning (i.e., thinking about "what if" or "if only" or "if... then") (Gopnik & Walker, 2013). When we observe children engage in pretend play - imitating, imagining and dramatising - we can learn about their interests, what they know about how the world works; we might also be able to glimpse into their unconscious struggles. how they perceive others, and how they begin to develop a sense of who they are in relation to others.

## Play and Work (Learning) Go Together

Many adults think of 'play' and 'work' as opposites, associating play with children, with leisure, amusement, and frivolous unproductivity. Sometimes, we may see 'games' as a separate category – with rules and often competitiveness– is often thought of as more serious or even adult and sophisticated (Hamayon, 2016). Hence, while we may oppose to letting our children play freely, some of us may be more compelled to send them to a sport enrichment class in the hopes that they will take part in competitive games.

Children have different views about what constitutes *real play*. For children, *real play* is an activity that *they* own because they have created it for themselves, with rules that *they* designed, risks that *they* are ready to take, all forms of silly tinkering, experimenting, not for any particular outcome but simply for the fun of it.

Johannes Huizinga (1949/1970) is known for his classic account of a cultural history of play *Homo Ludens*. As a study of the play-element in culture, Huizinga argued that play is an integral part of human culture and should be respected for its own sake rather than an activity to be justified for utilitarian purposes. He defined play as activity encompassing all aspects of life: "In play there is something 'at play' which transcends the immediate needs of life and imparts meaning to the action. All play means something." (Huizinga, 1970, p.19)

He suggested that play was a meaningful and important cultural human activity which possibly gave life to other forms of human activity such as the arts, law and philosophy. He cautioned against focusing on a "functionalist approach of play" which highlights mainly the social and educational benefits of play while glossing over the subjective, pleasurable experience of play.

Singer (2013) argued that Huizinga's play theory provided a counter-argument against overly focusing on "play curricula" in early childhood education. And that Huizinga's theory is in line with more recent studies of neuropsychology – that play can help young humans adapt to and survive in a complex social world.

Humans have lived as hunter-gatherers for more than 95% of our evolutionary history. Recently, anthropologists and child psychiatrists studying contemporary huntergatherer populations have found their cultures to be very indulgent of children's free play and exploration, with extensive involvement of non-parental caregivers in mixedage playgroups (Gray, 2011). Peter Gray argued that such active play and exploration without overt adult supervision can have positive results on children's mental health and serves as a contrast to common adult attitudes found in WEIRD (Western Educated Industrialised Rich Democratic) norms where minute-by-minute adult supervision of children and passive adult-led instruction seems necessary.

Whether we like it or not, Singapore with its cultural mix and history, has prominent elements of a WEIRD society.

## How Our Children Can Thrive

We want to raise healthy children to live well in a tough world. With increased global concerns about sustaining healthy societies, researchers are telling us to pay serious attention to 'having fun'.

Studies in neuropsychology shed new light on the benefits of child-initiated, free play that bring children joy and enables them to take calculated risks. Healthy brain development requires young children to have a rich array of everyday experiences that are joy-filled, adventurous, provide children with opportunities to exercise autonomy, and are mentally stimulating and challenging-enough (Gopnik, Meltzoff & Kuhl, 1999; Immordino-Yang et al., 2019; Shonkoff, 2011).

Yet in many economically developed and urbanised places, adults fear for children's safety and do not always allow children the freedom to play in the streets or at playgrounds unsupervised. Having children strapped to chairs for long hours of seatwork can kill their joy and love for learning. Participation in a sport does not provide the same level of physical and cognitive freedom, chaos and risk-taking that is required for children to learn about themselves, about adapting to socially dynamic environments, learning to read situations and other peoples' feelings.

### Free Play Supported by Responsive Adults Builds Brains

We now know that infants are born wired for feelings and ready to learn, and the innate desire to explore and learn continues throughout childhood as long as adults provide children with the time, space and permission to do so. Much of childhood exploration appears in the form of play that children initiate and are motivated to follow through. Through self-initiated play activities, children exercise and practise emotional regulation, physical control, learn to initiate ideas, to try out those ideas, deal with failure, and reflect/analyse the consequences of their decision-making.

Scientists tell us that the brain is plastic, in that it is changeable over time all throughout our lives, as long as we continue to learn (Immordino-Yang et al., 2019; Shonkoff, 2011). This means that we do not need to hurry our children to learn as much as possible to do well academically, in as short a time as possible. Quantity is not as important as the quality (depth and variety) of children's learning experiences.

Brain development is shaped by a child's interactions with his/her immediate environment and the quality of his/her everyday experiences. Unlike what we used to think, brain science tells us that genes alone do not determine the quality of a child's learning and development. How a child will grow and learn, and at what pace, is dependent on the active, dynamic interaction between the child's temperament and genetic make-up and the opportunities made available in his/her environment – how safe and secure a child feels, how (much) a child is spoken to, responded to, and engaged on a daily basis. And this is dependent on having responsive, sensitive adults who do not just "tell" a child what to do all the time, but are prepared to observe, listen to the child's ideas before suggesting or guiding. *(See Box 2 Brain Development)* 



#### Box 2: Brain Development In a Nutshell

Our brains build from "bottom up" across these main regions: the brain stem, cerebellum, limbic system, cortex. The brain stem (connected to the spine) is responsible for basic survival functions such as temperature regulation, blood pressure, heart rate, swallowing and other nervous system controls.

The cerebellum has been known to be largely responsible for our motor controls including balance and movement; the limbic system known largely as our emotional centre; and the cortex is most responsible for reasoning, decisionmaking and other executive functions. There are sensitive periods for neural circuits related to each of these major regions of the brain. For instance, an infant's vision, hearing and listening to languages, and the ability to learn through touch will strengthen tremendously during the first 2 years of life while the sensitive periods for neural circuits that support communication, executive functions will usually strengthen exponentially after the first 3 years of life.

What this means for us is that we ought to pay greater attention to supporting an infant's sensori-motor learning and development as early as possible, by providing the child with enriched experiences to move, touch, explore with the whole body, observe, and listen to different languages.

#### Box 2: Brain Development In a Nutshell

There is still a lot that scientists have yet to uncover about how our brains really work. Despite the different brain regions being 'in charge' of different main tasks, our brains are highly coordinated in function. The circuitry is interconnected with physiological systems that affect physical and mental health; the circuits that are involved in the regulation of emotion overlap with those that are associated with executive functioning. The left and right hemispheres of the brain work together more than we ever thought.

What does this mean for parents and teachers working with young children?

Given the multi-faceted nature of how young humans learn, we need to move away from relying on hot-housing young children with the use of flash cards or single modes of learning experiences (visual-only input or auditory-only input). A young child needs to have a variety of real-world experiences – multiple sounds, sights, taste, touch – to strengthen the development of his/her neural connections across developmental domains (i.e., listen, speak, think, move, feel).

Exciting everyday experiences help build brain architecture in young children.

Resource:

Centre on the Developing Child, Harvard University https://developingchild.harvard.edu/

## Let Loose, Let Us Play with Our Children: It's Good For Us Too!

Sigmund Freud within his psychoanalytical theory, was one of the first to recognise children's free play activity as foundational to psychosocial well-being in adulthood. He discussed aspects of children's play that led to adult playful thought. Freud (1908) saw children's playful endeavours as a way for children to create a world in which s/he can feel in control and be creative:

> "every child at play behaves like a creative writer, in that he creates a world of his own... rearranges the things of his world in a new way which please him ...the creative writer does the same as the child at play. He creates a world of fantasy which he takes very seriously – that is, which he invests with large amounts of emotion – while separating it sharply from reality" (p.421)

He also discussed how the joking behaviour of adults emerged from children's playful humour (Freud, 1905/2013). Humour in our everyday life keeps us sane, joyful, and healthy. Humour is the result of our creative play with ideas, supported by our imaginative abilities (e.g., play with words). In our modern rat-race, we should let our children remind us to play and live a little and we should give them permission to have playful pockets of time every day.

Stuart Brown - psychiatry professor and founder of the National Institute For Play - became a lifelong advocate for play in part because of what he had learned as part of a member of a multidisciplinary investigation group called the "Tower Commission" in the 1960s. The group was tasked to investigate and understand some of the motivations behind the Texas Tower mass murder-suicide, committed by a healthy 25-year-old with no criminal history. The group examined every facet of his life and the possible factors that might have contributed to his murderous behaviour. Ultimately, the group concluded that the young man's killing spree was likely associated with his loss of free play, and suppression by a sadistic and overbearing parent.

Brown subsequently went on to interview males incarcerated for homicide and assembled the life histories of felony drivers who had died in car accidents. He found in his research that both the prisoner and driver groups had play histories that were significantly deficient in play compared to matched control groups in the population that he sampled.

Brown also interviewed thousands of people to catalogue their relationships with play. He noted a strong correlation between playful activity and success. His book *Play: How it shapes the brain, opens the imagination and invigorates the soul* (2010) describes the impact that play could have on one's trajectory in life.

In an interview Brown (2009) reminded adults of the need to remain playful -

"When we forget to play or get out of the habit, we get all cranky and rule bound, and couch bound, too. As a clinician, I've seen the negative effects of discontinuing playing all too often. When adults don't play much, the consequences are rigidity, depression, lack of adaptability, the loss of irony, and such. When we're playing, we cultivate all those talents that help us explore a demanding world, and we roll with the punches life throws at us." (p. 405)

## Play Provides a Safe Space For All of Us to 'Just Be'

Play can take many forms, can cost us next to nothing, and take up very little time. More importantly, self-initiated playful moments can provide us and our children with the safe, non-judgmental space to feel alive, be silly and refresh our minds, to reframe what is possible, and to imagine something better. Within such a creative process, play supports adult-child relationships, our social well-being, and emotional regulation especially when words and wise counsel are sometimes not enough.

The World Health Organisation (WHO, 2020) has defined health as an integrated concept: "A state of complete physical, mental and social well-being, not merely the absence of disease" and mental health is defined as having the capacity to cope, connect, function and thrive<sup>4</sup>.

WHO reported that almost a billion people, across ages, were living with a mental disorder (2022), with depression ranked as the single largest contributor to disability worldwide (2024a), leading to lost productivity and costs to social welfare. And in Singapore, the health and economic burden associated with depression and anxiety symptoms is large, representing 2.9% of Singapore's gross domestic product (GDP) (Chodavadia, et al., 2023).

Depression can result from a complex interaction of social, psychological and biological factors, and is closely related to and affected by physical health and activity. While there is no singular preventive approach, self-care strategies include: regular exercise, staying connected with friends and family, doing activities that one enjoys. There have also been effective community-based approaches such as school-based programmes to enhance positive coping strategies as well as exercise programmes for older persons (WHO, 2024b).

Across all ages, physical movement that includes various forms of play usually triggers the production of neurotransmitters such as dopamine and serotonin which enhance our mental well-being (Kestly, 2014). Intentionally engaging in self-chosen, motivating and fun play(ful) activities can help all of us protect our well-being and health even when life's stresses get to us. We believe that if play is lost or missing in children's (our) lives, especially in a BANI (brittle, anxious, nonlinear, incomprehensible) world, there are serious negative consequences individually and culturally for families, communities, and the future of Singapore.

<sup>&</sup>lt;sup>4</sup> Cope with change and stress while managing emotions; connect by having positive relationships and have sense of belonging; function by learning new skills, applying cognitive skills, earn a living and make healthy choices; thrive by feeling good, finding purpose in life, realising our abilities and thinking about our own and others' well-being (WHO, 2022)

The eminent play scholar, Joe Frost, in his compelling book, A history of childhood play and play environments (2010) encouraged us to re-think the ways in which we might have inadvertently projected our adult ambitions onto children, resulting in the decrease and/or disappearance of free play during the latter 20th and beginning of the 21st century. Such a decrease in children's self-initiated play activity could eventually be detrimental to society's overall well-being, likely to last for many generations.

## Adult Approval for Child Risk-Taking, Chaos and Noise

Many individuals would reminisce about playing freely back in the day when Singapore was a sleepy *kampung*. Children of different ages would run, scream and yell, catch spiders and frogs in forested areas, catch fish in *lonkang*, get wet and muddy, build stick houses, use whatever they could get their hands on to imagine and play.

In our manicured neighbourhoods today, where have all the children gone?

Singaporean children growing up a few decades ago would not have been very different as young humans in terms of their biological and psychosocial make-up. Today's children are no less curious or capable of building, creating and imagining through play. In fact, scientists are finding out more and more about how capable babies' and children's minds are than we had previously thought.

Children were never meant to be seen and not heard. Letting them grow to become responsible people means letting them earn our trust to play on their own, to take risks, to make new friends, and it is good for them to have opportunities to imagine, run wild, rough-and-tumble, scream and yell. (see Box 3 on repetitive play behaviours; and Box 4 on violent play)

Children look up to us, so as adults, we need to give them permission to play in their own ways, provide them with pockets of time and space to do so even within scheduled days. As adults, our main role is to build trusting relationships with our children, let them know that we are here to guide (and not always to instruct), so that we become the secure base that they will return to and share with after their everyday adventures. As sensitive adults, our job is to observe our children, listen and respond to their evolving worldviews, and try to see our children in their different light.

Play that is self-initiated by children usually provides us with surprising discoveries about their innermost thoughts and feelings which may not manifest at the dinner table or during a soccer class. Let their innermost wonderings reveal themselves to us so that we may educate and guide them accordingly.



## Box 3: Masak-masak and Other Repetitive Play Behaviours Why is my child doing the same thing over and over again?!

Two-year-old Ash is seated on the floor, surrounded by "treasure" - containers of different sizes, plates, bowls, colourful plastic shaped fruit, wooden blocks, bottle caps, discarded utensils such as wooden ladles, spoons and wooden forks. He appears to be playing masak-masak ('cooking'). With much vigour, he scoops up some blocks and tosses them into a deep plastic container, gives the container a swirl before picking up a ladle to poke and prod at the blocks. he then pours all the contents into a smaller box with some of the blocks overflowing onto the floor. He doesn't bat an eyelid, instead, repeats his cooking actions by scooping up some blocks to toss into the deep plastic container, shakes the container, pushing the contents with a ladle and finally, pours all its contents into another box. This activity goes on for a good number of repetitions – scoop, toss, throw. For a good 5 to 10 minutes, Ash remained focused and attentive the whole time, appearing to be quite purpose-filled and "in the flow".

Very young children often exhibit repetitive actions that seem very purpose-filled for them, while appearing meaningless or even annoying to us. We often think, "What is wrong with this kid, why does she keep throwing that on the floor even after I've picked it up for her?" or, "Why is he walking back and forth with that bucket, not doing very much with it?"

Psychologists, beginning with Jean Piaget, have studied children's play behaviours and attempted to explain how children's play can occur in stages (Bergen, 2014). These are child-initiated play behaviours that often help children experience firsthand how the world works and will often support their longer-term development and understanding of mathematical and scientific concepts. Such play behaviours appear as repetitive behaviours.

## Box 3: Masak-masak and Other Repetitive Play Behaviours Why is my child doing the same thing over and over again?!

Psychologists have linked these repetitive and playful behaviours to schemas – mental structures or representations into which we organise our knowledge about the world (Athey, 2007).

During the first three years of a child's life, children's play involves "physical thinking" - revolves mostly around sensory, exploratory, and/or whole-body manipulation of objects. A characteristic of this play is that it is repeated, and these actions are directly linked to the strengthening of neural connections in the brain. For example, when they repeatedly drop their bowls from a height, when they repeatedly move objects in and out of containers. As toddlers repeat these playful behaviours, they begin to learn and master certain motor actions and as they grow older (from around age 4 onwards), they will eventually learn to compare, classify, sequence, organise, identify patterns and explain causes and effects.

Some examples of commonly observed schematic play behaviours (Athey, 2007):

- repeatedly throwing or dropping objects (Trajectory Schema),
- hiding objects/covering them up and revealing them again and again (Enveloping Schema),
- moving one's body or cause objects to move vertically, horizontally at different angles and speed (Trajectory schema),
- rotating oneself or objects (Rotation Schema),
- lining objects up in a row or stacking them upwards (Connecting Schema)
- repeatedly moving oneself or objects from one place to another (Transporting Schema).

## Box 4: The dark side? Dealing with violence in children's play

As adults, we are often troubled when we see children (as young as age 4 all through primary ages) who are aggressive players, or engage in pretend play themes that involve violence and conflict -- a child tearing off a doll's arm, building makebelieve guns to shoot 'bad people', playfighting with make-believe swords. How do we respond in educative ways?

Children's TV has never been free from violence (e.g., *Ninja Turtles, Power Rangers*), and even as TV continues to dominate children's screen time, their use of mobile devices has increased rapidly and they are playing violent games on these devices or on the computer. Wide-scale marketing of movie/media-linked toys has also promoted one violent smash hit after another. But the marketing of violence to children will always be around, and our children will always be exposed to many variations of violence whether we like it or not.

There have been two ways of looking at children's violent play (Levin, 2012):

1) the developmental view – children play with violent themes in an attempt to understand the violence they have seen or experienced directly; or, they are working through important developmental issues, such as feelings of aggression and frustration or a need to feel more powerful and strong. As Vygotsky (1978) has noticed about a child in pretend play --"always above his average age, above his daily behaviour [...] as though he were a head taller than himself [...] (p.102)



## Box 4: The dark side? Dealing with violence in children's play

2) the socio-political view – children will imitate and learn anti-social messages and behaviours if given opportunities to engage in violent play content (i.e., war play, gun play)

Both views are reasonable. What is crucial is for us to understand *why* a child plays the way he/she does because children are not always able to tell us in words what they are going through emotionally or explain what they don't yet understand. We need to observe to see if a child's violent play is imitative or creative and experimental in nature, if it is a temporary phase or has a deeper meaning for the child. To date, there is more to be discovered and learned about how children mentally and emotionally process violence and there is no evidence to say that children will become murderers if they are allowed to engage in gun play. In fact, Brown (2009) has uncovered in his work with felons that having opportunities to play in childhood may be better than not playing.

So, as parents and teachers, we are our children's best hope for them to learn to overcome the complex emotions that are often associated with violent play themes. Instead of saying 'no' entirely to violent play themes/content, we can leverage on children's violent play by observing them, and reflecting with them to understand why children are playing the way they do. This way, we can respond appropriately to educate them to think in more positive ways, or provide support to ensure their safety and protection.

## How Do We Change As A Society? What Can We Do Today?

If we want to help improve the quality of childhood in Singapore and do so for the sake of a healthier and more productive nation in an unpredictable world, we need to allow children to have self-initiated play opportunities, and we could play with our children or be playful with them during our everyday routines. We have the power to give *them* time, space and permission to play freely on their own, away from readymade games (digital or otherwise). By doing so, we are telling children that we trust them to make some decisions on their own, to take initiative, explore with ideas they have, and grow to be more responsible. As adults, we are the secure base for children to return to and share their everyday adventures and wonderings.

Here is our recommendation for a start --

- Give your child permission to play in his/her own self-initiated, creative ways as long as you know he/she is safe.
- Observe your child's play where possible without directing it, to understand why he/she is playing the way he/she is – e.g., if he/she is trying to make sense of something that he/she's has been exposed to, or if he/she just needs to expend surplus energy.
- Play with your child when you can, as a co-player (equal partner).
- Share with your child the games you used to play when you were growing up.
- Let your child see you engage in a hobby that brings you joy.
- Promote a range of play experiences -- from mindful and focused (e.g., jigsaw) to whole-body movement play, from slow and controlled actions to quick and reflexive moves; from physical play to playing with words and ideas.
- Play needs to be repetitive but have the rules/materials changed over time to increase the level of challenge or to add novelty.
- Promote play that preserves culture and let children enjoy some of the play activities you used to have in your own childhood.
- Play doesn't need to cost a lot of money, utilise what you have.
- Together with your child, devise different ways to play with existing toys/ game-sets rather than always following the original instructions.
- Bring a large cardboard box, a hula-hoop or a ball to the playground as a way of adding a new element into that space to create a different context for play to take place (e.g., an imaginary house on the playground).
- Play doesn't need to take up a lot of time. Be playful when you have a moment
  -- at the bus-stop, on the train, when waiting for your meal to be served
  (Quick play ideas: 'I spy', 'Paper, Scissors, Stone', create a story, make up a
  riddle, play a reflex/reaction game).

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