

Curriculum Framework on Parent Education (Kindergarten)

Notes for Parents

Educational talk: Recommendations on sleep, physical, recreational activities and media use

Importance of Sleep, Physical Activities, Play, and Appropriate Use of Electronic Devices

- Due to the emphasis on study and academic achievement, some Hong Kong parents arrange large amount of extra-curricular activities for their young children.
- Children may not have adequate time for play, physical activities or rest.
- A healthy life should include healthy eating, regular physical activities, personal hygiene, regular daily routines and mental health, etc.

(Source: https://www.studenthealth.gov.hk/english/health/health_hl/health_hl_ahl.html)

- In this session, we will illustrate:
 - The importance of sleep, physical and recreational activities, and appropriate use of electronic devices;
 - The consequences of inadequate sleep, physical activities, play and unlimited use of electronic devices;
 - Optimal time for sleep, physical activities and use of electronic devices.

Importance of Sleep

- Sleep is the major activity of children's early brain development.
- During the early years of a child's life, over half of the time is spent on sleeping in a day.
- Sleep plays a key role in the growth, repair and metabolic homeostasis of the brain, which has significant lifelong impact to physical development and health.

Negative Impacts of Sleep Deprivation

- Sleep deprivation has negative effects on cognitive performance and emotional regulation.
- Sleep deprivation is harmful to the functioning of brain, and has adverse effects on learning, cognition and reaction time.
- Sleep deprivation and lack of physical training will increase risk in health, such as obesity.
- Sleep deprivation is related to less ideal preparation for schooling, hyperactivity, inattention and less pro-social behaviours.

Common Causes of Sleep Deprivation in Kindergarten-aged Children

Health related factors

Circadian rhythm sleep disorder:

- Cerebral palsy, intellectual disability, autism spectrum disorders, vision impairment

Intercurrent diseases:

- Chronic conditions: anemia, atopic diseases, congenital heart defects
- Chronic or recurrent pain: malignant tumor, arthritis, gastroesophageal reflux disease
- Respiratory problems: obstructive sleep apnea
- Sleep disorder: restless legs syndrome, insomnia

Nervous system:

- Attention deficit / hyperactivity disorder
- Sleep-related epilepsy

Suggested Sleep Time Per Day

- Student Health Service Centre, Department of Health
- Adequate sleep time is essential for the health of children
- Total amount of sleep in a day for different age groups:

Newborns (up to 2 months)	12 to 18 hours
Infants (2 to 12 months)	13 to 15 hours
Toddlers (1 to 3 years old)	12 to 13 hours
3 to 5 years old	11 to 13 hours
5 to 12 years old	9 to 11 hours
12 to 18 years old	8.5 to 9.5 hours

* Source: Student Health Service Centre, Department of Health. Smart e-Team (Parents)booklet.

Importance of Physical Activities

- Physical activities in early childhood are related to children's physical and cognitive development, psychological-social and physical well-being, cardiovascular, bone and muscle health.
- Young children should have the opportunities to participate in a variety of developmentally-appropriate, safe and enjoyable play-based physical activities.

Negative Impacts of Insufficient Physical Activities

- Obesity
- Less favourable cardiovascular health conditions
- Less favourable bone health conditions
- Lower self-esteem
- Less emotional well-being

Suggested Duration for Physical

- Children aged 3 to 4 should have more than 180 minutes physical activities of different intensity levels (at least 60 minutes high intensity physical activities); the more the better.
- In order to optimize children’s holistic health, it is important to promote physical activities in early childhood.

Examples of physical activity by intensities:

Intensity	Physiological signs	Common examples*
Light	Breathing rate and heart rate normal; able to talk normally	Slow walking, playing toys, putting on clothes, grooming and packing school bag
Moderate	Slight increase in heart rate and breathing rate; able to talk in short sentences or single words	Brisk walking, cycling, paddling, playing slides, swinging, circuit games, hopscotch, tossing balls
Vigorous	Significant increase in heart rate and breathing rate; unable to talk normally	Running, rope skipping, dancing, playing in park, playing football and swimming

* Activities should be appropriate for the age and physical developmental needs of young children.

* Source: StartSmart@school.hk, Department of Health. Physical Activity Guide for Children Aged 2 to 6.

Free Play

“Free play” is a behavioral activity evoked by the intrinsic motivation of children. It places emphasis on children’s autonomy and free participation and children are not limited by the rules or preset goals established by adults. During free play, children can choose their own tools, ways to play, playmates and activity area.

Source: Education Bureau. Kindergarten Education Curriculum Guide. Page 119.

Free Play

- Play is of critical importance in facilitating parent's engagement; promoting safe, stable, and nurturing relationships; and encouraging the development of numerous competencies, including executive functioning skills; and improving life course trajectories.
- Play is brain building. Play has been shown to have both direct and indirect effects on the formation of brain structure and functioning.
- Quality free play can promote learning and adaptive and/or prosocial behaviour through improvement in executive functions and socioemotional skills and changes in neuronal and gene activities.
- The beneficial effects of free play are extensive which include improvements in executive functioning, language, early math skills (numerosity and spatial concepts), social development, peer relations, physical health and fitness, and enhanced sense of agency.
- In the presence of an adverse early child environment, play can take an even more important role - parents and children can experience harmony and joy together during the process, thus downregulates the body's stress response and protect the brain development.
- Free play in a variety of forms (e.g. active physical play, pretend play, and play with traditional toys, blocks and shape sorters "non-electronic toys") improves children's skills and diverse learning abilities.



Free Play

- It is important to ensure children have free play time. The benefits include improving basic physical development, and it brings lifelong benefits in reducing risk of obesity, hypertension and diabetes.
- The quality of sedentary time matters and interactive non-screen-based activities, such as reading, storytelling, singing and riddles are important for social and cognitive development as well as recreation and relaxation.

Rights of the Child

- As stated in Article 31 of *Convention on the Rights of the Child*:
“...recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.”

Appropriate Use of Electronic Device

- With the use of electronic devices becoming increasingly popular, some children start using them even in infancy. Parents should understand the necessity of restricting children to use electronic devices, and the importance of guiding children to use electronic devices in their early childhood appropriately.
- Media in all forms, including TV, computers, and smartphones can affect how children feel, learn, think, and behave. However, parents (you) are still the most important influence.
- It is important to help children develop a healthy habit in using media in early childhood.

Suggestions from Family Health Services Centre, Department of Health

- Parents act as good role models and avoid excessive use of electronic devices
- Set rules in using electronic devices
- Encourage other activities instead of using electronic devices, reduce screen time
- Use "intentional neglect" / "planned ignoring" when children cry and demand for electronic devices

Negatives Impacts of Excessive Screen Time on Kindergarten-age Children

Physical	Psychological
Long screen time reduces the time for physical activities → obesity	Mimic improper behaviours, including violent behaviours
Bad posture → neck and back pain	Affect sleep and attention
Looking at the screen for long hours → sore eyes and inflammation	Reduced social interactions → social development issues
Reduced verbal communications → Language development issues	Less ideal parent-child communications and relations

Electronic Devices – Duration of Use

For children younger than 1

- No screen time is suggested for children younger than 1, parents are encouraged to tell stories instead.

For children 1.5 to 2

If you want to introduce electronic media to children:

- Choose internet products with quality content.
- Use electronic devices together with children.
- Avoid children using the devices by themselves.
- Limit screen use to no more than 1 hour per day. Media use is conducted only when parent's co-view, discussion and guidance. For example, have a video-call with relatives along with parents.
- Try to replace screen time with parent-child reading.

For children 2 to 5

- Limit screen use to no more than 1 hour per day.
- Arrange other activities beneficial for children's physical and psychological well-being.
- Choose interactive, non-violent, educational and pro-social media.
- Co-view and co-play with children.
- Try to replace screen time with parent-child reading.

Happy Child, Happy Life: Parent-child Interactive Activities

- Let children have no less than 3 hours to participate in physical activities of different variety per day;
- Let child go outdoor to run, play and explore in the playground and park;
- Introduce concepts of size, colour and number to children through daily activities;
- Conduct parent-child reading daily, encourage children to learn new vocabularies, compose long sentences and answer simple questions;
- Use existing household items to encourage children to have imaginative role-play;
- Encourage children to conduct simple self-care activities independently;
- Limit children's total use of electronic devices to no more than 1 hour per day. Parent can choose appropriate programmes, view and play together, and give proper guidance.

References:

Eunice Kennedy Shriver National Institute of Child Health and Human Development (2019). How much sleep do I need? Retrieved from

<https://www.nichd.nih.gov/health/topics/sleep/conditioninfo/how-much>

Healthychildren.org (2019). Healthy digital media use habits for babies, toddlers & preschoolers.

Retrieved from

<https://www.healthychildren.org/English/family-life/Media/Pages/Healthy-Digital-Media-Use-Habits-for-Babies-Toddlers-Preschoolers.aspx>

World Health Organization (2019). Guidelines on physical activity, sedentary behavior and sleep for children under 5 years of age. Retrieved from

<https://apps.who.int/iris/bitstream/handle/10665/325147/WHO-NMH-PND-2019.4-eng.pdf>