

A Systematic Review on Physical, Cognitive, and Social-Emotional Development of Pre-Schoolers

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Abstract

This systematic review analyses the three major developments of pre-schoolers, which are physical, cognitive and social-emotional factors. This journal review aims to get a better understanding of those developments, and the method used was a thorough examination and compilation of recently published studies within five years (from 2017 to 2021). The physical development of pre-schoolers is based mainly on the growth of the body and features which were inherited biologically. However, external factors such as adequate exercise, nutrients, and sleep help to enhance it. Nonetheless, precautions are important to avoid the risk of catching contagious diseases caused by low metabolism, which will be pondered in detail in this article. Whereas, cognitive development refers to reasoning, thinking and understanding, and to gain a better comprehension of it, studies based on famous theories such as “Piaget’s Preoperational Stage” and “Vygotsky’s Theory” has been included. While major crisis Covid 19 has certainly impacted pre-schooler’s socio-emotional development in recent years. The way it impacted kids’ well-being, access to medical and therapy facilities, as well as the way it inflicted fear on parents has been explored. Besides that, in the discussion part, the limitation of studies and the expectation for future studies, especially in Malaysia, have been brought forward. To conclude, physical, cognitive and socio-emotional factors play a vital part in pre-schoolers life development, hence it’s important to invest in it to get a better comprehension and have a piece of updated information, especially with the changes in the situation.

Keywords: Pre-Schooler, Physical, Cognitive, Social-Emotional, COVID-19

Introduction

A stage of development is crucial in every phase of human growth whereas influenced by transition period inaccessibility and environment. In this journal, we would like to expand the overview of collective research in the early childhood development phase especially in physical, cognitive, and emotional. The development of early childhood is a very important aspect to identify and develop an individual characteristic, personality, and traits along of

preparedness to adolescence and adulthood stage (Tran et al., 2019). The full necessities to support the growth development of young children play an important role as per research that has been conducted previously where low-income and middle-income countries find it hard to support and risky the human evolution. The human condition is not their main priority as they strive to survive and with poor structure planning of development by their leadership authority. This encumbrance has led to us dig more into the previous and current research towards the advancement development of early childhood (Richter et al., 2016).

According to the recent PISA (Programme for International Student Assessment) benchmarking of children cognitive capabilities, Malaysian children remain behind in problem-solving and critical thinking skills compared to their global peers (MOE et al., 2020). As such, focus need to be given to preschool children's cognitive development for them to meet the need of primary school readiness. Through improved syllabus, children acquire more complex skills as they progress in their cognitive development stages. On the other hand, social-emotional such as the ability to capture others emotions such as knowing when a friend is upset when a particular toy is being taken away from them, hence they should return the toy to the friend, and ability self-regulate such as knowing it is not ok to be aggressive when teacher announce that playtime has over, so it's time for the kid to move to work time, despite the kid wants to play more. All the elements of social-emotional which mean interpreting and reacting through other people behaviour is very important for a child, as it is something they acquire by learning slowly and steadily.

Physical Development of Pre-Schoolers

Physical development in early childhood has been emphasized by Sigmund Freud in his psychoanalytic theory. It consists of five stages of development which are oral, anal, phallic, latency and genital stage where preschoolers focus more on phallic that known as understanding the pleasure of genitals from their fantasy. A girl will have a sense of penis envy which they might either feel the function of the organ is called completeness if they have an environment that insecure them especially related with the social activity and. While a boy will have castration anxiety that afraid, they will lose their organ. In addition, the structure of personality from Freud enlightens that Id is a natural creature, personality, and behaviour that have since been born. The function of this stage is the pleasure principle and avoiding any disturbance or sickness without thinking about other values to fulfil the maximum satisfaction of life. It is relevant with children because there is no limitation in this stage as their concept is to learn and experience as much as they can (Sumari et al., 2021).

There are many factors of elements that influence the pattern growth of an infant until adulthood, and all comes from biological process nature. Whereas genes are inherited from parents and descendants that moulded our physical appearance. This includes the characteristic of our face, height, weight and uniqueness of identity. According to Santrock (2021), there are a few principles of genetics that have been identified which are powerful recessive genes, sex-linked genes, genetic impairing, and polygenic bequest that clarify the questions of the type characterization of the individual. Dominant recessive genes describe individuals carrying both genes from parents or either one that physically can detect through appearances such as the brown colour of individual hair same as a mother or father or both. While sex-linked genes are related to chromosomes that male and female produce the gender of the baby, it may come to attention that the chromosome does not come out in the same way which is the X and Y chromosome and there have a potentially the chromosome that being carry is problematic. Genetic impairing refers to when the genes from the mother or

father that has an effect that cause the disturbance on the development that led to a growth disorder. Lastly, polygenic inheritance is much more complex than normal genes. It will affect the small particle genes that influence characteristics, behaviour, disease, and development (Santrock, 2021).

At this stage, physical appearance change directive toward the gender showed a difference as a girl size would be slightly smaller than a boy. Hence, boys tend to have more muscle tissue and girl have more fatty tissue which during this phase the body showed a steadily decline which depends on nutrition, and genes. Hormones are very important to an individual as the push factor created by the pituitary gland gives signals and instructions for the body to grow. The growth hormone disorder will lead to stunting the growth such as the height and will face the problem if an individual's height does not reach five feet, especially a boy (Santrock, 2021). In addition, physical activity is the principle of facilitating and sustaining a child's health to integrate with the motor skills functions. But it has been highlighted and there is evidence if a child spends time more in physical activity emerging better health, motor skills and cognitive. Moreover, from the physical activity, a child will be gaining a process of improvement and exploration which enhance the motor skills in problem solving and creativity (Motevalli et al., 2021). Children performing physical movement regularly achieved higher learning outcomes especially in recalling a memory, high satisfaction in sports and exposure to pre-school setting increase the social behaviour by learning a new language and new fine motor skills. Overall, finding outcomes showed that physical movement had significant positive effects on 80% of research assessing motor and cognitive development improving the sustainability health condition of the child (Zeng et al., 2017).

In this technology advancement era, children exposure shifted shift from physical activity by watching television and physical learning spending more time on the handphone, tablet or laptop since all activity has been compressed in one area which we called as visualize learning or activity. This behaviour will relation health and growth results such as obesity, weight, the high tendency in eye functionality, social skills, and mental health disorders. A child that is addicted to screen time will react to depression, aggressive behaviour and lack of interpersonal skills due to no interaction between other people or other children. Hence, the negative indicators increase when a child is exposed to excessive visual games which will develop aggressive behaviour due to unsatisfactory emotional feelings such as disrespect or disobedience to parents. In contrast, by spending more time in technology a child will increase cognitive development, especially in academic achievement since there is a lot of platforms of learning without any limitations of exercise that are being created. Therefore, social skills in not the main priority nowadays due to the pandemic COVID-19 on the enhancement of reducing face to face learning activities which will affect future well-being and social skills. The study showed that girls have reported spending more time on screen time which constructs low social skills than the boys and this behaviour is associated with a mental disorder. Parents play the biggest role to aware of the long-term effect for their children as this alternative behaviour will stealth overall children development and parents will take easy action to avoid any tantrum or discomfort behaviour from children which the awareness on balancing physical activities should be prioritised (Hinkley et al., 2018).

According to Maslow's hierarchy of human needs apart from oxygen and water, food is essential for humans to live in this world. The nutrients that come from food and water gives energy to human especially nowadays there is a lot of processing food and unhealthy fast food that can bring up the implications of disease such as cancer, heart attack, stroke and et. The pattern of eating behaviours is influenced by a few factors to develop successful

growth for a young child which is family conditions, parental skills, maternal and paternal influence, education and socioeconomic status and eating behaviour. Family play an important role to a child to show good behaviour, routine, and an example of assessing healthy eating behaviour starts from infancy. Children will remind and recall their favourite foods as their caregiver has provided them routine eating behaviour and the process of repeating is possible and the child will not try to new things if new food does not have exposed them. The family environment can be considered too low- and middle-income status that has difficulties to provide full necessities to their children. They just provide food that is easy to find and cheap by repeating the routine. The outcomes will affect children with low nutrition and decrease metabolism on growth development. Furthermore, on parenting skills studies found that it can be classified as authoritative, permissive, and authoritarian. All three types of parenting skills describe a parent who is controlling, have a directive opinion, is strict and with less negotiation approach. With all the characteristics of parenting skills that help the children to be more disciplined with their eating behaviour and the outcomes of the study showed that the children have a low obesity rate. These types of parents have a background and knowledge of what is best for their children and are restrictive on certain foods, nutritious food intake by their children. Maternal and paternal influences are referring to the way of mothers or fathers handle their children on food consumption. Mothers are more rigorous people since the attachment are closer and they know what their children want to eat or what types of food should be given. While fathers are very flexible and limit consumption of food to their children since their skills are more pressuring children to eat which lead to obesity is possible. Parents with low educational levels and lack exposure to types of food that are relevant to their children influence their growth development. For example, a low middle-income country that has low awareness of medical health diseases like diabetes showed that parents and children do not know to control the sugar level which will impact the future well-being. Lastly, child-eating behaviour and preference refer to an existing condition that difficult to change eating behaviour such as an obese child being pressured by their parents to control their food intake which the correct way is to change a healthy food consumption to a child. Family conformity affects the overall child's eating behaviour as this will impact their life in cognitive and emotional development (Scaglioni et al., 2018).

Another factor that is significant to physical development is sleep. Young children use a lot of energy because at this stage they are starts to explore, try new things and use high cognitive skills for their movements. A lot of physical activity in their daily routine require them a lot of energy, food, and sleep as a recharge to their unlimited action. Sleep can be considered as therapy that regulates better emotional stability, quality growth and improvement in motor and cognitive skills. Early childhood that spends 180 minutes at least on mixture activities and learning should spend 10 – 13 hours of consistent sleep to gain a better-quality day (Tremblay et al., 2017). Lack of getting not enough sleep can have trouble in focus especially in early adolescence and imbalance weight either obesity or undernourished. There are study outcomes on sleep problems that could lead to attention deficit hyperactivity disorder (ADHD).

Children safety has been highlighted from infancy until adolescence where they require attention to oversee what they have been doing since they did not have awareness of right or wrong things. People surrounding influence the attention toward them by providing a safes environment (Santrock, 2021). A synonym disease that affected young childhood is diarrhoea no matter in low middle-income countries, developing countries or developed countries. According to WHO (2017), around 1.7 billion cases around the world

affected young children and the second cause leading to mortality. The disease is described as an infection that causes by a mixture of bacteria and the child will lose energy and diarrhoea even worst if not being given treatment will lead to death. The dirty and unhealthy environment are the main causes of the disease, especially unboiled water. The country with high poverty lack awareness and knowledge in improving quality of life and a lot of young child experience hunger, critical illness such as HIV/AIDS that expose an unsafe environment to child development. Few parties required an intention to change the perspective of better development for future generations from individual, family, school, and community. Individuals are referring to a care helper or parent itself should have the knowledge, better understanding and social skills that can provide support, caring emotion towards the development of the young child. For the family, a sense of protection is highly required to provide a safes environment to young children together align with parenting skills. While the school is the phase where young children are sent to caretakers to expose their learning skills by promoting the safety programmed and awareness. Lastly, the community require to enhance surveillance of environmental hazards by implementing strict policies to the community that are related to children and safety (Santrock, 2021).

Indicator That Influence the Progress of Physical Development

A child can experience slow progress on physical development and obesity somehow proved a relationship between divorce family with children were showed that the tendency a child to gain weight is positive high by 80% compared having a stable family environment. This can be seen how strongly affected the children appearance apart from emotional and cognitive disturbance (Oh et al., 2018). A bedtime routine will help a young child to have a better quality of sleep, promoting better health and improving learning process but the contrast of the behaviour will lead to instability of emotion, cognitive and even physical because a child does not have full energy to support the growth. This will acquire the parents of caregivers to be concerned about the importance of sleep since the infancy stage (Mindell & Williamson, 2018).

Cognitive Development of Pre-schoolers

The cognitive development or cognitive world of pre-schoolers is often described as a creative, free and fanciful period of life. Preschool kids' imaginations grow over time, and their ability to understand or their intellectual grasp of the world improves constantly. The cognitive development during the early childhood stage has been described by many scholars, especially by Piaget and Vygotsky. Besides these two scholars, other theories such as learning theory, information processing and sociocultural theory also emphasized the cognitive development of young minds. These theories in particular differ from one another and at the same time have some shared values as well. In this section, I critically compare and contrast the elements in these theories and synthesize the idea of the cognitive development of pre-schoolers.

Piaget's Preoperational Stage

Piaget's preoperational stage' starts approximately from 2 years old and develops until 7 years old. This is the stage in our country Malaysia, a child enters preschool education and explores the world with his/her words, images and drawings. The child forms stable concepts from his/her perceived world and begins to reason. At this time, the young children cognitive world is influenced by egocentrism and enchanting beliefs. According to a study conducted

by (Babakr et al., 2019) egocentrism refers to the child's inability to differentiate between their perspective and others. This means the child behaves like a selfish person. Children until their later age are said to be egocentric (Babakr et al., 2019). Although Piaget's idea was supported by fewer studies that a young child is egocentric, some other experiments have shown that a child can take other points of view earlier than Piaget suggested (Babakr et al., 2019). Some studies suggested that the child will be egocentric until three years only. Whereas, another study supporting this statement suggested that a 4-year-old child can think of others' perspectives and their mental state can be distinguishable from others. Therefore, Piaget's thought of egocentrism has been revised critically (Newcombe & Huttenlocher, 1992), stated by (Babakr et al., 2019).

Moreover, the symbolic function is Piaget's first substage of preoperational thought, which explains that the child acquires the ability to mentally represent an object that is not present. This, symbolic function substage lasts between 2 and 4 years of age. This ability vastly expands the child's mental world (Santrock, 2021). Young children use designs as a representation of people, cars, houses, clouds, trees and other objects that depicts their perceived world. Hence, for children's cognitive development classroom settings must initially be conducive to accommodate and provision such pedagogy. In essence, activity and learning spaces should be designed with children's learning behaviour in mind, as practised in most Western countries (Shaari et al., 2021).

In Piaget's idea, children during the preoperational stage have conservational difficulty (Babakr et al., 2019). Conservation refers to the ability to recognize that something remains the same amount even if its shape changes (Babakr et al., 2019). According to Jean Piaget, the ability to conserve comes naturally, however it should be stimulated by the child's environment. The cognitive development of children's methods of learning promotes that children obtain their self-knowledge when they actively engage in their environment. Children's experiences are said to have a notable impact on their development and knowledge. Jean Piaget stated that the learning and thinking process of children are represented as the interaction among themselves and their surroundings. He strongly believed that when children do something on their own, they actively learn with the support of their teacher, and are conditioned with a stimulative learning environment (Rostan et al., 2021). Therefore, children need a conducive and effective learning environment especially for language activities (Rostan et al., 2021).

Vygotsky's Theory

Like Piaget, Vygotsky (1962) emphasized that children actively construct their knowledge and understanding. In Piaget's theory, children's pattern of thinking and understanding is developed by their actions and interactions with their physical world. In Vygotsky's theory, children are more often described as social creatures (Santrock, 2021). This theory explains that children primarily through their social interaction learn to think and understand. Vygotsky also pointed out that most children's learning takes place during play ([Dzainudin et al., 2018](#)). Children develop their knowledge and language through play. Interacting with their social groups at preschool (friends and teachers) help children develop their language and thoughts. The development of children's language also leads to a great change in their thinking (Dzainudin et al., 2018). This is especially when children are engaged in social dialogues with more knowledgeable individuals like teachers and mentors. As a result, the process of basic thinking of children will turn into a high cognitive process (Dzainudin et al., 2018).

The Zone of proximal development (ZPD) is Vygotsky's term used for the range of tasks that are too difficult for a child to master alone but can be learned with guidance and assistance from adults or more-skilled children. The ZPD captures the child's cognitive skills that are in the process of maturing and can be accomplished only with the assistance of a more skilled person (Santrock, 2021). Children usually get assistance from their mentors and preschool teachers to achieve the task given.

Scaffolding is another method proposed by Vygotsky which is closely linked to the idea of the ZPD. It means changing the level of support. Throughout a teaching session, a more-skilled person (a teacher or advanced peer) adjusts the amount of guidance to fit the child's current performance (Neumann, 2020). This method is widely used in preschools to boost children's reading habits. Teachers play an important role in scaffolding children's learning during shared reading experiences with printed books (Neumann, 2020). Teachers tend to provide scaffolding to children to encourage them to go beyond their limits and this method optimizes children's learning process (Neumann, 2020). For example, teacher's scaffolding at the level of the child's ability during shared storybook reading by asking questions (e.g., "What is this?"), then extending ("Yes, that's a butterfly"), and then taking children to a deeper cognitive level (e.g., "What do you think butterflies like to eat?"), to foster oral language development and word learning. Furthermore, increasing recent research has shown that teacher talk during shared reading creates a platform in scaffolding children's learning about content, meaning construction, and forming deeper understandings about words and concepts (Neumann, 2020).

Besides the theoretical concepts, both Piaget and Vygotsky's theories received criticisms. Even though their theories were proposed at about the same time, most of the world learned about Vygotsky's theory later than they learned about Piaget's theory. Thus, there is space for further evaluation in Vygotsky's theory thoroughly. Some critics viewed that Vygotsky was not very specific about age-related changes. Another criticism is that Vygotsky did not sufficiently explain how changes in socioemotional capabilities contribute to cognitive development (Santrock, 2021).

Analysis of Cognitive Development among Pre-Schoolers

It has been highlighted that play is a significant factor in children's cognitive development. According to Piaget's four stages of cognitive development and their sub-stages, it is explained that play is an important instrument in children's cognitive development. Children are usually involved in interactional play with their environment. This play proved to have a significant impact on children's cognitive development. While children use play as a part of their learning, they tend to learn their environment naturally. Pre-schoolers are more into playing go hand in hand with their learning process their brains are hard at work putting together vital knowledge about the world and supporting pre-schoolers cognitive development (Raising Children Network, 2018). Teachers and parents conceptualized those preschool children in middle-class modern societies actively involved in pretend play. Though games often have distinctly seen as a socializing tool in children; indeed, they also build distinctly cognitive skills in them and create a bridge between the social world and the more individualistic world of cognitive abilities (Bhagat et al., 2018).

In the Malaysian context, parents started to understand the importance of preparing a productive learning environment for their children's growth and learning process. This is proven by the increasing number of children are being registered in preschool every year ([Children Statistics Malaysia, 2020](#)). Children until the age of five are always looking for ways

to understand the world around them by using their senses and by interacting through social interaction language, calculation, the reasoning of incidents, as well as problem-solving angle. From this process of learning children build understanding and concepts about the things that surround them. Various methods have been implemented in evaluating the children's cognitive development during their preschool age. One of them is by cross-referencing the criteria from the instrument of children cognitive development assessment. There are eight categories in total namely the ability to understand the concept, categorise, order, tell stories, problem-solving, playing, mathematical problem solving and reading (AEPS, 2016). All these categories can be achieved by a child through preschool teacher's assistance and their social learning.

To guarantee children are prepared with the required skills to partake in such an improved syllabus, public preschools in Malaysia were required to ensure children are cognitively ready for primary school education (MOE, 2020). This recognition and promotion of cognitive school readiness (SR) is an important part of preschool education and it is crucial as it helps demonstrate important developmental foundations desired for children to acquire more complex skills as they progress in life. Studies have established that children with high cognitive SR are better prepared to perform better in life compared to children with poor cognitive SR (Shaari et al., 2021). Hence, preschool children's cognitive development needs to be encouraged both by parents and preschool teachers.

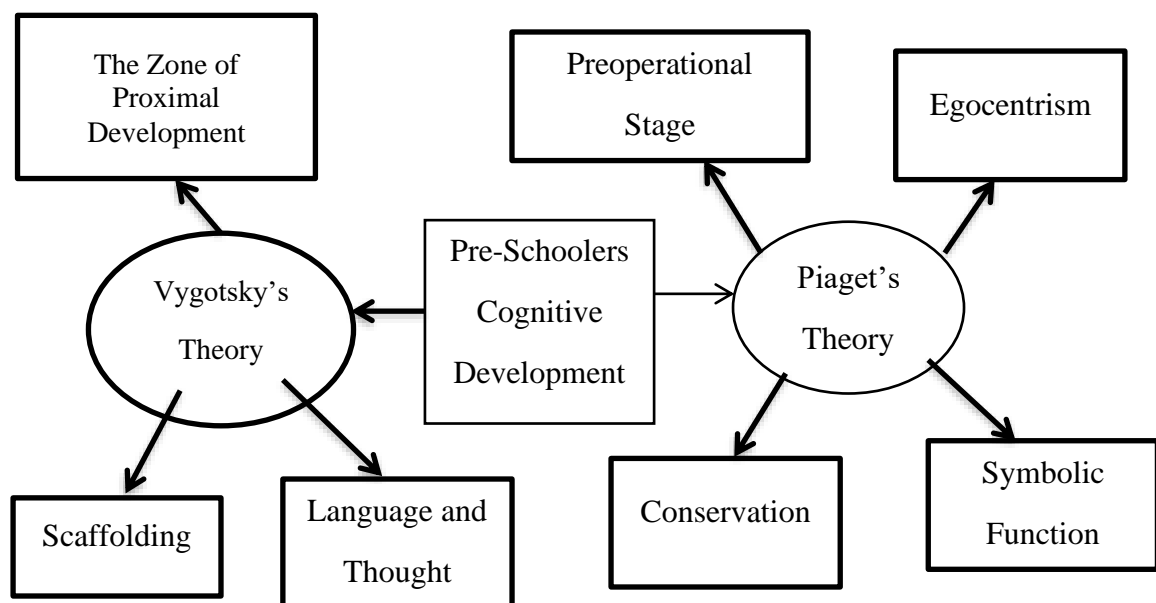


Figure 1: Theoretical Framework of Pre-Schoolers Cognitive Development

Social-Emotional Development of Pre-schoolers

Impacts of Covid on Social-Emotional Development of Pre-schoolers

For the past two years, the world has been terrorized by the noble Covid, it shook the world of children too, as children that used to run around with friends in school, engage in interactive learning, and be with people outside of their family circle, ended up being caged in the house while engaging in online learning. Thus, it's hard not to include the factors of Covid and their impacts on children's social-emotional development. The most prominent difference for kids is the shift from physical class to the virtual class. A study has been carried out in Pakistan to comprehend the influence of virtual class on both children and parents

(Bhamani et al., 2020). Their approach is mainly based on the parents' viewpoints, feedback and experiences, which was carried out through the online medium of questionnaires as preferred by their candidates. They had only nineteen parents who were willing to participate in the study, whereas the remaining sixteen chosen parents weren't willing to participate due to the ongoing pandemic (Bhamani et al., 2020). Parents have indicated the importance of gestures and group activities such as "shaking hands, hugging, celebrating parties, eating and praying" in developing their children's social-emotional skills such as being patient and understanding toward one another, and coexisting peacefully, that has been lacking since the days of an online class. Parents also believe and are afraid that their kids' sense of confidence will decrease as they are being more contained to the four walls of their house (Bhamani et al., 2020).

When self-regulation of emotions that plays a part in social-emotional development decreases, it may lead to mental health. However, how Covid does influences children's social-emotional development that leads to concern about their mental health? This question was answered by a journal published in Pakistan (Imran et al., 2020). They discussed many factors in this pandemic that cause impacts on the mental health and various ways it was being portrayed, plus they touched on different kinds of situations the kids' face (Imran et al 2020). The factors that lead to disturbance in children's mental health during Covid are lockdown with the inclusion of its standard operating procedures that makes kids feel isolated and lack of interpersonal relationship with teachers and friends, investing more time on laptop and phone that leads to involuntary exposure of unwanted contents that leads to excessive worries about the pandemic (Imran et al., 2020). They also stated that the predicament caused by Covid to parents that leads to great tension, puts the children's mental health at stake too, especially the fright felt by the parents get passed down to their children (Imran et al., 2020). Moreover, kids from the abusive household were put into greater abusive circumstances under lockdown as the time spent with their abusers had been increased; their method of escapism had been taken away with the imposition of lockdown (Imran et al., 2020). The journal mentioned the ways the kids display their stress, such as by outburst, retreating to toddler behaviours which had been explained by Freud Sigmund as one of the coping mechanisms, difficulties in sleeping as well as lacking a good quality of sleep (Imran et al., 2020). Unfortunately, parents may look past this or misjudge these actions or behaviours (Imran et al., 2020). Children who need to be confined due to having Covid, faces challenges such as panic and separation anxiety, as they had to be away from their family, whilst fighting something that is not known to them (Imran et al., 2020; Motevalli et al., 2020; Perveen et al., 2020).

Similarly, a Canadian based journal has stated the impacts of a pandemic on children (Courtney et al., 2020). They stated that parents play a vital role in consoling their children when their children go through a problem or a stressor, unfortunately, the pandemic that puts parents themselves under greater stress, makes parents unable or incompetent to provide the necessary support to help their kids (Courtney et al., 2020). Kids with pre-existing mental issues face difficulties as they are unable to attend their therapy sessions due to the new rule of operation of mental health facilities and healthcare facilities (Courtney et al., 2020). This situation forces staff of mental health care to come up with new techniques to reach out to their young clients (Courtney et al., 2020). By the same token, autistic kids are known to have rigidity and when the rigidity gets to bend, it causes a stir them, with the addition of shorter or online-based therapy may not give them the adequate sessions they needed, that will revert them to their socially unacceptable behaviours (Imran et al., 2020).

Activities and Factors that Enhances Social-Emotional Development in Pre-schoolers

Some journals have come up with ways to help promote better social-emotional skills and to promote good mental health in pre-schoolers to cope with the ongoing changes in lifestyle due to the recent pandemic. For autistic children, disruption in the everyday schedule that acts as a part of their rigidity remains one of the main causes of declination of good mental health in them, hence, bringing the schedule back to their life, by re-imposing it based on the current situation, while confining at home will at least give them something familiar and a routine to follow (Imran et al., 2020). Likewise, physical activities during lockdown provide not just good health, but good mental health to autistic children (Yarimkaya & Esenturk, 2020). Duration and type of activities are important, the time taken for the completion of the physical activity can be somewhere from 20 to 30 minutes, however, it's best to seek their healthcare providers or even the child's therapist if want to try a different type of activities, plus the activity should bring joy as it will increase anticipation (Yarimkaya & Esenturk, 2020). Planning the space that will be used for the exercise in terms of considering the safety measures, and enough room to carry it out will be useful (Yarimkaya & Esenturk, 2020). Participation of the members of the family during exercise is highly recommended, as it will increase the social-emotional between the family members, and will increase the well-being of the child (Yarimkaya & Esenturk, 2020). Types of physical activities can vary, it can be an activity that promotes gross motor skills such as "walking, climbing and aerobic exercises", or activity that promote problem-solving and critical thinking such as "LEGO therapy and educational games" (Yarimkaya & Esenturk, 2020).

Being at home 24 hours for 7 days a week might not be an entirely bad experience. Some journals show that this could be a positive impact on children with pre-existing mental health issues (Courtney et al, 2020). It has provided a good opportunity for parents to keenly observe their children, beware of the concerning symptoms being displayed, and know exactly when to seek professional advice (Courtney et al., 2020). This could open chances for a better exchange of views between the child and the parents (Courtney et al., 2020).

Correspondingly, preschoolers' social-emotional development and well-being could be prevented from being stagnant or disrupted in the times of Corona by making sure they are not purposely or accidentally exposed to worrying issues related to Covid to avoid them being struck by anxiety (Imran et al., 2020). As sleeping patterns became an issue during a pandemic, parents should allocate time to enjoy mind relaxing and joyful activities with their children in the daytime. Parents should give more affectionate gestures such as "hugging and cuddling" their kids (Imran et al., 2020).

Discussion

This part will be mainly focused on the areas of improvement and suggestions for future studies in Malaysia. Children's growth process plays a significant part as it allows advancement in cognition and language. Pre-schoolers well-being such as their appearance and fitness has a greater impact on their state of mind and emotion. Hence, parents, teachers and the community play a continuous role in children's growth process. Hopefully, a future study implements more safety measures and guidance in enhancing a child's growth process. In terms of cognitive development in Malaysia, as we have found out that Malaysia's pre-schoolers are only fairly ready to enter primary schools, there is an urgent need for more

attention to be given to spatial planning at preschools as it will subsequently impact the quality of activities carried out by pre-schoolers and their cognitive readiness to enter primary school. Furthermore, teachers should maximize the preschools' learning spaces, as it will encourage children to reinforce positive stimuli in their learning and cognitive development process. The shift in well-planned preschool designs can go a long way to ensure Malaysian children are afforded better learning facilities to boost their cognitive development as they progress in life.

On the other hand, when comes to social-emotional studies, not many studies were found, especially during Covid time, as children faces sudden life changes that stick for the past two years with the inclusion of three lockdowns, and the function of school that has been kept reopening and closing within a short period, hence [more studies should be done in Malaysia to see the impact of all these on pre-schoolers social-emotional](#). Moreover, studies should be carried out on lower social-economic status households or from those in lower to middle-class status, a top how financial impacts and stresses of the on-going pandemic takes a toll on the child especially in terms of social-emotional, as its harder for kids to understand the emotional turmoil that the parents are going through, as well as the kid's emotions seeing their parent in a predicament. Besides that, playgroups and playing together with friends are the main things that children use to do, and that is how they learn to detect emotions and to self-regulate, now with a pandemic, children are forced to follow sop and being taught not to hug their friends, etc, so how did this shift the social-emotional development of the kids. The above-mentioned research on Pakistani home learning was based on concerns of parents on children social-emotional as it kept mentioning that they worry it will impact negatively on children. A study that carries out on observation of the changes in social-emotional in pre-schoolers during this critical time will be more apt to understand how it changes and what can be done to overcome it, as these kids for few years have been going to school on a normal schedule but suddenly had to face being locked in the house.

As we don't know how long covid going to stay, a longitudinal study at a different period on different social-economic status households might help to understand whether does it impose any physical, cognitive and social-emotional changes in children. If the suggested studies get to be carried out, a better understanding of Covid impact on pre-schoolers in Malaysia, which in return can open a platform for future studies on how to promote or reduce the negative impact of Covid on children's development.

Conclusion

Preschool education plays an important role in the cognitive development of young children. More emphasis needs to be given to children's cognitive development as it is a crucial stage for a child to learn and progress throughout life. Teachers, parents as well as environment contribute to the children's cognitive development directly and indirectly. Ultimately, it is hoped that the quality of a child's environment does not continue to be overlooked and this study could help to elicit more awareness to parents and teachers on the development of a child's cognitive development. Social-emotional development is important for a child to turn into an empathetic adult, as well as to be able to comprehend the situation around them and their environment, so they know how to react when a certain situation surfaces. It is also a vital component to keep their well-being on point, especially during these trying times of the Covid pandemic.

Contribution of this Study

Our study makes an important theoretical contribution in which the results help in articulating the underlying of the role of physical, cognitive, and social-emotional development of pre-schoolers during Covid-19 and how it may influence these developmental domains. We make a theoretical contribution by explaining relevant theories on pre-schoolers' development, to improve their well-being and mental health among the young generations. In doing so, we address the importance of early life learning for more work to be drawn on physical, cognitive, and social-emotional development to better understand how pre-schoolers develop their essential domain. In doing so, it expands the previous studies that have been based on the physical, cognitive, and social-emotional development perspective almost exclusively to understand the pre-schoolers' well-being. This study would assist researchers and practitioners in focusing their educational efforts and investments better. This is particularly significant since existing literature is almost silent on the investigation essential developmental theories among pre-schoolers.

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