

**The Impact of COVID-19 on Infant Development: Social and Emotional Development, and  
The Weight of Fear**

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## **The Impact of COVID-19 on Infant Development: Social and Emotional Development, and The Weight of Fear**

The COVID-19 pandemic has caused unprecedented changes in social, economic, and healthcare systems worldwide. Amongst these impacted systems lie some of the most vulnerable groups affected by the pandemic; infants and young children. Infants rely heavily on social interactions, sensory stimulation, and attachment relationships to socially develop healthily. Infants are particularly vulnerable to the impact of the pandemic due to their developmental needs and reliance on caregivers. This dependency creates concern when considering how they might be obtaining their information to collect and formulate their own protection strategies. Should we question what information they are getting, and what the reliability is of it? This paper will discuss the impact of COVID-19 on infant development, highlighting the impact on social, and emotional development, and comment on how the type of media exposure can impact people on an individual level.

### **Social Development**

Infants' social development was negatively impacted by social distancing measures, which reduced their opportunities for social interactions. Infants thrive in social contexts, and their development depends on close relationships with caregivers, siblings, and peers. Due to social distancing measures, infants were isolated from family members, friends, and caregivers, limiting their opportunities for social interactions. In a recent study conducted by Viner et al. (2020), 60% of parents with children under 2 years reported a reduction in their child's social interaction since the onset of the pandemic. The study further reported that infants who had

limited interactions with other children or adults experienced delayed social development. Social isolation deprives infants of the opportunity to learn social cues, facial expressions, emotional regulation, and communication skills. Infants' cognitive development was also compromised since infants use social experiences as stimuli for learning and problem-solving. Although this seems overtly negative, some families reported a stronger sense of togetherness as a result of spending more time at home with their infants. The more time spent with family or loved ones impacted more than just social behaviours, it impacted emotions.

### **Emotional Development:**

The COVID-19 pandemic created stress and anxiety for caregivers, which can negatively affect infants' emotional development. Caregivers play a crucial role in regulating infants' emotions, and their anxiety and stress levels can impact their responsiveness to their infant's emotional cues. Spinelli et al. (2020) found that parents reported high levels of stress and anxiety since the onset of the pandemic, with many reporting difficulties in providing emotional support for their infants. Leading to difficulties in regulating emotions, distress, and negatively impacting infants' mental health. A study by Sprang and Silman (2013) found that prolonged separations from caregivers can lead to long-term psychological effects, including attachment disorders, post-traumatic stress disorder, anxiety, and depression. Opposing this, some families reported that this increased bonding time, as a result of being able to spend more time with their infants, also contributed to positive emotional development. Is there merit in these fears, or are people's fears being exacerbated by a lack of knowledge?

**Fact or Fiction: Is there a risk in being frank?**

Parents and guardians have to dissect every aspect of their child's life, and the pandemic was no relief from this. According to the below sources, the COVID-19 infection in infants and children can have long-term effects on their social, emotional, cognitive, and physical development. These sources are easily obtainable by parents, caregivers, and laymen alike, which can create unnecessary fear if the articles are not explained properly or clearly for people who wouldn't consider themselves knowledgeable on the subject matter.

Galusca et al. (2003) investigated whether wearing masks impacted an infant's visual preference for faces during the first year of their lives, or during the language development period of their lives. The researchers recruited 44 healthy infants between 4 and 12 months and showed them pairs of faces, one being masked and the other being unmasked. Their study found that in infants under the age of 7 months, there was no sign of a significant difference in visual preference for masked or unmasked faces. Infants aged 7-12 months did show a preference for unmasked faces, suggesting that the visual preference for faces was not significantly impacted by mask-wearing for the 6 first months of life. This preference away from masks would become more important at later developmental stages. The study, having not discussed why there might be an impact on the infants aged 7-12 months creates unnecessary fear for parents, insinuating that not even researchers know what it means. It is important to note that this research is ongoing to parents and caregivers and that no findings are definitive.

Another study by Wermelinger, et al. (2022), investigated how pandemic experiences could have an effect on infants' communication skills and behaviours. The researchers sought out 40 infants between 6 and 9 months, with half of the sample having experienced the pandemic and the other half having not experienced the pandemic. Using eye-tracking technology, the

researchers measured the infants' gaze-following behaviours while the infants watched a video of an adult looking side to side. The researchers found that the infants who had experienced the pandemic demonstrated better gaze-following behaviours than those who had not experienced the pandemic. This suggested that pandemic experiences could have potentially increased infants' social cue sensitivity, from this sample. The researchers also found that infants with more social interaction experience overall showed better gaze behaviours. All the findings led to the suggestion that early experiences could shape an infant's communicative behaviours, even in the case of the pandemic. This could be a scary realization that the pandemic did impact communication but also provides reassurance that this was true for all early learning experiences.

The study by Snyder, et al. (2022), examined the impact that the pandemic had on infant activity, strength, and overall communication ability. Using a thematic approach, the researchers conducted semi-structured interviews with 10 parents, who had infants ranging from 0-12 months. The findings reported by the parents found that there were reduced opportunities for their infants to engage in physical activities, they also found that some parents reported themselves as being less confident in promoting their infant's motor development (both these findings were based on a lack of support and access to resources). These findings are upsetting, and if you were to only take these findings out of the study you would be fairly fearful about your own child's development, but they found that some parents had reported increased opportunities for bonding and communication, and others reported being able to find creative ways to promote infant development. Although this study highlights the complex ways the pandemic has affected people's lives, it also discusses the importance of having support and resources available to families and caregivers during times of crisis.

Overall, these studies suggest that the COVID-19 infection in infants and children can have long-term effects on their social, emotional, cognitive, and physical development. These effects can impact a child's development and may require long-term medical and psychological intervention, but that is not the case for all who test positive for COVID-19 and not the case for all families. Personally, my niece was born at the end of 2020, and there was a very real fear about her social development in an uncertain world, as she was born into the world at the peak time of the pandemic. Born in a hospital room, surrounded by face masks and (due to some outlying complications,) without her father being allowed to be in the room, she was born at a weird and borderline “cold” time, we had so much fear for her and this new world. Instead of us having fully developed these fears, we have been blown away by her adaptability, resilience, and overall interest in learning. Whether that learning is social, emotional, cognitive, or physical, she is curious! This curiosity is a gift, that we were so happy to receive. Although bright and ahead of other toddlers her age, she did face a delay in her speech, and overall interest in conversation or communicating. This was most likely from everyone being home with her, and answering to any and every cry she had. There was no need for her to try and work harder to communicate something she knew was going to get resolved regardless. She also was the first grandchild born in our family, and social lives, a complete gift and wonder, but the first, which meant she was alone in her own category. She had some factors working against her successful development, and she overcame every single one of them. She is bubbly, kind, and loving, to every person she meets and every animal she comes in contact with. Curious about the life in front of her, and speaking to everyone and anyone who will listen. This is why, I personally believe that even though these media sources are only trying to inform parents and caregivers on what they should be concerned about, it can reach a point where it is more harmful than helpful. I knew the risks

my niece would be facing, but I also knew what the articles intended to explain, so I was able to cipher out the fear from what was being said and translate this to my family. Not everyone has someone in their lives who can help in this way and that is why these articles can be so harmful.

As we continue to navigate the challenges of the pandemic, it is important to prioritize the developmental needs of our youngest and most vulnerable members of society. By working together, we can support infants' healthy development and ensure a brighter future for all. These potential outcomes of the pandemic are anecdotal and have not been studied in a systematic way. Further research is needed to understand the full impact of the pandemic on the development of infants and young children, which needs to be translated much better to caregivers without the ability to comprehend the complexity of the articles.

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### **Abstract's**

Snyder:

Fostering physical activity, muscle strengthening and communication skills in diverse environments are vital to ensuring healthy infant development; however, promotion of these skills may be impacted by the COVID-19 pandemic. Therefore, the purpose of this study was to explore healthcare workers, parents and childcare providers' perceptions of the pandemic's influence on how they engage with infants to promote physical activity, muscle strength and communication.

Galusca:

The COVID-19 pandemic has been influencing people's social life substantially. Everybody, including infants and children needed to adapt to changes in social interactions (e.g., social distancing) and to seeing other people wearing facial masks. In this study, we investigated whether these pandemic-related changes influenced 12- to 15-months-old infants' reactions to observed gaze shifts (i.e., their gaze following). In two eye-tracking tasks, we measured infants' gaze-following behavior during the pandemic (with-COVID-19-experience sample) and compared it to data of infants tested before the pandemic (no-COVID-19-experience sample). Overall, the results indicated no significant differences between the two samples. However, in one sub-task infants in the with-COVID-19-experience sample looked longer at the eyes of a model compared to the no-COVID-19-experience sample. Within the with-COVID-19-experience sample, the amount of mask exposure and the number of contacts without mask were not related to infants' gaze-following behavior. We speculate that even though infants encounter fewer different people during the pandemic and are increasingly exposed to people wearing facial masks, they still also see non-covered faces. These contacts might be sufficient to provide infants with the social input they need to develop social and emotional competencies such as gaze following.

Wermelinger:

The COVID-19 pandemic has been influencing people's social life substantially. Everybody, including infants and children needed to adapt to changes in social interactions (e.g., social distancing) and to seeing other people wearing facial masks. In this study, we investigated whether these pandemic-related changes influenced 12- to 15-months-old infants' reactions to observed gaze shifts (i.e., their gaze following). In two eye-tracking tasks, we measured infants' gaze-following behavior during the pandemic (with-COVID-19-experience sample) and compared it to data of infants tested before the pandemic (no-COVID-19-experience sample). Overall, the results indicated no significant differences between the two samples. However, in one sub-task infants in the with-COVID-19-experience sample looked longer at the eyes of a model compared to the no-COVID-19-experience sample. Within the with-COVID-19-experience sample, the amount of mask exposure and the number of contacts without mask were not related to infants' gaze-following behavior. We speculate that even though infants encounter fewer different people during the pandemic and are increasingly exposed to people wearing facial masks, they still also see non-covered faces. These contacts might be sufficient to provide infants with the social input they need to develop social and emotional competencies such as gaze following.