Topic: Week 3 - Information Processing

Name

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In the article, The Development of Real-Time Stability Supports Visual Working Memory Performance: Young Children’s Feature Binding Can Be Improved through Perceptual Structure,” Simmering and Wood (2017) assume that the working memory can predict higher-level skills. As a cognitive process, working memory makes people attentive to their tasks. That is, individuals hold information in mind for the short-term to guide whatever they do. I agree with the authors because I always know what to do when I wake up. However, I cannot necessarily recall everything that I have been doing for the past month. This implies that my mind can hold information regarding my short-term tasks. However, once these tasks are over, some of them are erased from memory.

Since working memory emphasizes simple tasks, there is a need for developmental improvements to process complex tasks such as reading. In a complex task, the information needs to be processed and maintained. Therefore, the authors argued that there is a need for rehearsal and an increase in the processing speed. I find their argument valid because there is a need for someone to spend time reading and revising to understand a concept effectively. Simmering and Wood (2017) confirmed my previous belief that it could be difficult for someone to understand a complex task without rehearsing.

The items that the brain can hold increase with age. I have been observing that as children grow up, their memory increases. The observation was confirmed by Simmering and Wood (2017) when they found that children learn more about colors as they grow up. When making this observation about children, researchers collected data from children. I feel that several ethical issues could have emerged in the process. For instance, researchers always need to obtain informed consent from the participants. However, children cannot make informed decisions to determine whether they should be engaged in a study or not. Therefore, their parents need to provide assent. However, the relationship between children and their parents might not always be in the best interest of the child. Therefore, an ethical dilemma can arise when deciding whether to include children in a study or not. According to the American psychological association (2020), section 4.02 of the code of ethics requires psychologists to inform parents about the limits of confidentiality and privacy risk. However, since the children cannot make informed decisions, it is the responsibility of parents to ensure that the principles of beneficence and nonmaleficence are applied.

In their study, Simmering and Wood (2017) predict that when memory is unstable during early development, binding in visual working memory can be impaired. The prediction confirms my observation of children in daycare settings. The effectiveness of their working memory depends on the stability of their mind. Children whose mind is stable complete theirs tasks more effectively than the others. Therefore, when modeling children’s behavior, there is a need to examine their minds for stability to determine the most appropriate measures that should be taken.

References

American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. Retrieved from https://www.apa.org/ethics/code

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