

**IB DIPLOMA  
PSYCHOLOGY**

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# OPTIONAL COMPANION

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## Developmental Psychology



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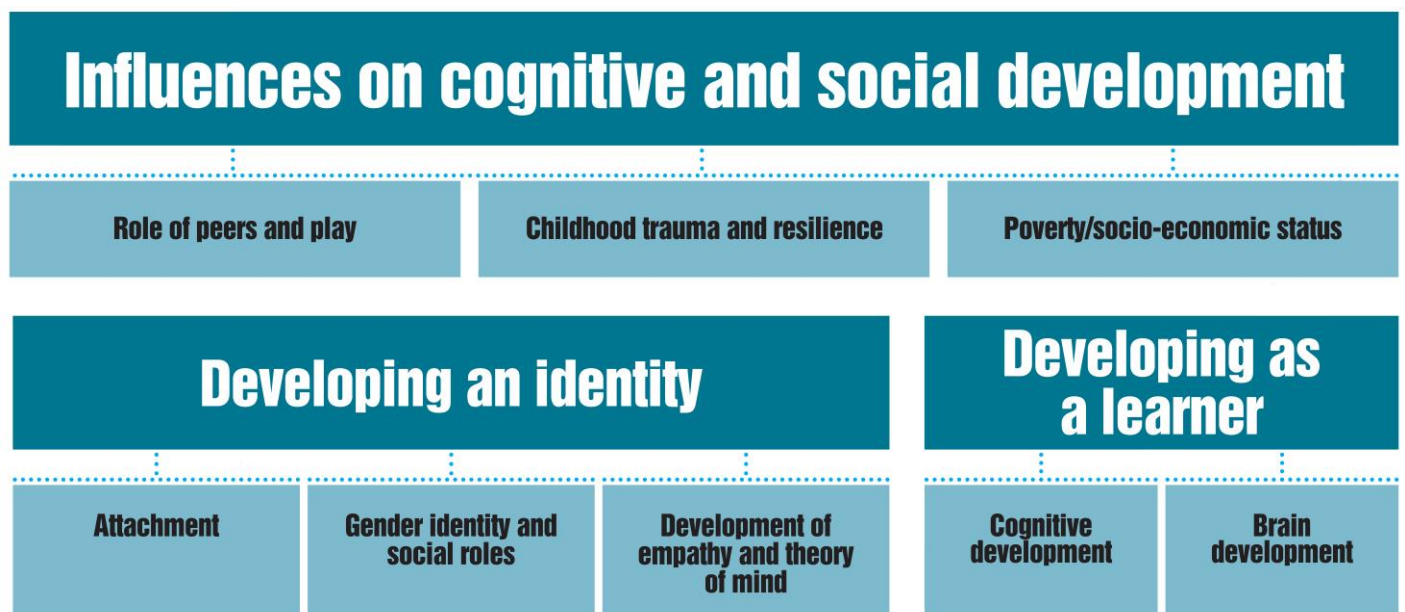
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# DEVELOPMENTAL PSYCHOLOGY: INTRODUCTION

Developmental Psychology is concerned with the ways in which human beings acquire particular skills, how they learn to relate to each other and the world, and how external forces may influence their development. Key topics in this option include the way in which children's brains develop; how their peers affect that development; the role that attachment to a caregiver plays in future development, and how children cope with traumatic early experiences.

**Our study of this approach is divided into three topics:**

- Developing as a Learner
- Influences on Cognitive and Social Development
- Developing an Identity



# PART 1: DEVELOPING AS A LEARNER

## WHAT YOU NEED TO KNOW

**Part 1A: Brain development** - Discuss how brain development contributes to developing as a learner.

**Part 1B: Cognitive development** - Contrast two theories of cognitive development.

## PART 1A: BRAIN DEVELOPMENT

**Key Question:** Discuss how brain development contributes to developing as a learner.

Human beings are born with an amazing capacity to respond to their environment. Our brains are hard-wired to take in the ever-changing array of stimuli that surrounds us and which assaults our senses on a daily basis. **Neural pruning** is the process carried out in the brain to increase its efficiency: neurons and synaptic connections that are no longer used are eliminated. Meanwhile, **neural branching** strengthens the brain and extends the network of synapses within it in much the same way as muscles are strengthened by repeated exercise. Brain development can be directly linked to the development of higher-order cognitive functioning, with evidence showing that the first areas of the brain to mature are those related to the most basic of functions: e.g. movement and senses. Areas of the brain associated with more mature cognitive functions such as decision-making, reflection and planning develop later so it is possible to see the connection between the developing brain and the ways in which human beings develop as learners.



### Key Study: Gotgay et al. (2004)

**Aim:** To chart brain development from 4 to 21 years old.

**Method:** The participants were 13 healthy children and teenagers from the USA. Every two years throughout the study's duration (10 years per child) the children were scanned using magnetic resonance imaging (MRI) technology permitting the researchers to collect several years' worth of brain development scanning in total. Neural branching was evident as the volume of grey matter increased with age in areas that are linked to cognitive and functional milestones in human development.

**Results:** The first areas of the brain to mature were those associated with the most basic of functions, such as the motor cortex, which controls voluntary movements. Maturity moved in a back-to-front direction in the brain. Areas that involve spatial orientation and language were the next to develop in the parietal lobes. Areas with more advanced and sophisticated cognitive functioning in the prefrontal cortex develop last, at some point in a person's early 20s.

The MRI also highlighted sustained loss of the brain's grey matter (neural pruning), starting around puberty.

**Conclusion:** The brain and the higher order cognitive functioning linked to developing as a learner do not fully develop until young adulthood. In terms of cognitive development, this gradual maturing of the brain can be seen in the more spontaneous, impulsive and uninhibited behaviour of very young children compared to the more reasoned responses of adults. A fully developed prefrontal cortex enables a person to reflect on a situation and be able to inhibit their impulsive, emotional responses. More reasoned

thought is possible with a mature prefrontal cortex, which goes some way towards explaining development as a learner.

The exact process underlying the grey matter loss is unknown. Cerebral white matter increases in the first four decades, along with increased myelination (insulation) of the axons, and may partially explain the observed grey matter loss.

## Evaluation of Gotgay et al. (2004)

- **STRENGTHS:** The use of a longitudinal design in this study means that the researchers were able to track changes over time which increases the internal validity of the research. Using MRI scans to measure brain development is a reliable way of analysing the volume of grey matter in the brain because it eliminates researcher bias in the process of data collection and it is a precise and clinical method. The findings of the research (that the brain develops from the basic to more sophisticated areas) is supported by the results of other studies (e.g. Huttenlocher, 1984) which gives the results concurrent validity.
- **LIMITATIONS:** The use of such an objective, clinical methodology means that the study lacks ecological validity and explanatory power: it is not clear *why* the different areas of the brain develop according to the study's findings, only that they appear to follow the same pattern. The ways in which the participants of the study functioned as learners was not measured, so it is unclear how cognitively able they were when compared to their brain development. The sample itself is extremely small (13) so the results are not robust enough to draw general conclusions about how human brains develop – this could, in fact, have been an anomalous sample. The sample demographic also limits the generalisability, potentially reducing its capacity to explain possible cross-cultural differences in brain development.

## Critical Thinking

**What are the possible applications of these findings?** The findings of Gotgay et al. (2004) could be used to check for signs of developmental delay in young children. For example, if a child is slow to walk, talk, read etc., then this could be investigated using brain imaging to see if their brain is undeveloped in the regions associated with such functions.

**How might abuse and neglect impact brain development and development as a learner?** An upbringing that includes loving care from adults, a healthy diet, plenty of stimulation and one-to-one attention is thought to contribute positively to brain development, preparing a child to flourish as a learner. This is an example of an interaction between biological and sociocultural explanations for brain development. Children who are maltreated either through abuse or neglect are at a disadvantage when compared to children who have not been maltreated: research has shown that these children suffer delays or lapses in brain development which in turn can lead to cognitive deficits. Specifically, research in this field shows that children who have been maltreated tend to show signs of impaired cognitive function evidenced by underperformance of the prefrontal cortex. Executive functions are governed by the prefrontal cortex: e.g. regulation of emotions; problem solving; sustained mental activity. Child abuse experiences, including neglect, may cause delays or deficits in a child's ability to achieve age-appropriate behavioural, cognitive and emotional regulation and thus lead to problems in their development as a learner.

## Key study: De Bellis et al. (1999)

**Aim:** To investigate whether or not the brain structure and development of maltreated and neglected children differed to that of normal children.

**Method:** 44 maltreated and neglected children and adolescents were compared to a control group of 61 normal children. The participants were given comprehensive psychiatric and neuropsychological assessments and magnetic resonance imaging (MRI) brain scans. The participants also completed questionnaires which measured their depression and their sense of self; and, to measure cognitive functioning, a range of other tests, including ones to test IQ level.

**Results:** Specific brain areas of the maltreated children were found to be significantly smaller than those of the control group, e.g. corpus callosum, middle and poster regions; and they had significantly less grey matter in their prefrontal cortex. The neglected and abused children had a 7-8% lower intracranial and cerebral volume of grey and white matter than the control group. There were also deficiencies in the corpus callosum of the neglected children - an area of the brain responsible for connecting the two hemispheres and communicating between them. The cognitive consequences of such brain deficiencies are likely to be a delay in processing information and in making synaptic connections: e.g. as might be seen in problem-solving or decision-making. The maltreated children scored higher on depression and 17 of them reported having attempted suicide compared to none of the normal children.

**Conclusion:** The results suggest that the overwhelming stress of maltreatment and neglect in childhood is associated with adverse brain development and subsequent cognitive impairment.

## Evaluation of De Bellis et al. (1999)

- **STRENGTHS:** This is a highly controlled clinical method of obtaining data, which means that the data are likely to be objective, thus increasing the reliability of the results. The use of standardised questionnaires that are replicable not only adds to the reliability of the study but it enhances validity because of the study's triangulation of method and data. The use of a control group means that the results are easy to compare so that the specific brain areas associated with maltreatment can be identified clearly and their link to cognitive functioning is then fairly simple to establish, reflected in this study by the IQ scores which showed a strong positive correlation to volume of grey matter in the prefrontal cortex.
- **LIMITATIONS:** De Bellis et al.'s study only provided correlational data, which means that they were unable to establish a cause-and-effect conclusion regarding the effect of maltreatment on brain development and cognitive functioning. Their use of questionnaires and IQ testing lacks ecological validity because they do not provide insight into how children regulate their emotions or use their intelligence in an everyday setting. There is also the possibility that the children were susceptible to social desirability bias or response bias in the way that they answered the questions.

## Critical Thinking

**Could this study be accused of perpetuating the maltreatment of the children?** There are ethical dilemmas inherent in investigating the impact of abuse and neglect on children which researchers should be sensitive to. By focusing on the children's negative experiences and asking questions about depression and suicide the researchers were continually reminding the children of traumatic and unpleasant events in their lives and, by association, possibly worsening an already negative situation. The issue of how to conduct research in this area is beset with problems, so it is vital that researchers consider the possible negative consequences of studies into child maltreatment where the children themselves are the participants – and when doing so take pains to remedy any ill effects of the research process.



## PART 2C: POVERTY/SOCIOECONOMIC STATUS

### Key Question: How does poverty affect cognitive and social development?

*Almost half the world — over three billion people — live on less than \$2.50 a day. At least 80% of humanity lives on less than \$10 a day. More than 80 percent of the world's population live in countries where income differentials are widening. (Global Issues website, January 7, 2013.)*

These statistics highlight just some of the devastating truths about global poverty and extreme need. It is often, but not always, the case that poverty has a detrimental effect on children because a child born into a household which falls on or below the poverty line will be denied some of the more life-enhancing and enriching experiences that more affluent families can offer: e.g. money for treats, days out, more time for parents to spend reading with the child, more time to take an interest in their schooling. Poverty impacts more than just material possessions: it can have far-reaching consequences for a child's cognitive and social development.



### Key Study: Farah (2005)

**Aim:** To investigate brain development and cognitive performance of low socio-economic status (SES) and middle SES children. SES is a total measure of a person's social and economic position, based on income, education and occupation.

**Method:** 30 low and 30 middle SES African American Philadelphia public school kindergarteners were tested on a range of tasks designed to assess the functioning of five key neurocognitive systems: the visual area; the area concerned with spatial awareness; the area governing memory; the area connected to language, and, finally, the pre-frontal cortex which regulates emotion and decision-making (executive functioning).

**Results:** The middle SES children performed better than the low SES children on all of the tasks as a whole. The low SES children performed worse on the tasks involving language and logic/reasoning, highlighting the deficit in their brain's language system and the pre-frontal/executive system. The disparity between the low and the middle SES kindergarteners was both large and statistically significant.

**Conclusion:** Low SES can be linked to reduced cognitive performance, particularly in the areas of language and executive functioning.

### Evaluation of Farah (2005)

- **STRENGTHS:** The study used standardised tests to assess which areas of the brain were being used which in turn means that it is replicable and free of bias. The study demonstrates a link between poverty and cognitive deficits, which could be used to inform future initiatives and intervention programmes for families in need.
- **LIMITATIONS:** This is a very small sample from one city in the USA; it does not include non-African American children, therefore it cannot be generalised beyond this demographic. There may be other factors that account for the low SES children's reduced cognitive functioning, such as undiagnosed

dyslexia or other learning difficulties. The results do not explain examples of middle or high SES children who have reduced cognitive functioning.

## Critical Thinking

**Does this study perpetuate racial stereotypes?** Farah, the researcher behind this study, explained in an article that she became interested in low SES and brain development after she had a baby because, at this point in her life, she got to know her child's babysitters who all hailed from the same kind of background: i.e. poor, African-American with low education, few prospects and knowledge of crime/prison due to their neighbourhood or families. Farah, a middle-class, white, educated professional might be accused of taking one aspect of a complex topic (race) and focusing on some negative stereotypes associated with it. It could be argued that her research is no more than 'sight-seeing' into lives that are a world away from her own, possibly reinforcing existing racial stereotypes along the way. But it could also equally be argued that research such as Farah's is crucial in exposing the inequalities that exist in the USA and are inexorably bound by race.

## Key Study: Conger et al. (1994)

**Aim:** To investigate how economic stress and related problems within the family contribute to adolescents' developmental problems.

**Method:** Participants were 198 female and 180 male adolescents living with both parents in the rural Midwest of the USA, a region in which there is a great deal of poverty and uncertainty over future prospects. A series of interviews was conducted every year over the course of three years, covering the adolescents' time at school in seventh, eighth and ninth grades. Both the adolescents and their parents were interviewed.

**Results:** The economic pressures experienced by the families tended to result in high levels of unhappiness and discontent on the part of the parents. A great deal of irritability between the parents was prevalent; and there were many reported arguments over money, triggered especially by the adolescents asking for money to buy goods and to have a social life. Such hostile exchanges were seen to contribute to the adolescents experiencing emotional and behavioural problems, for example, in their relationships with peers.

**Conclusion:** Poverty may contribute to adolescents experiencing negative socialisation and learning dysfunctional behaviour.

## Evaluation of Conger et al. (1994)

- **STRENGTHS:** The interviews recorded over three years will have resulted in a huge amount of rich, qualitative data that provides insight and reasons for feelings, actions, etc. This means that the study's findings are high in external validity. This is particularly impressive given the sample size as qualitative research is not often conducted with so many participants.
- **LIMITATIONS:** The downside of collecting a lot of qualitative data is that it is extremely time-consuming to analyse and, due to the subjective nature of interviews, it could be the case that some aspects of the participants' responses were misunderstood or taken out of context. There is always the possibility of social desirability bias to consider when using interviews to obtain data: participants may wish to present themselves in the best possible light during the interview, which would affect the validity of the findings. The sample cannot readily be generalised as it only represents the experiences of people from rural areas of the Midwestern USA.



## Critical Thinking

**Could this research be affected by confirmation bias?** It is possible that Conger et al. might have over-reported what they expected to find: that poverty breeds malcontent and socially dysfunctional adolescents. Because interviews offer a subjective view of a topic, it may be the case that the researchers steered their participants to over-reporting the negative aspects of their economic situation as this would fit in with their hypothesis.

## POSSIBLE EXAM QUESTIONS FOR PART 2: INFLUENCES ON COGNITIVE AND SOCIAL DEVELOPMENT

**Discuss how peers and play contribute to cognitive and/or social development. [22]**

*'Discuss' means that you should offer a balanced review of the ways in which peers and play contribute to cognitive and social development, using relevant research with good use of examples and critical thinking.*

**To what extent can resilience mitigate the effects of childhood trauma? [22]**

*This essay question is asking you to consider how successfully research on resilience can explain how it might mitigate the effects of trauma. You will need to use relevant studies to support your argument.*

**Evaluate research into the effects of poverty on cognitive and social development. [22]**

*This question is asking you to assess the strengths and limitations of one or more studies on the effects of poverty on cognitive and social development with the emphasis being placed on the methods used by the researchers. You should choose the evidence that you think best supports the points you have made and present your conclusion clearly. Alternative explanations may be used as part of the evaluation.*

# APPROACHES TO RESEARCH FOR PART 2:

## INFLUENCES ON COGNITIVE AND SOCIAL DEVELOPMENT

Researchers into influences on cognitive and social development use a variety of methods for investigating this topic due to it being open to multiple avenues of enquiry.

### Naturalistic Observation

Social psychologists often use methods, such as observation, which lack controls and are therefore less reliable than experimental methodology. Berk et al.'s (2002) research cannot be replicated due to the unique nature of each observational sample: i.e. each sampled episode of play was in itself a unique event. This means that the research lacks reliability although this can be remedied to some extent by using more than one observer (inter-rater reliability). The method does have some external validity due to the natural setting used and the lack of manipulation by the observer; but it is also worth considering the extent to which the observer effect might have impaired the natural behaviour of the participants.

### Longitudinal Case Study

This method provides rich, in-depth, quantitative data which can be used to track changes over time and can also reveal a wealth of background on the topic being studied. For these reasons, the case study method has great explanatory power; however, it cannot be replicated due to the unique experience of the individual(s) being studied, so it lacks reliability. Werner's (2005) longitudinal study provided great insight into how protective factors contribute to resilience in ways that could never have been achieved using experimental methods.

### Interviews

Using the interview method allows researchers to gain the in-depth and detailed insight into topics that goes far beyond the possibilities that questionnaires offer. Conger et al. (1994) were able to uncover connections between poverty, parental discord and adolescent behaviour problems over the course of several years and many hours of interviews. The research disadvantages of this method of investigation are the time it takes to analyse the interviews and that may result in some bias.

### Surveys

Surveys usually use questionnaires, which are a useful research tool because they can be replicated allowing a large sample access to them (particularly true today with the use of online surveys), making them reliable. The results of Wentzel et al. (1998) were analysed using the correlational method which means that clear relationships between the role played by peers, parents, and motivation at school etc., could be plotted on a graph and the correlation coefficient calculated. Statistical analyses however, cannot explain why such relationships might occur. There may be other reasons for apparent relationships but as questionnaires collect mostly quantitative data they lack explanatory power.

### Review Articles

This method looks at a range of published research on the topic of interest, reviews the findings, methodologies and conclusions and then offers ideas and suggests ways forward based on what the research has found. One of the main advantages of this method is that it is less time-consuming than undertaking original research and it allows for an overview of what may be a complex and multi-layered area, as is the case with Boyden's (2003) work on war-zone children. This method does, however, mean that the author has not been able to control the conditions of the original research so they cannot know

the extent of its reliability. It is also possible that the author may look for examples of findings that reflect their own aims/hypotheses, thus affecting the validity of those findings.

## ETHICAL CONSIDERATIONS FOR PART 2: INFLUENCES ON COGNITIVE AND SOCIAL DEVELOPMENT

The main ethical considerations with research into influences on cognitive and social development are outlined below:

### Anonymity

Anonymity is an especially important aspect of research such as that of Conger et al. (1994) in which socially sensitive topics such as poverty and family discord were being investigated. The researchers should approach and execute studies like these with an enhanced awareness of ethical guidelines, which is what is apparent in this research.

### Confidentiality of Data

The data collected needs to be kept confidential especially so that responses cannot be traced to any named participants. This is essential when research into topics like early childhood trauma is undertaken. All of the researchers in this section will have maintained confidentiality of data.

### Informed Consent

The participants in a lot of studies using children must gain consent from the parents of the child and from the school, if that is where the research is taking place. This was the case with Berk et al.'s (2002) study. The parents would need to be informed of how, when and where the research was going to proceed and what was going to be asked of them or of their children. If children taking part in longitudinal research reach their 16<sup>th</sup> birthday during the research period, then they would need to give their own consent at this stage.

### Psychological Harm

It is important that, given the sensitive nature of some of this research, the participants be protected from psychological harm or distress. This is particularly important when dealing with vulnerable or traumatised children such as the Czech twins who had already undergone extreme deprivation and trauma.

Researchers in this field must ensure that child participants are treated in a way that acknowledges that they may get upset more easily than adults and have made provision for this.

### Right to Withdraw

Werner's (2005) research was carried out over many years. It was, therefore, essential that the participants were told clearly, and often, that they had the right to withdraw and that their data would not be used if they so wish. This also applies to any piece of research, regardless of its duration.

Remember that ethical considerations are not the same as ethical problems. The majority of these studies were conducted ethically, but the researchers clearly had a lot to consider when planning their studies, carrying them out and publishing them.

## POSSIBLE EXAM QUESTIONS FOR PART 2: INFLUENCES ON COGNITIVE AND SOCIAL DEVELOPMENT

### [APPROACHES TO RESEARCH AND ETHICAL CONSIDERATIONS]

***Discuss ethical considerations into researching the influences on cognitive and/or social development. [22]***

*'Discuss' means that you should offer a balanced review of ethical considerations into researching the influences on cognitive and social development using relevant evidence with good use of examples and critical thinking.*

***Contrast two approaches to research used to investigate influences on cognitive and/or social development. [22]***

*This question is asking you to assess the ways in which two approaches to investigating the influences on cognitive and social development differ, e.g. in their assumptions, methodology, results and conclusions. You will be expected to show an understanding of how each theory explains an influence or influences on cognitive and social development. The two approaches should be contrasted throughout the essay.*

## REFERENCES

- Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behaviour of one-year-olds in a strange situation. *Child Development*, 41 (1), pp.49-67.
- Ainsworth, M. D. S. (1991). Attachments and other affectional bonds across the life cycle. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle*. pp.33-51. London: Routledge.
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a “theory of mind”? *Cognition*, 21(1), pp.37-46.
- Basu, S., Zuo, X., Lou, C., Acharya, R., & Lundgren, R. (2017). Learning to be gendered: gender socialization in early adolescence among urban poor in Delhi, India, and Shanghai, China. *Journal of Adolescent Health*, 61(4), pp.S24-S29.
- Berk, L. E., & Elias, C. L. (2002). Self-regulation in young children: Is there a role for sociodramatic play? *Early Childhood Research Quarterly*, 17(2), pp.216-238.
- Borke, H. (1973). The development of empathy in Chinese and American children between three and six years of age: A cross-cultural study. *Developmental Psychology*, 9(1), pp.102-108.
- Bowlby, J. (1958). The nature of the child's tie to his mother. *The International Journal of Psycho-Analysis*, 39 (5), pp.350-373.
- Boyden, J. (2003). Children under fire: challenging assumptions about children's resilience. *Children Youth and Environments*, 13(1), pp.1-29.
- Ciechanowski, P. S., Katon, W. J., Russo, J. E., & Walker, E. A. (2001). The patient-provider relationship: attachment theory and adherence to treatment in diabetes. *American Journal of Psychiatry*, 158(1), pp.29-35.
- Conger, R. D., Ge, X., Elder, G. H., Lorenz, F. O., & Simons, R. L. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 65(2), pp.541-561.
- Conner, D. B., & Cross, D. R. (2003). Longitudinal analysis of the presence, efficacy and stability of maternal scaffolding during informal problem-solving interactions. *British Journal of Developmental Psychology*, 21(3), pp.315-334.
- De Bellis, M. D., Keshavan, M. S., Clark, D. B., Casey, B. J., Giedd, J. N., Boring, A. M., & Ryan, N. D. (1999). Developmental traumatology part II: brain development. *Biological Psychiatry*, 45(10), pp. 1271-1284.
- Diamond, M. & Sigmundson, H. K. (1997). Sex reassignment at birth: a long-term review and clinical implications. *Archives of Paediatrics and Adolescent Medicine*, 152, pp.298 – 304.
- Farah, M. J., Noble, K. G., Norman, M. F. (2005). Neurocognitive correlates of socioeconomic status in kindergarten children. *Developmental Science*, 8(1), pp.74-87.
- Freud, A., & Dann, S. (1951). An experiment in group upbringing. *The Psychoanalytic Study of the Child*, 6(1), pp.127-168.



Gotgay, G., Giedd, J., Lusk, L., Hayashi, K., Greenstein, D., Vaituzis, A., Nugent III, T., Herman, D., Clasen, L., Toga, A., Rapoport, J., Thompson, P. (2004). "Dynamic Mapping of Human Cortical Development During Childhood Through Early Adulthood." *Proceedings of the National Academy of Sciences*, 101(21), pp.8174-8179.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of personality and social psychology*, 52(3), pp.511-524.

Huttenlocher, P.R. (1984). "Synapse elimination and plasticity in developing human cerebral cortex". *American Journal of Mental Deficiency*, 88, pp.488–96.

Koluchová, J. (1976). The further development of twins after severe and prolonged deprivation: A second report. *Journal of Child Psychology and Psychiatry*, 17(3), pp.181-188.

Krafft, K. C., & Berk, L. E. (1998). Private speech in two preschools: Significance of open-ended activities and make-believe play for verbal self-regulation. *Early Childhood Research Quarterly*, 13(4), pp.637-658.

Noble, K. G., Norman, M. F., & Farah, M. J. (2005). Neurocognitive correlates of socioeconomic status in kindergarten children. *Developmental Science*, 8(1), pp.74-87.

Palan, K. M., Areni, C. S., & Kiecker, P. (2001). Gender role incongruity and memorable gift exchange experiences. *NA – Advances in Consumer Research*, eds. Mary C. Gilly and Joan Meyers-Levy, Valdosta, GA: Association for Consumer Research, 28, pp.51-57.

Piaget, J from Wadsworth, B. J. (1996). *Piaget's theory of cognitive and affective development: Foundations of constructivism*. Longman Publishing.

Samuel, J. & Bryant, P. (1984). Asking only one question in the conservation experiment. *Journal of Child Psychology and Psychiatry*, 25, pp 315-18.

Smith, C., & Lloyd, B. (1978). Maternal behavior and perceived sex of infant: Revisited. *Child Development*, 49(4), pp.1263-1265.

Van Ijzendoorn, M. H., & Kroonenberg, P. M. (1988). Cross-cultural patterns of attachment: A meta-analysis of the strange situation. *Child Development*, (59), pp.147-156.

Veale, J. F., Watson, R. J., Peter, T., & Saewyc, E. M. (2017). Mental health disparities among Canadian transgender youth. *Journal of Adolescent Health*, 60(1), pp.44-49.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), pp.34-41.

Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90(2), pp.202-209.

Werner, E. (2005). Resilience and recovery: Findings from the Kauai longitudinal study. *Research, Policy, and Practice in Children's Mental Health*, 19(1), pp.11-14.

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