**NST – Psychology**

**ADOLESCENCE**

**Sarah-Jayne Blakemore**

**Wednesdays at 12-1pm**

**20th January - 17th March 2021**

**Reading list**

\*=essential

†=recommended

**Core text across course**

\*Blakemore, SJ (2019). *Inventing Ourselves: The Secret Life of the Teenage Brain*. Blackswan, UK

\*Steinberg, L. (2014). *Age of Opportunity: Lessons from the New Science of Adolescence.* Mariner Books, USA.

**Lecture 1: Introduction to adolescence (definitions, culture, species, history). [SJB]**

Wednesday 20th January 2021, 12-1

Definition

\*Sawyer S.M., Azzopardi P.S., Wickremarathne D. & Patton G.C. (2018). The age of adolescence. *Lancet Child Adolescent Health*, *2*(3), 223-228. [REVIEW]

Culture

\*Choudhury, S. (2009) Culturing the adolescent brain: What can neuroscience learn from anthropology? *Social Cognitive Affective Neuroscience, 5*(2-3), 159-167. [REVIEW]

Duell, N., Steinberg, N., Icenogle, G., Chein, J., Chaudhary, N., Giunta, L.D., Dodge, K.A., Fanti, K.A., Lansford, J.E., Oburu, P., Pastorelli, C., Skinner, A.T., Sorbring, E., Tapanya, S., Uribe Tirado, L.M., Peña Alampay, L., Al-Hassan, S.M., Takash, H.M.S., … & Chang, L. (2018). Age Patterns in Risk Taking Across the World. *Journal of Youth and Adolescence 47*(5), 1052–1072.

†Steinberg, L., Icenogle, G., Shulman, E.P., Breiner, K., Chein, J., Bacchini, D., Chang, L., Chaudhary, N., Giunta, L.D., Dodge, K.A., Fanti, K.A., Lansford, J.E., Malone, P.S. , Oburu, P., Pastorelli, C., Skinner, A.T., Sorbring, E., Tapanya, S., Uribe Tirado, L.M., … & Takash, H.M.S. (2018) Around the world, adolescence is a time of heightened sensation seeking and immature self-regulation. *Developmental Science, 21*(2), e12532.

Evolution and species

Gluckman, P.D. & Hanson, M.A. (2006). Evolution, development and timing of puberty. *Trends in Endocrinology & Metabolism, 17*(1), 7-12. [REVIEW]

Hawley, P.H. (2011). The Evolution of Adolescence and the Adolescence of Evolution: The Coming of Age of Humans and the Theory About the Forces That Made Them*. Journal of Research on Adolescence, 21*(1), 307-316. [REVIEW]

Yates, J. R., Beckmann, J. S., Meyer, A. C., & Bardo, M. T. (2013). Concurrent choice for social interaction and amphetamine using conditioned place preference in rats: effects of age and housing condition. *Drug and alcohol dependence*, *129*(3), 240-246.

Spear, L. (2000). Modelling Adolescent Development and Alcohol Use in Animals. *Alcohol Research & Health, 24*(2), 115-123. [REVIEW]

General

†Paus, T., Keshavan, M. & Giedd, J.N. (2008). Why do many psychiatric disorders emerge during adolescence? *Nature Reviews Neuroscience, 9*(12), 947-957. [REVIEW]

†Foulkes, L. & Blakemore, S-J. (2018). Studying individual differences in human adolescent brain development. *Nature Neuroscience*, *21*(3), 315-323. [REVIEW]

Knoll, L.J., Fuhrmann, D., Sakhardande, A., Stamp, F., Speekenbrink, M. & Blakemore, S-J. (2016). A window of opportunity for cognitive training in adolescence. *Psychological Science*, *27*(12), 1620-1631.

\*Fuhrmann, D., Knoll, L.J. & Blakemore, S-J. (2015). Adolescence as a sensitive period of brain development. *Trends in Cognitive Sciences, 19*(10), 558-566.

Chierchia, G., Fuhrmann, D., Knoll, L.J., Piera Pi-Sunyer, B., Sakhardande, A.L. & Blakemore, S-J. (2019). The matrix reasoning item bank (MaRs-IB): novel, open-access abstract reasoning items for adolescents and adults. *Royal Society open science*, *6*(10), 190232.

Puberty

Blakemore, S-J., Burnett, S. & Dahl, R.E. (2012). The role of puberty in the developing adolescent brain*. Human Brain Mapping, 31*(6), 926-33. [REVIEW]

Dorn, L.D., Dahl, R.E., Woodward, H.R. & Biro, F. (2006). Defining the boundaries of early adolescence: A user's guide to assessing pubertal status and pubertal timing in research with adolescents. *Applied Developmental Science, 10*(1), 30-56. [REVIEW]

Martel, M.M. (2013). Sexual selection and sex differences in the prevalence of childhood externalizing and adolescent internalizing disorders. *Psychological Bullitin, 139*(6), 1221-59. [REVIEW]

†Pfeifer, J. & Allen, N. (In Press). Puberty initiates cascading relationships between neurodevelopmental, social, and internalizing processes across adolescence. *Biological Psychiatry.* [REVIEW]

†Sisk, C.L. & Foster, D.L. (2004). The neural basis of puberty and adolescence. *Nature Neuroscience, 7*(10), 1040-1047. [REVIEW]

Spear, L.P. (2009). Heightened stress responsivity and emotional reactivity during pubertal maturation: Implications for psychopathology. *Developmental Psychopathology, 21*(1) 87-97. [REVIEW]

**Lecture 2: Adolescent structural brain development. [SJB]**

Wednesday 27th January 2021, 12-1

Brain development in adolescence

Herting, M.M., Johnson, C., Mills, K.L., Vikayakumar, N., Dennison, M., Liu, C., Goddings, A-L., Dahl, R.E., Sowell, E.R., Whittle, S., Allen, N.B. & Tamnes, C.K. (2018). Development of subcortical volumes across adolescence in males and females: A multisample study of longitudinal changes. *NeuroImage, 172,* 194-205.

Houston, S.M., Herting, M.M. & Sowell, E.R. (2014). The Neurobiology of Childhood Structural Brain Development: Conception Through Adulthood. *Current Topics in Behavioral Neuroscience, 16,* 3–17. [REVIEW]

\*Mills, K.L., Goddings, A-L., Herting, M.M., Meuwese, R., Blakemore, S-J., Crone, E.A., Dahl, R.E., Güroglu, B., Raznahan, A., Sowell, E.R. & Tamnes, C.K. (2016). Structural brain development between childhood and adulthood: Convergence across four longitudinal samples. *Neuroimage*, *141*, 273-281.

†Mills, K.L. & Tamnes, C.K. (2014). Methods and considerations for longitudinal structural brain imaging analysis across development. *Developmental Cognitive Neuroscience, 9,* 172-90. [REVIEW]

Tamnes, C.K., Herting, M.M., Goddings, A-L., Meuwese, R., Blakemore, S-J., Dahl, R.E., Güroglu, B., Raznahan, A., Sowell, E.R., Crone, E.A. & Mills, K.L. (2017). ​Development of the cerebral cortex across adolescence: A multisample study of interrelated longitudinal changes in cortical volume, surface area and thickness​. *Journal of Neuroscience,* ​*37*(12)*,* 3402-3412.

Puberty and structural brain development

†Goddings A.L., Mills, K.L., Clasen, L., Giedd, J. Viner, R.M. & Blakemore, S-J. (2014). The influence of puberty on subcortical brain development. *NeuroImage, 88,* 242-251

Herting, M.M., Gautam, P., Spielberg, J.M., Kan, E., Dahl, R.E. & Sowell, E.R. (2014). The Role of Testosterone and Estradiol in Brain Volume Changes Across Adolescence: A Longitudinal Structural MRI Study. *Human Brain Mapping, 35*(11),5633-5645.

Herting, M.M. & Sowell, E.R. (2017). Puberty and structural brain development in humans. *Frontiers in Neuroendocrinology, 44*, 122-137. [REVIEW]

Menzies, L., Goddings, A-L., Whitaker, K.J., Blakemore, S-J. & Viner, R.M. (2015). The effects of puberty on white matter development in boys. *Developmental Cognitive Neuroscience, 11*, 116-28

Peper, J.S., Hulshoff Pol, H.E., Crone, E.A. & van Honk, J. (2009). Sex steroids and brain structure in pubertal boys and girls. *Psychoneuroendocrinology, 34,* 332-342. [REVIEW]

Peper, J.S., Schnack, H.G., Brouwer, R.M., Van Baal, G.C.M., Pjetri, E., Székely, E., van Leeuwen, M., van den Berg, S.M., Collins, D.L., Evans, A.C., Boomsma, D.I., Kahn, R.S. & Hulshoff Pol, H.E. (2009). Heritability of regional and global brain structure at the onset of puberty: a magnetic resonance imaging study in 9-year-old twin pairs. *Human Brain Mapping* *30*(7), 2184-96.

†Vijayakumar, N., Op de Macks, Z., Shirtcliff, E.A. & Pfeifer, J.H. (2018). Puberty and the human brain: Insights into adolescent development. *Neuroscience and Biobehavioural Reviews, 92,* 417-436. [REVIEW]

**Lecture 3: Development of executive functions in adolescence: brain and behaviour [SJB]**

Wednesday 3rd February 2021, 12-1

Background – executive functions

Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child development*, *81*(6), 1641-1660.

Miyake, A. & Friedman, N.P. (2012). The nature and organisation of individual differences in executive functions: four general conclusions. *Current Directions in Psychological Science, 21*(1), 8-14. [REVIEW]

Miyake, A., Friedman, N.P., Emerson, M.J., Witzi, A.H., Howerter, A. & Wagner, T.D. (2000). The unity and diversity of executive functions and their contribution to complex ‘frontal lobe’ tasks: a latent variable analysis. *Cognitive Psychology, 4,* 49-100.

Executive function development – brain

Bazargani, N., Hillebrandt, H.F., Christoff, K., Dumontheil, I. (2014). Developmental changes in effective connectivity associated with relational reasoning. *Human Brain Mapping, 35*(7), 3262-3276.

Dumontheil, I. (2014). Development of abstract thinking during childhood and adolescence: The role of rostrolateral prefrontal cortex. *Developmental Cognitive Neuroscience, 10*, 57-76. [REVIEW]

†Dumontheil, I., Hassan, B., Gilbert, S. & Blakemore, S-J. (2010). Development of the selection and manipulation of self-generated thoughts in adolescence. *Journal of Neuroscience, 30,* 7664-7671.

†Dumontheil, I., Houlton, R., Christoff, K., & Blakemore, S-J. (2010). Development of relational reasoning during adolescence. *Developmental Science, 13*, F15-24.

\*Larsen, B. & Luna, B. (2018). Adolescence as a neurobiological critical period for the development of higher-order cognition. *Neuroscience & Biobehavioral Reviews, 94,* 179-195. [REVIEW]

Luna, B., Padmanabhan, A. & O’Hearn, K. (2010). What has fMRI told us about the development of cognitive control through Adolescence? *Brain and Cognition, 71*(1), 101-113. [REVIEW]

Simmonds, D.J., Hallquist, M.N., Asato, M. & Luna, B. (2014). Developmental stages and sex differences of white matter and behavioural development through adolescence: A longitudinal diffusion tensor imaging (DTI) study. *NeuroImage, 92,* 356-368.

Executive function development - behaviour

Brockmole, J.R. & Logie, R.H. (2013). Age-related change in visual working memory: a study of 55,753 participants aged 8–75. *Frontiers in Psychology, 4,* 12.

†Geier, C. & Luna, B. (2012). Developmental Effects of Incentives on Response Inhibition. *Child Development, 83*(4), 1262–1274.

Kohls, G., Peltzer, J., Herpertz-Dahlmann, B. & Konrad, K. (2009). Differential effects of social and non-social reward on response inhibition in children and adolescents. *Developmental Science, 12*(4), 614-625.

Luciana, M., Conklin, H.M., Hooper, C.J. & Yarger, R.S. (2005). The Development of Nonverbal Working Memory and Executive Control Processes in Adolescents. *Child Development, 76*(3), 697-712.

Luna, B., Garver, K.E., Urban, T.A., Lazar, N.A. & Sweeney, J.A. (2004). Maturation of cognitive processes from late childhood to adulthood. *Child Development, 75*(5), 1357-1372.

Roth, R. M., Isquith, P. K., & Gioia, G. A. (2014). Assessment of executive functioning using the Behavior Rating Inventory of Executive Function (BRIEF). In *Handbook of executive functioning* (pp. 301-331). Springer, New York, NY.

Palminteri, S., Kilford, E. J., Coricelli, G., & Blakemore, S-J. (2016). The computational development of reinforcement learning during adolescence. *PLoS Computational Biology*, *12*(6), e1004953.

Paulus, M., Tsalas, N., Proust, J. & Sodian, B. (2014). Metacognitive monitoring of oneself and others: Developmental changes during childhood and adolescence. *Journal of Experimental Child Psychology, 122,* 153-165.

Roebers, C.M. (2017). Executive function and metacognition: Towards a unifying framework of cognitive self-regulation. *Developmental Review, 45,* 31-51. [REVIEW]

Roth, R. M., Isquith, P. K., & Gioia, G. A. (2014). Assessment of executive functioning using the Behavior Rating Inventory of Executive Function (BRIEF). In *Handbook of executive functioning* (pp. 301-331). Springer, New York, NY.

Toplak, M. E., West, R. F., & Stanovich, K. E. (2013). Practitioner review: Do performance‐based measures and ratings of executive function assess the same construct? *Journal of child psychology and psychiatry*, *54*(2), 131-143.

Weil, G.L., Fleming, S.M., Dumontheil, I., Kilford, E.J., Weil, R.S., Rees, G., Dolan, R.J. & Blakemore, S-J. (2013). The development of metacognitive ability during adolescence. *Conscious Cognition, 22*(1), 264-271.

†Zelazo, P.D., & Carlson, S.M. (2012). Hot and Cool Executive Function in Childhood and Adolescence: Development and Plasticity. *Child Development Perspectives*, *6*(4), 354-360. [REVIEW]

**Lecture 4: Adolescent social development – brain and behaviour [SJB]**

Wednesday 10th February 2021, 12-1

Background

†Andrews, J.L., Ahmed, S. & Blakemore, S-J. (In Press). Navigating the social environment in adolescence: The role of social brain development. *Biological Psychiatry.* [REVIEW]

\*Blakemore, S-J. (2008). The social brain in adolescence. *Nature Reviews Neuroscience, 9,* 267-277. [REVIEW]

Frith, C.D. & Frith, U. (2012). Mechanisms of social cognition. *Annual Review of Psychology*, *63*, 287-313. [REVIEW]

Frith, U. & Frith, C. (2010). The social brain: allowing humans to boldly go where no other species has been. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *365*(1537), 165-176 [REVIEW]

Johnson, M.H., Grossmann, T. & Cohen Kadosh, K. (2009). Mapping functional brain development: Building a social brain through interactive specialization. *Developmental Psychology, 45*(1), 151-9. [REVIEW]

†Kilford, E.J., Garrett, E. & Blakemore, S-J. (2016). The Development of Social Cognition in Adolescence: An Integrated Perspective. *Neuroscience & Biobehavioral Reviews, 70,* 106-120. [REVIEW]

†Orben, A., Tomova, L. & Blakemore, S-J. (2020). The effects of social deprivation on adolescent development and mental health. *The Lancet Child & Adolescent Health, 4*(8), 634-640*.* [REVIEW]

Foulkes, L. & Blakemore, S-J. (2016). Is there heightened sensitivity to social reward in adolescence? *Current Opinion in Neurobiology*, *40*, 81-85. [REVIEW]

Face processing - Behaviour

Cohen Kadosh, K. (2012). Differing processing abilities for specific face properties in mid-childhood and adulthood. *Frontiers in Psychology, 2,* 400.

†Fuhrmann, D., Knoll, L.J., Sakhardande, A.L., Speekenbrink, M., Cohen Kadosh, K. & Blakemore, S-J. (2016). Perception and recognition of faces in adolescence. *Scientific Reports, 6,* 33497.

Motta-Mena, N.V. & Scherf, K.S. (2016). Pubertal development shapes perception of complex facial expressions. *Developmental Science, 20*(4), 1–10.

Face processing - Brain

†Cohen Kadosh, K., Johnson, M.H., Henson, R.N., Dick, F. & Blakemore, S-J. (2013). Differential face-network adaptation in children, adolescents and adults. *NeuroImage, 69*, 11-20.

Cohen Kadosh, K., Johnson, M.H., Dick, F., Cohen Kadosh, R. & Blakemore, S-J. (2011). Effects of age, task performance, and structural brain development on face processing. *Cerebral Cortex, 23*(7), 1630-42.

Mentalising and social decision making - REVIEWS

\*Crone, E.A. & Dahl, R.E. (2012). Understanding adolescence as a period of social–affective engagement and goal flexibility. *Nature Reviews Neuroscience*, *13*(9), 636-650. [REVIEW]

†Crone, E.A. & Fuligni, A (2020). Self and Others in Adolescence. *Annual Review of Psychology, 71*(1), 447-469. [REVIEW]

Mahy, C.E.V., Moses, L.J. & Pfeifer, J.H. (2014). How and where: Theory-of-mind in the brain. *Developmental Cognitive Neuroscience, 9*, 68-81. [REVIEW]

Mentalising and social decision making - Behaviour

†Burnett Heyes, S., Jih, Y.R., Block, P., Hiu, C.F., Holmes, E.A., & Lau, J.Y. (2015). Relationship Reciprocation Modulates Resource Allocation in Adolescent Social Networks: Developmental Effects. *Child development*, *86*(5), 1489-1506.

†Dumontheil, I., Apperly, I.A., & Blakemore, S-J. (2010). Online usage of theory of mind continues to develop in late adolescence. *Developmental Science*, *13*(2), 331-338.

Güroğlu, B., van den Bos, W. & Crone, E.A. (2014). Sharing and giving across adolescence: An experimental study examining the development of prosocial behaviour. *Frontiers in Psychology, 5,* 291.

Lee, N.C., Jolles, J. & Krabbendam, L. (2016). Social information influences trust behaviour in adolescents. *Journal of Adolescence,* *46*, 66-75.

Mills, K.L., Dumontheil, I., Speekenbrink, M. & Blakemore, S-J. (2015). Multitasking during social interactions in adolescence and early adulthood. *Royal Society Open Science, 2*(11), 150117.

Van de Groep, S., Meuwese, R., Zanolie, K., Güroğlu, B. & Crone, E.A. (2018). Developmental Changes and Individual Differences in Trust and Reciprocity in Adolescence. *Journal of Research on Adolescence, 30*(S1), 192-208.

Van der Graaff, J., Carlo, G., Crocetti, E., Koot, H.M. & Branje, S. (2018). Prosocial Behavior in Adolescence: Gender Differences in Development and Links with Empathy. *Journal of Youth and Adolescence, 47*(5), 1086-1099.

Mentalising and social decision making - Brain

Blakemore, S-J., den Ouden, H., Choudhury, S. & Frith, C. (2007). Adolescent development of the neural circuitry for thinking about intentions. *Social cognitive and affective neuroscience*, *2*(2), 130-139.

Burnett, S. & Blakemore, S-J. (2009). Functional connectivity during a social emotion task in adolescents and in adults. *European Journal of Neuroscience, 29*(6), 1294-1301.

†Burnett, S., Bird, G., Moll, J., Frith, C. & Blakemore, S-J. (2009). Development during adolescence of the neural processing of social emotion. *Journal of Cognitive Neuroscience, 21*(9), 1736-1750.

Dumontheil, I., Hillebrandt, H., Apperly, I.A. & Blakemore, S-J. (2012). Developmental differences in the control of action selection by social information. *Journal of Cognitive Neuroscience, 24*(10), 2080-2095.

Ferschmann, L., Vijayakumar, N., Grydeland, H., Overbye, K., Seredevicius, D., Due-Tønnessen, P., Fjell, A.M., Walhovd, K.B., Pfierfer, J.H. & Tamnes, C.K. (2019). Prosocial behavior relates to the rate and timing of cortical thinning from adolescence to young adulthood. *Developmental Cognitive Neuroscience, 40*, 100734.

†Goddings, A.L., Burnett Heyes, S., Bird, G., Viner, R.M. & Blakemore, S-J. (2012). The relationship between puberty and social emotion processing. *Developmental Science, 15*(6), 801-11.

Güroğlu, B., van den Bos, W., van Dijk, E., Rombouts, S.A. & Crone, E.A. (2011). Dissociable brain networks involved in development of fairness considerations: understanding intentionality behind unfairness. *NeuroImage, 57*(2), 634-41.

Klapwijk, E.T., Goddings, A.L., Burnett Heyes, S., Bird, G., Viner, R.M. & Blakemore, S-J. (2013). Increased functional connectivity with puberty in the mentalising network involved in social emotion processing. *Hormones and Behavior, 64*(2), 314-22.

Magis-Weinberg, L., Blakemore, S-J. & Dumontheil, I. (2016). Social and Non-social Relational Reasoning in Adolescence and Adulthood. *Journal of Cognitive Neuroscience, 29*(10), 1739-1754.

†Mills, K.L., Lalonde, F., Clasen, L., Giedd, J.N. & Blakemore, S-J. (2014). Developmental changes in the structure of the social brain in late childhood and adolescence. *Social Cognitive and Affective Neuroscience, 9*, 123-131.

Steinbeis, N., Bernhardt, B.C. & Singer, T. (2012). Impulse Control and Underlying Functions of the Left DLPFC Mediate Age-Related and Age-Independent Individual Differences in Strategic Social Behavior. *Neuron, 73,* 1040-1051.

Sul, S., Güroğlu, B., Crone, E.A. & Chang, L.J. (2017). Medial prefrontal cortical thinning mediates shifts in other-regarding preferences during adolescence. *Scientific Reports, 7*(1), 8510.

Tamnes, C.K., Overbye, K., Ferschmann, L., Fjell, A.M., Walhovd, K.B., Blakemore, S-J. & Dumontheil, I. ​(2018). Social perspective taking is associated with self-reported prosocial behavior and regional cortical thickness across adolescence. *Developmental Psychology, 54*(9), 1745-1757.

†Van den Bos, W., van Dijk, E., Westenberg, M., Rombouts, S.A. & Crone, E.A. (2011). Changing brains, changing perspectives: the neurocognitive development of reciprocity. *Psychological Science, 22*(1), 60-70.

**READING WEEK – 17TH FEBRUARY 2021**

**Lecture 5: Social media and adolescence [Dr Amy Orben, MRC CBU, Cambridge]**

Wednesday 24th February 2021, 12-1

Reviews and Perspectives

Boyd, D. (2014). *It’s complicated: The social lives of networked teens.* Yale University Press.

George, M.J., & Odgers, C.L. (2015). Seven Fears and the Science of How Mobile Technologies May Be Influencing Adolescents in the Digital Age. *Perspectives on Psychological Science,* *10*(6), 832–51. [REVIEW]

\*Odgers, C.L. & Jensen, M.R. (2020). Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. *Journal of Child Psychology and Psychiatry, 61*, 336-348. [REVIEW]

Odgers, C.L. (2018). Smartphones Are Bad for Some Teens, Not All. *Nature,* *554*(7693), 432–34.

†Orben, A. (2020). Teenagers, Screens and Social Media: A Narrative Review of Reviews and Key Studies. *Social Psychiatry and Psychiatric Epidemiology*, *55*, 407-414. [REVIEW]

Core Studies

\*Bell, V., Bishop, D.V.M. & Przybylski, A.K. (2015). The Debate over Digital Technology and Young People. *BMJ, 351*, h3064.

Jensen, M., George, M.J., Russell, M.R. & Odgers, C.L. (2019). Young Adolescents’ Digital Technology Use and Mental Health Symptoms: Little Evidence of Longitudinal or Daily Linkages. *Clinical Psychological Science*, *7*(6), 1416-33.

Orben, A. & Przybylski, A.K. (2019). Screens, Teens, and Psychological Well-Being: Evidence from Three Time-Use-Diary Studies. *Psychological Science*, *30*(5), 682-696.

Orben, A. & Przybylski, A.K. (2019). The association between adolescent well-being and digital technology use. *Nature Human Behavior*, *3*, 173-182.

\*Orben, A., Dienlin, T. & Przybylski, A.K. (2019). Social Media’s Enduring Effect on Adolescent Life Satisfaction. *Proceedings of the National Academy of Sciences of the United States of America*, *116*(21), 10226–28.

†Przybylski, A.K. & Weinstein, N. (2017). A large-scale test of the Goldilocks hypothesis: Quantifying the relations between digital-screen use and the mental well-being of adolescents. *Psychological Science*, *28*, 204–215

Twenge, J.M., Joiner, T.E., Rogers, M.L. & Martin, G.N. (2017). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, *6*, 3–17.

Measurement Debate

Davidson, B.I., Shaw, H. & Ellis, D.A. (2020). *When Psychometrics Fail: What Are Technology Usage Scales Actually Measuring?* PsyArXiv.

Ellis, D.A., Davidson, B.I., Shaw, H. & Geyer, K. (2019). Do Smartphone Usage Scales Predict Behavior? *International Journal of Human-Computer Studies, 130*, 86–92.

\*Parry, D., Davidson, B.I., Sewall, C., Fisher, J.T., Mieczkowski, H. & Quintana, D.S. (2020). *Measurement Discrepancies Between Logged and Self-Reported Digital Media Use: A Systematic Review and Meta-Analysis*. PsyArXiv.

Policy Debate

\*Hawkes, N. (2019). CMO Report Is Unable to Shed Light on Impact of Screen Time and Social Media on Children’s Health. *BMJ, 364*, l643.

Davies, S.C., Atherton, F., Calderwood, C. & McBride, M. (2019, February 7th). United Kingdom Chief Medical Officers’ commentary on ‘Screen-based activities and children and young people’s mental health and psychosocial wellbeing: A systematic map of reviews.’ *Department of Health and Social Care.* <https://www.gov.uk/government/publications/uk-cmo-commentary-on-screen-time-and-social-media-map-of-reviews>

Viner, R., Davie, M. & Firth, A. (2019, January). The health impacts of screen time: A guide for clinicians and parents. *Royal College of Paediatrics and Child Health*. <https://www.rcpch.ac.uk/sites/default/files/2018-12/rcpch_screen_time_guide_-_final.pdf>

Neuroscientific Approaches

\*Crone, K.E. & Konijn E.A. (2018). Media use and brain development during adolescence. *Nature Communications, 9,* 588. [REVIEW]

\*Orben, A., Tomova, L. & Blakemore, S-J. (2020). The Effects of Social Deprivation on Adolescent Development and Mental Health. *The Lancet Child & Adolescent Health*, *4*(8), 634–40. [REVIEW]

Pfeifer, J.H. & Allen, N.B. (In Press). Puberty Initiates Cascading Relationships between Neurodevelopmental, Social, and Internalizing Processes across Adolescence. *Biological Psychiatry*.

Historical Takes

Grimes, T., Anderson, J. A. & Bergen, L. (2008). *Media violence and aggression: Science and ideology.* Sage.

Gruenberg, S.M. (1935). Radio and the child. *The Annals of the American Academy of Political and Social Science, 177*(1), 123–128.

\*Orben, A. The Sisyphean Cycle of Technology Panics. *Perspectives on Psychological Science, 15*(5), 1143–57.

Wartella, E. & Reeves, B. (1985). Historical trends in research on children and the media: 1900–1960. *Journal of Communication, 35*, 118–133.

Cyberbullying

Modecki, K.L., Minchin, J., Harbaugh, A.G., Guerra, N.G. & Runions, K.C. (2014). Bullying prevalence across contexts: a meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*, 602–611.

\*Przybylski, A.K. & Bowes, L. (2017). Cyberbullying and Adolescent Well-Being in England: A Population-Based Cross-Sectional Study. *The Lancet Child & Adolescent Health, 1*(1), 19–26.

**Lecture 6: Adolescent mental health [Prof Tamsin Ford, Psychiatry, Cambridge]**

Wednesday 3rd March 2021, 12-1

Prevalence

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**Lecture 7: Adolescence from an evolutionary anthropological perspective [Dr Emily Emmott, UCL].**

Wednesday 10th March 2021, 12-1

**Human life history evolution**

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**Cross-cultural comparison of adolescence (book)**

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**Overview of adolescence from an evolutionary anthropological perspective (book)**

Hewlett, B. L. (Ed.). (2013). Adolescent identity: Evolutionary, cultural and developmental perspectives (Vol. 7). Routledge. (Print ISBN: 9781138920637, 1138920630; eText ISBN: 9781136239670, 1136239677)

**Lecture 8. Risk-taking and peer influence in adolescence [SJB]**

Wednesday 17th March 2021, 12-1

Risk taking

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Shulman, E.P., Smith, A.R., Silva, K., Icenogle, G., Duell, N., Chein, J., & Steinberg, L. (2016). The dual systems model: Review, reappraisal, and reaffirmation. *Developmental Cognitive Neuroscience*, *17*, 103-117. [REVIEW]

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Peer influence on decision making and social risk taking

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**Other resources**

Insight Into the Teenage Brain: Adriana Galván at TEDxYouth@Caltech [**https://www.youtube.com/watch?v=LWUkW4s3XxY**](https://www.youtube.com/watch?v=LWUkW4s3XxY)

Leah Somerville: <http://emotionnews.org/the-emotional-potency-of-peers-during-adolescence/>

SJ Blakemore TED talk 2012: https://www.ted.com/talks/sarah\_jayne\_blakemore\_the\_mysterious\_workings\_of\_the\_adolescent\_brain

Reporting of Sul et al.: <https://medicalxpress.com/news/2017-09-teens-ability-intentions-linked-brain.html>

Kate Mills A Lecture in Psychology: Is Adolescence a Sensitive Period for Sociocultural Processing? <https://www.youtube.com/watch?v=zwQDxn0SA44>

SJ Blakemore The Teenage Brain Royal Society lecture 2014: <https://www.youtube.com/watch?v=PVIWalUD4mA>

Teenage Brains. Article written by David Dobbs published at National Geographic Magazine

https://www.nationalgeographic.com/magazine/2011/10/beautiful-brains/