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Asscheman, J.S.

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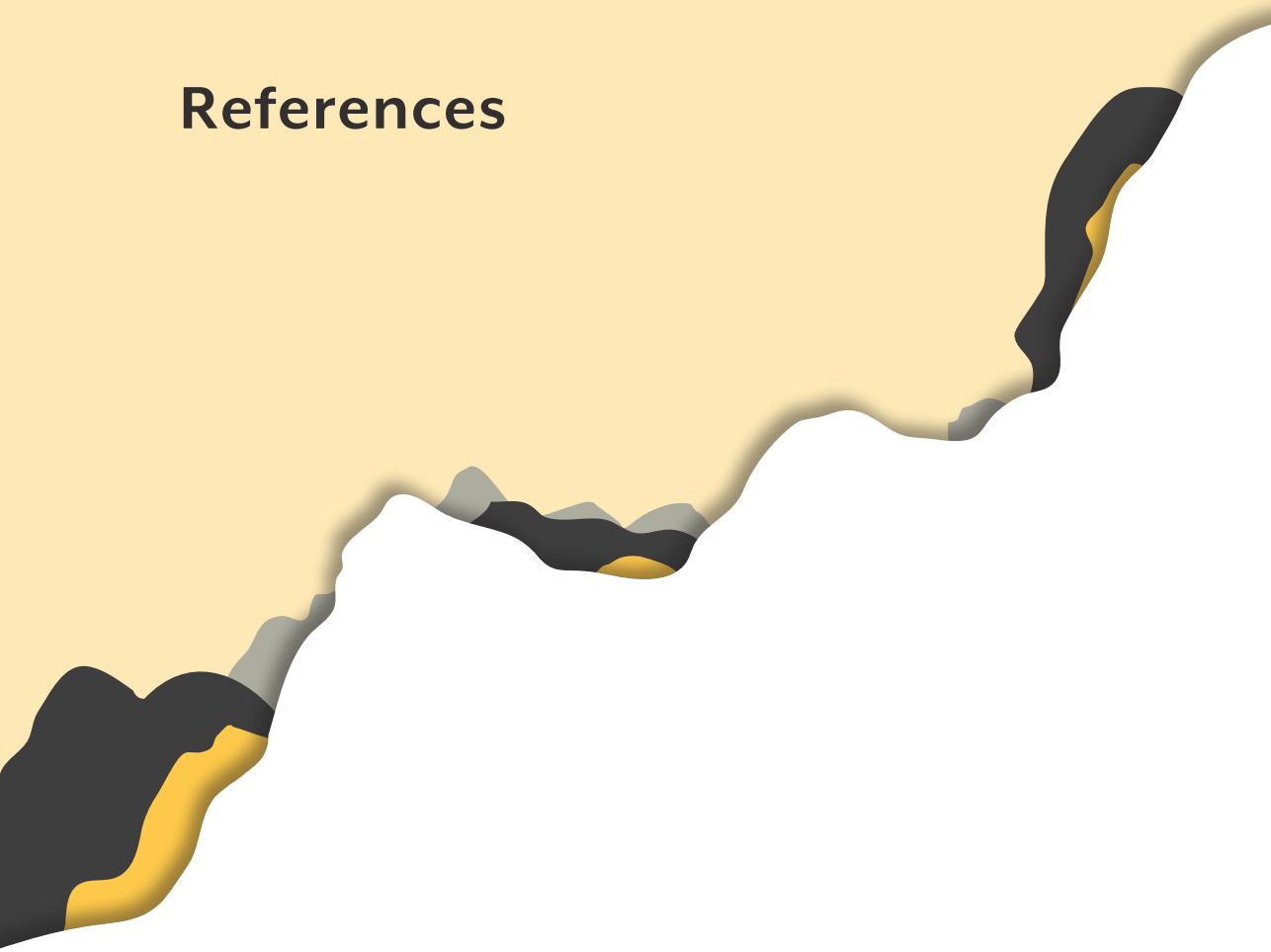
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References



References

A

- Abecassis, M., Hartup, W. W., Haselager, G. J. T., Scholte, R. H. J., & Van Lieshout, C. F. M. (2002). Mutual antipathies and their significance in middle childhood and adolescence. *Child Development, 73*, 1543-1556. doi:10.1111/1467-8624.00489
- Achenbach, T. M. (1991). Manual for the Child Behavior Checklist/4-18 and 1991 profile. *University of Vermont, Department of Psychiatry*.
- Achenbach, T. M., & Edelbrock, C. S. (1983). *Manual for the child behavior checklist: and revised child behavior profile*: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*, 213-232. doi:10.1037/0033-2909.101.2.213
- Achterberg, M., van Duijvenvoorde, A. C. K., Bakermans-Kranenburg, M. J., & Crone, E. A. (2016). Control your anger! The neural basis of aggression regulation in response to negative social feedback. *Social Cognitive and Affective Neuroscience, 11*, 712-720. doi:10.1093/scan/nsv154
- Achterberg, M., van Duijvenvoorde, A. C. K., van der Meulen, M., Bakermans-Kranenburg, M. J., & Crone, E. A. (2018). Heritability of aggression following social evaluation in middle childhood: An fMRI study. *Human Brain Mapping, 39*, 2828-2841. doi:10.1002/hbm.24043
- Achterberg, M., van Duijvenvoorde, A. C. K., van der Meulen, M., Euser, S., Bakermans-Kranenburg, M. J., & Crone, E. A. (2017). The neural and behavioral correlates of social evaluation in childhood. *Developmental Cognitive Neuroscience, 24*, 107-117. doi:10.1016/j.dcn.2017.02.007
- Aguilar-Pardo, D., Martinez-Arias, R., & Colmenares, F. (2013). The role of inhibition in young children's altruistic behaviour. *Cognitive Processing, 14*, 301-307. doi:10.1007/s10339-013-0552-6
- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control, 19*, 716-723. doi:10.1109/TAC.1974.1100705
- Alkire, D., Levitas, D., Warnell, K. R., & Redcay, E. (2018). Social interaction recruits mentalizing and reward systems in middle childhood. *Human Brain Mapping, 39*, 3928-3942. doi:10.1002/hbm.24221
- Ambler, G., Omar, R. Z., & Royston, P. (2007). A comparison of imputation techniques for handling missing predictor values in a risk model with a binary outcome. *Statistical Methods in Medical Research, 16*, 277-298. doi:10.1177/0962280206074466
- Andersen, S. L. (2003). Trajectories of brain development: Point of vulnerability or window of opportunity? *Neuroscience & Biobehavioral Reviews, 27*, 3-18. doi:10.1016/S0149-7634(03)00005-8
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*, 427-454. doi:10.1007/BF02202939
- Arnsten, A. F. T. (2009). Stress signalling pathways that impair prefrontal cortex structure and function. *Nature Reviews Neuroscience, 10*, 410. doi:10.1038/nrn2648
- Ashburner, J., & Friston, K. J. (2005). Unified segmentation. *NeuroImage, 26*, 839-851. doi:10.1016/j.neuroimage.2005.02.018
- Asscheman, J. S., He, J., Koot, S., Buil, J. M., Krabbendam, L., & van Lier, P. A. (2020). Classroom peer preferences and the development of sharing behavior with friends and others. *International Journal of Behavioral Development. doi:10.1177/0165025420911094*
- Asscheman, J. S., Koot, S., Ma, I., Buil, J. M., Krabbendam, L., Cillessen, A. H. N., & van Lier, P. A. C. (2019). Heightened neural sensitivity to social exclusion in boys with a history of low peer preference during primary school. *Developmental Cognitive Neuroscience, 38*, 100673. doi:10.1016/j.dcn.2019.100673

B

- Bach, D. R., Symmonds, M., Barnes, G., & Dolan, R. J. (2017). Whole-brain neural dynamics of probabilistic reward prediction. *The Journal of Neuroscience*, *37*, 3789-3798. doi:10.1523/jneurosci.2943-16.2017
- Baddam, S., Laws, H., Crawford, J. L., Wu, J., Bolling, D. Z., Mayes, L. C., & Crowley, M. J. (2016). What they bring: baseline psychological distress differentially predicts neural response in social exclusion by children's friends and strangers in best friend dyads. *Social Cognitive and Affective Neuroscience*, *11*, 1729-1740. doi:10.1093/scan/nsw083
- Baldini, S., Restani, L., Baroncelli, L., Coltelli, M., Franco, R., Cenni, M. C., . . . Berardi, N. (2013). Enriched early life experiences reduce adult anxiety-like behavior in rats: A role for insulin-like growth factor I. *Journal of Neuroscience*, *33*, 11715-11723.
- Barulli, D., & Stern, Y. (2013). Efficiency, capacity, compensation, maintenance, plasticity: Emerging concepts in cognitive reserve. *Trends in Cognitive Sciences*, *17*, 502-509. doi:10.1016/j.tics.2013.08.012
- Bault, N., Pelloux, B., Fahrenfort, J. J., Ridderinkhof, K. R., & van Winden, F. (2014). Neural dynamics of social tie formation in economic decision-making. *Social Cognitive and Affective Neuroscience*, *10*, 877-884. doi:10.1093/scan/nsul38
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529. doi:10.1037/0033-2909.117.3.497
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*, 323-370. doi:10.1037//1089-2680.5.4.323
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, *88*, 589-604. doi:10.1037/0022-3514.88.4.589
- Beauchaine, T. P., Neuhaus, E., Brenner, S. L., & Gatzke-Kopp, L. (2008). Ten good reasons to consider biological processes in prevention and intervention research. *Development and Psychopathology*, *20*, 745-774. doi:10.1017/S0954579408000369
- Bechara, A., & Damasio, A. R. (2005). The somatic marker hypothesis: A neural theory of economic decision. *Games and Economic Behavior*, *52*, 336-372. doi:10.1016/j.geb.2004.06.010
- Behnsen, P., Buil, M., Koot, S., Huizink, A., & van Lier, P. (2018). Classroom social experiences in early elementary school relate to diurnal cortisol levels. *Psychoneuroendocrinology*, *87*, 1-8. doi:10.1016/j.psyneuen.2017.09.025
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: differential susceptibility to environmental influences. *Psychological Bulletin*, *135*, 885.
- Bender, R., & Lange, S. (2001). Adjusting for multiple testing—when and how? *Journal of Clinical Epidemiology*, *54*, 343-349. doi:10.1016/S0895-4356(00)00314-0
- Benenson, J. F., Pascoe, J., & Radmore, N. (2007). Children's altruistic behavior in the dictator game. *Evolution and Human Behavior*, *28*, 168-175. doi:10.1016/j.evolhumbehav.2006.10.003
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238-246. doi:10.1037/0033-2909.107.2.238
- Berndt, T. J. (1981). Age changes and changes over time in prosocial intentions and behavior between friends. *Developmental Psychology*, *17*, 408-416. doi:10.1037/0012-1649.17.4.408
- Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science*, *11*, 7-10. doi:10.1111/1467-8721.00157
- Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child Development*, *81*, 1641-1660. doi:10.1111/j.1467-8624.2010.01499.x
- Blackhart, G. C., Eckel, L. A., & Tice, D. M. (2007). Salivary cortisol in response to acute social rejection and acceptance by peers. *Biological Psychology*, *75*, 267-276. doi:10.1016/j.biopsycho.2007.03.005
- Blakemore, S. J. (2008). The social brain in adolescence. *Nature Reviews Neuroscience*, *9*, 267-277. doi:10.1038/nrn2353
- Blakemore, S.-J. (2010). The developing social brain: Implications for education. *Neuron*, *65*, 744-747. doi:10.1016/j.neuron.2010.03.004

References

- Blakemore, S.-J., Burnett, S., & Dahl, R. E. (2010). The role of puberty in the developing adolescent brain. *Human Brain Mapping, 31*, 926-933. doi:10.1002/hbm.21052
- Bollen, K. A., & Curran, P. J. (2006). *Latent curve models: A structural equation perspective* (Vol. 467): John Wiley & Sons.
- Bolton, J. L., Molet, J., Ivy, A., & Baram, T. Z. (2017). New insights into early-life stress and behavioral outcomes. *Current Opinion in Behavioral Sciences, 14*, 133-139. doi:10.1016/j.cobeha.2016.12.012
- Botvinick, M. M., Braver, T. S., Barch, D. M., Carter, C. S., & Cohen, J. D. (2001). Conflict monitoring and cognitive control. *Psychological Review, 108*, 624-652. doi:10.1037/0033-295X.108.3.624
- Boyce, W. T., & Ellis, B. J. (2005). Biological sensitivity to context: I. An evolutionary-developmental theory of the origins and functions of stress reactivity. *Development and Psychopathology, 17*, 271-301. doi:10.1017/S0954579405050145
- Braams, B. R., & Crone, E. A. (2016). Peers and parents: A comparison between neural activation when winning for friends and mothers in adolescence. *Social Cognitive and Affective Neuroscience, 12*, 417-426. doi:10.1093/scan/nsw136
- Braams, B. R., & Crone, E. A. (2017). Longitudinal changes in social brain development: Processing outcomes for friend and self. *Child Development, 88*, 1952-1965. doi:10.1111/cdev.12665
- Braams, B. R., Peters, S., Peper, J. S., Güro lu, B., & Crone, E. A. (2014). Gambling for self, friends, and antagonists: Differential contributions of affective and social brain regions on adolescent reward processing. *NeuroImage, 100*, 281-289. doi:10.1016/j.neuroimage.2014.06.020
- Braams, B. R., van Duijvenvoorde, A. C. K., Peper, J. S., & Crone, E. A. (2015). Longitudinal changes in adolescent risk-taking: A comprehensive study of neural responses to rewards, pubertal development, and risk-taking behavior. *The Journal of Neuroscience, 35*, 7226-7238. doi:10.1523/jneurosci.4764-14.2015
- Brady, S. S., Dolcini, M. M., Harper, G. W., & Pollack, L. M. (2009). Supportive friendships moderate the association between stressful life events and sexual risk taking among African American adolescents. *Health Psychology, 28*, 238. doi:10.1037/a0013240
- Branchi, I., D'Andrea, I., Fiore, M., Di Fausto, V., Aloe, L., & Alleva, E. (2006). Early social enrichment shapes social behavior and nerve growth factor and brain-derived neurotrophic factor levels in the adult mouse brain. *Biological Psychiatry, 60*, 690-696. doi:10.1016/j.biopsych.2006.01.005
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence, 21*, 166-179. doi:10.1111/j.1532-7795.2010.00721.x
- Brendgen, M., Vitaro, F., Bukowski, W. M., Doyle, A. B., & Markiewicz, D. (2001). Developmental profiles of peer social preference over the course of elementary school: Associations with trajectories of externalizing and internalizing behavior. *Developmental Psychology, 37*, 308-320. doi:10.1037/0012-1649.37.3.308
- Brett, B. E., & de Weerth, C. (2019). The microbiota-gut-brain axis: A promising avenue to foster healthy developmental outcomes. *Developmental Psychobiology, 61*, 772-782. doi:10.1002/dev.21824
- Brett, M., Anton, J., Valabregue, R., & Poline, J. (2002). Region of interest analysis using the MarsBar toolbox for SPM 99. *NeuroImage, 16*, S497.
- Bronfenbrenner, U. (1992). *Ecological systems theory*. Jessica Kingsley Publishers. Brown, B. B. (2004). Adolescents' relationships with peers. *Handbook of adolescent psychology, 2*, 363-394.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research, 21*, 230-258. doi:10.1177/0049124192021002005
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology, 98*, 1-13. doi:10.1037/0022-0663.98.1.1
- Bukowski, W. M., Castellanos, M., Vitaro, F., & Brendgen, M. (2015). Socialization and experiences with peers. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (2nd ed., pp. 228-250). New York, NY: The Guilford Press.
- Bukowski, W. M., Laursen, B., & Rubin, K. H. (2018). *Handbook of peer interactions, relationships, and groups*: Guilford Publications.

- Bunge, S. A., & Wright, S. B. (2007). Neurodevelopmental changes in working memory and cognitive control. *Current Opinion in Neurobiology*, *17*, 243-250. doi:10.1016/j.conb.2007.02.005
- Burgess, K. B., Wojslawowicz, J. C., Rubin, K. H., Rose-Krasnor, L., & Booth-LaForce, C. (2006). Social information processing and coping strategies of shy/withdrawn and aggressive children: Does friendship matter? *Child Development*, *77*, 371-383. doi:10.1111/j.1467-8624.2006.00876.x
- Burklund, L. J., Eisenberger, N. I., & Lieberman, M. D. (2007). The face of rejection: Rejection sensitivity moderates dorsal anterior cingulate activity to disapproving facial expressions. *Social Neuroscience*, *2*, 238-253. doi:10.1080/17470910701391711
- Burnett Heyes, S., Jih, Y.-R., Block, P., Hiu, C.-F., Holmes, E. A., & Lau, J. Y. F. (2015). Relationship reciprocation modulates resource allocation in adolescent social networks: Developmental effects. *Child Development*, *86*, 1489-1506. doi:10.1111/cdev.12396
- Burnett, S., Sebastian, C., Kadosh, K. C., & Blakemore, S.-J. (2011). The social brain in adolescence: Evidence from functional magnetic resonance imaging and behavioural studies. *Neuroscience & Biobehavioral Reviews*, *35*, 1654-1664. doi:10.1016/j.neubiorev.2010.10.011

C

- Cacioppo, S., Frum, C., Asp, E., Weiss, R. M., Lewis, J. W., & Cacioppo, J. T. (2013). A quantitative meta-analysis of functional imaging studies of social rejection. *Scientific Reports*, *3*, 2027. doi:10.1038/srep02027
- Cairns, R. B., Leung, M.-C., Buchanan, L., & Cairns, B. D. (1995). Friendships and social networks in childhood and adolescence: Fluidity, reliability, and interrelations. *Child Development*, *66*, 1330-1345. doi:10.1111/j.1467-8624.1995.tb00938.x
- Callaghan, B. L., & Tottenham, N. (2016). The Stress Acceleration Hypothesis: Effects of early-life adversity on emotion circuits and behavior. *Current Opinion in Behavioral Sciences*, *7*, 76-81. doi:10.1016/j.cobeha.2015.11.018
- Caputi, M., Lecce, S., Pagnin, A., & Banerjee, R. (2012). Longitudinal effects of theory of mind on later peer relations: The role of prosocial behavior. *Developmental Psychology*, *48*, 257-270. doi:10.1037/a0025402
- Card, N. A. (2007). "I hated her guts!": Emerging adults' recollections of the formation, maintenance, and termination of antipathetic relationships during high school. *Journal of Adolescent Research*, *22*, 32-57. doi:10.1177/0743558406295783
- Card, N. A., Isaacs, J., & Hodges, E. V. E. (2008). Multiple contextual levels of risk for peer victimization: A review with implications for prevention and intervention efforts. In T. W. Miller (Ed.), *School Violence and Primary Prevention* (pp. 125-153). New York, NY: Springer New York.
- Casey, B. J., Jones, R. M., & Hare, T. A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences*, *1124*, 111-126. doi:10.1196/annals.1440.010
- Census, U. S. (2017). *2013-2017 American Community Survey Five-year Estimates*. Washington DC: United States Census Bureau.
- Chan, A., & Poulin, F. (2007). Monthly changes in the composition of friendship networks in early adolescence. *Merrill-Palmer Quarterly*, *53*, 578-602.
- Chang, L. J., Yarkoni, T., Khaw, M. W., & Sanfey, A. G. (2012). Decoding the role of the insula in human cognition: Functional parcellation and large-scale reverse inference. *Cerebral Cortex*, *23*, 739-749. doi:10.1093/cercor/bhs065
- Chen, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science*, *14*, F1-10. doi:10.1111/j.1467-7687.2010.01035.x
- Chen, Y., & Baram, T. Z. (2015). Toward understanding how early-life stress reprograms cognitive and emotional brain networks. *Neuropsychopharmacology*, *41*, 197. doi:10.1038/npp.2015.181

References

- Cicchetti, D. (2002). The impact of social experience on neurobiological systems: Illustration from a constructivist view of child maltreatment. *Cognitive Development, 17*, 1407-1428. doi:10.1016/S0885-2014(02)00121-1
- Cicchetti, D. V., & Sparrow, S. A. (1981). Developing criteria for establishing interrater reliability of specific items: Applications to assessment of adaptive behavior. *American Journal of Mental Deficiency, 86*, 127-137.
- Cillessen, A. H. N., & Bellmore, A. D. (1999). Accuracy of social self-perceptions and peer competence in middle childhood. *Merrill-Palmer Quarterly, 45*, 650-676.
- Cillessen, A. H. N., & Bukowski, W. M. (2018). Sociometric perspectives. In W. M. Bukowski, B. Laursen, & K. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (2 ed.). New York: The Guilford Press.
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. *Social support measurement and intervention: A guide for health and social scientists, 3*, 25.
- Coie, J. D., & Kupersmidt, J. B. (1983). A behavioral analysis of emerging social status in boys' groups. *Child Development, 1400*-1416. doi:10.2307/1129803
- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18*, 557-570. doi:10.1037/0012-1649.18.4.557
- Collado, A., Felton, J. W., MacPherson, L., & Lejuez, C. W. (2014). Longitudinal trajectories of sensation seeking, risk taking propensity, and impulsivity across early to middle adolescence. *Addictive Behaviors, 39*, 1580-1588. doi:10.1016/j.addbeh.2014.01.024
- Collins, S. M., Surette, M., & Bercik, P. (2012). The interplay between the intestinal microbiota and the brain. *Nature Reviews Microbiology, 10*, 735. doi:10.1038/nrmicro2876
- Constantino, J. N., & Gruber, C. P. (2012). *Social responsiveness scale (SRS)*: Western Psychological Services Torrance, CA.
- Copeland, W. E., Wolke, D., Angold, A., & Costello, E. J. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry, 70*, 419-426. doi:10.1001/jamapsychiatry.2013.504
- Coplan, R. J., & Arbeau, K. A. (2009). Peer interactions and play in early childhood. In K. H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.
- Corbetta, M., & Shulman, G. L. (2002). Control of goal-directed and stimulus-driven attention in the brain. *Nature Reviews Neuroscience, 3*, 201-215. doi:10.1038/nrn755
- Craig, A. D. (2009). How do you feel — now? The anterior insula and human awareness. *Nature Reviews Neuroscience, 10*.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development, 67*, 2317-2327. doi:10.1111/j.1467-8624.1996.tb01859.x
- Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience, 13*, 636-650. doi:10.1038/nrn3313
- Crone, E. A., van Duijvenvoorde, A. C., & Peper, J. S. (2016). Annual Research Review: Neural contributions to risk-taking in adolescence--developmental changes and individual differences. *Journal of Child Psychology and Psychiatry, 57*, 353-368. doi:10.1111/jcpp.12502
- Crowley, M. J., Wu, J., Molfese, P. J., & Mayes, L. C. (2010). Social exclusion in middle childhood: Rejection events, slow-wave neural activity, and ostracism distress. *Social Neuroscience, 5*, 483-495. doi:10.1080/17470919.2010.500169
- Curley, J. P., & Champagne, F. A. (2016). Influence of maternal care on the developing brain: Mechanisms, temporal dynamics and sensitive periods. *Frontiers in Neuroendocrinology, 40*, 52-66. doi:10.1016/j.yfrne.2015.11.001

D

- d'Acremont, M., & Bossaerts, P. (2008). Neurobiological studies of risk assessment: A comparison of expected utility and mean-variance approaches. *Cognitive, Affective, & Behavioral Neuroscience*, 8, 363-374. doi:10.3758/CABN.8.4.363
- Dalgleish, T., Walsh, N. D., Mobbs, D., Schweizer, S., van Harmelen, A.-L., Dunn, B., . . . Stretton, J. (2017). Social pain and social gain in the adolescent brain: A common neural circuitry underlying both positive and negative social evaluation. *Scientific Reports*, 7, 42010. doi:10.1038/srep42010
- Davey, C. G., Allen, N. B., Harrison, B. J., Dwyer, D. B., & Yücel, M. (2010). Being liked activates primary reward and midline self-related brain regions. *Human Brain Mapping*, 31, 660-668. doi:10.1002/hbm.20895
- De Castro, B. O., Veerman, J. W., Koops, W., Bosch, J. D., & Monshouwer, H. J. (2002). Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Development*, 73, 916-934. doi:10.1111/1467-8624.00447
- de Kloet, E. R. (2003). Hormones, brain and stress. *Endocrine Regulations*, 37, 51.
- de Kloet, E. R., Joëls, M., & Holsboer, F. (2005). Stress and the brain: From adaptation to disease. *Nature Reviews Neuroscience*, 6, 463-475. doi:10.1038/nrn1683
- de Water, E., Mies, G. W., Ma, I., Mennes, M., Cillessen, A. H. N., & Scheres, A. (2017). Neural responses to social exclusion in adolescents: Effects of peer status. *Cortex*, 92, 32-43. doi:10.1016/j.cortex.2017.02.018
- de Wilde, A., Koot, H. M., & van Lier, P. A. C. (2016). Developmental links between children's working memory and their social relations with teachers and peers in the early school years. *Journal of Abnormal Child Psychology*, 44, 19-30. doi:10.1007/s10802-015-0053-4
- Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42, 565-579. doi:10.1017/S0021963001007272
- Defoe, I. N., Dubas, J. S., Figner, B., & van Aken, M. A. G. (2015). A meta-analysis on age differences in risky decision making: Adolescents versus children and adults. *Psychological Bulletin*, 141, 48-84. doi:10.1037/a0038088
- Delgado, M. R. (2007). Reward related responses in the human striatum. In *Reward and decision making in corticobasal ganglia networks*. (Vol. 1104, pp. 70-88). Oxford: Blackwell Publishing.
- Delgado, M. R., Frank, R. H., & Phelps, E. A. (2005). Perceptions of moral character modulate the neural systems of reward during the trust game. *Nature Neuroscience*, 8, 1611-1618. doi:10.1038/nn1575
- Derrick, J. L., Gabriel, S., & Hugenberg, K. (2009). Social surrogacy: How favored television programs provide the experience of belonging. *Journal of Experimental Social Psychology*, 45, 352-362. doi:10.1016/j.jesp.2008.12.003
- Dickerson, S. S., & Zoccola, P. M. (2013). Cortisol responses to social exclusion. In C. N. DeWall (Ed.), *The Oxford handbook of social exclusion* (pp. 143-151). Oxford, UK: Oxford University Press
- Dippel, G., & Beste, C. (2015). A causal role of the right inferior frontal cortex in implementing strategies for multi-component behaviour. *Nature Communications*, 6, 6587. doi:10.1038/ncomms7587
- Dishion, T. J., & Owen, L. D. (2002). A longitudinal analysis of friendships and substance use: Bidirectional influence from adolescence to adulthood. *Developmental Psychology*, 38, 480-491. doi:10.1037//0012-1649.38.4.480
- Dishion, T. J., & Patterson, G. R. (2016). The development and ecology of antisocial behavior: Linking etiology, prevention, and treatment. In D. Cicchetti (Ed.), *Developmental Psychopathology: Maladaptation and psychopathology* (pp. 647-678). Hoboken, NJ, US: John Wiley & Sons Inc.
- Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., & Price, J. M. (2003). Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development*, 74, 374-393. doi:10.1111/1467-8624.7402004
- Donders, A. R. T., van der Heijden, G. J. M. G., Stijnen, T., & Moons, K. G. M. (2006). Review: A gentle introduction to imputation of missing values. *Journal of Clinical Epidemiology*, 59, 1087-1091. doi:10.1016/j.jclinepi.2006.01.014

References

- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70*, 1327.
- Downey, G., Lebolt, A., Rincon, C., & Freitas, A. L. (1998). Rejection sensitivity and children's interpersonal difficulties. *Child Development, 69*, 1074-1091. doi: 10.1111/j.1467-8624.1998.tb06161.x
- du Plessis, M. R., Smeekens, S., Cillessen, A. H. N., Whittle, S., & Güro lu, B. (2019). Bullying the brain? Longitudinal links between childhood peer victimization, cortisol, and adolescent brain structure. *Frontiers in Psychology, 9*, 2706-2706. doi:10.3389/fpsyg.2018.02706
- Duell, N., & Steinberg, L. (2019). Positive risk taking in adolescence. *Child Development Perspectives, 13*, 48-52. doi:10.1111/cdep.12310
- Dunfield, K. A. (2014). A construct divided: Prosocial behavior as helping, sharing, and comforting subtypes. *Frontiers in Psychology, 5*. doi:10.3389/fpsyg.2014.00958
- Dunfield, K. A., & Kuhlmeier, V. A. (2013). Classifying prosocial behavior: Children's responses to instrumental need, emotional distress, and material desire. *Child Development, 84*, 1766-1776. doi:10.1111/cdev.12075

E

- East, P. L., & Rook, K. S. (1992). Compensatory patterns of support among children's peer relationships: A test using school friends, nonschool friends, and siblings. *Developmental Psychology, 28*, 163-172. doi:10.1037/0012-1649.28.1.163
- Ehrlich, K. B., Gerson, S. A., Vanderwert, R. E., Cannon, E. N., & Fox, N. A. (2015). Hypervigilance to rejecting stimuli in rejection sensitive individuals: behavioral and neurocognitive evidence. *Personality and Individual Differences, 85*, 7-12. doi:10.1016/j.paid.2015.04.023
- Eisenberg-Berg, N., & Hand, M. (1979). The relationship of preschoolers' reasoning about prosocial moral conflicts to prosocial behavior. *Child Development, 50*, 356-363. doi:10.2307/1129410
- Eisenberg, N., Eggum-Wilkens, N. D., & Spinrad, T. L. (2015). The development of prosocial behavior. In *The Oxford handbook of prosocial behavior* (pp. 114-136). New York: Oxford University Press
- Eisenberg, N., Fabes, F. A., & Spinrad, T. L. (2006). *Prosocial development* (Vol. 6). New York: Wiley.
- Eisenberg, N., Spinrad, T. L., & Smith, C. L. (2004). Emotion-related regulation: Its conceptualization, relations to social functioning, and socialization. In P. Philippot & R. S. Feldman (Eds.), *The Regulation of Emotion* (pp. 277-306). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc
- Eisenberger, N. I. (2012). The pain of social disconnection: Examining the shared neural underpinnings of physical and social pain. *Nature Reviews Neuroscience, 13*, 421. doi:10.1038/nrn3231
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science, 302*, 290-292. doi:10.1126/science.1089134
- Endedijk, H. M., Meyer, M., Bekkering, H., Cillessen, A. H. N., & Hunnius, S. (2017). Neural mirroring and social interaction: Motor system involvement during action observation relates to early peer cooperation. *Developmental Cognitive Neuroscience, 24*, 33-41. doi:10.1016/j.dcn.2017.01.001
- Enders, C. K., Mistler, S. A., & Keller, B. T. (2016). Multilevel multiple imputation: A review and evaluation of joint modeling and chained equations imputation. *Psychological Methods, 21*, 222-240.
- Eshel, N., Nelson, E. E., Blair, R. J., Pine, D. S., & Ernst, M. (2007). Neural substrates of choice selection in adults and adolescents: Development of the ventrolateral prefrontal and anterior cingulate cortices. *Neuropsychologia, 45*, 1270-1279. doi:10.1016/j.neuropsychologia.2006.10.004

F

- Fabes, R. A., & Eisenberg, N. (1998). Meta-analyses of age and sex differences in children's and adolescents' prosocial behavior. *Handbook of Child Psychology*, 3.
- Fabes, R. A., Martin, C. L., & Hanish, L. D. (2003). Young children's play qualities in same-, other-, and mixed-sex peer groups. *Child Development*, 74, 921-932. doi:10.1111/1467-8624.00576
- Fabes, R. A., Martin, C. L., & Hanish, L. D. (2009). Children's behaviors and interactions with peers. In *Handbook of peer interactions, relationships, and groups*. (pp. 45-62). New York, NY, US: The Guilford Press.
- Fahrenfort, J., van Winden, F., Pelloux, B., Stallen, M., & Ridderinkhof, K. R. (2012). Neural correlates of dynamically evolving interpersonal ties predict prosocial behavior. *Frontiers in Neuroscience*, 6. doi:10.3389/fnins.2012.00028
- Farley, J. P., & Kim-Spoon, J. (2014). The development of adolescent self-regulation: Reviewing the role of parent, peer, friend, and romantic relationships. *Journal of Adolescence*, 37, 433-440. doi:10.1016/j.adolescence.2014.03.009
- Farrel, A. D. (1994). Structural equation modeling with longitudinal data: Strategies for examining group differences and reciprocal relationships. *Journal of Consulting and Clinical Psychology*, 62, 477-487. doi:10.1037/0022-006X.62.3.477
- Farrell, A. D., Henry, D. B., & Bettencourt, A. (2013). Methodological challenges examining subgroup differences: Examples from universal school-based youth violence prevention trials. *Prevention Science*, 14, 121-133. doi:10.1007/s1121-011-0200-2
- Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature*, 454, 1079-1083. doi:10.1038/nature07155
- Fehr, E., Fischbacher, U., & Gächter, S. (2002). Strong reciprocity, human cooperation, and the enforcement of social norms. *Human Nature*, 13, 1-25. doi:10.1007/s12110-002-1012-7
- Fehr, E., Glätzle-Rützler, D., & Sutter, M. (2013). The development of egalitarianism, altruism, spite and parochialism in childhood and adolescence. *European Economic Review*, 64, 369-383. doi:10.1016/j.eurocorev.2013.09.006
- Feldman, D. E., & Knudsen, E. I. (1998). Experience-dependent plasticity and the maturation of glutamatergic synapses. *Neuron*, 20, 1067-1071.
- FeldmanHall, O., Dalgleish, T., Thompson, R., Evans, D., Schweizer, S., & Mobbs, D. (2012). Differential neural circuitry and self-interest in real vs hypothetical moral decisions. *Social Cognitive and Affective Neuroscience*, 7, 743-751. doi:10.1093/scan/nss069
- Ferreri, L., Bigand, E., Perrey, S., & Bugaiska, A. (2014). The promise of Near-Infrared Spectroscopy (NIRS) for psychological research: A brief review. *L'Annee Psychologique*, 114, 537-569.
- Fields, S., Leraas, K., Collins, C., & Reynolds, B. (2009). Delay discounting as a mediator of the relationship between perceived stress and cigarette smoking status in adolescents. *Behavioural Pharmacology*, 20, 455-460. doi:10.1097/FBP.0b013e328330dcff
- Foulkes, L., & Blakemore, S. J. (2018). Studying individual differences in human adolescent brain development. *Nature Neuroscience*, 21, 315-323. doi:10.1038/s41593-018-0078-4
- Fox, S. E., Levitt, P., & Nelson III, C. A. (2010). How the timing and quality of early experiences influence the development of brain architecture. *Child Development*, 81, 28-40. doi:10.1111/j.1467-8624.2009.01380.x
- Frith, C. D., & Frith, U. (2003). Development and neurophysiology of mentalizing. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 358, 459-473. doi:10.1098/rstb.2002.1218
- Frith, C. D., & Frith, U. (2007). Social cognition in humans. *Current Biology*, 17, R724-R732. doi:10.1016/j.cub.2007.05.068
- Frith, U., & Frith, C. D. (2003). Development and neurophysiology of mentalizing. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 358, 459-473. doi:10.1098/rstb.2002.1218

References

G

- Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology, 41*, 625-635. doi:10.1037/0012-1649.41.4.625
- Gardner, W. L., Pickett, C. L., & Brewer, M. B. (2000). Social exclusion and selective memory: How the need to belong influences memory for social events. *Personality and Social Psychology Bulletin, 26*, 486-496 doi:10.1177/0146167200266007
- Ge, X., & Natsuaki, M. N. (2009). In search of explanations for early pubertal timing effects on developmental psychopathology. *Current Directions in Psychological Science, 18*, 327-331. doi:10.1111/j.1467-8721.2009.01661.x
- Giedd, J. N., Blumenthal, J., Jeffries, N. O., Castellanos, F. X., Liu, H., Zijdenbos, A., . . . Rapoport, J. L. (1999). Brain development during childhood and adolescence: A longitudinal MRI study. *Nature Neuroscience, 2*, 861-863. doi:10.1038/13158
- Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology, 41*, 235-284. doi:10.1016/S0022-4405(03)00048-7
- Giletta, M., Slavich, G. M., Rudolph, K. D., Hastings, P. D., Nock, M. K., & Prinstein, M. J. (2018). Peer victimization predicts heightened inflammatory reactivity to social stress in cognitively vulnerable adolescents. *Journal of Child Psychology and Psychiatry, 59*(2), 129-139. doi:10.1111/jcpp.12804
- Goddings, A.-L., Beltz, A., Peper, J. S., Crone, E. A., & Braams, B. R. (2019). Understanding the role of puberty in structural and functional development of the adolescent brain. *Journal of Research on Adolescence, 29*, 32-53. doi:10.1111/jora.12408
- Goddings, A. L., Mills, K. L., Clasen, L. S., Giedd, J. N., Viner, R. M., & Blakemore, S. J. (2014). The influence of puberty on subcortical brain development. *Neuroimage, 88*, 242-251. doi:10.1016/j.neuroimage.2013.09.073
- Goes, T. C., Antunes, F. D., & Teixeira-Silva, F. (2015). Environmental enrichment for adult rats: Effects on trait and state anxiety. *Neuroscience Letters, 584*, 93-96. doi:10.1016/j.neulet.2014.10.004
- Gogtay, N., Giedd, J. N., Lusk, L., Hayashi, K. M., Greenstein, D., Vaituzis, A. C., . . . Toga, A. W. (2004). Dynamic mapping of human cortical development during childhood through early adulthood. *Proceedings of the National Academy of Sciences, 101*, 8174-8179.
- Goldin, P. R., McRae, K., Ramel, W., & Gross, J. J. (2008). The neural bases of emotion regulation: Reappraisal and suppression of negative emotion. *Biological Psychiatry, 63*, 577-586. doi:10.1016/j.biopsych.2007.05.031
- Gooren, E. M., van Lier, P. A. C., Stegge, H., Terwogt, M. M., & Koot, H. M. (2011). The development of conduct problems and depressive symptoms in early elementary school children: The role of peer rejection. *Journal of Clinical Child & Adolescent Psychology, 40*, 245-253. doi:10.1080/15374416.2011.546045
- Gorrese, A., & Ruggieri, R. (2012). Peer attachment: A meta-analytic review of gender and age differences and associations with parent attachment. *Journal of Youth and Adolescence, 41*, 650-672. doi:10.1007/s10964-012-9759-6
- Greenberg, M. T., Domitrovich, C. E., Weissberg, R. P., & Durlak, J. A. (2017). Social and emotional learning as a public health approach to education. *The Future of Children, 27*, 13-32.
- Gregory, A. M., Light-Häusermann, J. H., Rijdsdijk, F., & Eley, T. C. (2009). Behavioral genetic analyses of prosocial behavior in adolescents. *Developmental Science, 12*, 165-174. doi:10.1111/j.1467-7687.2008.00739.x
- Griese, E. R., & Buhs, E. S. (2014). Prosocial behavior as a protective factor for children's peer victimization. *Journal of Youth and Adolescence, 43*, 1052-1065. doi:10.1007/s10964-013-0046-y
- Grossmann, T., & Johnson, M. H. (2007). The development of the social brain in human infancy. *European Journal of Neuroscience, 25*, 909-919. doi:10.1111/j.1460-9568.2007.05379.x
- Gullone, E., & Robinson, K. (2005). The Inventory of Parent and Peer Attachment—Revised (IPPA-R) for children: A psychometric investigation. *Clinical Psychology & Psychotherapy, 12*, 67-79. doi:10.1002/cpp.433

- Gummerum, M., Keller, M., Takezawa, M., & Mata, J. (2008). To give or not to give: Children's and adolescents' sharing and moral negotiations in economic decision situations. *Child Development, 79*, 562-576. doi:10.1111/j.1467-8624.2008.01143.x
- Gunnar, M. R., Sebanc, A. M., Tout, K., Donzella, B., & van Dulmen, M. M. (2003). Peer rejection, temperament, and cortisol activity in preschoolers. *Developmental Psychobiology, 43*, 346-368. doi:10.1002/dev.10144
- Gunther Moor, B., Güroğlu, B., Op de Macks, Z. A., Rombouts, S. A. R. B., Van der Molen, M. W., & Crone, E. A. (2012). Social exclusion and punishment of excluders: Neural correlates and developmental trajectories. *NeuroImage, 59*, 708-717. doi:10.1016/j.neuroimage.2011.07.028
- Gunther Moor, B., van Leijenhorst, L., Rombouts, S. A., Crone, E. A., & Van der Molen, M. W. (2010). Do you like me? Neural correlates of social evaluation and developmental trajectories. *Social Neuroscience, 5*, 461-482. doi:10.1080/17470910903526155
- Güroğlu, B., Haselager, G. J. T., van Lieshout, C. F. M., Takashima, A., Rijpkema, M., & Fernández, G. (2008). Why are friends special? Implementing a social interaction simulation task to probe the neural correlates of friendship. *NeuroImage, 39*, 903-910. doi:10.1016/j.neuroimage.2007.09.007
- Güroğlu, B., van den Bos, W., & Crone, E. A. (2009). Fairness considerations: Increasing understanding of intentionality during adolescence. *Journal of Experimental Child Psychology, 104*, 398-409. doi:10.1016/j.jecp.2009.07.002
- Güroğlu, B., van den Bos, W., & Crone, E. A. (2014). Sharing and giving across adolescence: An experimental study examining the development of prosocial behavior. *Frontiers in Psychology, 5*, 1-13. doi:10.3389/fpsyg.2014.00291
- Güroğlu, B., Will, G.-J., & Crone, E. A. (2014). Neural correlates of advantageous and disadvantageous inequity in sharing decisions. *PLoS One, 9*, e107996. doi:10.1371/journal.pone.0107996
- Guyer, A. E., & Jarcho, J. M. (2018). Neuroscience and peer relations. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (second ed.). New York: The Guilford Press
- Guyer, A. E., Choate, V. R., Pine, D. S., & Nelson, E. E. (2011). Neural circuitry underlying affective response to peer feedback in adolescence. *Social Cognitive and Affective Neuroscience, 7*, 81-92. doi:10.1093/scan/nsr043
- Guyer, A. E., McClure-Tone, E. B., Shiffrin, N. D., Pine, D. S., & Nelson, E. E. (2009). Probing the neural correlates of anticipated peer evaluation in adolescence. *Child Development, 80*, 1000-1015. doi:10.1111/j.1467-8624.2009.01313.x
- Guyer, A. E., Silk, J. S., & Nelson, E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neuroscience & Biobehavioral Reviews, 70*, 74-85. doi:10.1016/j.neubiorev.2016.07.037

H

- Hampton, A. N., Bossaerts, P., & O'Doherty, J. P. (2008). Neural correlates of mentalizing-related computations during strategic interactions in humans. *Proceedings of the National Academy of Sciences, 105*, 6741-6746. doi:10.1073/pnas.0711099105
- Hardy, C. L., Bukowski, W. M., & Sippola, L. K. (2002). Stability and change in peer relationships during the transition to middle-level school. *The Journal of Early Adolescence, 22*, 117-142. doi:10.1177/0272431602022002001
- Hartgerink, C. H. J., van Beest, I., Wicherts, J. M., & Williams, K. D. (2015). The ordinal effects of ostracism: A meta-analysis of 120 Cyberball studies. *PLoS One, 10*, e0127002. doi:10.1371/journal.pone.0127002
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development, 67*, 1-13. doi:10.1111/j.1467-8624.1996.tb01714.x
- Haselager, G. J. T., Cillessen, A. H. N., Van Lieshout, C. F. M., Riksen-Walraven, J. M. A., & Hartup, W. W. (2002). Heterogeneity among peer-rejected boys across middle childhood: Developmental pathways of social behavior. *Developmental Psychology, 38*, 446. doi:10.1037/0012-1649.38.3.446

References

- Hastings, P. D., Utendale, W. T., & Sullivan, C. (2007). The socialization of prosocial development. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 638-664). New York, NY: Guilford Press.
- Hawley, P. H. (1999). The ontogenesis of social dominance: A strategy-based evolutionary perspective. *Developmental Review, 19*, 97-132. doi:10.1006/drev.1998.0470
- Hawley, P. H., Little, T. D., & Pasupathi, M. (2002). Winning friends and influencing peers: Strategies of peer influence in late childhood. *International Journal of Behavioral Development, 26*, 466-474. doi:10.1080/01650250143000427
- Hay, D. F. (1994). Prosocial development. *Journal of Child Psychology and Psychiatry, 35*, 29-71. doi:10.1111/j.1469-7610.1994.tb01132.x
- Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry, 45*, 84-108. doi:10.1046/j.0021-9630.2003.00308.x
- He, J., Koot, H. M., Buil, J. M., & Van Lier, P. A. (2018). Impact of low social preference on the development of depressive and aggressive symptoms: Buffering by children's prosocial behavior. *Journal of Abnormal Child Psychology, 46*, 1497-1507. doi:10.1007/s10802-017-0382-6
- Hebb, D. O. (1949). The organization of behavior: A neuropsychological theory. *A Wiley Book in Clinical Psychology*, 62-78.
- Heim, C., & Binder, E. B. (2012). Current research trends in early life stress and depression: Review of human studies on sensitive periods, gene-environment interactions, and epigenetics. *Experimental Neurology, 233*, 102-111. doi:10.1016/j.expneurol.2011.10.032
- Heise, D. R. (1969). Separating reliability and stability in test-retest correlation. *American Sociological Review, 34*, 93-101. doi:10.2307/2092790
- Herting, M. M., Gautam, P., Chen, Z., Mezher, A., & Vetter, N. C. (2018). Test-retest reliability of longitudinal task-based fMRI: Implications for developmental studies. *Developmental Cognitive Neuroscience, 33*, 17-26. doi:10.1016/j.dcn.2017.07.001
- Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*, 94-101. doi:10.1037/0012-1649.35.1.94
- Hoffmann, F., Puetz, V. B., Viding, E., Sethi, A., Palmer, A., & McCrory, E. J. (2017). Risk-taking, peer-influence and child maltreatment: A neurocognitive investigation. *Social Cognitive and Affective Neuroscience, 13*, 124-134. doi:10.1093/scan/nsx124
- Holmbeck, G. N. (2002). Post-hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology, 27*, 87-96. doi:10.1093/jpepsy/27.1.87
- Holmes, C. J., Kim-Spoon, J., & Deater-Deckard, K. (2016). Linking executive function and peer problems from early childhood through middle adolescence. *Journal of Abnormal Child Psychology, 44*, 31-42. doi:10.1007/s10802-015-0044-5
- Holt, C. A., & Laury, S. K. (2002). Risk aversion and incentive effects. *American Economic Review, 92*, 1644-1655. doi:10.2139/ssrn.893797
- Holtmaat, A., & Svoboda, K. (2009). Experience-dependent structural synaptic plasticity in the mammalian brain. *Nature Reviews Neuroscience, 10*, 647. doi:10.1038/nrn2699
- Howes, C. (2000). Social-emotional classroom climate in child care, child-teacher relationships and children's second grade peer relations. *Social Development, 9*, 191-204. doi:10.1111/1467-9507.00119
- Huang, F. L. (2016). Alternatives to multilevel modeling for the analysis of clustered data. *The Journal of Experimental Education, 84*, 175-196. doi:10.1080/00220973.2014.952397
- I
- Imuta, K., Henry, J. D., Slaughter, V., Selcuk, B., & Ruffman, T. (2016). Theory of mind and prosocial behavior in childhood: A meta-analytic review. *Developmental Psychology, 52*, 1192-1205. doi:10.1037/dev0000140

International Labour Organization. (2012). *International standard classification of occupations: ISCO-08*. Geneva, Switzerland: International Labour Office.

J

- Janak, P. H., & Tye, K. M. (2015). From circuits to behaviour in the amygdala. *Nature*, *517*, 284. doi:10.1038/nature14188
- Jarcho, J. M., Davis, M. M., Shechner, T., Degnan, K. A., Henderson, H. A., Stoddard, J., . . . Nelson, E. E. (2016). Early-childhood social reticence predicts brain function in preadolescent youths during distinct forms of peer evaluation. *Psychological Science*, *27*, 821-835. doi:10.1177/0956797616663839
- Jarcho, J. M., Grossman, H. Y., Guyer, A. E., Quarmley, M., Smith, A. R., Fox, N. A., . . . Nelson, E. E. (2019). Connecting childhood wariness to adolescent social anxiety through the brain and peer experiences. *Journal of Abnormal Child Psychology*. doi:10.1007/s10802-019-00543-4
- Jarcho, J. M., Leibenluft, E., Walker, O. L., Fox, N. A., Pine, D. S., & Nelson, E. E. (2013). Neuroimaging studies of pediatric social anxiety: Paradigms, pitfalls and a new direction for investigating the neural mechanisms. *Biology of Mood & Anxiety Disorders*, *3*, 14. doi:10.1186/2045-5380-3-14
- Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. *American psychologist*, *48*, 117.
- Jewell, T., Gardner, T., Susi, K., Watchorn, K., Coopey, E., Simic, M., . . . Eisler, I. (2019). Attachment measures in middle childhood and adolescence: A systematic review of measurement properties. *Clinical Psychology Review*, *68*, 71-82. doi:10.1016/j.cpr.2018.12.004
- Jiang, X. L., & Cillessen, A. H. N. (2005). Stability of continuous measures of sociometric status: A meta-analysis. *Developmental Review*, *25*, 1-25. doi:10.1016/j.dr.2004.08.008
- Jöreskog, K. G. (1970). A general method for analysis of covariance structures. *Biometrika Trust*, *57*, 239-251. doi:10.1093/biomet/57.2.239

K

- Kahneman, D., Knetsch, J. L., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *The American Economic Review*, *76*, 728-741.
- Kandel, D. B. (1985). On processes of peer influences in adolescent drug use. *Advances in Alcohol & Substance Abuse*, *4*, 139-162. doi:10.1300/J251v04n03_07
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., . . . Ethier, K. A. (2018). Youth Risk Behavior Surveillance - United States, 2017. *Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C. : 2002)*, *67*, 1-114. doi:10.15585/mmwr.ss6708a1
- Karatsoreos, I. N., & McEwen, B. S. (2013). Annual Research Review: The neurobiology and physiology of resilience and adaptation across the life course. *Journal of Child Psychology and Psychiatry*, *54*, 337-347. doi:10.1111/jcpp.12054
- Karremans, J. C., Heslenfeld, D. J., van Dillen, L. F., & Van Lange, P. A. M. (2011). Secure attachment partners attenuate neural responses to social exclusion: An fMRI investigation. *International Journal of Psychophysiology*, *81*, 44-50. doi:10.1016/j.ijpsycho.2011.04.003
- Kawamoto, T., Nittono, H., & Ura, M. (2015). Trait rejection sensitivity is associated with vigilance and defensive response rather than detection of social rejection cues. *Frontiers in Psychology*, *6*, 1516. doi:10.3389/fpsyg.2015.01516
- Kelley, N. J., Hortensius, R., Schutter, D. J. L. G., & Harmon-Jones, E. (2017). The relationship of approach/avoidance motivation and asymmetric frontal cortical activity: A review of studies manipulating frontal asymmetry. *International Journal of Psychophysiology*, *119*, 19-30. doi:10.1016/j.ijpsycho.2017.03.001
- Kempermann, G. (2019). Environmental enrichment, new neurons and the neurobiology of individuality. *Nature Reviews Neuroscience*, *20*, 235-245. doi:10.1038/s41583-019-0120-x

References

- Kennedy, D. P., & Adolphs, R. (2012). The social brain in psychiatric and neurological disorders. *Trends in Cognitive Sciences*, *16*, 559-572. doi:10.1016/j.tics.2012.09.006
- Kenward, B., Hellmer, K., Winter, L. S., & Eriksson, M. (2015). Four-year-olds' strategic allocation of resources: Attempts to elicit reciprocity correlate negatively with spontaneous helping. *Cognition*, *136*, 1-8. doi:10.1016/j.cognition.2014.11.035
- 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. doi:10.1016/j.neubiorev.2016.08.016
- Kim-Spoon, J., Deater-Deckard, K., Brieant, A., Lauharatarahirun, N., Lee, J., & King-Casas, B. (2019). Brains of a feather flocking together? Peer and individual neurobehavioral risks for substance use across adolescence. *Development and Psychopathology*.
- Kim-Spoon, J., Deater-Deckard, K., Lauharatanahirun, N., Farley, J. P., Chiu, P. H., Bickel, W. K., & King-Casas, B. (2017). Neural interaction between risk sensitivity and cognitive control predicting health risk behaviors among late adolescents. *Journal of Research on Adolescence*, *27*, 674-682. doi:10.1111/jora.12295
- Knafo, A., & Plomin, R. (2006). Prosocial behavior from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology*, *42*, 771.
- Kohn, N., Eickhoff, S. B., Scheller, M., Laird, A. R., Fox, P. T., & Habel, U. (2014). Neural network of cognitive emotion regulation—An ALE meta-analysis and MACM analysis. *NeuroImage*, *87*, 345-355. doi:10.1016/j.neuroimage.2013.11.001
- Kok, R., Prinzie, P., Bakermans-Kranenburg, M. J., Verhulst, F. C., White, T., Tiemeier, H., & van Ijzendoorn, M. H. (2018). Socialization of prosocial behavior: Gender differences in the mediating role of child brain volume. *Child Neuropsychology*, *24*, 723-733. doi:10.1080/09297049.2017.1338340
- Kok, R., Thijssen, S., Bakermans-Kranenburg, M. J., Jaddoe, V. W. V., Verhulst, F. C., White, T., . . . Tiemeier, H. (2015). Normal variation in early parental sensitivity predicts child structural brain development. *Journal of the American Academy of Child & Adolescent Psychiatry*, *54*, 824-831.e821. doi:10.1016/j.jaac.2015.07.009
- Kolb, B., Mychasiuk, R., Muhammad, A., Li, Y., Frost, D. O., & Gibb, R. (2012). Experience and the developing prefrontal cortex. *Proceedings of the National Academy of Sciences*, *109*, 17186-17193. doi:10.1073/pnas.1121251109
- Kopala-Sibley, D. C., Cyr, M., Finsaas, M. C., Orawe, J., Huang, A., Tottenham, N., & Klein, D. N. (2018). Early childhood parenting predicts late childhood brain functional connectivity during emotion perception and reward processing. *Child Development*. doi:10.1111/cdev.13126
- Kornbluh, M., & Neal, J. W. (2014). Examining the many dimensions of children's popularity: Interactions between aggression, prosocial behaviors, and gender. *Journal of Social and Personal Relationships*, *33*, 62-80. doi:10.1177/0265407514562562
- Kraemer, H. C., Yesavage, J. A., Taylor, J. L., & Kupfer, D. (2000). How can we learn about developmental processes from cross-sectional studies, or can we? *American Journal of Psychiatry*, *157*, 163-171. doi:10.1176/appi.ajp.157.2.163
- Kringelbach, M. L., & Rolls, E. T. (2004). The functional neuroanatomy of the human orbitofrontal cortex: Evidence from neuroimaging and neuropsychology. *Progress in Neurobiology*, *72*, 341-372. doi:10.1016/j.pneurobio.2004.03.006

L

- Ladd, G. W. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. *Child Development*, *77*, 822-846. doi:10.1111/j.1467-8624.2006.00905.x
- Ladd, G. W., & Troop-Gordon, W. (2003). The role of chronic peer difficulties in the development of children's psychological adjustment problems. *Child Development*, *74*, 1344-1367. doi:10.1111/1467-8624.00611

- Ladd, G. W., Herald, S. L., Slutzky, C. B., & Andrews, R. K. (2004). Preventive interventions for peer group rejection. In L. Rapp-Paglicci, C. N. Dulmus, & J. S. Wodarski (Eds.), *Handbook of preventive interventions for children and adolescents* (pp. 15-48). New York: Wiley.
- Lahat, A., Walker, O. L., Lamm, C., Degnan, K. A., Henderson, H. A., & Fox, N. A. (2014). Cognitive conflict links behavioural inhibition and social problem solving during social exclusion in childhood. *Infant and Child Development, 23*, 273-282. doi:10.1002/icd.1845
- Laible, D., McGinley, M., Carlo, G., Augustine, M., & Murphy, T. (2014). Does engaging in prosocial behavior make children see the world through rose-colored glasses? *Developmental Psychology, 50*, 872-880. doi:10.1037/a0033905
- Laird, R. D., Jordan, K. Y., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2001). Peer rejection in childhood, involvement with antisocial peers in early adolescence, and the development of externalizing behavior problems. *Development and Psychopathology, 13*, 337-354. doi:10.1017/S0954579401002085
- Lakin, J. L., Chartrand, T. L., & Arkin, R. M. (2008). I am too just like you: Nonconscious mimicry as an automatic behavioral response to social exclusion. *Psychological Science, 19*, 816-822.
- Lansford, J. E., Malone, P. S., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2010). Developmental cascades of peer rejection, social information processing biases, and aggression during middle childhood. *Development and Psychopathology, 22*, 593-602. doi:10.1017/S0954579410000301
- Larson, R. W., Richards, M. H., Moneta, G., Holmbeck, G., & Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology, 32*, 744. doi:10.1037/0012-1649.32.4.744
- Laursen, B., & Hartup, W. W. (2002). The origins of reciprocity and social exchange in friendships. *New Directions for Child and Adolescent Development, 2002*, 27-40. doi:10.1002/cd.55
- Lebel, C., & Beaulieu, C. (2011). Longitudinal development of human brain wiring continues from childhood into adulthood. *The Journal of Neuroscience, 31*, 10937-10947. doi:10.1523/jneurosci.5302-10.2011
- Lee, H. S., Lee, J. E., Lee, K. U., & Kim, Y. H. (2014). Neural changes associated with emotion processing in children experiencing peer rejection: A functional MRI study. *Journal of Korean Medical Science, 29*, 1293-1300.
- Lehmann, M. L., & Herkenham, M. (2011). Environmental enrichment confers stress resiliency to social defeat through an infralimbic cortex-dependent neuroanatomical pathway. *The Journal of Neuroscience, 31*, 6159. doi:10.1523/JNEUROSCI.0577-11.2011
- Lelieveld, G., Moor, B. G., Crone, E. A., Karremans, J. C., & Beest, I. v. (2013). A penny for your pain? The financial compensation of social pain after exclusion. *Social Psychological and Personality Science, 4*, 206-214. doi:10.1177/1948550612446661
- Leman, P. J., Keller, M., Takezawa, M., & Gummerum, M. (2009). Children's and adolescents' decisions about sharing money with others. *Social Development, 18*, 711-727. doi:10.1111/j.1467-9507.2008.00486.x
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development, 71*, 107-118. doi:10.1111/1467-8624.00124
- Little, R. J. (1992). Regression with missing X's: A review. *Journal of the American Statistical Association, 87*, 1227-1237.
- Lloyd-Fox, S., Blasi, A., & Elwell, C. E. (2010). Illuminating the developing brain: The past, present and future of functional near infrared spectroscopy. *Neuroscience & Biobehavioral Reviews, 34*, 269-284. doi:10.1016/j.neubiorev.2009.07.008
- London, B., Downey, G., Bonica, C., & Paltin, I. (2007). Social causes and consequences of rejection sensitivity. *Journal of Research on Adolescence, 17*, 481-506. doi:10.1111/j.1532-7795.2007.00531.x
- Lu, H. J., & Chang, L. (2016). Resource allocation to kin, friends, and strangers by 3- to 6-year-old children. *Journal of Experimental Child Psychology, 150*, 194-206. doi:10.1016/j.jecp.2016.05.018
- Lucassen, P., Korosi, A., Krugers, H., & Oomen, C. (2016). Early life stress- and sex-dependent effects on hippocampal neurogenesis. In G. Fink (Ed.), *Stress: Neuroendocrinology and Neurobiology: Handbook of Stress Series* (Vol. 2, pp. 135): Elsevier Inc. .

References

Lupien, S. J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behaviour and cognition. *Nature Reviews Neuroscience*, *10*, 434. doi:10.1038/nrn2639

M

MacDonald, A. W., Cohen, J. D., Stenger, V. A., & Carter, C. S. (2000). Dissociating the role of the dorsolateral prefrontal and anterior cingulate cortex in cognitive control. *Science*, *288*, 1835-1838. doi:10.1126/science.288.5472.1835

MacPherson, L., Magidson, J. F., Reynolds, E. K., Kahler, C. W., & Lejuez, C. W. (2010). Changes in sensation seeking and risk-taking propensity predict increases in alcohol use among early adolescents. *Alcoholism: Clinical and Experimental Research*, *34*, 1400-1408. doi:10.1111/j.1530-0277.2010.01223.x

Malti, T., Gummerum, M., Keller, M., Chaparro, M. P., & Buchmann, M. (2012). Early sympathy and social acceptance predict the development of sharing in children. *PLoS One*, *7*, e52017. doi:10.1371/journal.pone.0052017

Malti, T., Gummerum, M., Ongley, S., Chaparro, M., Nola, M., & Bae, N. Y. (2016). "Who is worthy of my generosity?" Recipient characteristics and the development of children's sharing. *International Journal of Behavioral Development*, *40*, 31-40. doi:10.1177/0165025414567007

Malti, T., Ongley, S. F., Peplak, J., Chaparro, M. P., Buchmann, M., Zuffianò, A., & Cui, L. (2016). Children's sympathy, guilt, and moral reasoning in helping, cooperation, and sharing: A 6-year longitudinal study. *Child Development*, *87*, 1783-1795. doi:10.1111/cdev.12632

Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "Porcupine Problem". *Journal of Personality and Social Psychology*, *92*, 42-55. doi:10.1037/0022-3514.92.1.42

Masten, C. L., Eisenberger, N. I., Borofsky, L. A., McNealy, K., Pfeifer, J. H., & Dapretto, M. (2011). Subgenual anterior cingulate responses to peer rejection: A marker of adolescents' risk for depression. *Development and Psychopathology*, *23*, 283-292. doi:10.1017/S0954579410000799

Masten, C. L., Eisenberger, N. I., Borofsky, L. A., Pfeifer, J. H., McNealy, K., Mazziotta, J. C., & Dapretto, M. (2009). Neural correlates of social exclusion during adolescence: Understanding the distress of peer rejection. *Social Cognitive and Affective Neuroscience*, *4*, 143-157. doi:10.1093/scan/nsp007

Masten, C. L., Telzer, E. H., Fuligni, A. J., Lieberman, M. D., & Eisenberger, N. I. (2012). Time spent with friends in adolescence relates to less neural sensitivity to later peer rejection. *Social Cognitive and Affective Neuroscience*, *7*, 106-114. doi:10.1093/scan/nsq098

Mayeux, L., & Cillessen, A. H. N. (2008). It's not just being popular, it's knowing it, too: The role of self-perceptions of status in the associations between peer status and aggression. *Social Development*, *17*, 871-888. doi:10.1111/j.1467-9507.2008.00474.x

McDonald, K. L., & Asher, S. R. (2018). Peer acceptance, peer rejection, and popularity: Social-cognitive and behavioral perspectives. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.

McEwen, B. S. (2006). Protective and damaging effects of stress mediators: Central role of the brain. *Dialogues in Clinical Neuroscience*, *8*, 367-381.

McEwen, B. S., Nasca, C., & Gray, J. D. (2015). Stress effects on neuronal structure: Hippocampus, amygdala, and prefrontal cortex. *Neuropsychopharmacology*, *41*, 3. doi:10.1038/npp.2015.171

McGuigan, N., Fisher, R., & Glasgow, R. (2016). The influence of receiver status on donor prosociality in 6- to 11-year-old children. *Child Development*, *87*, 855-869. doi:10.1111/cdev.12517

McLachlan, J., Zimmer-Gembeck, M. J., & McGregor, L. (2012). Rejection sensitivity in childhood and early adolescence: Peer rejection and protective effects of parents and friends. *Journal of Relationships Research*, *1*, 31-40. doi:10.1375/jrr.1.1.31

McLaren, D., Schultz, A., Locascio, J., Sperling, E., & Atri, A. (2011). *Repeated-measures designs overestimate between-subject effects in fMRI packages using one error term*. Paper presented at the 17th Annual Meeting of the Organization for Human Brain Mapping.

- Menon, V., & Uddin, L. Q. (2010). Saliency, switching, attention and control: A network model of insula function. *Brain Structure and Function*, *214*, 655-667. doi:10.1007/s00429-010-0262-0
- Michael, K., & Ben-Zur, H. (2007). Risk-taking among adolescents: Associations with social and affective factors. *Journal of Adolescence*, *30*, 17-31. doi:10.1016/j.adolescence.2005.03.009
- Miller-Johnson, S., Coie, J. D., Maumary-Gremaud, A., & Bierman, K. (2002). Peer rejection and aggression and early starter models of conduct disorder. *Journal of Abnormal Child Psychology*, *30*, 217-230. doi:10.1023/A:1015198612049
- Miller, D. C., & Byrnes, J. P. (1997). The role of contextual and personal factors in children's risk taking. *Developmental Psychology*, *33*, 814. doi:10.1037/0012-1649.33.5.814
- Mills, K. L., Goddings, A.-L., Herting, M. M., Meuwese, R., Blakemore, S.-J., Crone, E. A., . . . Tamnes, C. K. (2016). Structural brain development between childhood and adulthood: Convergence across four longitudinal samples. *NeuroImage*, *141*, 273-281. doi:10.1016/j.neuroimage.2016.07.044
- Mills, K. L., Lalonde, F., Clasen, L. S., Giedd, J. N., & Blakemore, S. J. (2014). Developmental changes in the structure of the social brain in late childhood and adolescence. *Social Cognitive Affective Neuroscience*, *9*, 123-131. doi:10.1093/scan/nss113
- Mišić, B., & Sporns, O. (2016). From regions to connections and networks: New bridges between brain and behavior. *Current Opinion in Neurobiology*, *40*, 1-7. doi:10.1016/j.conb.2016.05.003
- Miyapuram, K. P., Tobler, P. N., Gregorios-Pippas, L., & Schultz, W. (2012). BOLD responses in reward regions to hypothetical and imaginary monetary rewards. *NeuroImage*, *59*, 1692-1699. doi:10.1016/j.neuroimage.2011.09.029
- Modin, B., Östberg, V., & Almquist, Y. (2011). Childhood peer status and adult susceptibility to anxiety and depression. A 30-year hospital follow-up. *Journal of Abnormal Child Psychology*, *39*, 187-199. doi:10.1007/s10802-010-9462-6
- Moffitt, R. (2005). Remarks on the analysis of causal relationships in population research. *Demography*, *42*, 91-108. doi:10.1353/dem.2005.0006
- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, *13*, 355-375. doi:10.1017/S0954579401002097
- Mohr, P. N. C., Biele, G., & Heekeren, H. R. (2010). Neural processing of risk. *The Journal of Neuroscience*, *30*, 6613-6619. doi:10.1523/jneurosci.0003-10.2010
- Moore, C. (2009). Fairness in children's resource allocation depends on the recipient. *Psychological Science*, *20*, 944-948. doi:10.1111/j.1467-9280.2009.02378.x
- Moreland, J. J., Raup-Krieger, J. L., Hecht, M. L., & Miller-Day, M. M. (2013). The conceptualization and communication of risk among rural appalachian adolescents. *Journal of Health Communication*, *18*, 668-685. doi:10.1080/10810730.2012.743620
- Morrongiello, B. A., & Sedore, L. (2005). The influence of child attributes and social-situational context on school-age children's risk taking behaviors that can lead to injury. *Journal of Applied Developmental Psychology*, *26*, 347-361. doi:10.1016/j.appdev.2005.02.003
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide. Seventh edition*. Los Angeles, CA: Muthén & Muthén

N

- Nancekivell, S. E., Van de Vondervoort, J. W., & Friedman, O. (2013). Young children's understanding of ownership. *Child Development Perspectives*, *7*, 243-247. doi:10.1111/cdep.12049
- Nelson, D. A., & Crick, N. R. (1999). Rose-colored glasses: Examining the social information-processing of prosocial young adolescents. *The Journal of Early Adolescence*, *19*, 17-38. doi:10.1177/0272431699019001002
- Nelson, E. E., Leibenluft, E., McClure, E. B., & Pine, D. S. (2005). The social re-orientation of adolescence: A neuroscience perspective on the process and its relation to psychopathology. *Psychological Medicine*, *35*, 163-174. doi:10.1017/s0033291704003915

References

- Newman, D. A. (2003). Longitudinal modeling with randomly and systematically missing data: A simulation of ad hoc, maximum likelihood, and multiple imputation techniques. *Organizational Research Methods, 6*, 328-362. doi:10.1177/1094428103254673
- Nickerson, A. B., & Nagle, R. J. (2005). Parent and peer attachment in late childhood and early adolescence. *The Journal of Early Adolescence, 25*, 223-249. doi:10.1177/0272431604274174
- Nishiyama, Y., Okamoto, Y., Kunisato, Y., Okada, G., Yoshimura, S., Kanai, Y., . . . Takagaki, K. (2015). fMRI Study of social anxiety during social ostracism with and without emotional support. *PLoS One, 10*, e0127426. doi:10.1371/journal.pone.0127426

O

- O'Mahony, S. M., Clarke, G., Dinan, T. G., & Cryan, J. F. (2017). Early-life adversity and brain development: Is the microbiome a missing piece of the puzzle? *Neuroscience, 342*, 37-54. doi:10.1016/j.neuroscience.2015.09.068
- Ochsner, K. N., & Gross, J. J. (2005). The cognitive control of emotion. *Trends in Cognitive Sciences, 9*, 242-249. doi:10.1016/j.tics.2005.03.010
- Ongley, S. F., & Malti, T. (2014). The role of moral emotions in the development of children's sharing behavior. *Developmental Psychology, 50*, 1148-1159. doi:10.1037/a0035191
- Onoda, K., Okamoto, Y., Nakashima, K. i., Nittono, H., Ura, M., & Yamawaki, S. (2009). Decreased ventral anterior cingulate cortex activity is associated with reduced social pain during emotional support. *Social Neuroscience, 4*, 443-454. doi:10.1080/17470910902955884
- Orobio de Castro, B., Mulder, S., Ploeg, R., Onrust, S., van den Berg, Y., Stoltz, S., . . . Cillessen, A. (2018). Wat werkt tegen pesten? Effectiviteit van kansrijke programma's tegen pesten.
- Orobio de Castro, B., Thomaes, S., & Reijntjes, A. (2015). Using experimental designs to understand the development of peer relations. *Journal of Research on Adolescence, 25*, 1-13. doi:10.1111/jora.12103
- Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. P. (2016). Advancing the science and practice of social and emotional learning: Looking back and moving forward. *Review of Research in Education, 40*, 644-681. doi:10.3102/0091732X16673595
- Ouellet-Morin, I., Danese, A., Bowes, L., Shakoor, S., Ambler, A., Pariante, C. M., . . . Arseneault, L. (2011). A discordant monozygotic twin design shows blunted cortisol reactivity among bullied children. *Journal of the American Academy of Child & Adolescent Psychiatry, 50*, 574-582.e573. doi:10.1016/j.jaac.2011.02.015
- Ouellet-Morin, I., Odgers, C. L., Danese, A., Bowes, L., Shakoor, S., Papadopoulos, A. S., . . . Arseneault, L. (2011). Blunted cortisol responses to stress signal social and behavioral problems among maltreated/bullied 12-year-old children. *Biological Psychiatry, 70*, 1016-1023. doi:10.1016/j.biopsych.2011.06.017
- Overgaauw, S., Güro lu, B., Rieffe, C., & Crone, E. A. (2014). Behavior and neural correlates of empathy in adolescents. *Developmental Neuroscience, 36*, 210-219. doi:10.1159/000363318

P

- Padiilla-Walker, L. M., Carlo, G., & Memmott-Elison, M. K. (2018). Longitudinal change in adolescents' prosocial behavior toward strangers, friends, and family. *Journal of Research on Adolescence, 28*, 698-710. doi:10.1111/jora.12362
- Padiilla-Walker, L. M., Memmott-Elison, M. K., & Coyne, S. M. (2018). Associations between prosocial and problem behavior from early to late adolescence. *Journal of Youth and Adolescence, 47*, 961-975. doi:10.1007/s10964-017-0736-y
- Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102*, 357.
- Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*, 611-621. doi:10.1037/0012-1649.29.4.611

- Parker, J., Rubin, K. H., Erath, S., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships and developmental psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology: Risk, Disorder, and Adaptation* (2 ed., Vol. 2, pp. 419-493). New York: Wiley.
- Paulsen, D., Carter, R. M., Platt, M., Huettel, S., & Brannon, E. (2012). Neurocognitive development of risk aversion from early childhood to adulthood. *Frontiers in Human Neuroscience*, *5*. doi:10.3389/fnhum.2011.00178
- Paulus, M. (2014). The early origins of human charity: Developmental changes in preschoolers' sharing with poor and wealthy individuals. *Frontiers in Psychology*, *5*, 344. doi:10.3389/fpsyg.2014.00344
- Paulus, M. (2016). Friendship trumps neediness: The impact of social relations and others' wealth on preschool children's sharing. *Journal of Experimental Child Psychology*, *146*, 106-120. doi:10.1016/j.jecp.2016.02.001
- Paulus, M., & Moore, C. (2014). The development of recipient-dependent sharing behavior and sharing expectations in preschool children. *Developmental Psychology*, *50*, 914-921. doi:10.1037/a0034169
- Paulus, M., & Moore, C. (2017). Preschoolers' generosity increases with understanding of the affective benefits of sharing. *Developmental Science*, *20*, e12417. doi:10.1111/desc.12417
- Paulus, M., Licata, M., Kristen, S., Thoermer, C., Woodward, A., & Sodian, B. (2014). Social understanding and self-regulation predict pre-schoolers' sharing with friends and disliked peers: A longitudinal study. *International Journal of Behavioral Development*, *39*, 53-64. doi:10.1177/0165025414537923
- Peake, S. J., Dishion, T. J., Stormshak, E. A., Moore, W. E., & Pfeifer, J. H. (2013). Risk-taking and social exclusion in adolescence: Neural mechanisms underlying peer influences on decision-making. *NeuroImage*, *82*, 23-34. doi:10.1016/j.neuroimage.2013.05.061
- Peets, K., Hodges, E. V. E., & Salmivalli, C. (2008). Affect-congruent social-cognitive evaluations and behaviors. *Child Development*, *79*, 170-185. doi:10.1111/j.1467-8624.2007.01118.x
- Peper, J. S., Brouwer, R. M., Boomsma, D. I., Kahn, R. S., & Hulshoff Pol, H. E. (2007). Genetic influences on human brain structure: A review of brain imaging studies in twins. *Human Brain Mapping*, *28*, 464-473. doi:10.1002/hbm.20398
- Perini, I., Gustafsson, P. A., Hamilton, J. P., Kämpfe, R., Zetterqvist, M., & Heilig, M. (2018). The salience of self, not social pain, is encoded by dorsal anterior cingulate and insula. *Scientific Reports*, *8*, 6165. doi:10.1038/s41598-018-24658-8
- Peters, E., Riksen-Walraven, J. M., Cillessen, A. H. N., & de Weerth, C. (2011). Peer rejection and HPA activity in middle childhood: Friendship makes a difference. *Child Development*, *82*, 1906-1920. doi:10.1111/j.1467-8624.2011.01647.x
- Petersen, A. C., Crockett, L., Richards, M., & Boxer, A. (1988). A self-report measure of pubertal status: Reliability, validity, and initial norms. *Journal of Youth and Adolescence*, *17*, 117-133. doi:10.1007/bf01537962
- Pickett, C. L., Gardner, W. L., & Knowles, M. (2004). Getting a cue: The need to belong and enhanced sensitivity to social cues. *Personality and Social Psychology Bulletin*, *30*, 1095-1107. doi:10.1177/0146167203262085
- Piko, B. (2000). Perceived social support from parents and peers: Which is the stronger predictor of adolescent substance use? *Substance Use & Misuse*, *35*, 617-630. doi:10.3109/10826080009147475
- Pinheiro, J., Bates, D., DebRoy, S., & Sarkar, D. (2018). R Core Team (2018) nlme: Linear and nonlinear mixed effects models. R package version 3.1-137. *R software*.
- Pitula, C. E., Wenner, J. A., Gunnar, M. R., & Thomas, K. M. (2017). To trust or not to trust: Social decision making in post institutionalized, internationally adopted youth. *Developmental Science*, *20*. doi:10.1111/desc.12375
- Platt, M. L., & Huettel, S. A. (2008). Risky business: The neuroeconomics of decision making under uncertainty. *Nature Neuroscience*, *11*, 398. doi:10.1038/nn2062
- Porath, M. (2003). Social understanding in the first years of school. *Early Childhood Research Quarterly*, *18*, 468-484. doi:10.1016/j.ecresq.2003.09.006

References

- Poser, B. A., Versluis, M. J., Hoogduin, J. M., & Norris, D. G. (2006). BOLD contrast sensitivity enhancement and artifact reduction with multiecho EPI: Parallel-acquired inhomogeneity-desensitized fMRI. *Magnetic Resonance in Medicine*, *55*, 1227-1235. doi:10.1002/mrm.20900
- Power, T. G. (1999). *Play and exploration in children and animals*. New York: Psychology Press.
- Powers, K. E., Yaffe, G., Hartley, C. A., Davidow, J. Y., Kober, H., & Somerville, L. H. (2018). Consequences for peers differentially bias computations about risk across development. *Journal of Experimental Psychology: General*, *147*, 671-682. doi:10.1037/xge0000389
- Prinstein, M. J., & Aikins, J. W. (2004). Cognitive moderators of the longitudinal association between peer rejection and adolescent depressive symptoms. *Journal of Abnormal Child Psychology*, *32*, 147-158. doi:10.1023/B:JACP.0000019767.55592.63
- Prinstein, M. J., Rancourt, D., Adelman, C. B., Ahlich, E., Smith, J., & Guerry, J. D. (2018). Peer status and psychopathology. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (2 ed.). New York: The Guilford Press.
- Pruim, R. H. R., Mennes, M., van Rooij, D., Llera, A., Buitelaar, J. K., & Beckmann, C. F. (2015). ICA-AROMA: A robust ICA-based strategy for removing motion artifacts from fMRI data. *NeuroImage*, *112*, 267-277. doi:10.1016/j.neuroimage.2015.02.064
- Puetz, V. B., Kohn, N., Dahmen, B., Zvyagintsev, M., Schuppen, A., Schultz, R. T., . . . Konrad, K. (2014). Neural response to social rejection in children with early separation experiences. *Journal of the American Academy of Child & Adolescent Psychiatry*, *53*, 1328-1337. doi:10.1016/j.jaac.2014.09.004
- Putnam, S. P., & Rothbart, M. K. (2006). Development of short and very short forms of the children's behavior questionnaire. *Journal of Personality Assessment*, *87*, 102-112. doi:10.1207/s15327752jpa8701_09

Q

- Qu, Y., Fuligni, A. J., Galvan, A., & Telzer, E. H. (2015). Buffering effect of positive parent-child relationships on adolescent risk taking: A longitudinal neuroimaging investigation. *Developmental Cognitive Neuroscience*, *15*, 26-34. doi:10.1016/j.dcn.2015.08.005

R

- Raja, S. N., McGee, R., & Stanton, W. R. (1992). Perceived attachments to parents and peers and psychological well-being in adolescence. *Journal of Youth and Adolescence*, *21*, 471-485. doi:10.1007/bf01537898
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., Boelen, P. A., van der Schoot, M., & Telch, M. J. (2011). Prospective linkages between peer victimization and externalizing problems in children: A meta-analysis. *Aggressive Behavior*, *37*, 215-222. doi:10.1002/ab.20374
- Richards, J. M., Plate, R. C., & Ernst, M. (2013). A systematic review of fMRI reward paradigms used in studies of adolescents vs. adults: The impact of task design and implications for understanding neurodevelopment. *Neuroscience & Biobehavioral Reviews*, *37*, 976-991. doi:10.1016/j.neubiorev.2013.03.004
- Rilling, J. K., & Sanfey, A. G. (2011). The neuroscience of social decision-making. *Annual Review of Psychology*, *62*, 23-48. doi:10.1146/annurev.psych.121208.131647
- Rogers, G. B., Keating, D. J., Young, R. L., Wong, M. L., Licinio, J., & Wesselingh, S. (2016). From gut dysbiosis to altered brain function and mental illness: mechanisms and pathways. *Molecular Psychiatry*, *21*, 738. doi:10.1038/mp.2016.50
- Romer, D., & Hennessy, M. (2007). A biosocial-affect model of adolescent sensation seeking: The role of affect evaluation and peer-group influence in adolescent drug use. *Prevention Science*, *8*, 89. doi:10.1007/s1121-007-0064-7
- Roosendaal, B., McEwen, B. S., & Chattarji, S. (2009). Stress, memory and the amygdala. *Nature Reviews Neuroscience*, *10*, 423. doi:10.1038/nrn2651

- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, *132*, 98-131. doi:10.1037/0033-2909.132.1.98
- Rosen, D., Patel, N., Pavletic, N., Grillon, C., Pine, D. S., & Ernst, M. (2016). Age and social context modulate the effect of anxiety on risk-taking in pediatric samples. *Journal of Abnormal Child Psychology*, *44*, 1161-1171. doi:10.1007/s10802-015-0098-4
- Rotge, J., Lemogne, C., Hinfrey, S., Huguet, P., Grynszpan, O., Tartour, E., . . . Fossati, P. (2014). A meta-analysis of the anterior cingulate contribution to social pain. *Social Cognitive and Affective Neuroscience*, *10*, 19-27. doi:10.1093/scan/nsu110
- Rubin, K. H., Bukowski, W. M., & Laursen, B. (2011). *Handbook of peer interactions, relationships, and groups*: Guilford Press.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In *Handbook of Child Psychology* (Vol. III).
- Rubright, J. D., Nandakumar, R., & Glutting, J. J. (2014). A simulation study of missing data with multiple missing X's. *Practical Assessment, Research & Evaluation*, *19*, 2.
- Rudolph, K. D. (2002). Gender differences in emotional responses to interpersonal stress during adolescence. *Journal of Adolescent Health*, *30*, 3-13. doi:10.1016/S1054-139X(01)00383-4
- Rudolph, K. D., Miernicki, M. E., Troop-Gordon, W., Davis, M. M., & Telzer, E. H. (2016). Adding insult to injury: Neural sensitivity to social exclusion is associated with internalizing symptoms in chronically peer-victimized girls. *Social Cognitive and Affective Neuroscience*, *11*, 829-842. doi:10.1093/scan/nsw021
- Rudolph, K. D., Troop-Gordon, W., & Flynn, M. (2009). Relational victimization predicts children's social-cognitive and self-regulatory responses in a challenging peer context. *Developmental Psychology*, *45*, 1444-1454. doi:10.1037/a0014858
- Rutter, M. (2002). The interplay of nature, nurture, and developmental influences: The challenge ahead for mental health. *Archives of General Psychiatry*, *59*, 996-1000. doi:10.1001/archpsyc.59.11.996
- Rutter, M., Caspi, A., & Moffitt, T. E. (2003). Using sex differences in psychopathology to study causal mechanisms: Unifying issues and research strategies. *Journal of Child Psychology and Psychiatry*, *44*, 1092-1115. doi:10.1111/1469-7610.00194
- Rutter, M., Pickles, A., Murray, R., & Eaves, L. (2001). Testing hypotheses on specific environmental causal effects on behavior. *Psychological Bulletin*, *127*, 291. doi:10.1037/0033-2909.127.3.291

S

- Salmivalli, C., & Isaacs, J. (2005). Prospective relations among victimization, rejection, friendlessness, and children's self- and peer-perceptions. *Child Development*, *76*, 1161-1171. doi:10.1111/j.1467-8624.2005.00841.x-ii
- Sanfey, A. G. (2007). Social decision-making: Insights from game theory and neuroscience. *Science*, *318*, 598-602. doi:10.1126/science.1142996
- Sapolsky, R. M., Romero, L. M., & Munck, A. U. (2000). How do glucocorticoids influence stress responses? Integrating permissive, suppressive, stimulatory, and preparative actions. *Endocrine Reviews*, *21*, 55-89. doi:10.1210/edrv.21.1.0389
- Sartori, L., Betti, S., & Castiello, U. (2013). When mirroring is not enough: That is, when only a complementary action will do (the trick). *Neuroreport*, *24*, 601-604. doi:10.1097/WNR.0b013e3283630a66
- Satorra, A. (2000). Scaled and adjusted restricted tests in multi-sample analysis of moment structures. In R. D. H. Heijmans, D. S. G. Pollock, & A. Satorra (Eds.), *Innovations in Multivariate Statistical Analysis. Advanced Studies in Theoretical and Applied Econometrics* (Vol. 36). Springer, Boston, MA.
- Satorra, A., & Bentler, P. M. (2010). Ensuring positiveness of the scaled difference Chi-square test statistic. *Psychometrika*, *75*, 243-248. doi:10.1007/s11336-009-9135-y

References

- Saylor, C. F., Williams, K. D., Nida, S. A., McKenna, M. E., Twomey, K. E., & Macias, M. M. (2013). Ostracism in pediatric populations: Review of theory and research. *Journal of Developmental & Behavioral Pediatrics, 34*, 279-287.
- Scharpf, F., Paulus, M., & Wörle, M. (2017). The impact of social relationships on Ugandan children's sharing decisions. *European Journal of Developmental Psychology, 14*, 436-448. doi:10.1080/17405629.2016.1231062
- Schmitz, T. W., Kawahara-Baccus, T. N., & Johnson, S. C. (2004). Metacognitive evaluation, self-relevance, and the right prefrontal cortex. *NeuroImage, 22*, 941-947. doi:10.1016/j.neuroimage.2004.02.018
- Schneider, B. H., Woodburn, S., del Toro, M. d. P. S., & Udvari, S. J. (2005). Cultural and gender differences in the implications of competition for early adolescent friendship. *Merrill-Palmer Quarterly, 51*, 163-191.
- Scholte, R. H. J., & van Aken, M. (2006). Peer relations in adolescence. In *Handbook of adolescent development*. (pp. 175-199). New York, NY, US: Psychology Press.
- Schonberg, T., Fox, C. R., & Poldrack, R. A. (2011). Mind the gap: Bridging economic and naturalistic risk-taking with cognitive neuroscience. *Trends in Cognitive Sciences, 15*, 11-19. doi:10.1016/j.tics.2010.10.002
- Schreuders, E., Klapwijk, E. T., Will, G.-J., & Güroğlu, B. (2018). Friend versus foe: Neural correlates of prosocial decisions for liked and disliked peers. *Cognitive, Affective, & Behavioral Neuroscience, 18*, 127-142. doi:10.3758/s13415-017-0557-1
- Schriber, R. A., & Guyer, A. E. (2016). Adolescent neurobiological susceptibility to social context. *Developmental Cognitive Neuroscience, 19*, 1-18. doi:10.1016/j.dcn.2015.12.009
- Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 6*, 461-464. doi:10.1214/aos/1176344136
- Sebanck, A. M. (2003). The friendship features of preschool children: Links with prosocial behavior and aggression. *Social Development, 12*, 249-268. doi:10.1111/1467-9507.00232
- Sebastian, C. L., Tan, G. C., Roiser, J. P., Viding, E., Dumontheil, I., & Blakemore, S. J. (2011). Developmental influences on the neural bases of responses to social rejection: Implications of social neuroscience for education. *NeuroImage, 57*, 686-694. doi:10.1016/j.neuroimage.2010.09.063
- Seidel, E.-M., Eickhoff, S. B., Kellermann, T., Schneider, F., Gur, R. C., Habel, U., & Derntl, B. (2010). Who is to blame? Neural correlates of causal attribution in social situations. *Social Neuroscience, 5*, 335-350. doi:10.1080/17470911003615997
- Serdiouk, M., Rodkin, P., Madill, R., Logis, H., & Gest, S. (2015). Rejection and victimization among elementary school children: The buffering role of classroom-level predictors. *Journal of Abnormal Child Psychology, 43*, 5-17. doi:10.1007/s10802-013-9826-9
- Shaw, P., Eckstrand, K., Sharp, W., Blumenthal, J., Lerch, J. P., Greenstein, D., . . . Rapoport, J. L. (2007). Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation. *Proceedings of the National Academy of Sciences, 104*, 19649. doi:10.1073/pnas.0707741104
- Shaw, P., Gogtay, N., & Rapoport, J. (2010). Childhood psychiatric disorders as anomalies in neurodevelopmental trajectories. *Human Brain Mapping, 31*, 917-925. doi:10.1002/hbm.21028
- Shenhav, A., Botvinick, Matthew M., & Cohen, Jonathan D. (2013). The expected value of control: An integrative theory of anterior cingulate cortex function. *Neuron, 79*, 217-240. doi:10.1016/j.neuron.2013.07.007
- Sherman, L., Steinberg, L., & Chein, J. (2018). Connecting brain responsivity and real-world risk taking: Strengths and limitations of current methodological approaches. *Developmental Cognitive Neuroscience, 33*, 27-41. doi:10.1016/j.dcn.2017.05.007
- Shonkoff, J. P., & Levitt, P. (2010). Neuroscience and the future of early childhood policy: Moving from why to what and how. *Neuron, 67*, 689-691. doi:10.1016/j.neuron.2010.08.032
- Silston, B., Bassett, D. S., & Mobbs, D. (2018). How dynamic brain networks tune social behavior in real time. *Current Directions in Psychological Science, 27*, 413-421. doi:10.1177/0963721418773362
- Silverman, M. H., Jedd, K., & Luciana, M. (2015). Neural networks involved in adolescent reward processing: An activation likelihood estimation meta-analysis of functional neuroimaging studies. *NeuroImage, 122*, 427-439. doi:10.1016/j.neuroimage.2015.07.083

- Smith, C. E., Blake, P. R., & Harris, P. L. (2013). I should but I won't: Why young children endorse norms of fair sharing but do not follow them. *PLoS One*, 8, e59510. doi:10.1371/journal.pone.0059510
- Somerville, L. H. (2013). The teenage brain: Sensitivity to social evaluation. *Current Directions in Psychological Science*, 22, 121-127. doi:10.1177/0963721413476512
- Somerville, L. H., Heatherton, T. F., & Kelley, W. M. (2006). Anterior cingulate cortex responds differentially to expectancy violation and social rejection. *Nature Neuroscience*, 9, 1007-1008. doi:10.1038/nn1728
- Soto-Icaza, P., Aboitiz, F., & Billeke, P. (2015). Development of social skills in children: Neural and behavioral evidence for the elaboration of cognitive models. *Frontiers in Neuroscience*, 9. doi:10.3389/fnins.2015.00333
- Sparling, J. E., Baker, S. L., & Bielajew, C. (2018). Effects of combined pre- and post-natal enrichment on anxiety-like, social, and cognitive behaviours in juvenile and adult rat offspring. *Behavioural Brain Research*, 353, 40-50. doi:10.1016/j.bbr.2018.06.033
- Stanley, D. A., & Adolphs, R. (2013). Toward a neural basis for social behavior. *Neuron*, 80, 816-826. doi:10.1016/j.neuron.2013.10.038
- Starcke, K., & Brand, M. (2012). Decision making under stress: A selective review. *Neuroscience and Biobehavioral Reviews*, 36, 1228-1248. doi:10.1016/j.neubiorev.2012.02.003
- Statistics Netherlands. (2010). *Standaard beroepenclassificatie 2010*. Den Haag/ Heerlen: Netherlands Central Bureau of Statistics.
- Statistics Netherlands. (2017). *Population; sex, age, origin and generation*. Den Haag/Heerlen: Netherlands Central Bureau of Statistics.
- Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science*, 16, 55-59. doi:10.1111/j.1467-8721.2007.00475.x
- Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review*, 28, 78-106. doi:10.1016/j.dr.2007.08.002
- Stenseng, F., Belsky, J., Skalicka, V., & Wichstrom, L. (2014). Social exclusion predicts impaired self-regulation: A 2-year longitudinal panel study including the transition from preschool to school. *Journal of Personality*, 83, 212-220. doi:10.1111/jopy.12096
- Storch, E. A., Crisp, H., Roberti, J. W., Bagner, D. M., & Masia-Warner, C. (2005). Psychometric evaluation of the social experience questionnaire in adolescents: Descriptive data, reliability, and factorial validity. *Child psychiatry and human development*, 36(2), 167-176.
- Stormshak, E. A., Bierman, K. L., Bruschi, C., Dodge, K. A., & Coie, J. D. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70, 169-182. doi:10.1111/1467-8624.00013

T

- Takizawa, R., Maughan, B., & Arseneault, L. (2014). Adult health outcomes of childhood bullying victimization: Evidence from a five-decade longitudinal british birth cohort. *American Journal of Psychiatry*, 171, 777-784. doi:10.1176/appi.ajp.2014.13101401
- Tanaka, S. C., Doya, K., Okada, G., Ueda, K., Okamoto, Y., & Yamawaki, S. (2016). Prediction of immediate and future rewards differentially recruits cortico-basal ganglia loops. In S. Ikeda, H. K. Kato, F. Ohtake, & Y. Tsutsui (Eds.), *Behavioral Economics of Preferences, Choices, and Happiness* (pp. 593-616). Tokyo: Springer Japan.
- Tau, G. Z., & Peterson, B. S. (2009). Normal development of brain circuits. *Neuropsychopharmacology*, 35, 147. doi:10.1038/npp.2009.115
- Taylor, S. E. (2011). Tend and befriend theory. In P. van Lange, A. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 32). Thousand Oaks: Sage Publications.
- Taylor, S. E., & Master, S. L. (2011). Social responses to stress: The tend-and-befriend model. In R. J. Contrada & A. Baum (Eds.), *The handbook of stress science: Biology, psychology, and health* (pp. 101-109). New York, NY: Springer Publishing Company.

References

- Team, R. C. (2018). R: A language and environment for statistical computing. In Vienna, Austria: Foundation for Statistical Computing
- Telzer, E. H., Fuligni, A. J., Lieberman, M. D., Miernicki, M. E., & Galvan, A. (2015). The quality of adolescents' peer relationships modulates neural sensitivity to risk taking. *Social Cognitive and Affective Neuroscience, 10*, 389-398. doi:10.1093/scan/nsu064
- Telzer, E. H., Ichien, N., & Qu, Y. (2015). The ties that bind: Group membership shapes the neural correlates of in-group favoritism. *NeuroImage, 115*, 42-51. doi:10.1016/j.neuroimage.2015.04.035
- Telzer, E. H., McCormick, E. M., Peters, S., Cosme, D., Pfeifer, J. H., & van Duijvenvoorde, A. C. K. (2018). Methodological considerations for developmental longitudinal fMRI research. *Developmental Cognitive Neuroscience, 33*, 149-160. doi:10.1016/j.dcn.2018.02.004
- Tieskens, J. M., Buil, J. M., Koot, S., Krabbendam, L., & van Lier, P. A. C. (2018). Elementary school children's associations of antisocial behaviour with risk-taking across 7-11 years. *Journal of Child Psychology and Psychiatry, 59*, 1052-1060. doi:10.1111/jcpp.12943
- Tobia, V., Riva, P., & Caprin, C. (2017). Who are the children most vulnerable to social exclusion? The moderating role of self-esteem, popularity, and nonverbal intelligence on cognitive performance following social exclusion. *Journal of Abnormal Child Psychology, 45*, 789-801. doi:10.1007/s10802-016-0191-3
- Tononi, G., Sporns, O., & Edelman, G. M. (1999). Measures of degeneracy and redundancy in biological networks. *Proceedings of the National Academy of Sciences, 96*, 3257. doi:10.1073/pnas.96.6.3257
- Torrente, C. E., Cappella, E., & Watling Neal, J. (2014). Children's positive school behaviors and social preference in urban elementary classrooms. *Journal of Community Psychology, 42*, 143-161. doi:10.1002/jcop.21599
- Troisi, J. D., & Gabriel, S. (2011). Chicken soup really is good for the Soul: "Comfort food" fulfills the need to belong. *Psychological Science, 22*, 747-753. doi:10.1177/0956797611407931
- Troop-Gordon, W., & Ladd, G. W. (2005). Trajectories of peer victimization and perceptions of the self and schoolmates: Precursors to internalizing and externalizing problems. *Child Development, 76*, 1072-1091. doi:10.1111/j.1467-8624.2005.00898.x
- Twenge, J. M., & Baumeister, R. F. (2004). Social exclusion increases aggression and self-defeating behavior while reducing intelligent thought and prosocial behavior. In *Social psychology of inclusion and exclusion* (pp. 45-64): Psychology Press.
- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology, 81*, 1058-1069. doi:10.1037//0022-3514.81.6.1058
- Twenge, J. M., Catanese, K. R., & Baumeister, R. F. (2002). Social exclusion causes self-defeating behavior. *Journal of Personality and Social Psychology, 83*, 606-615. doi:10.1037//0022-3514.83.3.606
- Tyborowska, A., Volman, I., Niermann, H. C., Pouwels, J. L., Smeekens, S., Cillessen, A. H., ... & Roelofs, K. (2018). Early-life and pubertal stress differentially modulate grey matter development in human adolescents. *Scientific reports, 8*(1), 1-11. doi:10.1038/s41598-018-27439-5
- Tzourio-Mazoyer, N., Landeau, B., Papathanassiou, D., Crivello, F., Etard, O., Delcroix, N., . . . Joliot, M. (2002). Automated anatomical labeling of activations in SPM using a macroscopic anatomical parcellation of the MNI MRI single-subject brain. *NeuroImage, 15*, 273-289. doi:10.1006/nimg.2001.0978

U

- Urberg, K. A., Luo, Q., Pilgrim, C., & Degirmencioglu, S. M. (2003). A two-stage model of peer influence in adolescent substance use: Individual and relationship-specific differences in susceptibility to influence. *Addictive Behaviors, 28*, 1243-1256. doi:10.1016/S0306-4603(02)00256-3

V

- Vaish, A., Hepach, R., & Tomasello, M. (2018). The specificity of reciprocity: Young children reciprocate more generously to those who intentionally benefit them. *Journal of Experimental Child Psychology, 167*, 336-353. doi:10.1016/j.jecp.2017.11.005
- van Beest, I., & Williams, K. D. (2006). When inclusion costs and ostracism pays, ostracism still hurts. *Journal of Personality and Social Psychology, 91*, 918-928.
- van Buuren, S., & Groothuis-Oudshoorn, K. (2011). Mice: Multivariate imputation by chained equations in R. *Journal of Statistical Software, 45*, 1-67.
- van de Groep, S., Zanolie, K., & Crone, E. A. (2019). Giving to friends, classmates, and strangers in adolescence. *Journal of Research on Adolescence, 0*. doi:10.1111/jora.12491
- van den Berg, Y. H. M., & Cillessen, A. H. N. (2015). Peer status and classroom seating arrangements: A social relations analysis. *Journal of Experimental Child Psychology, 130*, 19-34. doi:10.1016/j.jecp.2014.09.007
- van den Berg, Y. H. M., Segers, E., & Cillessen, A. H. N. (2012). Changing peer perceptions and victimization through classroom arrangements: A field experiment. *Journal of Abnormal Child Psychology, 40*, 403-412. doi:10.1007/s10802-011-9567-6
- van der Meulen, M., Steinbeis, N., Achterberg, M., Bilo, E., van den Bulk, B. G., van, I. M. H., & Crone, E. A. (2017). The neural correlates of dealing with social exclusion in childhood. *Neuropsychologia*. doi:10.1016/j.neuropsychologia.2017.07.008
- van der Meulen, M., Steinbeis, N., Achterberg, M., van Ijzendoorn, M. H., & Crone, E. A. (2018). Heritability of neural reactions to social exclusion and prosocial compensation in middle childhood. *Developmental Cognitive Neuroscience, 34*, 42-52. doi:10.1016/j.dcn.2018.05.010
- van Duijvenvoorde, A. C. K., Huizenga, H. M., Somerville, L. H., Delgado, M. R., Powers, A., Weeda, W. D., . . . Figner, B. (2015). Neural correlates of expected risks and returns in risky choice across development. *The Journal of Neuroscience, 35*, 1549-1560. doi:10.1523/jneurosci.1924-14.2015
- van Duijvenvoorde, A. C. K., Peters, S., Braams, B. R., & Crone, E. A. (2016). What motivates adolescents? Neural responses to rewards and their influence on adolescents' risk taking, learning, and cognitive control. *Neuroscience & Biobehavioral Reviews, 70*, 135-147. doi:10.1016/j.neubiorev.2016.06.037
- van Harmelen, A. L., Hauber, K., Gunther Moor, B., Spinhoven, P., Boon, A. E., Crone, E. A., & Elzinga, B. M. (2014). Childhood emotional maltreatment severity is associated with dorsal medial prefrontal cortex responsivity to social exclusion in young adults. *PLoS One, 9*, e85107. doi:10.1371/journal.pone.0085107.t001
- van Hoorn, J., Shablack, H., Lindquist, K. A., & Telzer, E. H. (2019). Incorporating the social context into neurocognitive models of adolescent decision-making: A neuroimaging meta-analysis. *Neuroscience & Biobehavioral Reviews, 101*, 129-142. doi:10.1016/j.neubiorev.2018.12.024
- van Leijenhorst, L., Crone, E. A., & Bunge, S. A. (2006). Neural correlates of developmental differences in risk estimation and feedback processing. *Neuropsychologia, 44*, 2158-2170. doi:10.1016/j.neuropsychologia.2006.02.002
- van Leijenhorst, L., Moor, B. G., Op de Macks, Z. A., Rombouts, S. A. R. B., Westenberg, P. M., & Crone, E. A. (2010). Adolescent risky decision-making: Neurocognitive development of reward and control regions. *NeuroImage, 51*, 345-355. doi:10.1016/j.neuroimage.2010.02.038
- van Lier, P. A. C., & Koot, H. M. (2010). Developmental cascades of peer relations and symptoms of externalizing and internalizing problems from kindergarten to fourth-grade elementary school. *Development and Psychopathology, 22*, 569-582. doi:10.1017/S0954579410000283
- van Noordt, S. J., White, L. O., Wu, J., Mayes, L. C., & Crowley, M. J. (2015). Social exclusion modulates event-related frontal theta and tracks ostracism distress in children. *NeuroImage, 118*, 248-255. doi:10.1016/j.neuroimage.2015.05.085
- van Praag, H., Kempermann, G., & Gage, F. H. (2000). Neural consequences of environmental enrichment. *Nature Reviews Neuroscience, 1*, 191-198. doi:10.1038/35044558

References

- van Wijk, I. C., van den Bulk, B. G., Euser, S., Bakermans-Kranenburg, M. J., van Ijzendoorn, M. H., & Huffmeijer, R. (2019). Social judgments, frontal asymmetry, and aggressive behavior in young children: A replication study using EEG. *Neuropsychologia*, *126*, 120-127. doi:10.1016/j.neuropsychologia.2017.06.022
- Vangelisti, A. L. (2001). Making sense of hurtful interactions in close relationships: When hurt feelings create distance. In V. Manusov & J. H. Harvey (Eds.), *Attribution, communication behavior, and close relationships* New York: Cambridge University Press.
- VanTieghem, M. R., & Tottenham, N. (2018). Neurobiological programming of early life stress: Functional development of amygdala-prefrontal circuitry and vulnerability for stress-related psychopathology. In E. Vermetten, D. G. Baker, & V. B. Risbrough (Eds.), *Behavioral Neurobiology of PTSD* (pp. 117-136). Cham: Springer International Publishing.
- Vijayakumar, N., Cheng, T. W., & Pfeifer, J. H. (2017). Neural correlates of social exclusion across ages: A coordinate-based meta-analysis of functional MRI studies. *NeuroImage*, *153*, 359-368. doi:10.1016/j.neuroimage.2017.02.050
- Vinkers, C. H., Zorn, J. V., Cornelisse, S., Koot, S., Houtepen, L. C., Olivier, B., . . . Joels, M. (2013). Time-dependent changes in altruistic punishment following stress. *Psychoneuroendocrinology*, *38*, 1467-1475. doi:10.1016/j.psyneuen.2012.12.012
- Vrieze, S. I. (2012). Model selection and psychological theory: A discussion of the differences between the Akaike information criterion (AIC) and the Bayesian information criterion (BIC). *Psychological Methods*, *17*, 228. doi:10.1037/a0027127
- ## W
- Wachs, T. D., Georgieff, M., Cusick, S., & McEwen, B. S. (2014). Issues in the timing of integrated early interventions: Contributions from nutrition, neuroscience, and psychological research. *Annals of the New York Academy of Sciences*, *1308*, 89-106. doi:10.1111/nyas.12314
- Wager, T. D., Jonides, J., & Reading, S. (2004). Neuroimaging studies of shifting attention: A meta-analysis. *NeuroImage*, *22*, 1679-1693. doi:10.1016/j.neuroimage.2004.03.052
- Wang, H., Braun, C., & Enck, P. (2017). How the brain reacts to social stress (exclusion) – A scoping review. *Neuroscience & Biobehavioral Reviews*, *80*, 80-88. doi:10.1016/j.neubiorev.2017.05.012
- Wang, Q., Zhang, H., Wee, C.-Y., Lee, A., Poh, J. S., Chong, Y.-S., . . . Qiu, A. (2019). Maternal sensitivity predicts anterior hippocampal functional networks in early childhood. *Brain Structure and Function*, *224*, 1885-1895. doi:10.1007/s00429-019-01882-0
- Wang, S., Harvey, L., Martin, R., van der Beek, E. M., Knol, J., Cryan, J. F., & Renes, I. B. (2018). Targeting the gut microbiota to influence brain development and function in early life. *Neuroscience & Biobehavioral Reviews*, *95*, 191-201. doi:10.1016/j.neubiorev.2018.09.002
- Wang, Y., & Olson, I. R. (2018). The original social network: White matter and social cognition. *Trends in Cognitive Sciences*, *22*, 504-516. doi:10.1016/j.tics.2018.03.005
- Warneken, F., & Tomasello, M. (2007). Helping and cooperation at 14 months of age. *Infancy*, *11*, 271-294. doi:10.1111/j.1532-7078.2007.tb00227.x
- Warnell, K. R., Sadikova, E., & Redcay, E. (2018). Let's chat: Developmental neural bases of social motivation during real-time peer interaction. *Developmental Science*, *21*, e12581. doi:10.1111/desc.12581
- Weber, E. U., Shafir, S., & Blais, A.-R. (2004). Predicting risk sensitivity in humans and lower animals: Risk as variance or coefficient of variation. *Psychological Review*, *111*, 430. doi:10.1037/0033-295X.111.2.430
- Webley, P. (2005). Children's understanding of economics. In M. Barrett & E. Buchanan-Barrow (Eds.), *Children's understanding of society* (pp. 43-67). Hove: Psychology Press.
- Wechsler, D. (1991). Manual for the Wechsler intelligence scale for children-(WISC-III). San Antonio, TX: Psychological Corporation.
- Wentzel, K. R. (2003). Sociometric status and adjustment in middle school: A longitudinal study. *The Journal of Early Adolescence*, *23*, 5-28. doi:10.1177/0272431602239128

- Wentzel, K. R. (2014). Prosocial behavior and peer relations in adolescence. In *Prosocial development: A multidimensional approach* (pp. 178-200).
- Westenberg, M. P., Drewes, M. J., Goedhart, A. W., Siebelink, B. M., & Treffers, P. D. A. (2004). A developmental analysis of self-reported fears in late childhood through mid-adolescence: Social-evaluative fears on the rise? *Journal of Child Psychology and Psychiatry*, *45*, 481-495. doi:10.1111/j.1469-7610.2004.00239.x
- Wewers, M. E., Katz, M., Fickle, D., & Paskett, E. D. (2006). Risky behaviors among Ohio Appalachian adults. *Preventing chronic disease*, *3*, A127-A127.
- Whitfield-Gabrieli, S., Ghosh, S. S., Nieto-Castanon, A., Saygin, Z., Doehrmann, O., Chai, X. J., . . . Gabrieli, J. D. E. (2015). Brain connectomics predict response to treatment in social anxiety disorder. *Molecular Psychiatry*, *21*, 680. doi:10.1038/mp.2015.109
- Whittle, S., Simmons, J. G., Dennison, M., Vijayakumar, N., Schwartz, O., Yap, M. B. H., . . . Allen, N. B. (2014). Positive parenting predicts the development of adolescent brain structure: A longitudinal study. *Developmental Cognitive Neuroscience*, *8*, 7-17. doi:10.1016/j.dcn.2013.10.006
- Wilcox, T., & Biondi, M. (2015). fNIRS in the developmental sciences. *Wiley Interdisciplinary Reviews: Cognitive Science*, *6*, 263-283. doi:10.1002/wcs.1343
- Will, G. J., Crone, E. A., van Lier, P. A., & Guroglu, B. (2016). Neural correlates of retaliatory and prosocial reactions to social exclusion: Associations with chronic peer rejection. *Developmental Cognitive Neuroscience*, *19*, 288-297. doi:10.1016/j.dcn.2016.05.004
- Will, G. J., van Lier, P. A., Crone, E. A., & Guroğlu, B. (2016). Chronic childhood peer rejection is associated with heightened neural responses to social exclusion during adolescence. *Journal of Abnormal Child Psychology*, *44*, 43-55. doi:10.1007/s10802-015-9983-0
- Will, G.-J., Crone, E. A., van den Bos, W., & Guroğlu, B. (2013). Acting on observed social exclusion: Developmental perspectives on punishment of excluders and compensation of victims. *Developmental Psychology*, *49*, 2236-2244.
- Will, G., Crone, E. A., & Guroğlu, B. (2015). Acting on social exclusion: Neural correlates of punishment and forgiveness of excluders. *Social Cognitive and Affective Neuroscience*, *10*, 209-218. doi:10.1093/scan/nsu045
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, *58*, 425-452. doi:10.1146/annurev.psych.58.110405.085641
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 41, pp. 275-314). New York: Academic Press.
- Williams, K. D. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science*, *20*, 71-75. doi:10.1177/0963721411402480
- Williams, K. D., & Jarvis, B. (2006). Cyberball: A program for use in research on interpersonal ostracism and acceptance. *Behavior Research Methods*, *38*, 174-180. doi:10.3758/BF03192765
- Williams, K. D., Cheung, C. K., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, *79*, 748.
- Williams, R. L. (2000). A note on robust variance estimation for cluster-correlated data. *Biometrics*, *56*, 645-646. doi:10.1111/j.0006-341X.2000.00645.x
- Wills, T. A., Resko, J. A., Ainette, M. G., & Mendoza, D. (2004). Role of parent support and peer support in adolescent substance use: A test of mediated effects. *Psychology of Addictive Behaviors*, *18*, 122. doi:10.1037/0893-164X.18.2.122
- Wissink, I. B., Deković, M., Stams, G.-J., Asscher, J. J., Rutten, E., & Zijlstra, B. J. H. (2013). Moral orientation and relationships in school and adolescent pro- and antisocial behaviors: A multilevel study. *The Journal of School Nursing*, *30*, 216-225. doi:10.1177/1059840513497402
- Wittmann, M., Leland, D. S., & Paulus, M. P. (2007). Time and decision making: Differential contribution of the posterior insular cortex and the striatum during a delay discounting task. *Experimental Brain Research*, *179*, 643-653. doi:10.1007/s00221-006-0822-y

References

- World Medical Association. (2013). World medical association declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, *310*, 2191-2194. doi:10.1001/jama.2013.281053
- Wright, N. D., Symmonds, M., Fleming, S. M., & Dolan, R. J. (2011). Neural segregation of objective and contextual aspects of fairness. *The Journal of Neuroscience*, *31*, 5244. doi:10.1523/JNEUROSCI.3138-10.2011

Y

- Yu, J., Zhu, L., & Leslie, A. M. (2016). Children's sharing behavior in mini-dictator games: The role of in-group favoritism and theory of mind. *Child Development*, *87*, 1747-1757. doi:10.1111/cdev.12635

Z

- Zadro, L., Hawes, D. J., Iannuzzelli, R. E., Godwin, A., MacNevin, G., Griffiths, B., & Gonsalkorale, K. (2013). Ostracism and children: A guide to effectively using the cyberball paradigm with a child sample. *International Journal of Developmental Science*, *7*, 7-11. doi:10.3233/DEV-131212
- Zaki, J., & Mitchell, J. P. (2011). Equitable decision making is associated with neural markers of intrinsic value. *Proceedings of the National Academy of Sciences*, *108*, 19761. doi:10.1073/pnas.1112324108
- Zijlmans, M. A. C., Korpela, K., Riksen-Walraven, J. M., de Vos, W. M., & de Weerth, C. (2015). Maternal prenatal stress is associated with the infant intestinal microbiota. *Psychoneuroendocrinology*, *53*, 233-245. doi:10.1016/j.psyneuen.2015.01.006
- Zimmer-Gembeck, M. J., Geiger, T. C., & Crick, N. R. (2005). Relational and physical aggression, prosocial behavior, and peer relations. *The Journal of Early Adolescence*, *25*, 421-452. doi:10.1177/0272431605279841
- Zimmer-Gembeck, M. J., Nesdale, D., Webb, H. J., Khatibi, M., & Downey, G. (2016). A longitudinal rejection sensitivity model of depression and aggression: Unique roles of anxiety, anger, blame, withdrawal and retribution. *Journal of Abnormal Child Psychology*, *44*, 1291-1307. doi:10.1007/s10802-016-0127-y