

Fak GSBC / PSU

## Puberty as Developmental Milestone

Monday, 10.15-11.45, CADS – Semmelweisstr. 12

*(we can shift the seminar to another day, it can be discussed in the first session on May 11)*

Summer Semester 2009

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### Summary

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Puberty represents a milestone of human development which encompasses besides physical changes a massive restructuring of the hormonal and central nervous systems. At least as dramatic as these biological transformations are processes at the psychological and social level that can be observed during this phase of life. Girls and boys show higher psychosocial problems, and relationships to peers or family undergo restructurings – all of them may imply chance and risk for future developmental pathways to adult development. This seminar not only aims at the pure description of the biopsychosocial changes during puberty and the detailed analyses of the complex mechanisms leading to adaptation problems in puberty (e.g., eating problems, depression, delinquency), it also focuses on childhood antecedents and adult outcomes of girls and boys reporting problems during puberty. Thereby, inter-individual differences as variations in the timing of a developmental transition (i.e., timing and tempo of bodily changes) will be focused. What does it mean to look like an adult when the majority of same-aged class mates still look like a child? What factors predict early and late timing of physical changes during puberty? Under what contextual circumstances do variations in the timing of puberty have long-term consequences? – Such examples of questions the seminar aims to answer. Thereby we can draw on qualitative and quantitative data from own research. Finally, this seminar will focus on measurement problems and feasibility of pubertal events (e.g., questionnaire data, hormone assays, assessments by physicians), and also options for the promotion of a smooth transition during puberty and effective coping with negative experiences and emotional problems will be discussed.

The participants of the seminar are expected to actively participate on a regular basis. Each student should present one of the papers in front of the group, which will be then discussed by the entire group.

### Introductory Literature

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Weichold, K., Silbereisen, R. K., & Schmitt-Rodermund, E. (2003). Short- and long-term consequences of early versus late physical maturation in adolescents. In C. Hayward (Ed.), *Puberty and psychopathology* (pp. 241-276). Cambridge, MA: Cambridge University Press.

## Sessions, Topics, and Literature

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### 11.05.2009 *Organizational Issues and Structure of the Seminar*

#### *Hormonal Changes, Brain Development and Physical Changes during Puberty - Introduction*

- Daniel, W.A. (1983). Pubertal changes in adolescence. In: J. Brooks-Gunn and A.C. Petersen (Hrsg.), Girls at puberty : Biological and Psychosocial Perspectives (S. 51–71), Plenum Press, New York.
- Fechner, P. Y. (2003). The biology of puberty: New developments in sex differences. In C. Hayward (Hrsg.), Gender differences at puberty (S: 17-28). New York: Cambridge University Press.
- Warren, M. P. (1983). Physical and biological aspects of puberty. In Brooks-Gunn, J., and Petersen, A. C. (eds.), Girls at Puberty: Biological and Psychosocial Perspectives (S. 3-28). Plenum Press, New York.

### 15.05.2009 *Hormonal Changes, Brain Development and Physical Changes during Puberty (extra session)*

- Blakemore, S-J. & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. Journal of Child Psychology and Psychiatry, 47(3–4), 296–312.
- Blakemore, S-J. (2008). Development of the social brain during adolescence. Quarterly Journal of Experimental Psychology, 61 (1), 40-49.
- Buchanan, C., Eccles, J. & Becker, J. (1992). Are adolescents victims of raging hormones: evidence for activational effects of hormones on moods and behaviour at adolescence. Psychological Bulletin, 111, 62-107.
- Hughes SM, Gore AC (2007) How the brain controls puberty, and implications for sex and ethnic differences. Family and Community Health, 30, 112-114.
- Spear, L. P. (2002). The adolescent brain and the college drinker: Biological basis of propensity to use and misuse alcohol. Journal of Studies on Alcohol, 14, 71-81.

### 18.05.2009 *Antecedents of Differences in Timing of Pubertal Changes*

- Belsky, J., Steinberg, L., & Draper, P. (1991). Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. Child Development, 62, 647-670.
- Belsky, J., Steinberg, L., Houts, R., Friedman, S.L., DeHart, G., Cauffman, E., Roisman, G.I., Halpern-Felsher, B., Susman, E. & The NICHD Early Child Care Research Network (2007). Family Rearing Antecedents of Pubertal Timing. Child Development, 78, 1302-1321.
- Mustanski, B.S., Viken, R.J., Kaprio, J., Pulkkinen, L., & Rose, R.J. (2004). Genetic and environmental influences on pubertal development: Longitudinal data from Finnish twins at ages 12 and 14. Developmental Psychology, 40, 1188-1198.
- Sun, S.S., Schubert, C.M., Liang, R., Roche, A.F., Kulin, H.E., Lee, P.A., Himeia, J.H., Chumlea, W.C. (2005). Is sexual maturity occurring earlier among U.S. children? Journal of Adolescent Health, Volume 37 (5), 345-355.

25.05.2009 *Measurement Issues*

- Bond, L., Clements, J., Betalli, N., Evans-Whipp, T., McMorris, B.J., Patton, G.C., Toumbourou, J.W. and Catalano, R.F. (2006) A comparison of self-reported puberty using the Pubertal Development Scale and the Sexual Maturation Scale in a school-based epidemiologic survey. Journal of Adolescence, 29(5), 709-720.
- Dorn, L.D., Dahl, R.E., Woodward, H.R., Biro, F. (2006). Defining the boundaries of early adolescence: a user's guide to assessing pubertal status and pubertal timing in research with adolescents. Applied Developmental Science, 10(1), 30–56.
- Negriff, S., Fung, M. T., Trickett, P. K. (2008). Self-Rated Pubertal Development, Depressive Symptoms and Delinquency: Measurement Issues and Moderation by Gender and Maltreatment. Journal of Youth and Adolescence, 37, 736-746.
- Smolak, L., Krieg, D. B., Hayward, C. , Shisslak, C. M. and Taylor, C. B. (2007). The Reliability of Self-Reported Menarcheal Timing. The Journal of Early Adolescence, 27(3), 386 - 397.

08.06.2009 *Practical Training in Assessing Status and Timing of Pubertal Development*

15.06.2009 *Theoretical Models: Consequences of inter-individual Differences in Pubertal Timing*

- Graber, J.A., Petersen, A. and Brooks-Gunn, J. (1996). Pubertal processes: Methods, measures, and models. In: Graber, J.A., Brooks-Gunn, J. and Petersen, A. (Hrsg.). Transitions through adolescence: Interpersonal domains and context (S. 23–53). Lawrence Erlbaum Associates, Mahwah, NJ.
- Weichold, K., Silbereisen, R. K., & Schmitt-Rodermund, E. (2003). Short-term and long-term consequences of early versus late physical maturation in adolescents. In C. Hayward (Hrsg.), Gender differences at puberty (S. 241-276). Cambridge, MA: Cambridge University Press.

22.06.2009 *Consequences of Differences in Pubertal Timing during Puberty*

- Graber, J. A., Brooks-Gunn, J., & Warren, M. P. (2006). Pubertal effects on adjustment in girls: Moving from demonstrating effects to identifying pathways. Journal of Youth & Adolescence, 35, 413-423.
- Stroud, C. B., & Davila, J. (2008). Pubertal timing and depressive symptoms in early adolescents: The roles of romantic competence and romantic experiences. Journal of Youth and Adolescence, 37, 953-966.

29.06.2009 *Contextual Influences (KW)*

- Cavanagh, S.E. (2004). The sexual debut of girls in early adolescence: The intersection of race, pubertal timing, and friendship group characteristics, Journal of Research on Adolescence, 14, 285–312.
- Dick, D., Viken, R., Purcell, S., Kaprio, J., Pulkkinen, L. & Rose, R. (2007). Parental monitoring moderates the importance of genetic and environmental influences on adolescent smoking. Journal of Abnormal Psychology, 116 (1), 213-218.

Ge, X., Brody, G. H., Conger, R. D., Simons, R. L., & Murry, V. M. (2002). Contextual amplification of pubertal transition effects on deviant peer affiliation and externalizing behavior among African American children. Developmental Psychology, 38(1), 42-54.

*06.07.2009 Long-Term Developmental Pathways of Early and Late Maturing Boys and Girls*

Taga, K. A., Markey, C. N., & Friedman, H. S. (2006). A Longitudinal Investigation of Associations between Boys' Pubertal Timing and Adult Behavioral Health and Well-Being. Journal of Youth and Adolescence, 35, 401-411.

Weichold, K., Büttig, S., & Silbereisen, R. K. (2008). Effects of Pubertal Timing on Communication Behaviors and Stress Reactivity in Young Woman during Conflict Discussions with their Mothers. Journal of Youth and Adolescence, 37(9), 1123-1133.

*13.07.2009 Application, Intervention, and Summary*