Affective Variability in Adolescence - a Temporary Imbalance between Hormonal and Cognitive Development?

**Kalilin Klipker, Cornelia Wizus, Anlije Rauers, Michaela Riediger**

Max Planck Institute for Human Development, Berlin, Germany

**OBJECTIVE:** Empirical evidence shows more rapidly changing affective experiences in adolescence as compared to late childhood and adulthood. However, possible factors contributing to age differences in affective experiences lack sufficient empirical investigation. Against common assumptions, hormonal changes in puberty alone only have minor explanatory value. We hypothesize (a) that adolescents show a temporary imbalance between the activating force of hormonal changes and the deactivating force of cognitive control on affective experiences, and (b) that this imbalance accounts for the greater variability in affective experiences during adolescence, as compared to late childhood and early adulthood.

**METHODS:** We investigated these hypotheses using a 9-month longitudinal design in a sample of 158 male participants aged 10 to 20 years. During a 2-week long experience-sampling phase, participants indicated on several times a day, among other things, how much they were feeling different emotions. To assess gonadal hormone concentration, participants provided morning and evening saliva samples on 4 consecutive days. Individual's working-memory performance was assessed with several memory-updating and complex span tasks in the laboratory and in daily life. The local ethics committee approved of this study. Multilevel regression models were used to investigate whether within-person changes in gonadal hormone concentration and working memory performance predicted within-person variability in affective experiences.

**RESULTS:** Results support the assumption of a temporary imbalance in adolescents' hormonal and cognitive development. That is, adolescents, as compared to children and young adults, showed great hormonal changes but not yet fully developed cognitive control. Moreover, adolescents in puberty showed larger interindividual variations in their person-specific imbalance than did prepubertal adolescents.

**CONCLUSIONS:** We emphasise that adolescence is characterized by much developmental heterogeneity, suggesting a need for individually adjusted health services in order to promote individuals' successful socioemotional development and psychological well-being. No author has any conflicts of interests in this research.

**Keywords:** Affective variability, adolescence, hormones, working memory

Associations with Positive Experiences of Transfer to Adult Care in Young Adults with Chronic Conditions

**Anneloes Van Staa, Jane Sattoe**, **Sander Hilberink**

Erasmus University Rotterdam, Rotterdam, the Netherlands

*Rotterdam University, Rotterdam, the Netherlands

**OBJECTIVE:** To explore the associations between young adults' experiences with the transfer to adult care and socio-demographics, disease characteristics, transfer readiness, self-management related factors such as self-efficacy and adherence, and Health-Related Quality of Life (HRQoL).

**METHODS:** 1001 young adults (18-25 years) with somatic chronic conditions, formerly treated in Erasmus MC-Sophia, Rotterdam, were invited to participate in a 6-year follow-up study On Your Own Feet (response 52%; n=518). A newly constructed 18-item scale, the On Your Own Feet - Transfer Experiences Scale (OYOF-TES), was used to assess experienced transfer to adult care. Associations were explored with stepwise multivariate modelling, using past (2006-10) and current (2012-11) variables.

**RESULTS:** On a scale of 1-10, the overall process of transfer was appreciated with 6.7 (±1.6). Factor analysis showed that the OYOF-TES has two subscales: 1) the organisation of transfer and the experienced collaboration between pediatric and adult care (Cronbach's Alpha=.91). 2) appreciation of preparation and transitional care arrangements (Cronbach's Alpha=.89). Regarding organisation of transfer (R²=.31), those with a higher satisfaction with their relationship with current healthcare providers were more positive (β=-.43). Regarding the appreciation of the preparation for transfer (R²=.24), males' (β=-.17) were more positive. This was also associated with higher reported current self-efficacy (β=.20) and current care consumption (β=.26). All 10 variables (including transfer readiness) did not contribute significantly to the multivariate models.

**CONCLUSIONS:** This exploratory study is one of the first reporting on young adults' experiences with the transfer from pediatric care to adult care and its associations. Since self-management factors, transfer readiness, and HRQoL at T0 did not contribute to positive transitional care experiences, it remains difficult to predict a good transfer. However, higher HRQoL and higher self-efficacy were related to better transfer experiences, suggesting that a smooth transfer might contribute to current self-management skills and HRQoL.

**Keywords:** transition, transfer, pediatric care, adult care, chronic disease, patient perspective