

# SAMPLE PIECE ON

The Impact of Support on the  
Relationship Between Stress  
and Depression

The fact that the fourth principal cause of adolescents' death is suicide indicates that stress during adolescence is no laughing matter (Eaton, Kann, Kinchen, Shanklin, Ross, Hawkins, et al, 2008). On the other hand, labelling adolescence as a stage of stress is arguable. The intensified salience of peer and social relations, desire for freedom, brain development, physical maturation, and numerous other concurrent changes during adolescence are the bases of this argument (Casey, Getz, & Galvan, 2008a; Casey, Jones, & Hare, 2008b; Blakemore, 2008).

As suggested by Yurgelun-Todd (2007), there is a link between the progressively increasing effectiveness of the development of cognitive control abilities during adolescence. Despite the linear growth in the childhood to adulthood progress as indicated by the universal model of enhanced cognitive control with the prefrontal cortex maturation (Crone et al, 2007), a nonlinear change represented by the observed adolescent behaviors can be distinguished from childhood and adulthood. This is corroborated by the report of the National Center for Health Statistics on behaviors and death among adolescents (Casey et al, 2010). It must be considered, however, that adolescent behavior cannot be explained by mere undeveloped prefrontal function. Otherwise, there should be a remarkable similarity among children considering that their cognitive capacities and prefrontal cortex are less developed than those of the adolescents (Casey et al, 2010).

It is important to identify with the neurobiological and developmental substrates that bring about anxious conditions and other associated pathologies (Steinberg, 2008; Paus, Keshavan, & Giedd, 2008). In order to understand adolescence as a developmental stage, diverse characteristics of this period should be differentiated through transitions into adolescence and out of it (Casey et al. 2008a; 2008b). All theoretical adolescence models should give an explanation for adolescent inflections and deflections in relation to childhood and adulthood and all other nonlinear changes. Several authors have proposed a brain development model, which explains the distinctive affective changes in the behaviors of adolescents (Casey, Getz & Galvan, 2008a; Casey, Jones, & Hare, 2008b; Somerville, Jones, & Casey, 2010).

Characterizing adolescence must not merely focus on the exclusive link between the prefrontal cortex immaturity and the behavior of adolescent. Based on the adolescent development models by Ernst, Pine and Hardin (2006) and Steinberg (2008), less top-down parameter heightens adolescent emotionality. While it is similar, another model by Casey et al (2010) gives emphasis to the dynamic interaction between cortical and subcortical brain systems during the adolescent development, which leads to increased sensitivity to aversive and appetitive signals, and integrates results not only from adolescents but also from children and adult into the model leading to an explanation as to why changes in the behavior of adolescents are nonlinear.

Williams et al (2006), Rich et al (2006), and Guyer et al (2008; 2009) are in consensus with the fact that affective cues engage the amygdala with inflated reaction magnitudes among adolescents as compared to those of children and adults. Corroborating these findings, Galvan et al (2006) stated that the prefrontal cortex plays an recognized role in the parameter of sensitive behavior and its prolonged maturation during adolescence. Thus, the need for top-down control and put individuals with less control at greater risk for poor outcomes might be increased by overstated expressive reactivity during adolescence.

According to Casey et al (2010), there are diverse developmental routes of cortical control regions and subcortical emotional systems that are linked to the heightened hazard in adolescent stress. Such a differential development can heighten emotive reactivity and disturb the control balance in subcortical

and prefrontal regions. On the one hand, during adolescence, emotive reactivity normally increases. On the other hand, anxiety symptoms may be brought about by not eventually suppressing the emotive reactivity.

Due in part to the individual differences in terms of environmental background, developmental investigations on emotional control are largely variable. The disparity between control and limbic regions that cause greater stress in some people than others can be aggravated both by genetic factors and by the environment. According to Casey et al (2010), it will be helpful to study a large sample in terms of the interface among developmental, environmental, and genetic factors. In this way, these outcomes can be directly examined from a developmental standpoint.

It is typical for adolescents to cope with family problems, puberty, and educational transition and pressure. Failure to handle these adolescent problems may cause other negative effects, which include low self-esteem and poor performance in school. In turn, these outcomes can bring about further difficulties. According to Hashim (2007), adolescents who are having low performance in school are likely to be suffering from complicated relationships with peers and teachers, several corrective troubles at school, and a poor life regulation.

Except for the models that account for alcohol use among delinquent and antisocial adolescents, there is a lack of comprehensive models that produce contributors to intoxication among typical adolescents. In a model of additive cognitive, emotional, and peer-related risk factors for intoxication among adolescents within a sample of tenth graders, (Nelson, 2009) asked participants to provide self-reports of peer-related social stress, the inconsistency between their required and professed authentic belonging within school peer mobs and of self-esteem, coping, reactions to involuntary stress, friendliness and anxiety lessening, positive alcohol expectancies, and intoxication. Results indicated that adolescents with higher peer-related social stress levels and approved higher sociability alcohol expectancies involved higher intoxication levels, and those who reported higher self-esteem were particularly more likely to get intoxicated when encountering peer-related social stress (Nelson, 2009).

In a cross-sectional investigation of gender differences with Norwegian adolescents in terms of the interface between self-esteem, emotional conditions, and stress, Moksnes, Moljord, Espnes, and Byrne (2010) found out that male adolescents had lower emotional condition and stress scores and higher self-esteem score than their female counterparts. Increasing peer-related stress is strongly linked to academic performance, home life, school and adult responsibility, and higher emotional condition levels and gender does not moderate the link between emotional condition and stress (Moksnes et al, 2010). While emotional condition and self-esteem are strongly inversely associated, there is a weak control impact of self-esteem on the link between emotional condition and stress related caused by academic performance, peer pressure, and romantic relationships (Moksnes et al, 2010). A significant stage towards the development of pre-emptive interventions for adolescents and children is represented by the recognition of the possible protective role of self-esteem relative to the emotional outcomes of adolescents (Moksnes et al, 2010).

According to Byrne, Davenport, and Mazanov (2007), adolescence is questionably the most noticeable life-stage considering its speedy and possibly disorderly transition, which include variable self-ideas and social, psychological, and biological changes. In order to promote health and preventive strategies during adolescent years, it is imperative to investigate the interface between self-esteem, emotional condition, and stress including gender differences (Moksnes, Moljord, Espnes, & Byrne, 2010).