How sleep may be key to antisocial behaviour in young people

Sleep is vital to our health and yet remains understudied in young people and especially in its links to behaviours. Professor Alexander Vazsonyi at the University of Kentucky is focused on highlighting the role of sleep in problem behaviours in adolescents. His work on sleep unearths some important influences on deviant behaviour but also points to ways that young people can be supported to avoid such antisocial behaviours.

As anyone with a newborn will tell you, sleep is vital to our ability to function at our best. Research over the last years has shown that sleep is key to healthy living and a crucial cog in maintaining physical and mental health. Sleep quality and length has been linked to a number of health issues including heart and blood vessel health, cognitive conditions, obesity and cancer risk. The quality of sleep has also been associated with depression and anxiety, with poor sleep involved in almost all psychiatric conditions.

Sleep need changes over a lifetime, with newborns sleeping for the majority of the day, teenagers needing up to ten hours and mid-life adults requiring around eight hours of sleep. Sleep is intrinsically linked to circadian rhythms – our internal body clock – dictating our sleepiness at certain times of day. Adolescents typically have an ‘owl’ chronotype, staying up late and sleeping in late during the day. The natural sleep cycle for teens often conflicts with their school schedule, and this period of life is notoriously linked with poor sleep.

Signs of poor sleep include trouble falling asleep, waking up multiple times throughout the night, excessive daytime sleepiness, and not being able to fall back asleep after waking. Poor sleep makes it difficult to concentrate and to store and retain information, and lack of sleep can impair school performance for many adolescents. Psychologists are also starting to understand that poor sleep can be linked to aggression and low self-esteem. Now, researchers are turning their attention to how sleep impacts our behaviours.

SLEEP AND BEHAVIOUR

Sleep is known to be related to ‘norm-violating’ or deviant behaviours – actions that go against the informal rules of how society works. Precisely how sleep affects these forms of behaviour remains unknown. Alexander T. Vazsonyi, Professor of Family Sciences and Director of the Adolescent Development Lab at the University of Kentucky, is an authority in the field of adolescence. His work focuses on the transition between childhood and adolescence and the onset of problem behaviours, violence and deviance. Prof Vazsonyi – who is also Editor-in-Chief of the Journal of Early Adolescence – is interested in the role of culture and wider societal influences on adolescent behaviour.

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Low self-control has been associated with alcohol and drug use as well as other norm-violating behaviours. They showed substantial support for low self-control being a factor in deviance. These findings support the ‘self-control theory’ first put forward by criminologists Travis Hirschi and Michael Gottfredson in 1990 to explain crime. The analysis of a decade’s worth of studies showed convincing evidence of a strong link between low self-control and deviance or crime across studies with different assessments, designs, measures of deviance and across cultures and demographic groups.

SLEEP AND ITS RELATIONSHIP WITH DEVIANCY AND LOW SELF-CONTROL

In a recent paper in the Journal of Adolescence, Prof Vazsonyi and colleagues set out to understand more about how sleep contributes to the link between self-control and deviant behaviours. They did this by looking at almost 6,900 high school students in Switzerland, considering self-control across a variety of immigration and socioeconomic groups. The researchers employed statistical techniques known as structural equation modelling, which allows scientists to investigate the relationships between both measured variables and latent, or inferred, variables. The team found that the effect of sleep problems on delinquency was indeed moderated in part by low self-control. Sleep problems predicted lower self-control and in turn greater delinquency across cultural and socio-economic groups. This is an important step in highlighting ways that young people can be influenced, and indeed helped, by sleep.

CULTURAL EFFECTS

This study was particularly important because it gathered data from a large sample of teenagers – with the support of the Swiss Federal Office of Public Health – representing the national population. It revealed differences in sleep, with the Swiss native young people (Swiss-born and Swiss parents) reporting better sleep than young people from first- and second-generation immigrant families, highlighting that immigrant families are most in need of sleep support. Studies examining ethnicity, race or immigrant status are...
Sleep problems predicted lower self-control and in turn greater delinquency across cultural and socioeconomic groups. Sleep was found to mediate the effect of parental warmth on problem behaviours, highlighting sleep as a mechanism that impacts parenting efforts on behaviour. They found a relationship between positive parenting – measured as warmth – and sleep in both countries. This is consistent with findings from previous studies stating that parental influences can improve adolescents’ sleep and that young people living in homes with high monitoring have more regular sleep patterns and better-quality sleep.

**WHY WE CAN’T SLEEP ON IT**

The work by Prof Vazsonyi and colleagues makes it clear that poor sleep is an issue with widespread consequences for children that go further than low concentration or poor school performance. Their findings not only show the relationship but also pinpoint the mediating factors (variables that link poor sleep and deviance, such as poor family relationships or other stressors) that could be part-responsible for the effects of poor sleep on deviance. Importantly, these areas are goals that could be tackled in interventions. Teenagers across the world have a paucity of sleep and a wealth of sleep issues. This is particularly true of immigrant young people who are most at risk of poor sleep. Helping families to support their young people to sleep better should be a priority to affect change not only for adolescent health but also to reduce societal problems such as vandalism and aggression across different demographic groups.