OPEN ACCESS Freely available online

Journal of Sleep Disorders & Therapy

Commentary

Chronotypes and Their Variations

Philip Polson*

Department of Andrology, Good Hope Hospital, University Hospitals Birmingham NHS Foundation Trust, Sutton Coldfield, B75 7RS, UK

COMMENTARY

The inherent predisposition of your body to sleep at a specific hour, or what most people refer to as being an early bird *vs* a night owl,is known as chronotype. Chronotype affects appetite, exercise, and core body temperature in addition to regulating sleep and wake periods. It is the cause of your feeling more alert at certain times of the day and sleepier at others.

Chronotype *vs.* circadian rhythm

The circadian rhythm, which controls the day-to-day sleep-wake cycle and releases melatonin in response to environmental stimuli like light and temperature, is intimately linked to sleep chronotype. While the circadian rhythm can be "trained" by sticking to a rigorous schedule, the underlying chronotype remains constant.

As a result, a natural night owl may be able to get up at 7 a.m. for work every day, but they may not be productive until later in the day. An early bird, on the other hand, may wake up bright and cheerful for their 7 a.m. shift, but begin to feel drowsy by late afternoon.

Total sleep time is unaffected by chronotype. If most individuals require seven to nine hours of sleep per night, an early bird will find it much simpler to achieve this than a night owl who struggles to fall asleep before 1 a.m. As a result, night owls have historically had a harder time adjusting to traditional work patterns.

Scientists believe it is extremely difficult, if not impossible, to modify your chronotype on intentionally, however it may fluctuate with time. The term "social jetlag" refers to when a person's innate chronotype clashes with the demands of their schedule.

If they have to get up early for work or school, those with a later chronotype may have social jetlag and feel perpetually exhausted.

Similarly, folks who prefer to go to bed earlier may struggle to participate in social or cultural activities scheduled later in the evening. At non-peak periods, it may be difficult for both groups to conduct things that demand focus or inventiveness.

What factors influence your chronotype?

Genetics, age, and other variables can all influence a person's chronotype. Due to differences in daylight hours, some scientists believe that chronotype may differ depending on geographical location.

Most children, on average, have an early chronotype. Chronotype is pushed back starting in adolescence, giving rise to the idea that teens are sluggish because they find it difficult to get up for school. Starting at the age of 20, the chronotype swings sooner and earlier. The majority of middle-aged Americans benefit from a bedtime of 11 p.m. to 12 a.m. and a wake-up time of 7 a.m. to 8 a.m. Our chronotype shifts even earlier as we get older.

Females have an earlier chronotype than males, while some research show that this difference fades around the age of 50. It's likely that gender differences are merely a result of societal issues like family chores, career advancement, and retirement, which tend to follow different patterns for men and women.

According to new evidence, chronotype has a considerable genetic component. A longer allele on the PER3 circadian clock gene has been linked to morningness, among other factors. According to some studies, chronotype variation may have originated as a survival strategy among hunter-gatherers. The idea is that by taking turns napping, someone will always be awake to keep an eye on everything.

***Correspondence to**: Philip J Polson, Department of Andrology, Good Hope Hospital, University Hospitals Birmingham NHS Foundation Trust, Sutton Coldfield, B75 7RS, UK, Tel: 07815164278; E-mail: philip.polson1@nhs.net

Received: 25-Nov-2022, Manuscript No. JSDT-22-20629; **Editor assigned:** 28-Nov-2022; PreQC No. JSDT-22-20629 (PQ); **Reviewed:** 13-Dec-2022,

QC No. JSDT-22-20629; **Revised:** 20-Dec-2022, Manuscript No. JSDT-22-20629 (R); **Published:** 27-Dec-2022, DOI: 10.35248/2167-0277.22.11.391

Citation: Polson P (2022) Chronotypes and Their Variations. J Sleep Disord Ther 10:391.