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Conflicted clocks: Social jetlag, entrainment and the role of chronotype

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Propositions belonging to the thesis

**Conflicted clocks: social jetlag,
entrainment and the role of chronotype**

From physiology to academic performance;
From students to working adults

by
Giulia Zerbini

1. Like many biological traits, the timing of sleep is highly individual. When society ignores the rich variety in sleep timing by imposing uniform school and working starting times, performance (e.g. school grades) of some individuals (e.g. late chronotypes) can be severely handicapped (Chapters 2 - 5).
2. Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid (attributed to Albert Einstein).
3. The chronotype-effect on grades in high-school students depends on time of day and on school subject. To assess students on an even ground, examinations (especially from scientific subjects) should be scheduled later in the day (Chapters 2 & 3).
4. Simple 'in-home' light interventions can shift sleep and phase of entrainment confirming the lab-known effects of morning and evening light on the circadian clock (Chapter 6).
5. There is a seasonal variation in absenteeism, with a peak in winter. Seasonal school starting times (with later starting times in winter) could be a solution to decrease absenteeism and possibly increase school performance, especially at high latitudes (Chapter 7).
6. Dim-light melatonin onset (one of the most widely used markers of human entrainment) varies with seasonal and weekly structure. When assessing DLMO, it is important to keep the day of assessment constant across participants and conditions (Chapter 8).
7. Weather forecast for tonight: dark. (George Carlin).
8. A conclusion is the place where you got tired of thinking (Martin H. Fischer).