

The Morality of "Larks" and "Owls": The Relationship Between the Circadian Clock and Morality in Decision-Making

Schor, Naama (School: Arcadia High School)

Decision-making is affected by many factors, including the level of morality in decision making. Recently, a relationship between unethical decisions and time-of-day (TOD) was demonstrated. Two possible explanations were suggested for this finding: 1) Ethical behavior is depleted along the day by daily activities; 2) There is a daily rhythm in morality, which is based on the human circadian clock. The current study sought to test these two hypotheses by characterizing the subjects' circadian type (chronotype), which is determined by the circadian clock, and tested the level of morality in their decision-making. I recruited 48 participants who chose whether to participate in the study during the morning or during the evening. Each participant filled a questionnaire that defined its chronotype (morning or evening type), and performed a computerized task to examine the level of morality, in which the participants could make a moral or an immoral decision. I found that in the morning, evening types had significantly lower level of morality (as determined by more immoral decisions), compared to morning types, and evening types had significantly lower level of morality in the morning than in the evening. Within morning chronotypes, there was no significant difference between the morning and the evening. Our results suggest a relationship between the chronotype and the pattern of level of morality in decision-making along the day, and therefore support the hypothesis that there is a daily rhythm in morality, which is based on the circadian clock.

Awards Won:

American Psychological Association: Certificate of Honorable Mention