ECRONICON OPEN ACCESS

EC PSYCHOLOGY AND PSYCHIATRY
Research Article

Practical Application of the Morning-Evening Chronotype (MEQ) Questionnaire in the Diagnosis of Night Eating Syndrome

Melehin AI*

PhD, Clinical Psychologist, Private Psychotherapeutic Practice, Moscow, Russia

***Corresponding Author:** Melehin AI, PhD, Clinical Psychologist, Private Psychotherapeutic Practice, Moscow, Russia.

Received: October 01, 2026; **Published:** October 08, 2026

Abstract

Among people suffering from clinical depression, chronic insomnia, and night eating syndrome in the past and present, there are more of those who are prone to evening chronotype activity. This suggests that the circadian rhythm is one of the predisposing or supporting factors of these disorders.

Keywords: *Chronotype; Depression; Night Eating Syndrome; Chronic Insomnia; Morning Chronotype; Evening Chronotype*

Introduction

The chronotype not only regulates the sleep-wake cycle and mood, but also determines the time of meals and emotional regulation [1-3]. A systematic review on chronotype and eating behavior showed that although the total amount of energy and macronutrients consumed per day is about the same, people with an evening chronotype tend to concentrate most of their diet during the biological night and eat later [4]. At this stage, the chronotype coincides with one of the main symptoms of nighttime overeating syndrome, namely evening hyperphagia (consumption of more than 25% of the daily calorie intake after dinner). This indicates a possible relationship between these two variables. Their relationship can be partially explained by abnormal melatonin secretion, a mismatch between central and peripheral circadian rhythms and changes in the hypothalamic-pituitary-adrenal system, and increased cortisol levels due to a malfunction in the patient's emotional regulation [5].

Aim of the Study

The aim of the study is to identify the relationship between various aspects of the chronotype with symptoms of depression, insomnia, manifestations of night eating syndrome, and a tendency to emotional overeating as a way of emotional regulation.

Materials and Methods

The study involved 110 men and women, 31.6 ± 11.7 years old (M = 26), and the average body mass index was 26.9 ± 4.9 kg/m^2 (M = 27). The majority of participants were women (68%) and unmarried (59%). More than half of the participants had an education of at least 11th grade (59%), and a significant part did not suffer from chronic diseases (83%).

Exclusion criteria: The presence of physical, cognitive, or psychological limitations that prevent effective communication or data collection.

Research methods: Morning-Evening Questionnaire (MEQ), Athens Insomnia Scale (AIS), Three-Factor Eating Questionnaire-R18, Night Eating Questionnaire (NEQ), Hamilton Depression Rating Scale (HDRS/Ham-D).

Results

Increased morning activity and preference for morning hours were associated with less depressive symptoms (overall effect β = -0.37, -0.14, -0.21, -0.17) and a tendency to emotional overeating, night eating syndrome (overall effect β = -0.22, -0.08), in contrast to evening activity. An indirect negative effect of the evening chronotype was observed through depressive symptoms (β = -0.12, -0.10, -0.15, -0.14) on insomnia, night eating syndrome, and emotional overeating. The evening chronotype was significantly associated with higher rates of depression and insomnia (r = -0.34, -0.54 p = 0.013; p = 0.019). The proportion of patients with evening chronotype (64.5%) in our study was higher.

Discussion and Conclusion

In the psychological diagnosis of chronic insomnia, depression, and night eating syndrome, the MEQ scale should be used to determine the preferred time for sleep, wakefulness, physical activity, and mental work during the day. People with the morning chronotype tend to be most active and productive in the morning, while people with the evening chronotype are most active in the afternoon and at night. Unstable rhythms of sleep and wakefulness, characteristic of "owls", can make it difficult to regulate affective states, increasing the risk of developing depression and other affective disorders, including insomnia, night eating syndrome. Thus, the results obtained emphasize the importance of separating different aspects of the chronotype when studying its relationship with psychological factors such as depressive symptoms, insomnia, and a tendency to emotional overeating, night eating syndrome. Among people suffering from clinical depression, chronic insomnia, and night eating syndrome in the past and present, there are more of those who are prone to evening chronotype activity. This suggests that the circadian rhythm is one of the predisposing or supporting factors of these disorders.

Bibliography

1. Azad-Marzabadi E and Amiri S. "Morningness-eveningness and emotion dysregulation incremental validity in predicting social anxiety dimensions". *International Journal of General Medicine* 10 (2017): 275-279.
2. Başar Gökcen B. "From eveningness to food addiction: exploring the roles of night eating syndrome and mindful eating". *Journal of Eating Disorders* 13.1 (2025): 234.
3. Kanagarajan K., *et al*. "Morningness-Eveningness questionnaire in bipolar disorder". *Psychiatry Research* 262 (2018): 102-107.
4. Melehin AI. "Clinical psychology of chronic insomnia. A practical guide". Moscow, DMK Press (2024): 370.
5. van der Merwe C., *et al*. "Chronotype differences in body composition, dietary intake and eating behavior outcomes: a scoping systematic review". *Advances in Nutrition* 13.6 (2022): 2357-2405.

Volume 15 Issue 5 October 2026
©All rights reserved by Melehin AI.