



# To Investigate The Association Between Social Rhythm And Hassles In Patients With Bipolar Affective Disorders

Ruei-You Chen<sup>1</sup>, Yun-Hsuan Chang<sup>2,3,4\*</sup>

<sup>1</sup>Department of Psychology, Asia University, Taichung, Taiwan

<sup>2</sup>Institute of Gerontology, College of Medicine, National Cheng Kung University, Tainan, Taiwan.

<sup>3</sup>Department of Psychology, National Cheng Kung University, Tainan, Taiwan.

<sup>4</sup>Institute of Genomics and Bioinformatics, College of Life Sciences, National Chung Hsing University, Taichung, Taiwan.



## INTRODUCTION

Past few decades, studies worked for finding out the triggers of bipolar affective disorder. Social rhythm disruption and daily stressors might be key factors triggering the onset or recurrence of bipolar affective disorder. However, the intricate relationship between social rhythm disruption, routine disturbances, and affective instability remains nebulous within the context of the progression of bipolar affective disorder.

Our study pursued two primary objectives. Firstly, we sought to explore the links between routine stressors, social rhythm disruptions, and emotional fluctuations in the progression of bipolar affective disorder. Secondly, we aimed to assess the predictive value of daily irritations and social rhythm disturbances in predicting the course of bipolar affective disorder.

## METHODS

This study was approved by the Institute Review Board (IRB) of the University hospital (#B-ER-108-448 and #CMUH109-REC3-036). All patients were referred by a senior psychiatrist for an initial diagnosis. Each patient received a structured interview by trained research assistants using the Mini-International Neuropsychiatric Interview (MINI) (Sheehan et al., 1998) to confirm a diagnosis according to the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5). Participants with substance use, neurological, or neurodegenerative disorders were excluded. For the BD patient group, Young Mania Rating Scale (YMRS) (Young et al., 1978) and Hamilton Depression Rating Scale 17 (HDRS) were used for evaluation of the severity of mania and depression, respectively. In addition, all participants were required to complete the following questionnaires, Social Rhythm Metric (SRM), and the Daily Hassles Scale (DHS) every month for at least three months.

## RESULTS

The SRM score was found significantly negatively correlated with HDRS and YMRS ( $\rho = -.436$ ,  $p < .05$ ;  $\rho = -.463$ ,  $p < .05$ ) respectively. The DHS was found significantly correlated with YMRS ( $\rho = .373$ ,  $p < .05$ ), but not with HDRS ( $p > .05$ ).

Table 1

*Spearman's  $\rho$  correlation between SRM, DHS, HDRS, and YMRS*

Measure	1	2	3	4
1. SRM	–	-.181	-.436*	-.463*
2. DHS	-.181	–	.095	.373*
3. HDRS	-.436*	.095	–	–
4. YMRS	-.463*	.373*	–	–

*Note.* SRM = Social Rhythm Metric; DHS = Daily Hassles Scale; HDRS = Hamilton Depressive Rating Scale; YMRS = Young Mania Rating Scale; \* $p < .05$ ; \*\* $p < .01$

## CONCLUSIONS

The results showed that social rhythm disruptions may influence bipolar affective disorder symptoms. In addition, the more daily hassles stressors the more severe manic/hypomanic symptom was observed in patients with bipolar disorders. The SRM score might possibly predict the severity of BD patients' symptom severity. These findings could emphasize the need for interventions that stabilize social rhythms in managing this disorder. More comprehensive studies are encouraged to further explore these relationships and their clinical implications.

## DISCUSSIONS

This preliminary finding indicated the impact of social rhythmic stability and severity among patients with bipolar disorders. However, some limitations should be addressed. First, a small sample size so far might limit our findings in general. In addition, the patients recruited were from outpatient clinics, and they were relatively more stable. A longitudinal design could be conducted further to confirm the results.