Daily Mood Variability and Academic Stress in First-Year University Students

Yamada Riko[*]

Department of Psychiatry, Osaka Medical University, Osaka, Japan

DESCRIPTON

The transition to university represents a critical life stage marked by new responsibilities, increased autonomy and substantial academic challenges. For many students, especially those in their first year, adapting to the demands of university life involves a complex interplay of cognitive, emotional and social adjustments. The combination of elevated academic expectations and reduced parental oversight can place students under persistent psychological strain, potentially leading to fluctuating emotional states and impaired well-being. To better understand how academic stress affects emotional functioning in this population the present observational study tracked mood variability and perceived stress among first-year university students over a 30-day period. The study involved 120 participants, all enrolled in their first semester at a large urban university. Participants were asked to complete self-reported mood ratings twice daily once in the morning and once in the evening for 30 consecutive days. In addition, they provided weekly reflections on their perceived academic stress levels, including factors such as workload, upcoming deadlines and self-efficacy in managing academic responsibilities.

The findings revealed a significant association between higher levels of perceived academic stress and greater mood variability over the course of the month. Students who consistently rated their academic stress as high experienced more pronounced mood swings, alternating between emotional highs and lows across the daily check-ins. Importantly, this mood instability was not directly linked to scheduled exam periods or major academic events. Instead, the data indicated that ongoing, day-to-day academic demands such as managing continuous coursework, meeting assignment deadlines and navigating new learning environments had a more sustained influence on students' emotional regulation. One of the more striking findings was that students who exhibited high mood variability were also more likely to report feelings of social isolation and physical fatigue. These students described experiencing less connection with peers, reduced motivation to engage in social or extracurricular activities and frequent exhaustion. The combination of

emotional instability, perceived isolation and fatigue may contribute to a negative feedback loop in which academic stress undermines emotional balance, leading to withdrawal and further emotional strain. While none of the participants were formally diagnosed with a mental health condition at the time of the study, the patterns observed suggest that non-clinical emotional disturbances can still significantly affect daily functioning and quality of life.

These outcomes align with broader research suggesting that chronic, low-grade stress can be just as disruptive to emotional well-being as acute stressors. While universities often focus their mental health support services around predictable periods of heightened demand such as exam weeks or midterm periods this study suggests that the steady pressure of academic life plays a more pervasive role in shaping students emotional states. As such, mental health services may need to re-evaluate how they monitor and support students, particularly those in their first year who are still developing coping strategies and social support systems. Rather than concentrating solely on crisis intervention during high-stress periods, universities might consider implementing more consistent preventative strategies aimed at monitoring emotional fluctuations throughout the academic term. Routine emotional check-ins, digital mood-tracking tools and low-threshold counselling sessions could help identify students who are struggling before their difficulties escalate. These tools could be embedded into student wellness platforms or academic advising structures allowing for early detection and intervention in cases where emotional instability begins to interfere with academic or social functioning.

Additionally, the findings underscore the value of helping students build resilience and develop practical strategies for managing day-to-day academic stress. Workshops or orientation programs focused on time management, stress reduction techniques and emotional regulation may serve as protective factors during this vulnerable transition period. Peer mentoring and structured social engagement opportunities could also mitigate feelings of isolation and encourage the development of meaningful connections, which are known to buffer against stress and emotional dysregulation. It is worth noting some

limitations of the study. The reliance on self-report measures may introduce subjectivity and response bias, as students might underreport or overestimate their emotional states or stress levels. Furthermore, the sample was drawn from a single university which may limit the generalizability of the findings to other educational contexts or student populations. Future research could explore these relationships across multiple institutions and academic disciplines and incorporate objective indicators of stress or academic performance (such as physiological markers or data) to strengthen the robustness of conclusions. In conclusion, this study highlights the significant role of ongoing academic stress in shaping mood variability among first-year university students. Even in the absence of major academic events or clinical mental health diagnoses the persistent demands of university life can disrupt emotional equilibrium, contributing to feelings of fatigue and disconnection. These findings suggest a need for universities to adopt proactive and continuous support strategies aimed at fostering emotional consistency and resilience in their student populations. By shifting focus from reactive to preventative care institutions can better support student well-being and academic success throughout the academic journey.