

To what extent do cognitive processes (rumination and fear of missing out) predict anxiety severity in students?

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Anxiety has become an increasingly alarming issue within student populations following the rise of the twenty-first-century digital era. This study focuses on two possible underlying factors: rumination (the repetition of negative thoughts) and the fear of missing out, or rather, "FOMO". This study aims to find the extent to which rumination predicts anxiety severity and if FOMO increases anxiety by amplifying students' perception of missed opportunities.

To further comprehend anxiety severity within our high school population, 103 students from grades nine to eleven from the Western Academy of Beijing (WAB) were surveyed to identify the relationship between anxiety, rumination, and FOMO. Students filled out voluntary questionnaires, which formed the basis of the data. Data was collected using pre-established academic systems, modified to be more applicable to WAB. The Hospital Anxiety & Depression Scale (HADS) was applied to assess overarching anxiety symptoms. Rumination was measured using the Ruminative Responses Scale, and anxiety symptoms were assessed via a composite of the Beck Anxiety Inventory. Major depression was diagnosed using the Structured Clinical Interview for DSM-IV (SCID), with a 100% inter-rater reliability on a random subsample. All analyses controlled for gender, age, and income. The Fear of Missing Out Scale: FOMOS (Przybylski) concerns habits associated with FOMO that may amplify anxiety.

There are no right or wrong answers. This study is anonymous - please answer honestly.

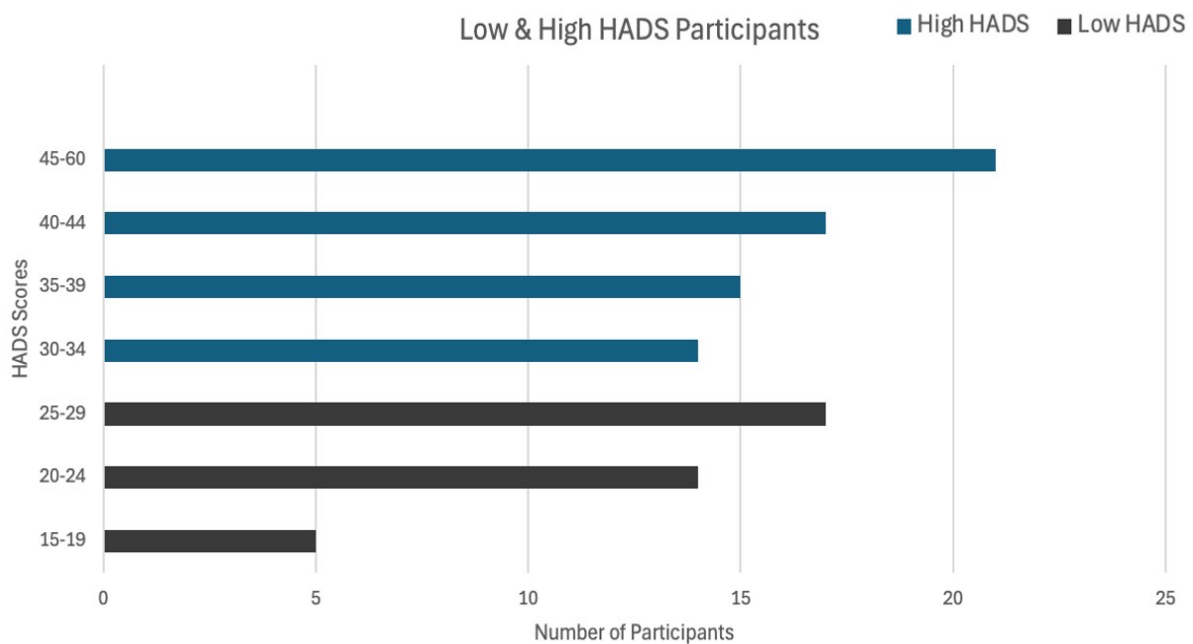
Please indicate how often you have experienced the following using the scale below:

- 1 - Not at all true of me.** You strongly disagree, and this never applies to you. *Example: "I never feel this way. This doesn't describe me at all."*
- 2 - Somewhat not true of me.** You disagree, but this happens once in a while. *Example: "I experience this occasionally, but it's not a big part of my life."*
- 3 - Somewhat true of me.** You agree, and this happens fairly regularly. *Example: "I notice this happening somewhat often."*
- 4 - Completely true of me.** You fully agree, and this is a constant and defining experience. *Example: "This describes me perfectly. I feel this way all the time."*

Scale used in "Study on Student Wellbeing & Mental Health - 2026" survey

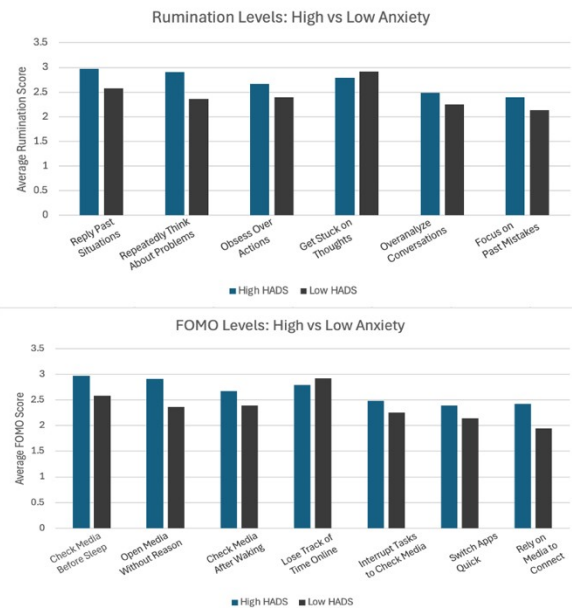
This study used an adapted version of the Przybylski FOMO Scale with a four-point scale to eliminate neutrality among the results. A substantial limitation of the 2013 FOMO scale is that it was conducted before the rise of highly immersive platforms like TikTok and modern algorithm-driven content. Social media environments today are much more intense and personalized,

meaning the psychological effects of FOMO may now be even stronger. To combat this flaw, the modernized scale includes questions focused heavily and more closely on screen time and digital awareness, growing factors contributing to the creation of anxiety symptoms in today's adolescents. To protect the experiment's internal validity, the exact research topic was not disclosed to the students. Participants remained anonymous and held the right to withdraw at any time.



Graph: Participants (103 total) scoring between 15-29 were sorted into low-anxiety symptoms test group, whereas participants scoring between 30-60 were sorted into high-anxiety symptoms test group

Data indicated that 65% of students exhibited high-anxiety symptoms, while 35% displayed low-anxiety symptoms. The majority of students were within the scope of the highest anxiety band, indicating that anxiety symptoms have a high prevalence amongst our high school students. Findings also evidenced that high-anxiety students reported more frequent compulsive behaviors in relation to social media, along with substantial reliance on media to maintain connections. Students who demonstrated higher anxiety symptoms had a daily mean screentime ~33% greater than that of low-anxiety students. Nevertheless, rumination was the strongest predictor of anxiety severity among students, suggesting that anxiety is associated not only with external pressures but also with cognitive processes. Students in the high anxiety group reported substantially higher levels of rumination than those in the low anxiety group, with a 25% increase. Particularly elevated scores in the high-anxiety group reported more replaying of past events, self-criticism, repetitive thinking, and difficulty letting go of negative thoughts. These findings suggest that rumination functions as a central maintaining factor in student anxiety, creating a self-reinforcing cycle of negative thinking that is especially relevant during high-stress periods. FOMO behaviors were also notably higher in this group, suggesting they act as triggers that extend and amplify ruminative thinking. Frequent comparison with others online, along with compulsive checking of social media, increases emotional stress and encourages further overthinking. In addition, high-anxiety symptom students reported relying more on social media to stay socially connected, scoring 2.42, compared to 1.94 in the low-anxiety group. These results support the cognitive model of anxiety, which suggests that anxiety is not only caused by external events, but is also maintained by internal thought patterns, which connects with fear of missing out.



Graphs: Comparison of rumination and FOMO levels with high and low anxiety symptom scores within the study

These findings support the cognitive model of anxiety in adolescents and emphasize the potential value of school-based programs that combine cognitive restructuring, coping skill development, and stress management to reduce anxiety within the student body. With this in mind, to prevent lapsing into cycles of anxiety, it is recommended to recognize negative thought patterns; maintain healthy social media habits; prioritize the real world; and seek holistic support when needed. Guardians may also provide further support by encouraging communication, promoting healthy digital habits, and, if necessary, accessing appropriate mental health resources.