

Symptoms Of Major Depressive Disorder In Medical Students Before And After Examinations

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Background

Research shows that medical students experience high rates of depressive symptoms throughout their training, with female medical students often found to have higher rates of depression compared to their male counterparts ^{1,2,3}. In addition, "high levels of performance-basedself-esteem, and depressive symptoms" in medical students have been linked to increased risk of being diagnosed with a psychiatric illness such as **MDD** later in training ⁴. However, there is limited research on major depressive disorder (MDD) symptoms experienced by medical students directly surrounding medical school examinations. **Previous research from our group suggests that** female medical students experience more symptoms of depression after exams compared to male medical students ⁵. However, in the previous study symptoms were measured only directly after exams.

Aim:

In the present study, we aimed to look at symptoms of major depressive disorder in firstand second-year medical students three days before and three days after medical school exams to better characterize the effects of exams on students' mental health.

Hypothesis

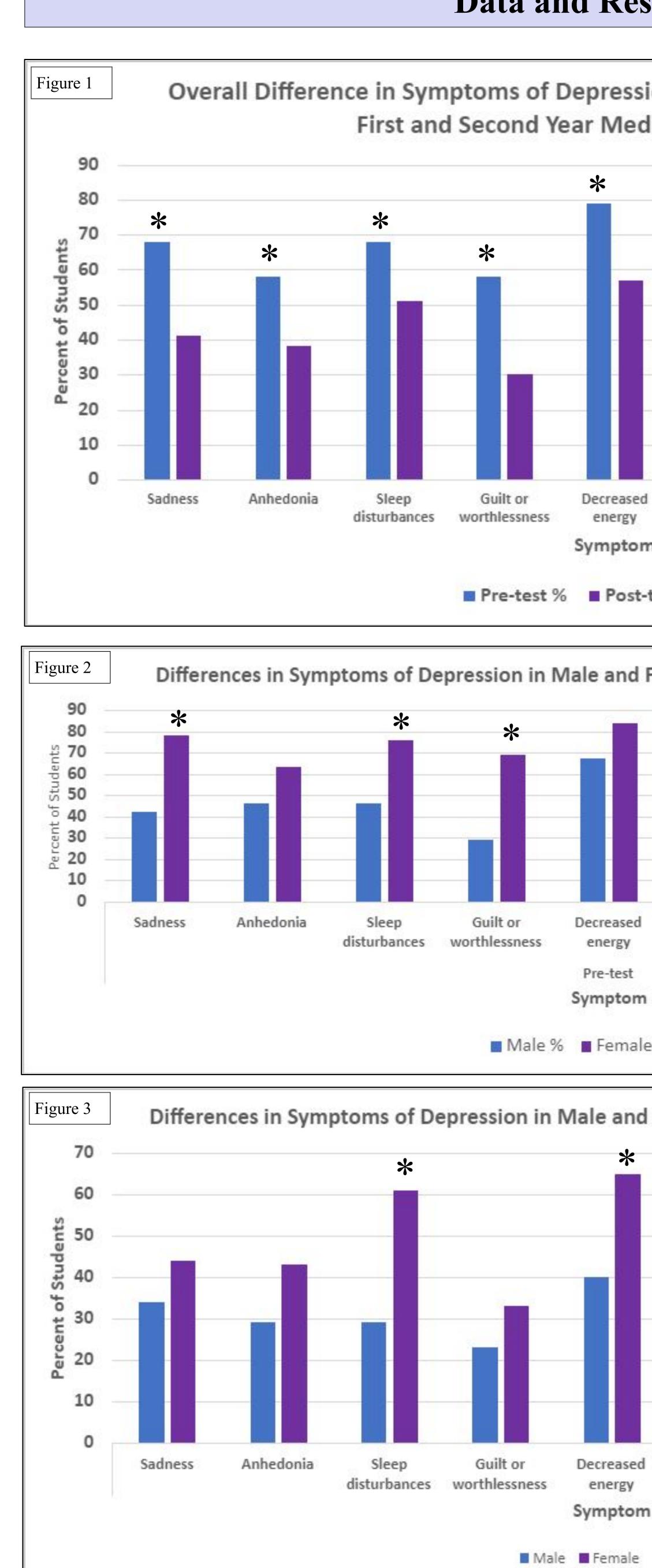
1. Female medical students will have more symptoms of depression both before and after medical school exams 2. Medical students will experience symptoms of MDD both directly before and after medical school exams while *experiencing more symptoms after exams*

Methods:

An anonymous and secure survey was sent via University email to first- and second- year medical students on the day of medical school exams, and students were asked about symptoms of MDD as defined by the DSM-V for the three days leading up to the exam. A second survey was sent out three days after the exam to ask about the same symptoms in the three days since the exam.

Data and Results Overall Difference in Symptoms of Depression Before and After Exams in First and Second Year Medical Students Suicidial ideation psychomotor Chance in Decrease agitation appetite Symptom statistical significant P < 0.05 indicated by Pre-test % Post-test % Differences in Symptoms of Depression in Male and Female Medical Students Before Exams Suicidial Psychomoto Guilt or Chance i Decrease ideation agitation Pre-test Symptom statistical significant P < 0.05 indicated by Male % Female % Differences in Symptoms of Depression in Male and Female Medical Students After Exams Guilt or Suicidial Chance in Decreased Psychomoto Decreased ideation agitation concentration appetite energy

statistical significant P < 0.05 indicated by



- students.
- care leaders.



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Conclusions:

• •Medical students experienced more symptoms of depression directly before exams compared to directly after exams. This was significant for all symptoms of major depressive disorder (MDD) except for psychomotor agitation or retardation and suicidal ideation.

• • Both before and after exams, female medical students experienced symptoms of MDD at overall greater rates compared to male medical

• • Both male and female medical students experience symptoms of depression at high rates both directly before and after exams.

• • This study shows the importance of understanding how medical school exams impact students' mental health, and supports further research on the topic to better find ways to improve the mental health of our future health

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