



# Attitudes Towards Antidepressant Medications Among Neuroscience Students



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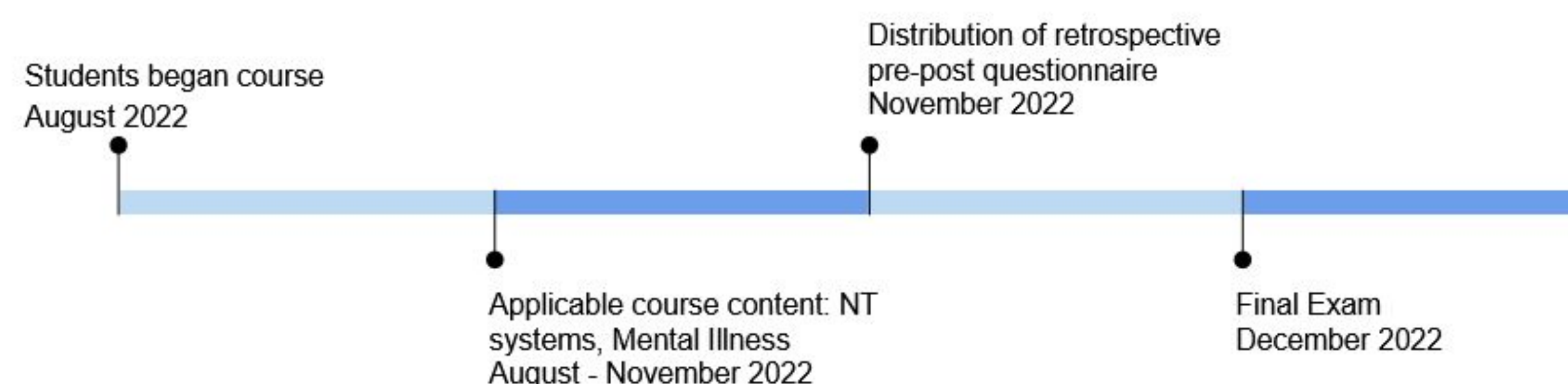
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## Introduction

- Stigma is a common reason many individuals do not seek out or adhere to treatment for mental illness.<sup>1</sup>
- Education is commonly used to reduce stigma towards individuals with mental illness, but less so to target stigma towards antidepressant treatment.<sup>2</sup>
- Determining if neuroscience education reduces stigma towards antidepressants will help identify targets of intervention to aid treatment seeking and adherence.

**If equipped with better knowledge of mental illness, serotonin systems, and reuptake inhibition, then students may hold less stigmatizing beliefs.**

## Experimental Design



The sample of surveyed undergraduate students (N = 257) were mostly female (72.3%) intending to pursue a healthcare career in the future (66.8%). All of the participants were enrolled in Introduction to Neuroscience. 45.7% of students were White, 28.9% were Asian, 8.7% were Multiracial, 8.6% were Black, and 6.6% were Hispanic or Latinx.

Measure	Survey Item
Physician Overconfidence and Adherence	"Individuals know better than doctors regarding when to stop taking antidepressants."
Addictive Substance	"Antidepressants are addictive substances."
Unnatural for Mind and Body	"It is unnatural for the mind and body to be controlled by medications such as antidepressants."
Prescribed too Frequent	"Doctors prescribe antidepressants too frequently."
Belief of Harmfulness	"In general, I believe the good of antidepressants outweigh the bad"
Similarity to Recreational Drug	"Antidepressants do not make you feel high, change your sensory experiences or result in ups and downs."

Table 1. Survey items adapted from the Drug Attitudes Inventory and the Beliefs about Medicines Questionnaire.

## Stigmatizing Beliefs Altered Throughout Semester

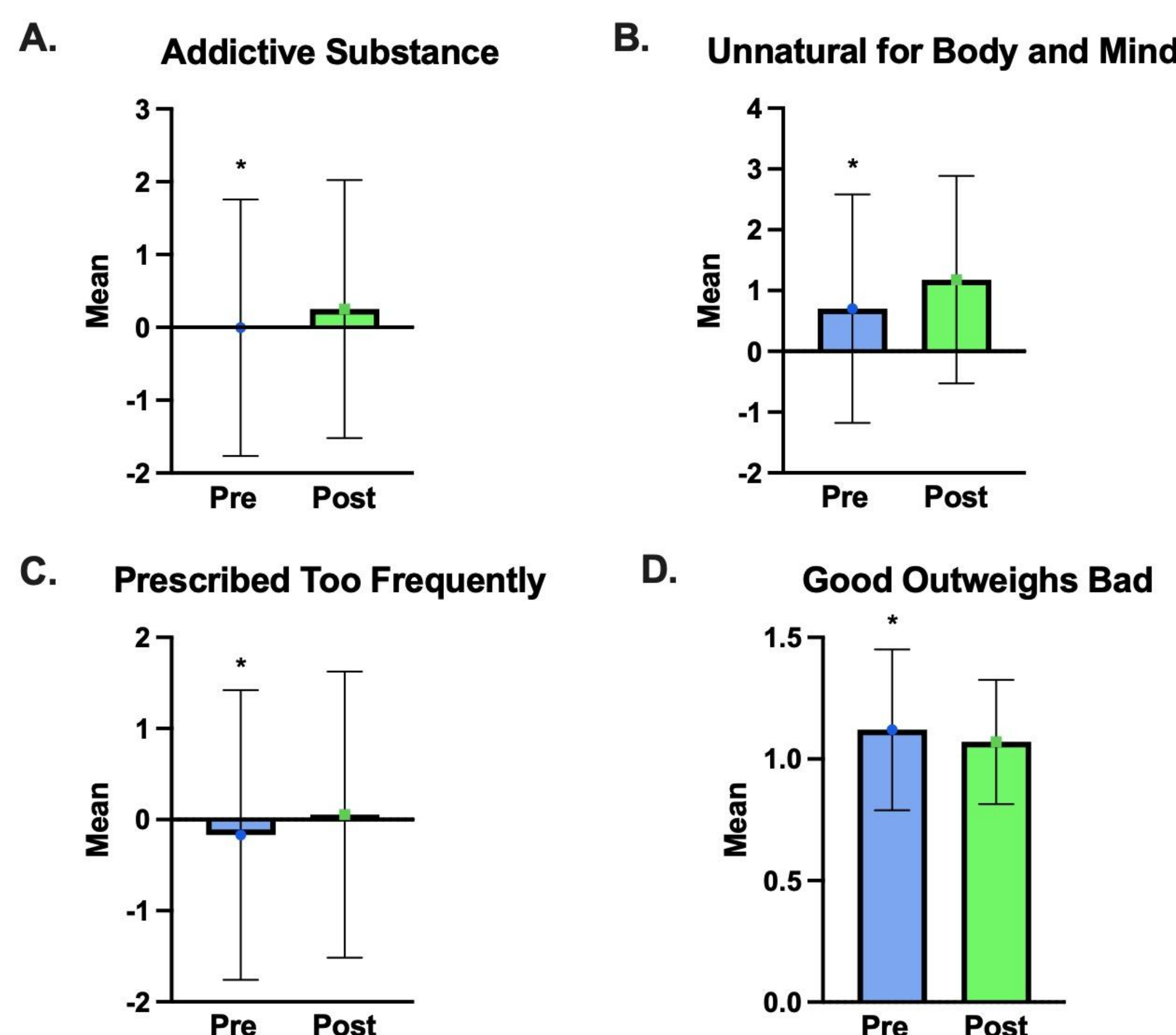


Figure 1. From beginning to end of the course, students were significantly less likely to believe that antidepressants are addictive substances, unnatural for the body and mind, prescribed too frequently, or harmful ( $p < 0.05$ ).

## Do Career Aspiration Influence Students' Beliefs?

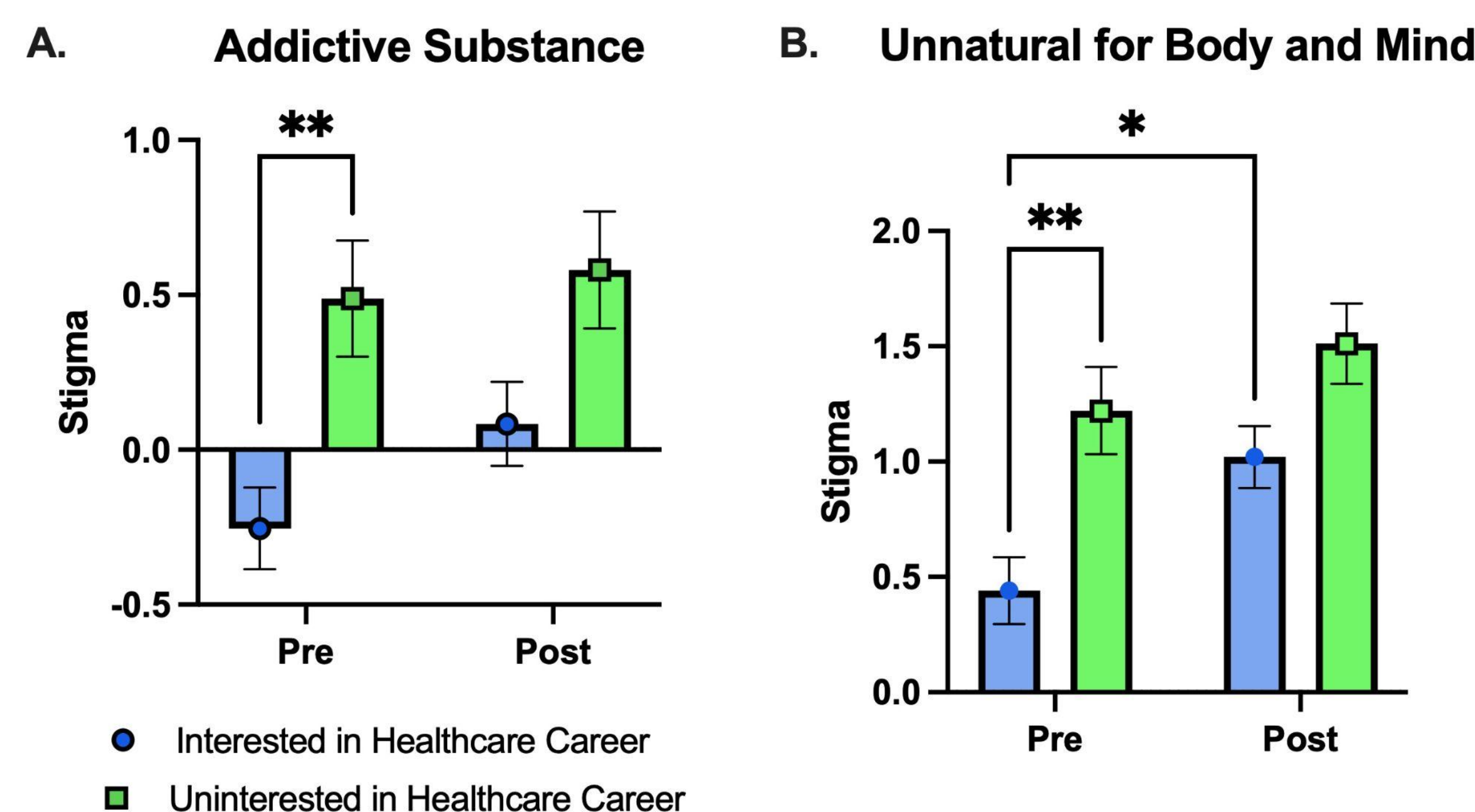


Figure 2. Aspiring healthcare students and their peers held statistically different beliefs regarding whether antidepressants are addictive ( $F(1, 505) = 14.48, p < 0.05$ ) and unnatural for the mind and body ( $F(1, 508) = 14.61, p < 0.05$ ).

## What Influenced of Students' Beliefs?

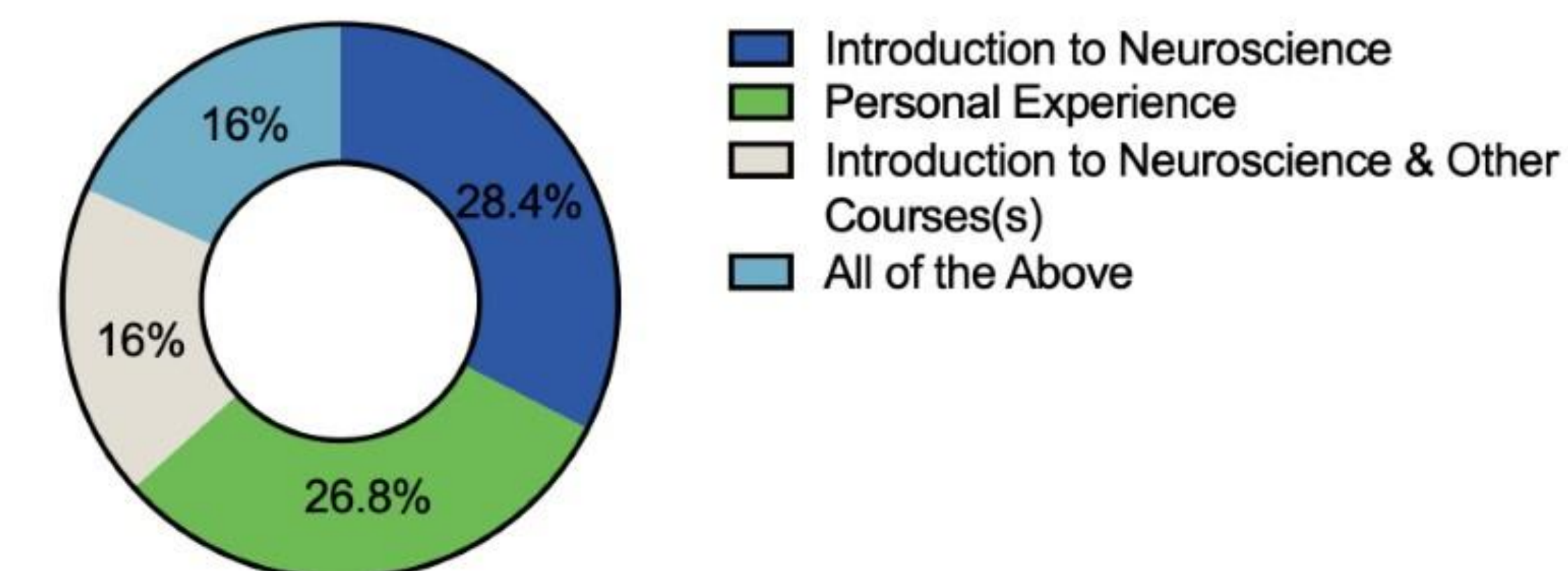


Figure 3. 28.4% of students surveyed reported that in NSCI 175, they learned things that corrected some of their previously held beliefs surrounding psychiatric conditions and/or treatment. Additionally 32% of students reported NSCI 175 content along with personal experience or content from other courses shaped their perceptions.

## Discussion

- Results indicate that neuroscience education has utility in reducing stigma toward antidepressant medication. Perhaps understanding the biological mechanism of medications corrects previously held misconceptions.
- Correcting misconceptions through educational interventions may help destigmatize treatment, which is shown to increase treatment seeking and treatment adherence. Subsequently, seeking and sustaining treatment is associated with better mental health, mood, and function.<sup>1</sup>
- Future research should consider conducting pre-to-post intervention surveys, including more diverse populations, and implementing longer follow-up periods to assess the persistence of changes in attitudes towards mental illness.

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## Citations

