

Field Courses and Improving Student Mental Health: Undergraduate Perspectives from UCSB

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Acknowledgements



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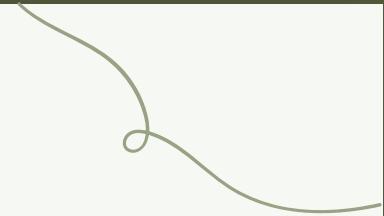
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Introduction: Academia and Mental Health





Problem: Undergraduates are facing an unprecedented mental health crisis.¹

Mental health impacts confidence, motivation, and sense of belonging.²

1. Blanco et al., 2008; Pedrelli et al., 2015; Ribeiro et al., 2018; Mofatteh, 2020
2. Beltran et al., 2020; Pedler et al., 2022

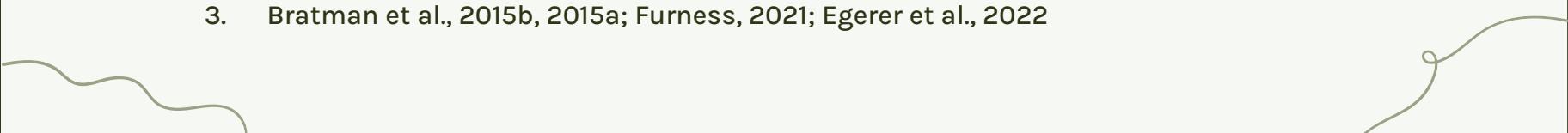




Solution: Integrate more outdoor learning into curriculum.

Nature exposure is linked to improve mood, motivation, and concentration.³

3. Bratman et al., 2015b, 2015a; Furness, 2021; Egerer et al., 2022



Our Question

**What are the
benefits of field
courses to mental
health and
academic learning
in comparison to
other course types?**



Prediction

Field courses would improve both mental health and academic learning more than other courses types.



O2

Methods: Locally-Sourced Undergraduates

(Tariff and Cruelty Free, IRB Approved)





Data Collection

Online Surveys

- Distributed December 2023 to May 2024
- Sent to 4 departments at UCSB
- Multiple choice and free response questions

UCSB EEMB

UC SANTA BARBARA

Environmental Studies Program

MCDB Molecular, Cellular, and
Developmental Biology



Focus Group Interviews

- 1-2 students
- Interviewed on the following:
 - Learning experiences at UCSB
 - Sense of belonging in academia





Qualitative Analysis: Analysis of text, audio, and/or images to understand people's experiences and highlight themes.



Field course: A course held outdoors at least 50% of the time.

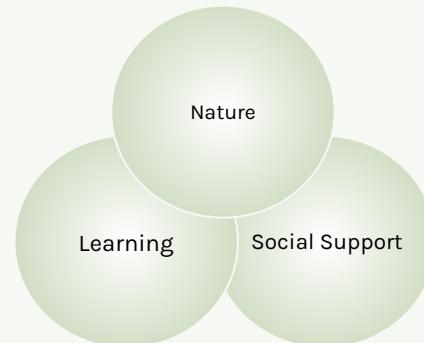




Qualitative Analysis



We created our own theoretical framework by borrowing ideas from four pre-existing ones



Coding Excerpts

“Although I love what I'm learning about, it is so difficult to keep up with the material, as well as to balance other responsibilities such as work, family, and my mental well-being.”

- **Barriers** >> Barriers to classes/opportunities >> **Difficulty**
- **Motivations** >> Motivations for classes/opportunities >> **Interest**



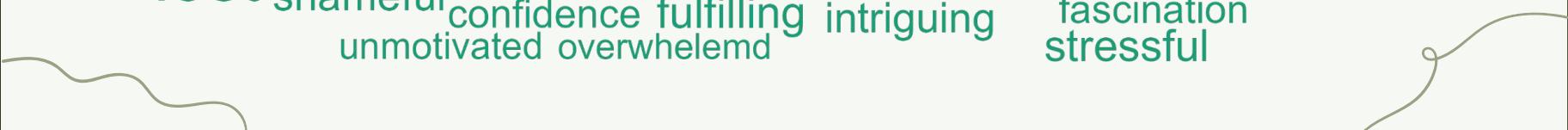
O3

Results: Fruits of (Y)our Labor



stressed

hopeful
regretful
optimistic
ashamed
pleased
rushed
nervous
challenging
drained
tiring
exciting
content
happy
anxious
eventful
proud
tired
good
lonely
conflicted
stressed
excited
grateful
pressured
thankful
satisfied
lucky
overwhelmed
challenged
confused
frustrated
curious
sad
doubtful
focused
interested
disappointed
motivating
lost
annoyed
cproud
excitement
worried
troubled
shameful
confidence
fulfilling
intriguing
fascination
unmotivated
overwhelmed
stressful



The Effectiveness of Field Courses

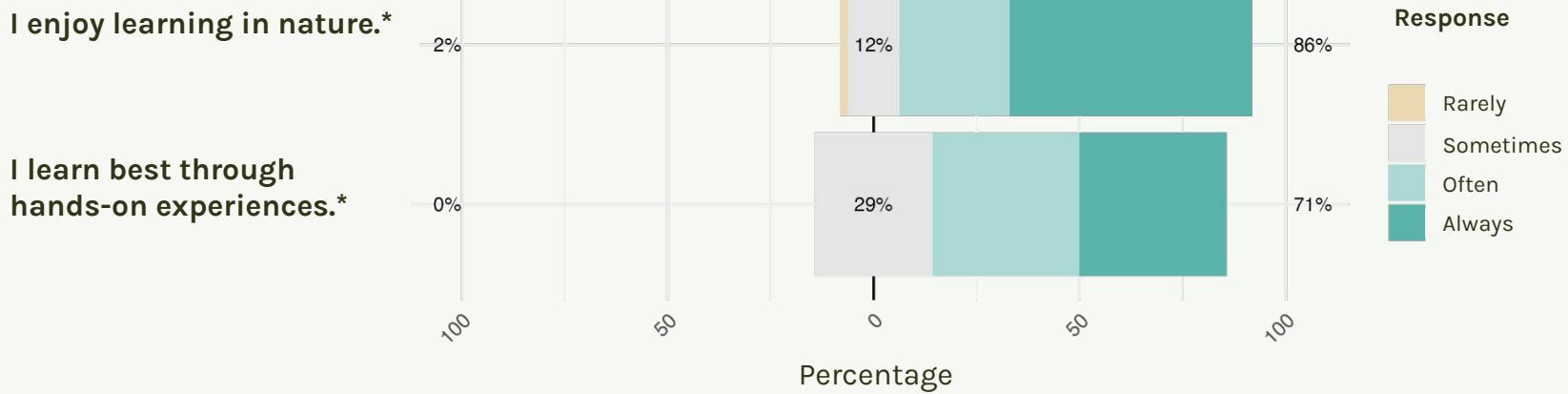
“There was ... a field portion of an invertebrate zoology class I took where we did go tide pooling. I still remember all the Latin names of the animals we saw. Because you were there. You were seeing it. And it's like, I'll never forget. It was just fun memories.”

} Positively Engaged

Outdoor learning - Comprehension - Hands-on Learning

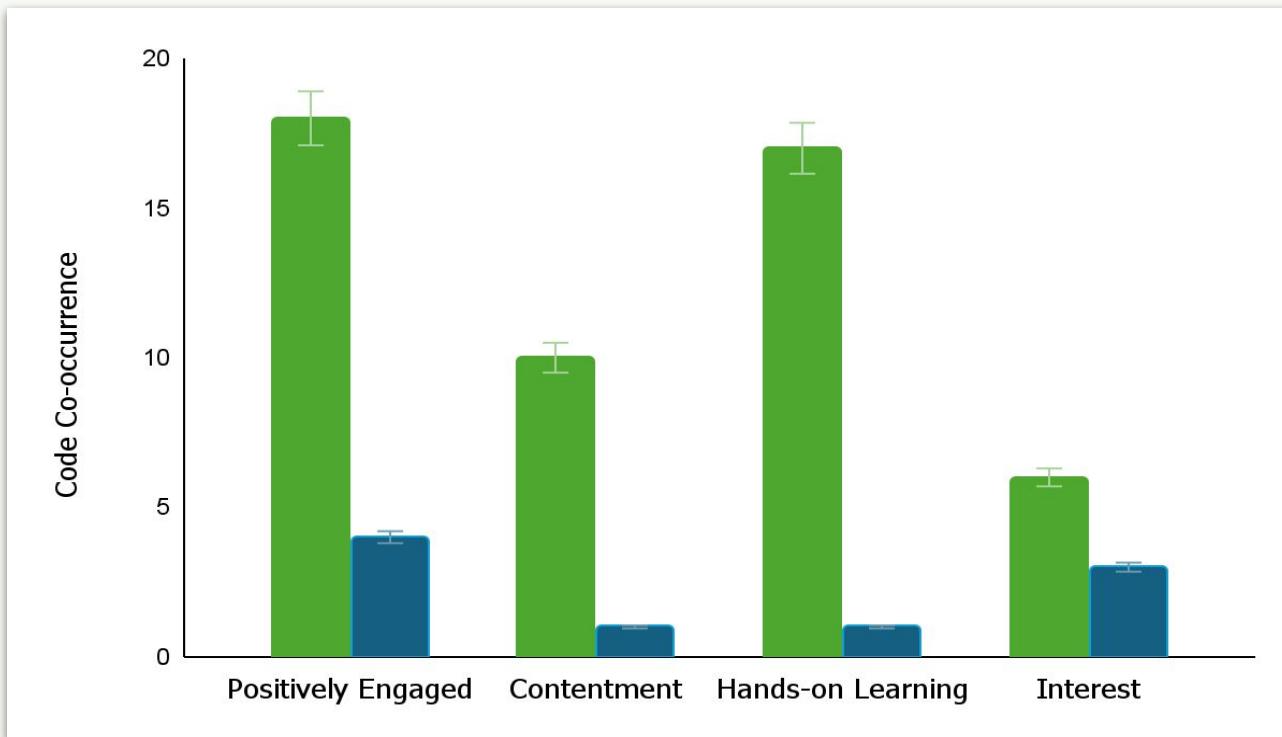


Notable Likert Scale Responses



* n = 56 respondents

Field vs. Lecture Courses



O4

Conclusions: Touch Grass



Prediction

Field courses DID enhance both mental health and academic learning more when compared to other course types.



Benefits of Field Courses

1. Improved mental health and learning
2. Provide hands-on learning experiences
3. Connecting with peers and faculty
4. Applying field research techniques



Benefits of Field Courses

5. Inspiring a new generation of field biologists



A scenic landscape photograph showing rolling green hills and mountains in the background, leading to a coastal town visible through the mist. The foreground is filled with dense green shrubs and rocks, suggesting a coastal or desert environment.

What inspired *you* to pursue
your studies in ecology?

La Cumbre Peak - EEMB 127L

Plant Biodiversity Lab - 5/20/24

What inspired *you* to pursue
your studies in ecology?

Citations

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Questions?

Scan the QR code to see our codebook!

