

20th Annual

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RESEARCH FORUM

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presentations from students within the
Pikes Peak Region.



SATURDAY | APRIL 27, 2024

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Registration
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Dwire Hall Atrium

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Dwire Hall Theatre

Springs



Keynote Speaker

Dr. Jessi L. Smith

Vice Provost & Associate Vice Chancellor for
Research, Research Integrity Officer, and
Professor of Psychology

Lab Rats and Lab Mates: The Motivational Push and Pull of Undergraduate Research Experience

Faculty research labs are essential to inspiring their students' passion for discovery and innovation. That lab setting is a vibrant and immersive "microculture" where students exchange ideas, norms, and values with their fellow lab mates and faculty mentors. In this presentation,

we will learn how the undergraduate research experience is a key social context in which students come to understand what it means to be a researcher. We will review findings from a series of national longitudinal and experimental studies with over 1,000 undergraduates to illustrate how the research experience pushes and pulls students' identity-development, motivation, and career aspirations. We end by reviewing evidence-based strategies for creating and sustaining an inclusive and diverse research microculture to shape the next generation of scholars and advance the frontiers of knowledge.





COLORADO COLLEGE



From Left: Basimah Curry, Cerella Zhao, Luke Bleckman, Isabella Hageman, Denise Benitez, Riley Hester, Gina Lynch, Jack Higgins, Fargol Yeganeh Fathi, Violet Datcu, Luca Pieretti, Annie Seymour





Virtual Bonds, Real Effects: Female Otome Game Players' Self-Perceptions and Empowerment
 Curia Li (Yankai) Zhao and Tomi Ann Roberts
 Colorado College, Colorado Springs, CO

Abstract
 Otome games are a popular genre of Japanese role-playing video games (RPGs) that are designed specifically for female players. These games typically feature a female protagonist who interacts with and forms relationships with several male characters. The game's narrative and mechanics are designed to provide a sense of agency and empowerment to the player. This study examines the self-perceptions and empowerment of female otome game players. We conducted a survey of 100 female otome game players, measuring their self-perceptions of agency, competence, and empowerment. We also measured their engagement with the game and their overall satisfaction. The results show that otome game players report higher levels of self-perceived agency, competence, and empowerment compared to non-players. Additionally, we found that otome game players are more engaged with the game and report higher levels of satisfaction. These findings suggest that otome games can provide a sense of agency and empowerment to female players, which may have positive effects on their self-perceptions and overall well-being.

Introduction
 Otome games are a popular genre of Japanese role-playing video games (RPGs) that are designed specifically for female players. These games typically feature a female protagonist who interacts with and forms relationships with several male characters. The game's narrative and mechanics are designed to provide a sense of agency and empowerment to the player. This study examines the self-perceptions and empowerment of female otome game players. We conducted a survey of 100 female otome game players, measuring their self-perceptions of agency, competence, and empowerment. We also measured their engagement with the game and their overall satisfaction. The results show that otome game players report higher levels of self-perceived agency, competence, and empowerment compared to non-players. Additionally, we found that otome game players are more engaged with the game and report higher levels of satisfaction. These findings suggest that otome games can provide a sense of agency and empowerment to female players, which may have positive effects on their self-perceptions and overall well-being.

Method
 We conducted a survey of 100 female otome game players. The survey included questions about their self-perceptions of agency, competence, and empowerment, as well as their engagement with the game and their overall satisfaction. We also collected demographic information about the players, including their age, education level, and gaming experience. The survey was distributed online and completed by the players in their own time.

Results
 The results of the survey show that otome game players report higher levels of self-perceived agency, competence, and empowerment compared to non-players. Specifically, otome game players scored significantly higher on measures of self-perceived agency, competence, and empowerment than non-players. Additionally, we found that otome game players are more engaged with the game and report higher levels of satisfaction. These findings suggest that otome games can provide a sense of agency and empowerment to female players, which may have positive effects on their self-perceptions and overall well-being.

Conclusion
 This study provides evidence that otome games can provide a sense of agency and empowerment to female players, which may have positive effects on their self-perceptions and overall well-being. These findings have implications for the design of video games and other digital media, suggesting that games designed to provide a sense of agency and empowerment may be beneficial for female players.

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14
 MONDAY, APRIL 14, 2025

25
 WEDNESDAY, APRIL 25, 2025





50 Years

Digital Media Consumption and Hours Spent on Fergal Negan Fan The Colorado College Council on Research



Background

Main Research:

- Identify what digital media fans are using and how often they use it.
- Determine what digital content consumers are using and how often they use it.

Research Objectives:

- Identify the digital media fans are using.
- Determine how often fans use digital media.
- Determine what digital content consumers are using.
- Determine how often fans use digital content.

Methodology:

Data Collection:

Analysis:

Conclusion:



A woman in a blue jacket and jeans is walking past the poster in the background.

A woman with long brown hair, wearing a grey plaid blazer, a white tube top, and blue jeans, stands next to the poster. She is looking towards the man in the suit.

A man in a blue suit with a sergeant's rank insignia on his sleeve is talking to the woman. He has his hands clasped in front of him.

Another man in a blue suit is visible in the background on the right side of the image.



Assessing the Equine Guided Learning and Healing Experience A Self-Determination Theory Perspective

Lucia Perez
The Colorado College, Colorado Springs, CO

Abstract

Introduction

Methods

Results

Conclusion

References

Appendix

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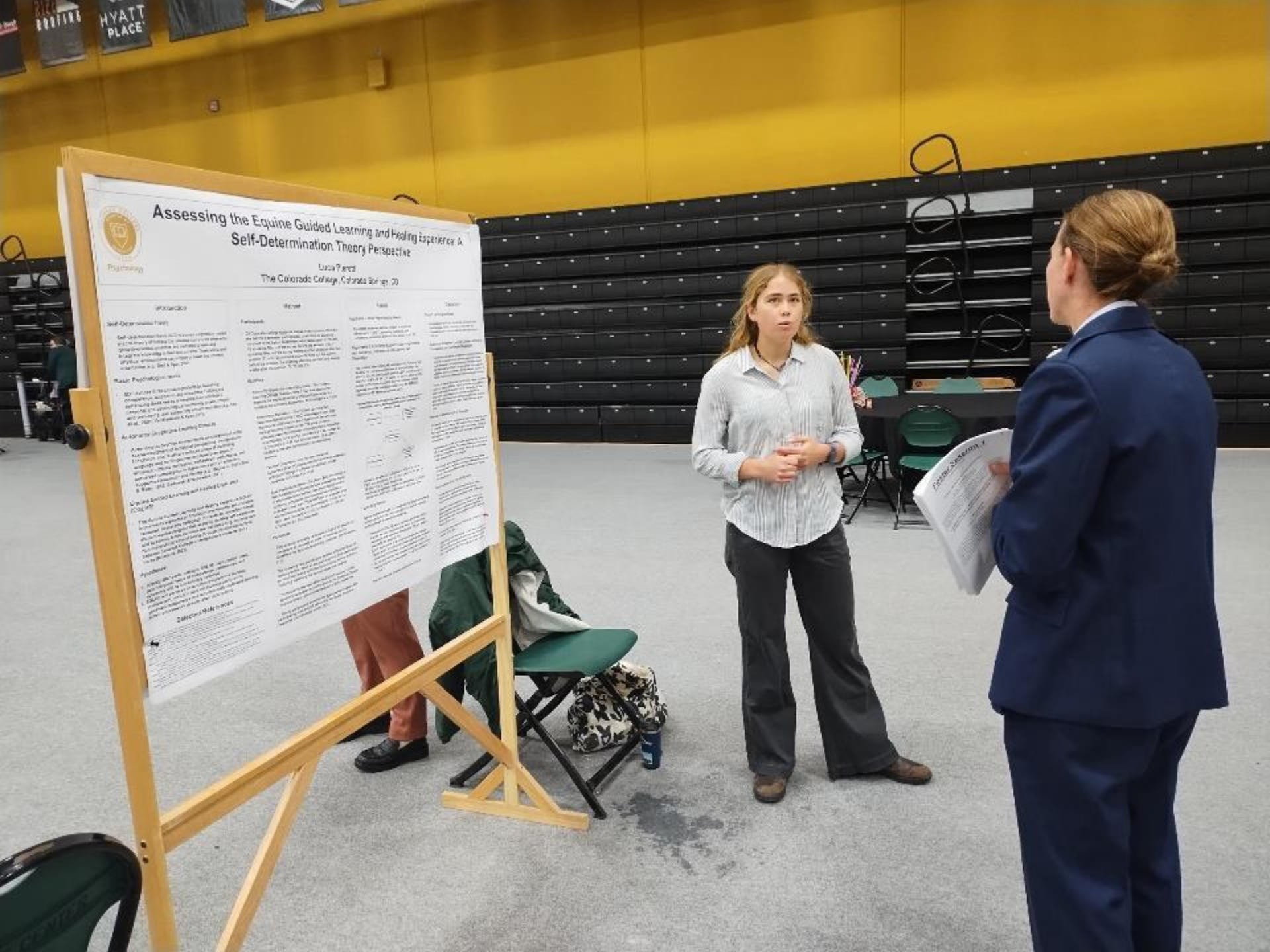
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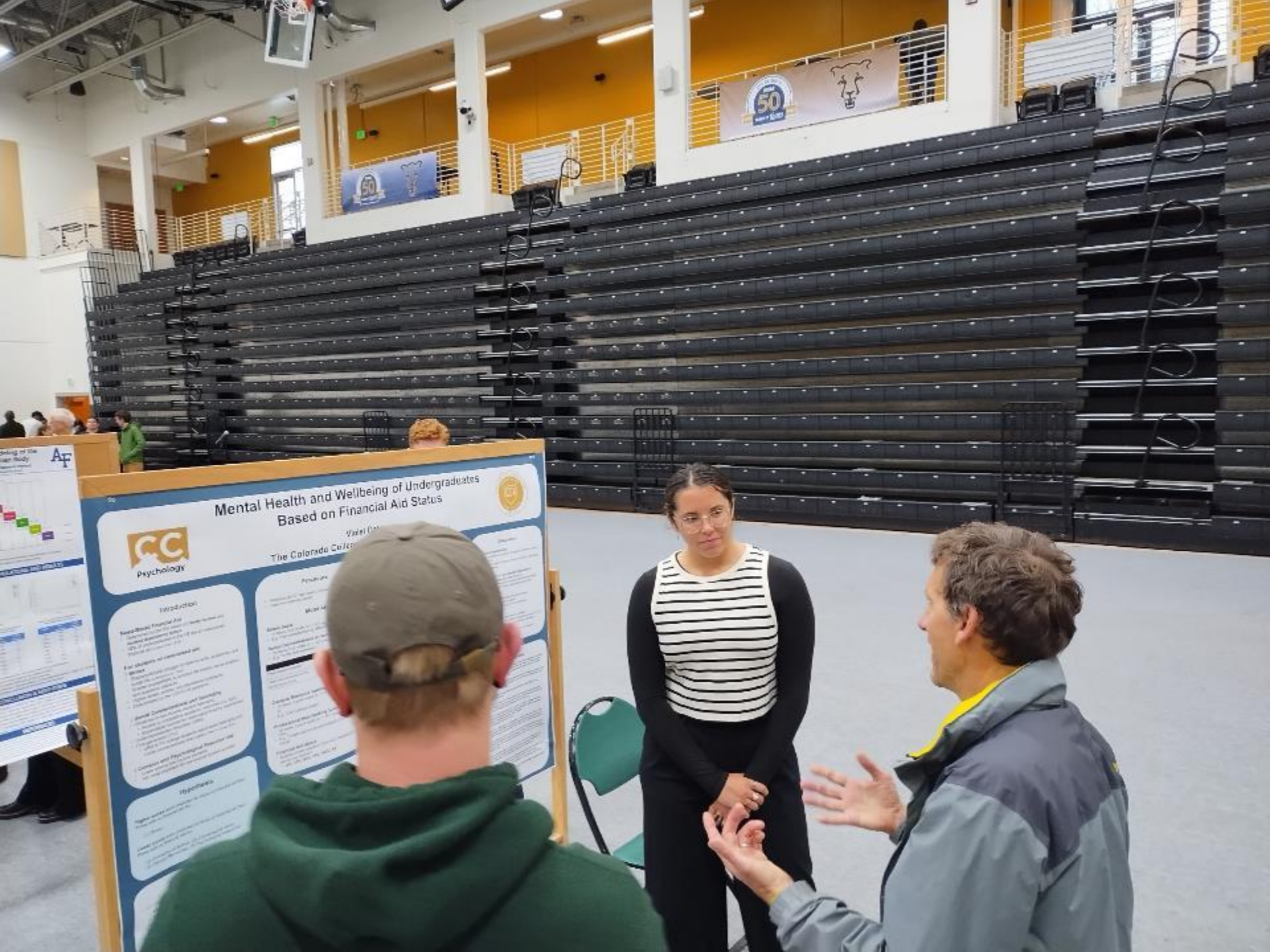
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Table 100

Lucia Perez, a young woman with long brown hair, wearing a light blue and white striped button-down shirt and dark grey trousers, stands in the center of the frame. She has her hands clasped in front of her and is looking towards the woman on the right.

A woman in a dark blue business suit, with her hair pulled back, stands on the right side of the frame. She is holding a white paper or brochure and appears to be in conversation with Lucia Perez.





Mental Health and Wellbeing of Undergraduates Based on Financial Aid Status

Vajal G.

The Colorado College



Introduction

Need-Based Financial Aid
The amount of need-based financial aid a student receives is directly related to their family's income and assets. Students with higher financial need receive more aid, which can significantly impact their ability to attend college.

Financial Stressors and Wellbeing
Financial stressors, such as the need to work long hours or take on excessive debt, can lead to increased anxiety, depression, and overall poor mental health. These stressors can also impact academic performance and social engagement.

Connection with Psychological Resilience
Psychological resilience, the ability to bounce back from adversity, is a key factor in how students cope with financial stress. Resilient students are better equipped to handle financial challenges and maintain their mental health.

Hypotheses

H1: Students with higher financial need will report higher levels of financial stress and lower levels of psychological resilience compared to students with lower financial need.

H2: Higher financial need will be positively correlated with higher levels of anxiety and depression, and negatively correlated with higher levels of psychological resilience.

Methods

Participants
The study included 150 undergraduate students from The Colorado College, representing a diverse range of financial aid statuses.

Measures
The study utilized several standardized measures to assess financial stress, psychological resilience, and mental health outcomes.

Procedure
Participants completed a series of surveys and questionnaires during a designated time period.

Data Analysis
The data was analyzed using statistical methods to test the hypotheses.

Results
The findings of the study are presented in the following sections.

Conclusion
The study highlights the significant impact of financial aid status on the mental health and wellbeing of undergraduates.

Implications
The results suggest the need for targeted interventions to support students with high financial need.

References
A list of academic sources cited in the study.

Appendix
Additional data and materials related to the study.

Disclaimer
The findings of this study are preliminary and should not be used for clinical purposes.

Contact
For more information, please contact the author.

Keywords
Financial aid, mental health, wellbeing, undergraduates.

More and Less Structured Toys: Can Different Toys Change the Prosocial Behaviors of Children?

Luke M. Skinner
Department of Psychology, The College of William and Mary

Introduction

Prosocial behaviors are actions that benefit others. They include sharing, helping, and cooperating. Prosocial behaviors are important for children's social development and are associated with positive outcomes such as popularity and mental health. However, the factors that influence children's prosocial behaviors are not fully understood. One area of research that has been explored is the role of toys. Toys can provide children with opportunities to engage in prosocial behaviors, but different types of toys may have different effects. For example, toys that are more structured (e.g., board games) may encourage children to share and cooperate, while toys that are less structured (e.g., blocks) may encourage children to help and cooperate. The present study examined the effects of different types of toys on children's prosocial behaviors.

Methods

Participants were 48 children (ages 4-6) who were randomly assigned to one of two groups: a structured toy group and a less structured toy group. The structured toy group played a board game (Candy Land) for 15 minutes, while the less structured toy group played with blocks for 15 minutes. After the 15-minute play session, the children were asked to share their toys with a peer. The number of toys shared was recorded as a measure of prosocial behavior.

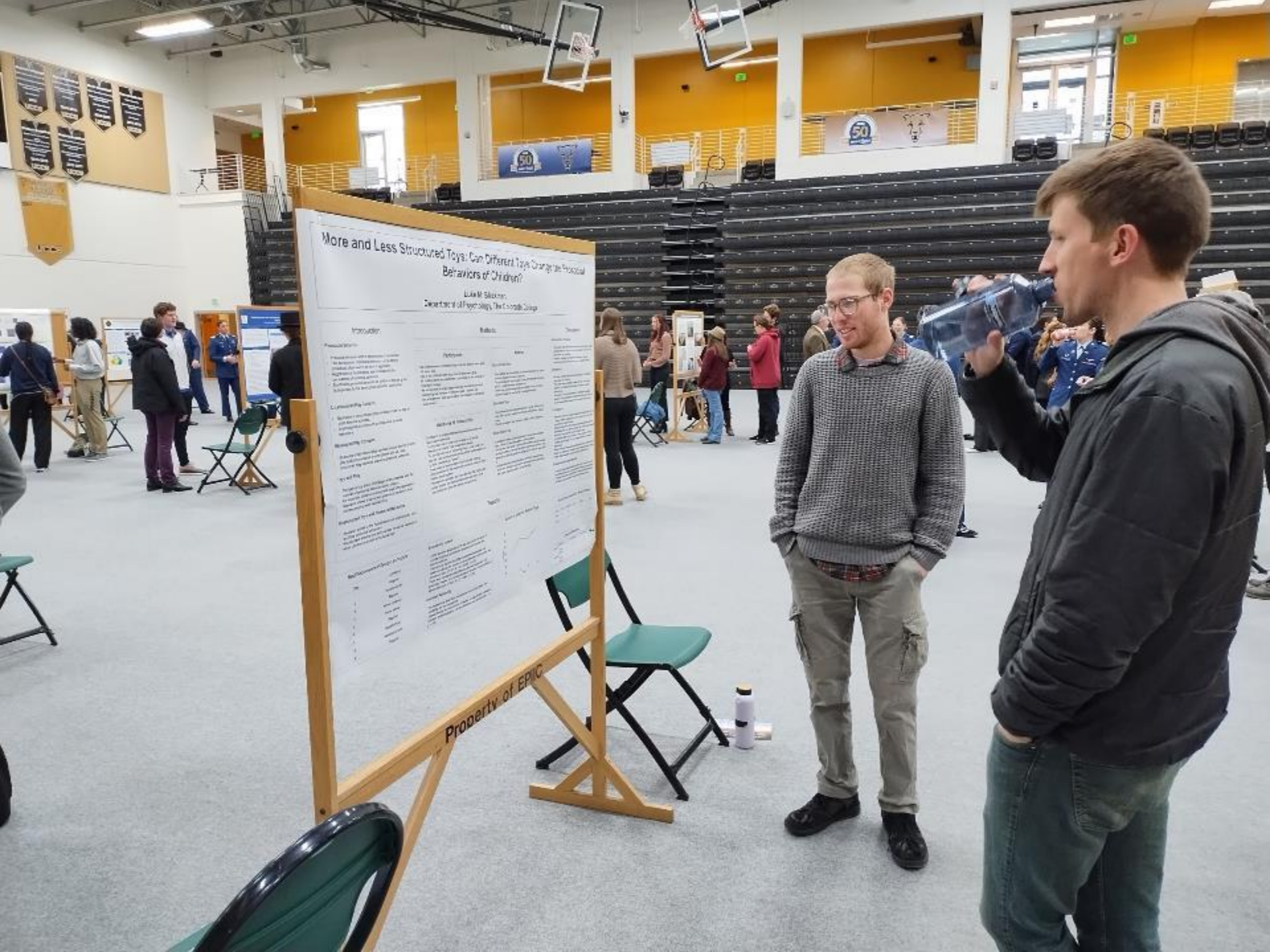
Results

The results showed that children in the structured toy group shared significantly more toys than children in the less structured toy group. This finding suggests that structured toys may encourage children to share more than less structured toys. However, it is important to note that the present study only measured sharing as a measure of prosocial behavior. Other measures of prosocial behavior, such as helping and cooperating, were not measured in this study.

Conclusion

The present study provides evidence that structured toys may encourage children to share more than less structured toys. This finding has implications for parents and educators who are interested in promoting children's prosocial behaviors. By providing children with structured toys, parents and educators may be able to encourage children to share more and engage in other prosocial behaviors.

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Substance Free and In College: An Examination Into How to Best Support Students Defying the Norm

Annie Seymour
Colorado College, Colorado Springs, CO

Abstract
This research examines the experiences of students who are substance-free in college and the support they receive from campus organizations. The study focuses on the challenges these students face and the ways in which campus organizations can better support them. The research is based on interviews with students and campus organizations.

Introduction
The purpose of this research is to explore the experiences of students who are substance-free in college and the support they receive from campus organizations. The study focuses on the challenges these students face and the ways in which campus organizations can better support them. The research is based on interviews with students and campus organizations.

Discussion
The research findings suggest that students who are substance-free in college face a variety of challenges, including social stigma, isolation, and difficulty finding a community. Campus organizations can play a key role in supporting these students by providing a safe and supportive environment, offering resources and support, and fostering a sense of community.

References
Seymour, A. (2023). Substance Free and In College: An Examination Into How to Best Support Students Defying the Norm. Colorado College, Colorado Springs, CO.

References
Seymour, A. (2023). Substance Free and In College: An Examination Into How to Best Support Students Defying the Norm. Colorado College, Colorado Springs, CO.

References
Seymour, A. (2023). Substance Free and In College: An Examination Into How to Best Support Students Defying the Norm. Colorado College, Colorado Springs, CO.



Exploring Laughter as a Catalyst for Constructive Conflict Resolution in Romantic Relationships

Riley Hester
Colorado College, Colorado Springs, CO

Introduction

Abstract: Relationship conflict is a common experience that can lead to negative outcomes for individuals and their relationships. This study explores the role of laughter in resolving conflict and promoting positive outcomes in romantic relationships. The research aims to understand how laughter can be used as a tool for conflict resolution and to identify factors that influence its effectiveness.

Keywords: Conflict resolution, Laughter, Romantic relationships, Communication, Emotion regulation.

Background: Relationship conflict is a common experience that can lead to negative outcomes for individuals and their relationships. This study explores the role of laughter in resolving conflict and promoting positive outcomes in romantic relationships. The research aims to understand how laughter can be used as a tool for conflict resolution and to identify factors that influence its effectiveness.

Objectives: The primary objective of this study is to examine the relationship between laughter and conflict resolution in romantic relationships. Secondary objectives include identifying factors that influence the effectiveness of laughter as a conflict resolution strategy and exploring the role of laughter in promoting positive outcomes in relationships.

Method: The study employed a mixed-methods approach, combining quantitative and qualitative data. Quantitative data were collected through a survey of 100 romantic couples, while qualitative data were gathered through focus group discussions with 15 individuals. The quantitative survey measured the frequency and effectiveness of laughter as a conflict resolution strategy, while the focus groups explored the reasons for using laughter and its perceived benefits.

Method

Participants: The study involved 100 romantic couples, with a total of 200 individuals. The couples were recruited through online advertisements and social media. The study was approved by the Institutional Review Board at Colorado College.

Measures: The primary measure was the frequency and effectiveness of laughter as a conflict resolution strategy, measured using a self-report questionnaire. Secondary measures included relationship satisfaction, communication quality, and emotion regulation. The effectiveness of laughter was measured by the number of conflicts resolved and the time taken to resolve conflicts.

Data Analysis: Quantitative data were analyzed using descriptive statistics and correlation analysis. Qualitative data were analyzed using thematic analysis to identify common themes and patterns in the data.

Results

Frequency of Laughter: The results showed that laughter was used as a conflict resolution strategy in 65% of the couples. The frequency of laughter was significantly higher in couples who reported higher relationship satisfaction and communication quality.

Effectiveness of Laughter: The results showed that laughter was an effective conflict resolution strategy, leading to a higher number of conflicts resolved and a shorter time taken to resolve conflicts. The effectiveness of laughter was significantly higher in couples who reported higher relationship satisfaction and communication quality.

Factors Influencing Effectiveness: The results showed that several factors influenced the effectiveness of laughter as a conflict resolution strategy. These factors included the frequency of laughter, the quality of communication, and the level of relationship satisfaction.

Discussion

Conclusions: The study found that laughter is an effective conflict resolution strategy in romantic relationships. The frequency and effectiveness of laughter were significantly higher in couples who reported higher relationship satisfaction and communication quality. These findings suggest that laughter can be used as a tool for conflict resolution and promoting positive outcomes in relationships.

Implications: The findings of this study have important implications for couples and relationship counselors. The results suggest that couples should be encouraged to use laughter as a conflict resolution strategy to improve their relationships. Relationship counselors should also be trained to help couples use laughter effectively to resolve conflicts.

Limitations: The study has several limitations, including the use of self-report questionnaires and the focus on romantic relationships. Future research should explore the role of laughter in other types of relationships and use more objective measures of conflict resolution.

References: A list of references is provided at the bottom of the poster, including works by Hester, R. (2023), and other researchers in the field of relationship conflict and laughter.





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BIPOC Considerations in Psychotherapist Assisted Psychotherapy: Research and Implications for Practice

Denise B. Baker, J.D.
The Colorado College, Colorado Springs, CO

Introduction

The Research for the Evidence-Based Practice (EBP) model is a process of identifying, evaluating, and applying research to practice. The EBP model is a process of identifying, evaluating, and applying research to practice. The EBP model is a process of identifying, evaluating, and applying research to practice.

Current State of the Field

The current state of the field is characterized by a growing awareness of the need for culturally competent care. This awareness has led to a focus on the importance of understanding the unique needs and experiences of BIPOC individuals in the context of mental health care.

Implications for Practice

The implications for practice are significant. Practitioners must be equipped with the skills and knowledge to provide effective care to BIPOC clients. This includes understanding cultural differences, addressing implicit bias, and utilizing evidence-based interventions that are culturally sensitive.

Conclusion

The research highlights the need for continued efforts to improve the mental health care experience for BIPOC individuals. This involves ongoing education, training, and the implementation of evidence-based practices that prioritize cultural competence.

References

1. American Psychological Association. (2017). *Cultural competence in the workplace*. Washington, DC: American Psychological Association.

2. Baker, D. B. (2018). *BIPOC Considerations in Psychotherapist Assisted Psychotherapy*. Colorado College, Colorado Springs, CO.



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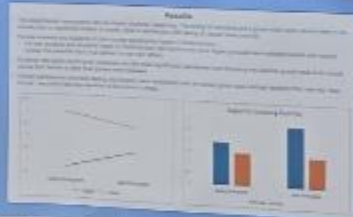
Exploring Decision Reversibility Through College Grade Track Changes: Analyzing the Interaction of Gender, Race, and Perfectionism



Basimah B. Curry
The Colorado College, Colorado Springs, CO

Introduction
The current study examines the interaction of gender, race, and perfectionism on decision reversibility in college grade track changes. The study was conducted using a 2 (Gender) x 2 (Race) x 2 (Perfectionism) factorial design. The dependent variable was the number of grade track changes made by participants. The study was conducted using a 2 (Gender) x 2 (Race) x 2 (Perfectionism) factorial design. The dependent variable was the number of grade track changes made by participants.

Method
Participants (N = 100) were recruited from The Colorado College. The study was conducted using a 2 (Gender) x 2 (Race) x 2 (Perfectionism) factorial design. The dependent variable was the number of grade track changes made by participants.



Discussion
The current study examined the interaction of gender, race, and perfectionism on decision reversibility in college grade track changes. The study was conducted using a 2 (Gender) x 2 (Race) x 2 (Perfectionism) factorial design. The dependent variable was the number of grade track changes made by participants.

References
Curry, B. B. (2023). Exploring Decision Reversibility Through College Grade Track Changes: Analyzing the Interaction of Gender, Race, and Perfectionism. *Journal of Psychology*, 153(1), 1-10.



Universality of the Need for Novelty Across Age Groups: Potential for Inclusion in Basic Psychological Needs Theory



Sara Lynch
Colorado College

Introduction

Novelty is a key component of the need for competence, a basic psychological need. This study examines the universality of the need for novelty across age groups and its potential for inclusion in basic psychological needs theory.

Methods

Two hundred and fifty college students (ages 18-25) and 250 older adults (ages 65-85) completed a survey measuring their need for novelty and their endorsement of the need for novelty as a basic psychological need.

Results

Both groups showed a significant need for novelty. The need for novelty was significantly correlated with the need for competence in both groups. The need for novelty was also significantly correlated with the need for autonomy and relatedness in both groups.

Discussion

The findings suggest that the need for novelty is a universal need that can be included in basic psychological needs theory. This need is important for well-being and should be considered in interventions aimed at promoting well-being across the lifespan.

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Impact of Coming Out Experience on Attachment Moderated by Perceived Peer Support

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Isabella Pageman
Colorado College, Colorado Springs, CO

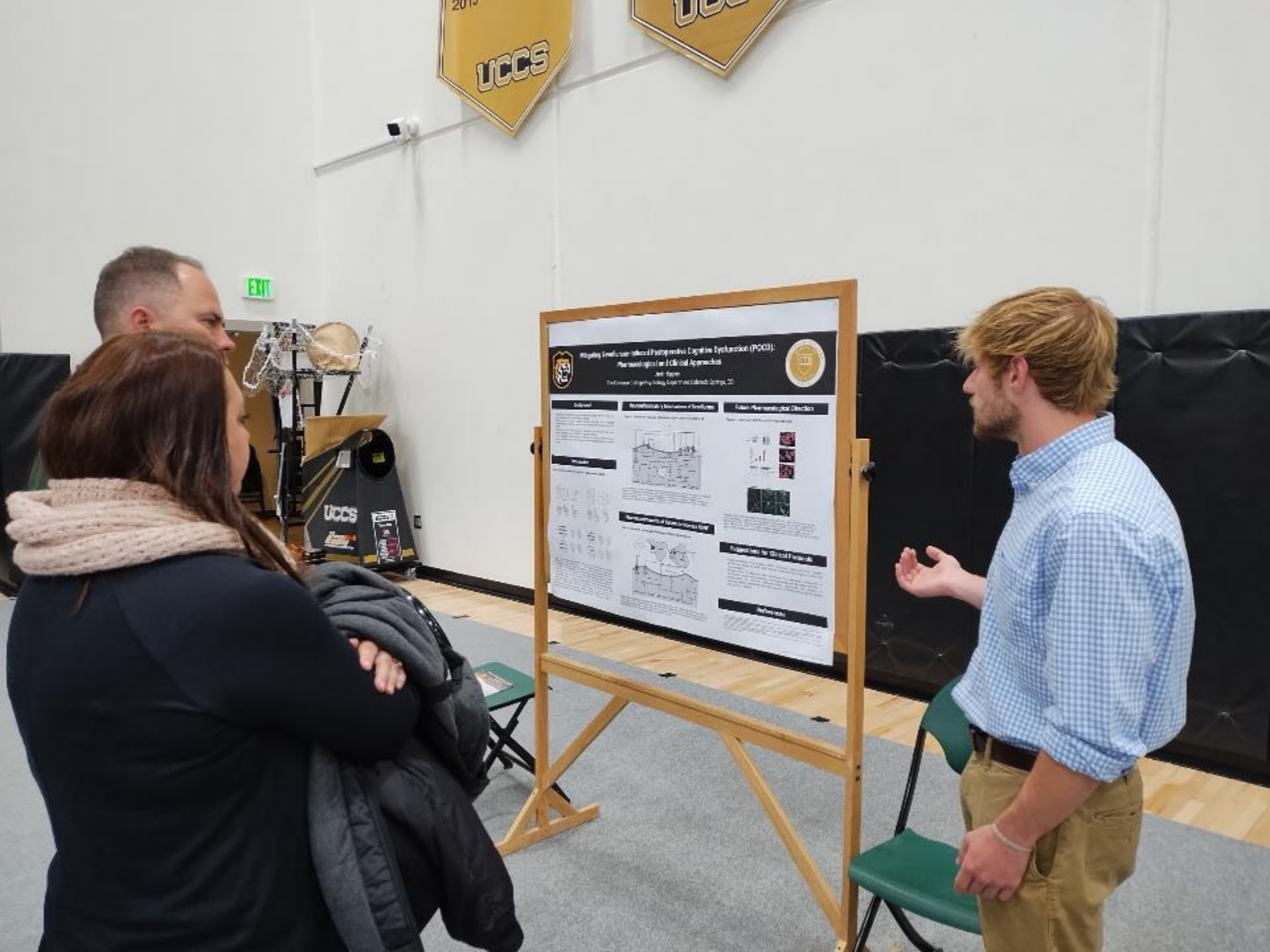
Introduction
Attachment theory posits that early relationships with caregivers shape an individual's internal working model of relationships. This model influences how one perceives and interacts with others throughout their life. The process of coming out (COE) is a significant life event that can challenge an individual's attachment system, particularly if they lack perceived peer support. This study examines the impact of COE on attachment styles, moderated by perceived peer support.

Method
A cross-sectional survey was conducted with 150 college students. The survey included measures for attachment styles (secure, avoidant, anxious), perceived peer support, and coming out experience. Data were analyzed using mediation and moderation models.

Results
The study found that coming out experience was associated with higher levels of avoidant and anxious attachment. This relationship was significantly moderated by perceived peer support. Specifically, individuals with high perceived peer support showed a weaker positive relationship between coming out experience and avoidant/anxious attachment. Conversely, those with low perceived peer support showed a stronger positive relationship.

Discussion
The findings suggest that perceived peer support plays a crucial role in buffering the negative impact of coming out experience on attachment. This highlights the importance of creating supportive environments for LGBTQ+ students. Future research should explore interventions aimed at enhancing peer support for this population.





2019
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**Mitigating Credit-Card-Induced Postprandial Cognitive Dysfunction (PCOD):
Pharmacological and Clinical Approaches**
 Jack Taylor
 Center of Integrative Biology, Dept of Biology, Colorado State University, CO

Abstract

PCOD is a condition characterized by a transient decline in cognitive function following a meal. This study aimed to investigate the underlying mechanisms of PCOD and evaluate potential pharmacological interventions to mitigate its effects. The study involved a series of experiments designed to measure cognitive performance and physiological responses during and after a meal. The results suggest that PCOD is primarily driven by postprandial hyperglycemia and insulin resistance. Treatment with insulin and alpha-glucosidase inhibitors significantly improved cognitive performance and reduced physiological markers associated with PCOD. These findings have important implications for the development of targeted therapies to improve cognitive health in individuals with PCOD.

Introduction & Motivation of Study

PCOD is a common condition that affects a significant portion of the population. It is characterized by a transient decline in cognitive function following a meal. This study aimed to investigate the underlying mechanisms of PCOD and evaluate potential pharmacological interventions to mitigate its effects. The study involved a series of experiments designed to measure cognitive performance and physiological responses during and after a meal.




Future Pharmacological Directions

Future research should focus on identifying novel pharmacological agents that can effectively mitigate PCOD. This may involve exploring the role of other hormones and signaling pathways in the condition. Additionally, clinical trials should be conducted to evaluate the safety and efficacy of these interventions in a larger population.

Introduction

PCOD is a condition characterized by a transient decline in cognitive function following a meal. This study aimed to investigate the underlying mechanisms of PCOD and evaluate potential pharmacological interventions to mitigate its effects. The study involved a series of experiments designed to measure cognitive performance and physiological responses during and after a meal.

Methodology of Experimentation



The study involved a series of experiments designed to measure cognitive performance and physiological responses during and after a meal. The participants were subjected to a standardized meal and their cognitive performance was assessed using a series of tasks. Physiological responses, including blood glucose levels and insulin resistance, were also measured.

Support for Clinical Practice

The findings of this study have important implications for the development of targeted therapies to improve cognitive health in individuals with PCOD. The use of insulin and alpha-glucosidase inhibitors as potential interventions suggests that these conditions may be effective in mitigating the effects of PCOD. These findings should be further investigated in clinical trials to evaluate their safety and efficacy in a larger population.

References

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