



CSURF

19TH ANNUAL COLORADO SPRINGS UNDERGRADUATE RESEARCH FORUM

WHEN:

Saturday, April 22, 2003
8 a.m - 5 p.m.

WHERE:

Colorado College
14 E Cache La Poudre
Colorado Springs, Colorado
Cornerstone Arts Building and
Armstrong Hall

WHAT:

This collaborative venture is designed to highlight the research and creative works of undergraduates from Pikes Peak State College, Colorado College, the United States Air Force Academy, and the University of Colorado Colorado Springs.

FOR MORE INFO: CSURF.UCCS.EDU/
REGISTRATION OPENS IN JANUARY

For more information on a specific event, directions, or disability accommodation, email Lisa Schwartz at lschwartz@coloradocollege.edu.





Armstrong Hall, Colorado College



Cornerstone Arts Center
Colorado College

Keynote Address

Juan Miguel Arias, PhD

Visiting Assistant Professor, Environmental Education, Colorado College

Title: Axe Sharpening: Undergraduate research in a constantly changing world

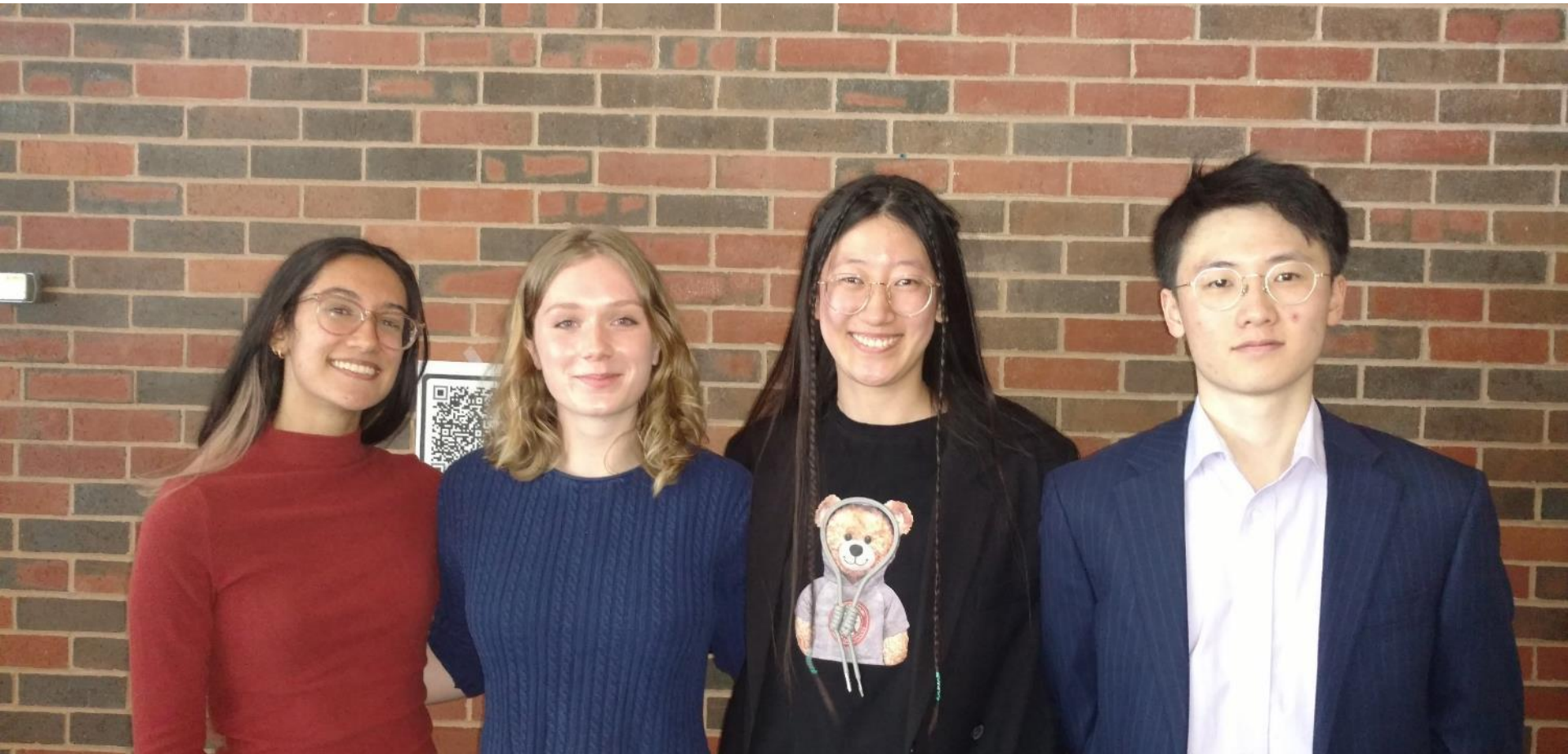


Abraham Lincoln (allegedly) once said, “If I only had an hour to chop down a tree, I would spend the first 45 minutes sharpening my axe.” Taking this and any Lincoln quote with a historical grain of salt, the lesson nevertheless holds true. This is especially so in our world today, when we realize that the figurative trees we face in our work are not ones we will face for an hour but rather years and lifetimes, and that these trees are changing with every new technology and cultural pattern we create. In the face of this magnitude, undergraduate research—often the first opportunity to “add a tiny bit of knowledge to a field”—can feel at once

overwhelming and superficial. In this talk, however, I draw from psychology, education, history, environmentalism, and critical social theory to propose that the divergence of thought made possible by the undergraduates themselves doing such research is necessary for our resilience and adaptability in this constantly changing world.

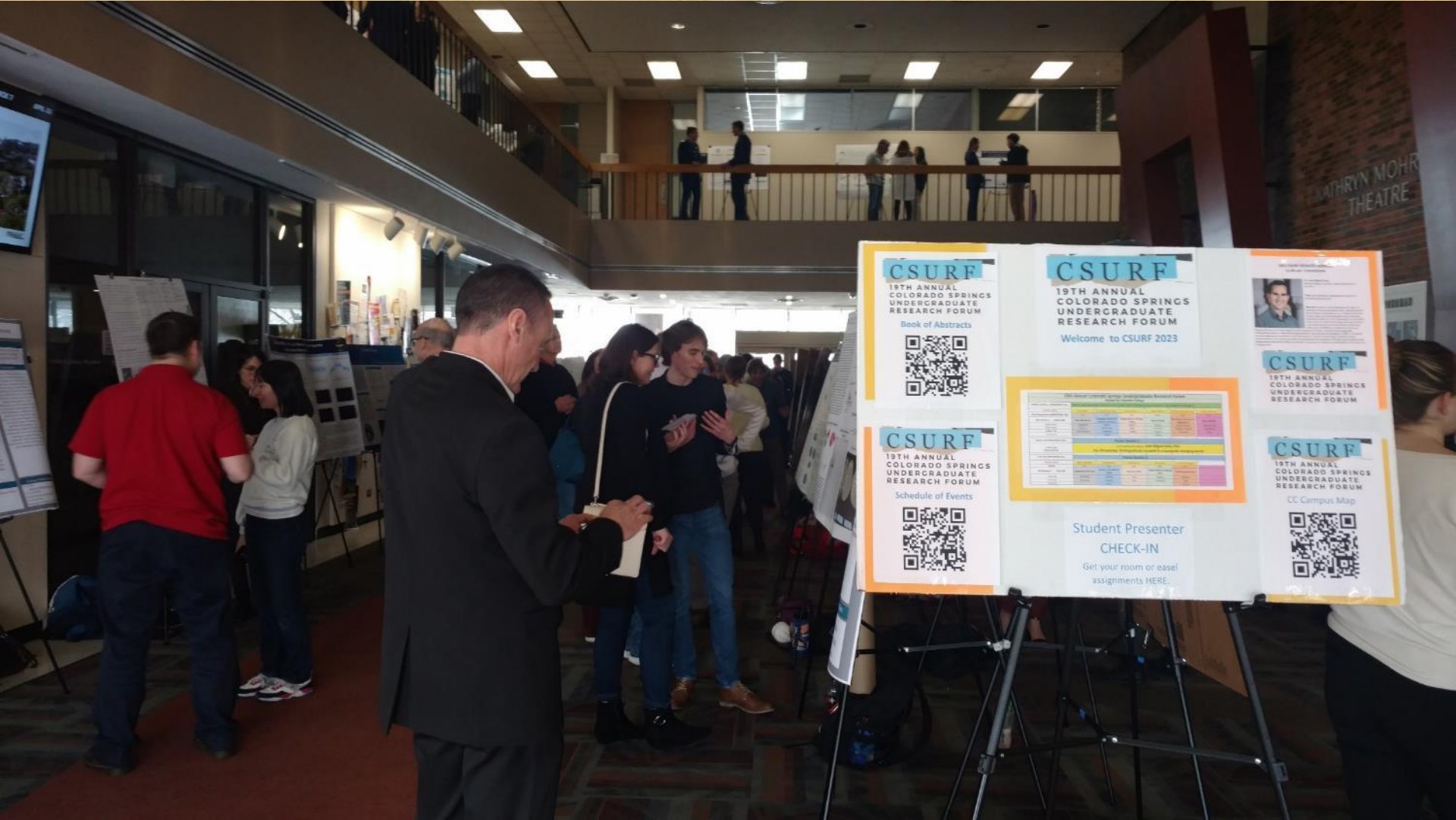


**COLORADO
COLLEGE**




Lena Saunders Rhetta Power Zimin Guo

Rocky Sui



CSURF
19TH ANNUAL
COLORADO SPRINGS
UNDERGRADUATE
RESEARCH FORUM

Book of Abstracts




CSURF
19TH ANNUAL
COLORADO SPRINGS
UNDERGRADUATE
RESEARCH FORUM

Welcome to CSURF 2023

Room	Time	Topic
Room 101	10:00 AM - 12:00 PM	Session 1: Research in Progress
Room 102	10:00 AM - 12:00 PM	Session 2: Research in Progress
Room 103	10:00 AM - 12:00 PM	Session 3: Research in Progress
Room 104	10:00 AM - 12:00 PM	Session 4: Research in Progress
Room 105	10:00 AM - 12:00 PM	Session 5: Research in Progress
Room 106	10:00 AM - 12:00 PM	Session 6: Research in Progress
Room 107	10:00 AM - 12:00 PM	Session 7: Research in Progress
Room 108	10:00 AM - 12:00 PM	Session 8: Research in Progress
Room 109	10:00 AM - 12:00 PM	Session 9: Research in Progress
Room 110	10:00 AM - 12:00 PM	Session 10: Research in Progress
Room 111	10:00 AM - 12:00 PM	Session 11: Research in Progress
Room 112	10:00 AM - 12:00 PM	Session 12: Research in Progress
Room 113	10:00 AM - 12:00 PM	Session 13: Research in Progress
Room 114	10:00 AM - 12:00 PM	Session 14: Research in Progress
Room 115	10:00 AM - 12:00 PM	Session 15: Research in Progress
Room 116	10:00 AM - 12:00 PM	Session 16: Research in Progress
Room 117	10:00 AM - 12:00 PM	Session 17: Research in Progress
Room 118	10:00 AM - 12:00 PM	Session 18: Research in Progress
Room 119	10:00 AM - 12:00 PM	Session 19: Research in Progress
Room 120	10:00 AM - 12:00 PM	Session 20: Research in Progress
Room 121	10:00 AM - 12:00 PM	Session 21: Research in Progress
Room 122	10:00 AM - 12:00 PM	Session 22: Research in Progress
Room 123	10:00 AM - 12:00 PM	Session 23: Research in Progress
Room 124	10:00 AM - 12:00 PM	Session 24: Research in Progress
Room 125	10:00 AM - 12:00 PM	Session 25: Research in Progress
Room 126	10:00 AM - 12:00 PM	Session 26: Research in Progress
Room 127	10:00 AM - 12:00 PM	Session 27: Research in Progress
Room 128	10:00 AM - 12:00 PM	Session 28: Research in Progress
Room 129	10:00 AM - 12:00 PM	Session 29: Research in Progress
Room 130	10:00 AM - 12:00 PM	Session 30: Research in Progress
Room 131	10:00 AM - 12:00 PM	Session 31: Research in Progress
Room 132	10:00 AM - 12:00 PM	Session 32: Research in Progress
Room 133	10:00 AM - 12:00 PM	Session 33: Research in Progress
Room 134	10:00 AM - 12:00 PM	Session 34: Research in Progress
Room 135	10:00 AM - 12:00 PM	Session 35: Research in Progress
Room 136	10:00 AM - 12:00 PM	Session 36: Research in Progress
Room 137	10:00 AM - 12:00 PM	Session 37: Research in Progress
Room 138	10:00 AM - 12:00 PM	Session 38: Research in Progress
Room 139	10:00 AM - 12:00 PM	Session 39: Research in Progress
Room 140	10:00 AM - 12:00 PM	Session 40: Research in Progress
Room 141	10:00 AM - 12:00 PM	Session 41: Research in Progress
Room 142	10:00 AM - 12:00 PM	Session 42: Research in Progress
Room 143	10:00 AM - 12:00 PM	Session 43: Research in Progress
Room 144	10:00 AM - 12:00 PM	Session 44: Research in Progress
Room 145	10:00 AM - 12:00 PM	Session 45: Research in Progress
Room 146	10:00 AM - 12:00 PM	Session 46: Research in Progress
Room 147	10:00 AM - 12:00 PM	Session 47: Research in Progress
Room 148	10:00 AM - 12:00 PM	Session 48: Research in Progress
Room 149	10:00 AM - 12:00 PM	Session 49: Research in Progress
Room 150	10:00 AM - 12:00 PM	Session 50: Research in Progress
Room 151	10:00 AM - 12:00 PM	Session 51: Research in Progress
Room 152	10:00 AM - 12:00 PM	Session 52: Research in Progress
Room 153	10:00 AM - 12:00 PM	Session 53: Research in Progress
Room 154	10:00 AM - 12:00 PM	Session 54: Research in Progress
Room 155	10:00 AM - 12:00 PM	Session 55: Research in Progress
Room 156	10:00 AM - 12:00 PM	Session 56: Research in Progress
Room 157	10:00 AM - 12:00 PM	Session 57: Research in Progress
Room 158	10:00 AM - 12:00 PM	Session 58: Research in Progress
Room 159	10:00 AM - 12:00 PM	Session 59: Research in Progress
Room 160	10:00 AM - 12:00 PM	Session 60: Research in Progress
Room 161	10:00 AM - 12:00 PM	Session 61: Research in Progress
Room 162	10:00 AM - 12:00 PM	Session 62: Research in Progress
Room 163	10:00 AM - 12:00 PM	Session 63: Research in Progress
Room 164	10:00 AM - 12:00 PM	Session 64: Research in Progress
Room 165	10:00 AM - 12:00 PM	Session 65: Research in Progress
Room 166	10:00 AM - 12:00 PM	Session 66: Research in Progress
Room 167	10:00 AM - 12:00 PM	Session 67: Research in Progress
Room 168	10:00 AM - 12:00 PM	Session 68: Research in Progress
Room 169	10:00 AM - 12:00 PM	Session 69: Research in Progress
Room 170	10:00 AM - 12:00 PM	Session 70: Research in Progress
Room 171	10:00 AM - 12:00 PM	Session 71: Research in Progress
Room 172	10:00 AM - 12:00 PM	Session 72: Research in Progress
Room 173	10:00 AM - 12:00 PM	Session 73: Research in Progress
Room 174	10:00 AM - 12:00 PM	Session 74: Research in Progress
Room 175	10:00 AM - 12:00 PM	Session 75: Research in Progress
Room 176	10:00 AM - 12:00 PM	Session 76: Research in Progress
Room 177	10:00 AM - 12:00 PM	Session 77: Research in Progress
Room 178	10:00 AM - 12:00 PM	Session 78: Research in Progress
Room 179	10:00 AM - 12:00 PM	Session 79: Research in Progress
Room 180	10:00 AM - 12:00 PM	Session 80: Research in Progress
Room 181	10:00 AM - 12:00 PM	Session 81: Research in Progress
Room 182	10:00 AM - 12:00 PM	Session 82: Research in Progress
Room 183	10:00 AM - 12:00 PM	Session 83: Research in Progress
Room 184	10:00 AM - 12:00 PM	Session 84: Research in Progress
Room 185	10:00 AM - 12:00 PM	Session 85: Research in Progress
Room 186	10:00 AM - 12:00 PM	Session 86: Research in Progress
Room 187	10:00 AM - 12:00 PM	Session 87: Research in Progress
Room 188	10:00 AM - 12:00 PM	Session 88: Research in Progress
Room 189	10:00 AM - 12:00 PM	Session 89: Research in Progress
Room 190	10:00 AM - 12:00 PM	Session 90: Research in Progress
Room 191	10:00 AM - 12:00 PM	Session 91: Research in Progress
Room 192	10:00 AM - 12:00 PM	Session 92: Research in Progress
Room 193	10:00 AM - 12:00 PM	Session 93: Research in Progress
Room 194	10:00 AM - 12:00 PM	Session 94: Research in Progress
Room 195	10:00 AM - 12:00 PM	Session 95: Research in Progress
Room 196	10:00 AM - 12:00 PM	Session 96: Research in Progress
Room 197	10:00 AM - 12:00 PM	Session 97: Research in Progress
Room 198	10:00 AM - 12:00 PM	Session 98: Research in Progress
Room 199	10:00 AM - 12:00 PM	Session 99: Research in Progress
Room 200	10:00 AM - 12:00 PM	Session 100: Research in Progress


CSURF
19TH ANNUAL
COLORADO SPRINGS
UNDERGRADUATE
RESEARCH FORUM

Schedule of Events




CSURF
19TH ANNUAL
COLORADO SPRINGS
UNDERGRADUATE
RESEARCH FORUM

Student Presenter
CHECK-IN
Get your room or easel assignments HERE.



CSURF
19TH ANNUAL
COLORADO SPRINGS
UNDERGRADUATE
RESEARCH FORUM

CC Campus Map









The Dematerialized Self: Smartphone Mediated Being-In-The-World

Rheta Power and Tomi-Ann Roberts
Colorado College, Colorado Springs, CO



Introduction

Introduction text describing the study's focus on the dematerialized self and smartphone-mediated being-in-the-world.

Method

Study 1: Scale Development

218 MTurk participants: 18 to 51, 157 women, 148 men

Self-Dematerialization example items:


- "Sometimes, I feel as though I can't remember the things I have done and instead the world around me."
- "After I get too much advice from other people, I often find it hard to know what to do."
- "There is a lot of information out there and I often feel overwhelmed."

Study 2: Construct Validity

218 MTurk participants: 18 to 51, 157 women, 148 men

Measures:

- Self-Dematerialization Questionnaire (SDM)
- Expanded Solinger Addiction Scale (EAS)
- Smartphone Addiction Scale - Short Version (SAS-SV)
- Dematerialization with Life Scale (DWLS)
- Loneliness Scale-Short Form (LS-SF)



Results

Study 1

- Self-Dematerialization Questionnaire (SDM) created
- 25 items formed six-factor structure with high scale reliability: Cronbach's alpha = .96
- Higher scores on the SDM predicted by:
- Greater higher GSM use (more than 100)
- Greater smartphone use (more than 100)
- Greater amount of daily device use
- Greater device use compared to life
- Using all device while 10 percent of waking hours
- Using device all day

Study 2

- SDM showed high scale reliability: alpha = .979
- SDM and Smartphone Addiction positively correlated
- SDM and Age positively correlated
- SDM and Age negatively correlated
- SDM, but not Smartphone addiction, predicted higher satisfaction with life (M = 3.92, p < .001) (M = 3.25, F(1,282) = 45.42, p < .001)
- Smartphone addiction, but not SDM, predicted Loneliness (M = 1.98, F(1,282) = 13.6, p < .001) (M = 2.92, p < .001)
- Higher correlation between loneliness and SDM than between life satisfaction and SDM

Discussion

Summary of Findings:

- SDM is reliable measure of trait Self-Dematerialization
- Trait SDM correlates with the construct of trait absorption, suggesting the dematerialization functions much as story-world absorption does, engendering a sense of being inside the digital world.
- Women, younger people, heavier device users, and those who enjoy device use all higher on SDM
- Although Self-Dematerialization is correlated with Smartphone addiction, it does not carry the negative consequences of loneliness that Smartphone addiction does.
- Unlike Smartphone addiction, SDM positively predicts satisfaction with life.

Self-Dematerialization may...

- Give women and others whose bodies are publicly surveilled/objectified more access and freedom to move through the world as a digital body
- Feelings of privacy and access engendered by dematerializing into one's smartphone are an illusion, due to widespread data mining
- Explain why GenZ (iGen) are less likely to drink, get a driver's license, get a job, have sex, go out on dates or socialize with their friends (Twenge, 2017). Perhaps they invest in their dematerialized, over-material, bodies.

Toward Dematerialization Theory

- Smartphones offer us an alternative way of being in the world
- We Self-Dematerialize while on our devices and...
- Detach from our surroundings and physical body
- Invest in our digital selves and worlds over physical/material ones.
- Mobility of smartphones has made dematerialization increasingly possible in any location at any time
- Emphasis of smartphones has made dematerialization increasingly possible in how the sensation of its embodied, and private, self

Selected References

Davis, J.B., Zou, C.H., Chen, C., & Wang, L. (2017). The Dematerialized Self: Smartphone Mediated Being-In-The-World. *Journal of Research on Personality*, 68, 1-12.

Alienation on campus: The unique impact of cultural identity and belongingness on college students



Helena Saunders and Tricia Waters
Psychology Department, Colorado College, Colorado Springs, CO

Introduction

- Alienation**
- The experience of feeling socially isolated from surroundings or persons is an important aspect of college student well-being. (Burbach, 1972).
- Cultural Identity**
- Learned experiences by an individual can be unique to group belongingness especially when that group membership is part of their culture values (Hudson et al., 2020).
- Campus Belongingness**
- Students who feel as though they belong to their campus community often experience an increased sense of working morally, socially, and academically. (Hudson et al., 2020).
- Social model of identity change (SMIC)**
- Minorities that the negative effect of low belongingness on mental health can be mitigated by the social identity construct (belongingness) or the social identity gain pathway. (Hudson et al., 2020).
- Hypotheses**
- If students with international backgrounds have a strong sense of cultural identity, then they will experience lower levels of alienation.
 - If students with international backgrounds have high levels of campus belongingness, then they will experience less alienation.

Selected Readings

Burbach, M. J. (1972). The relationship of perceived isolation to alienation. *The Pacific Sociological Review*, 15(2), 120-134.

Chen, Y., Ng, M. H., Hudson, A. E., & Hudson, J. (2020). Ethnic centrality, campus belongingness, and the relationship among international students. *Journal of International Student Services*, 52(1), 21-30.

Hudson, J., Hudson, A., Chen, Y., Jahn, J., Santos, E., Yang, P., & Waters, T. A. (2020). Social identity centrality, campus belongingness, and mental health outcomes for international and native students. *Journal of International Student Services*, 52(1), 141-149.

Waters, T. A., Saunders, H., & Fisher, J. (2020). Ethnocentric belongingness, campus belongingness, and mental health of college students. *Journal of International Student Services*, 52(1), 141-149.

Method

- Participants**
- 30 undergraduate students between 19-24 years of age.
 - 41% identified as female.
 - 54% were in their fourth year of college.
 - 22 participants had international experience.
 - Students were recruited through email and in-person with a focus on recruiting individuals who have attended school outside the U.S. prior to beginning their undergraduate education.
- Materials**
- Alienation - University Alienation Scale (UAS; Burbach, 1972).
 - Example item: "I don't have as many friends as I would like at [institution]"
 - $\alpha = .83$
 - Cultural Identity - modified Swanson & Kwan's Cultural Identity Scale (CIS; Swanson et al., 2019).
 - Example item: "I have spent time trying to learn about my home country and culture"
 - $\alpha = .89$
 - Campus Belongingness - Cultural and Academic Experience Questionnaire (CAEQ; Latt et al., 2020).
 - Example item: "I feel that my peers respect my academic views"
 - Subscale: campus membership, campus integration ($\alpha = .77$)

Procedure

- Participants completed a 10-minute survey. The survey began with questions on demographic information.
- Participants then completed the three scales measuring alienation, cultural identity, and campus belongingness.
- All participants were instructed to respond to items based on how they currently felt as an undergraduate student to encourage responsiveness to think about their present day identity.

Results

- Cultural Identity**
- A linear multiple regression was used to test hypothesis 1 (effect of cultural identity on alienation).
 - Higher cultural identity resulted in lower alienation (predicting lower alienation for the full sample).
 - A second exploratory hierarchical linear regression showed that when the interaction of international status and cultural identity were added, the model was strengthened.
 - Additionally, the exploratory model showed that a stronger sense of cultural identity resulted in higher reported alienation in the international group.
 - The hypothesis that strong cultural identity predicts lower alienation was not supported in the full sample.
- Campus Belongingness**
- Linear models were used to test hypothesis 2 (effect of campus belongingness on alienation).
 - Higher campus belongingness resulted in lower alienation (predicting lower alienation for the full sample).
 - This result was reported in both the international and domestic groups.
 - Campus belongingness and cultural identity were negatively correlated and the second exploratory model.
 - These findings support hypothesis 2 which predicts that increased campus belongingness decreases alienation.

Cultural Identity

- Linear models were used to test hypothesis 1 (effect of cultural identity on alienation).
- Higher cultural identity resulted in lower alienation (predicting lower alienation for the full sample).
- A second exploratory hierarchical linear regression showed that when the interaction of international status and cultural identity were added, the model was strengthened.
- Additionally, the exploratory model showed that a stronger sense of cultural identity resulted in higher reported alienation in the international group.
- The hypothesis that strong cultural identity predicts lower alienation was not supported in the full sample.

Campus Belongingness

- Linear models were used to test hypothesis 2 (effect of campus belongingness on alienation).
- Higher campus belongingness resulted in lower alienation (predicting lower alienation for the full sample).
- This result was reported in both the international and domestic groups.
- Campus belongingness and cultural identity were negatively correlated and the second exploratory model.
- These findings support hypothesis 2 which predicts that increased campus belongingness decreases alienation.

PLEASE NO FOOD OR DRINKS IN THE WATER

The Dematerialized Self: Smartphone Mediated Being-In-The-World

Rheta Power and Tomi-Ann Roberts
Colorado College, Colorado Springs, CO

This poster discusses the impact of smartphones on the self. It includes a title, authors' names and affiliation, a logo, and a section titled 'Discussion'.

Impact of Prenatal and Postnatal Inulin Supplementation on Memory and Gut Microbiota in Maternally Separated Rats

Rocky Sul*, Jack Beattie, Peyton Classon, Nick Firestone, Lori L. Driscoll
Colorado College, Colorado Springs, CO

This poster is titled 'Impact of Prenatal and Postnatal Inulin Supplementation on Memory and Gut Microbiota in Maternally Separated Rats'. It lists authors Rocky Sul, Jack Beattie, Peyton Classon, Nick Firestone, and Lori L. Driscoll from Colorado College. The poster is divided into sections: Background, Method, Results, and Discussion. It includes a diagram of the experimental design and several graphs showing data on memory and microbiota.

Impact of Prenatal and Postnatal Inulin Supplementation on Memory and Gut Microbiota in Maternally Separated Rats

Rocky Sul*, Jack Beattie, Peyton Classon, Nick Firestone, Lori L. Driscoll
Colorado College, Colorado Springs, CO

Background
Early Life Adversity (ELA) is a common experience in many human populations, including those in an endemic region (epidemic) associated with chronic stress and immune dysfunction. As the form of parental neglect is correlated with a chronic reduction of maternal care, the child's gut microbiota (diversity, stability, and composition) is altered, leading to behavioral and physiological changes. Disrupted education and lack of social support are also associated with ELA, leading to increased risk of mental illness and chronic disease. The present study is designed to investigate the impact of ELA on the gut microbiota and immune response of maternally separated (MS) rats during development.

Method
Animals
A total of 100 Long-Evans (LE) (C57BL/6J) approved (2019-2021) rats were used in a 2x2x2 factorial design (prenatal and postnatal inulin, 0 or 100 mg/kg body weight, with or without MS).
Maternal Separation (MS)
MS rats were separated from their dams and littermates from 10 days after birth until weaning (21 days). Control pups were in their mother's cage and were housed in our standard colony cage.
Inulin-Enriched Diet
All MS and MS+Inulin (MS+I) rats were housed in a standard colony cage with 100 mg/kg inulin in their chow (Diet 100 mg/kg inulin) throughout the water intake.
Gut Microbiome Analysis
Fecal (total samples) were taken on PND 14, 21, and 28. Rats were sacrificed using CO₂ and perfused with PBS. Gut contents were collected after perfusion. Samples (N = 10) were stored in RNAlater (Qiagen) at -80°C until analyzed in 16S rRNA gene sequencing (Illumina-MiSeq, FC, San Diego, CA).
Behavioral Testing
New Object Recognition (NOR)
Rats were divided into two similar groups during the first session, and then one of the two groups was retained for a new object during the second session after a delay of 1 or 24 hours. The number of times of recognition memory (repetitions) was recorded.
Probe Trial
Rats were divided into two similar groups during the first session, and then one of the two groups was retained for a new object during the second session after a delay of 1 or 24 hours. The number of times of recognition memory (repetitions) was recorded.
Statistical Analysis
Data for each group were analyzed using two-way ANOVA with post-hoc Tukey's test. All data are presented as mean ± SEM. Statistical significance was determined by p < 0.05.

Results cont'd.
Reference Memory Task (Hidden Platform)
Figure 1: Significant interaction between MS and inulin on reference memory task. MS rats spent less time on the platform than control rats. Inulin treatment significantly reduced this effect. Error bars are n = 10.

Probe Trial
Figure 2: Significant interaction between MS and inulin on probe trial. MS rats spent less time on the platform than control rats. Inulin treatment significantly reduced this effect. Error bars are n = 10.

Discussion
The current study did not find evidence that prenatal or postnatal inulin supplementation and their interaction with MS significantly improved memory performance. However, inulin treatment significantly reduced the effect of MS on reference memory task. This suggests that inulin treatment may have a protective effect on memory performance in MS rats. Further studies are needed to investigate the underlying mechanisms of this effect.



Alienation on campus: The unique impact of cultural belongingness on college students

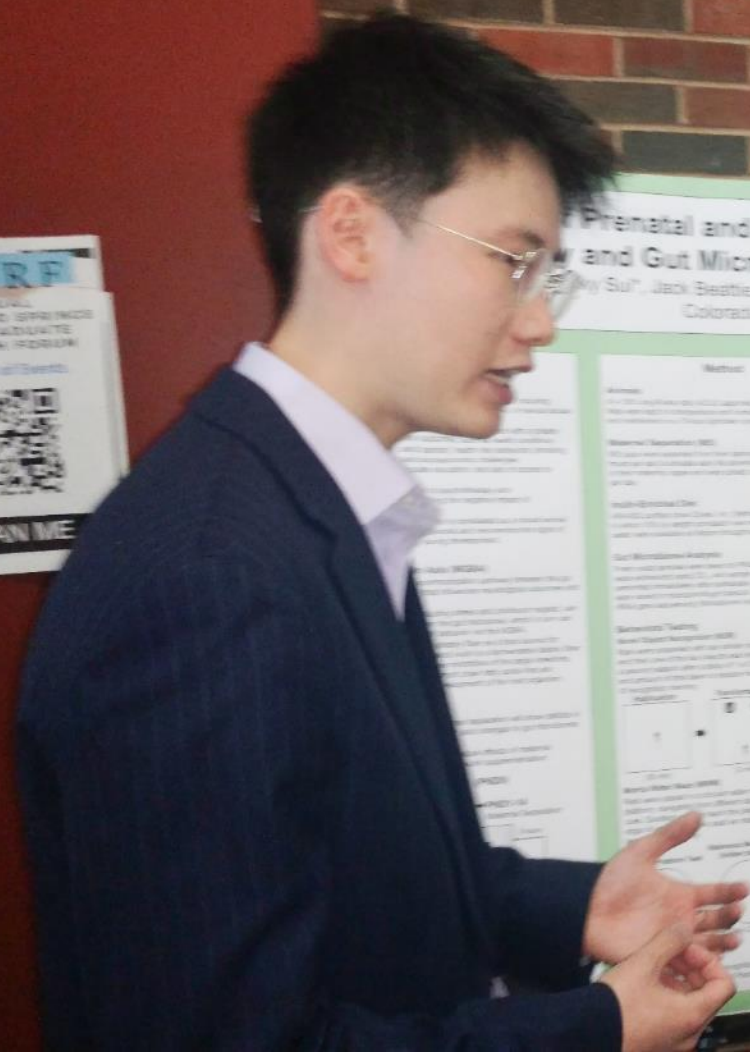


Helena Saunders and Tricia Waters
Psychology Department, Colorado College, Colorado

Introduction	Method	Results
<p>Alienation</p> <ul style="list-style-type: none">The experience of feeling socially isolated from communities or groups is an important aspect of college student well-being. (Berkefeld, 1972) <p>Cultural identity</p> <ul style="list-style-type: none">Students experienced an individual sense of belonging to group belongingness identity when that group membership is part of their cultural identity. (Swanson et al., 2012) <p>Campus belongingness</p> <ul style="list-style-type: none">Students who feel as though they belong to their campus community often experience an increased sense of well-being, socially, and academically. (Waters et al., 2018) <p>Social model of identity change (SMIC)</p> <ul style="list-style-type: none">Investigation that the negative effect of the transition to higher education can be mitigated by the social identity continuity pathway, consisting of the social identity, past academic, identity membership in the new environment, or campus belongingness. (Griswold et al., 2021) <p>Hypotheses</p> <ol style="list-style-type: none">If students with international backgrounds have a strong sense of cultural identity, then they will experience lower levels of alienation.If students with international backgrounds have high levels of campus belongingness, then they will experience less alienation. <p>Selected Readings</p> <p>Swanson, H. J. (2012). The development of a cultural identity scale. <i>Journal of Cross-Cultural Psychology, 43</i>(1), 100-110.</p> <p>Waters, T. R., & Saunders, H. J. (2018). Campus belongingness and academic success: A meta-analysis. <i>Journal of Research in Personality, 74</i>, 1-15.</p> <p>Waters, T. R., Saunders, H. J., & Waters, T. R. (2018). Campus belongingness and academic success: A meta-analysis. <i>Journal of Research in Personality, 74</i>, 1-15.</p>	<p>Participants</p> <ul style="list-style-type: none">60 undergraduate students between 18-24 years of age.67% identified as female.54% were in their fourth year of college.22 participants had international experience.Students were recruited through Instagram messages with a focus on recruiting individuals who have attended school outside the U.S. prior to beginning their undergraduate education. <p>Materials</p> <ul style="list-style-type: none">Alienation - University Alienation Scale (UAS; Berkefeld, 1972).Example item: "I don't have as many friends as I would like at [university]."$\alpha = .82$Cultural identity - modified Swanson's Cultural Identity Scale (Swanson et al., 2012).Example item: "I have spent time trying to learn about my home country and culture."$\alpha = .88$Campus belongingness - Culture and Academic Experiences Questionnaire (CAEQ; Ladd et al., 2008).Example item: "I feel that my peers respect my academic views."Behavioral intention membership, campus integration ($\alpha = .77$). <p>Procedure</p> <ul style="list-style-type: none">Participants completed a 10-minute survey demographic information.Participants then completed the three scales measuring alienation, cultural identity, and campus belongingness.All participants were instructed to respond to items regarding how they currently felt as an undergraduate student to encourage high independence to think about their own identity.	<p>Cultural identity</p> <ul style="list-style-type: none">A linear regression analysis showed that cultural identity significantly predicted alienation with a stronger sense of membership resulting in lower alienation. <p>Campus belongingness</p> <ul style="list-style-type: none">Linear multiple regression analysis showed that campus belongingness significantly predicted alienation with a stronger sense of membership resulting in lower alienation.This result was reported in both the international and domestic groups.Campus belongingness continued to be negatively correlated with alienation in the second exploratory model.These findings support hypothesis 2, which posits that increased campus belongingness decreases alienation.



CSURF
CENTRAL SPRINGS
UNDERGRADUATE
RESEARCH FORUM
Schedule of Events
SCAN ME



Prenatal and Postnatal Inulin Supplementation on Gut Microbiota in Maternally Separated Rats

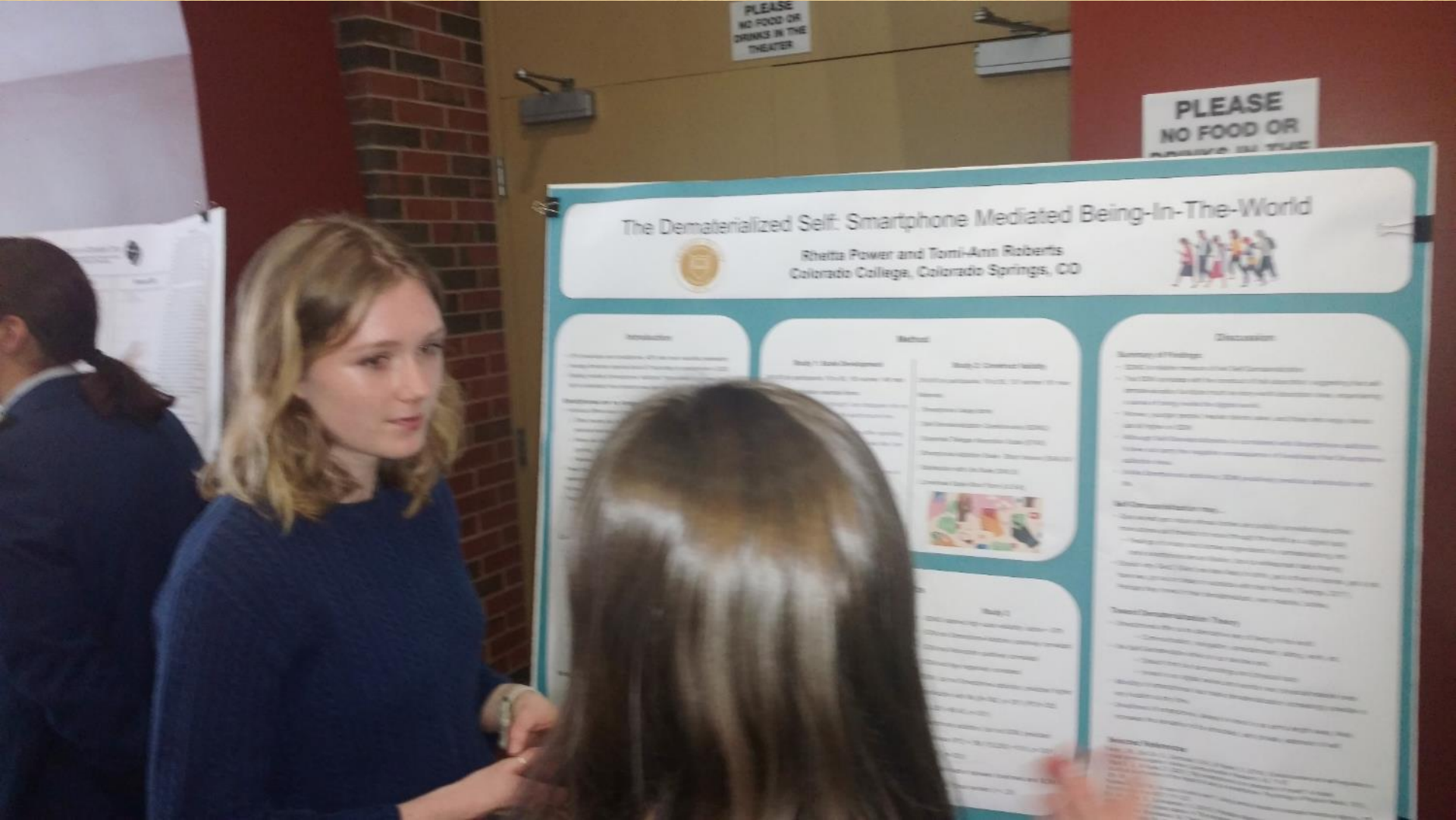
Yiyi Su*, Jack Beattie, Peyton Claesson, Nick Firestone, Larr L. Driscoll
Colorado College, Colorado Springs, CO

Method

Results

Discussion

The poster is divided into three main columns. The left column, titled 'Method', contains text and a diagram of a rat's gut showing the location of the cecum and colon. The middle column, titled 'Results', features several bar graphs and line plots showing data points with error bars. The right column, titled 'Discussion', contains text and a small diagram. The entire poster is framed with a green border.



The Dematerialized Self: Smartphone Mediated Being-In-The-World

Rhetta Power and Tomi-Ann Roberts
Colorado College, Colorado Springs, CO




Introduction

Smartphone mediated being-in-the-world is a new form of being-in-the-world. It is a form of being-in-the-world that is mediated by the smartphone. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world.

Method

Study 1: Data Development
Participants (N = 100) were recruited from a local university. They were asked to use their smartphones for a period of one week. They were asked to record their smartphone usage. They were asked to record the number of times they used their smartphones. They were asked to record the amount of time they spent using their smartphones. They were asked to record the types of activities they used their smartphones for. They were asked to record the locations where they used their smartphones. They were asked to record the people they used their smartphones with. They were asked to record the things they used their smartphones for. They were asked to record the feelings they had when they used their smartphones. They were asked to record the thoughts they had when they used their smartphones. They were asked to record the actions they took when they used their smartphones. They were asked to record the results of their actions when they used their smartphones. They were asked to record the consequences of their actions when they used their smartphones. They were asked to record the feedback they received when they used their smartphones. They were asked to record the rewards they received when they used their smartphones. They were asked to record the punishments they received when they used their smartphones. They were asked to record the feedback they received when they used their smartphones. They were asked to record the rewards they received when they used their smartphones. They were asked to record the punishments they received when they used their smartphones.



Discussion

Smartphone mediated being-in-the-world is a new form of being-in-the-world. It is a form of being-in-the-world that is mediated by the smartphone. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world.

Summary of Findings

Smartphone mediated being-in-the-world is a new form of being-in-the-world. It is a form of being-in-the-world that is mediated by the smartphone. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world. This form of being-in-the-world is characterized by the presence of the smartphone in the world. The smartphone is a device that is used to communicate with other people. It is a device that is used to access information. It is a device that is used to control the world. The smartphone is a device that is used to create a new form of being-in-the-world.

References

Power, R., & Roberts, T. (2014). The dematerialized self: Smartphone mediated being-in-the-world. *Journal of Human-Computer Studies*, 68(1), 1-15.

Appendix

Appendix A: Smartphone Usage Log

Date	Time	Location	Activity	Duration	People	Things	Feelings	Thoughts	Actions	Results	Consequences	Feedback	Rewards	Punishments
1/1/2014	10:00	Home	Texting	5 min	Friend	Phone	Happy	Thinking about friend	Texted friend	Friend replied	Friend is happy	Friend likes me	Friend likes me	Friend likes me

CSURF 2023