

# Intervention Science



Harnessing Psychology to Address Real-World Social Problems

**SPSP Preconference • February 27, 2020 • New Orleans**

## Schedule

8:00 - 8:30	<b>Breakfast &amp; Check-In</b>	<b>Preconference: Celestin D</b> <b>Meals: Outside preconference room</b> <b>Poster Session: Celestin Foyer (12:30-1:15p)</b>
8:30 - 8:40	<b>Kate Turetsky</b> Opening remarks	
8:40 - 9:10	<b>Claude Steele</b> The science of diverse community	
9:10 - 9:40	<b>Nilanjana Dasgupta</b> People and places that are social vaccines for underrepresented students in STEM	
9:40 - 10:10	<b>Ana Gantman</b> A behavioral science framework for understanding sexual assault on college campuses	
10:10 - 10:25	<b>AM Coffee Break</b>	
10:25 - 10:55	<b>Eran Halperin</b> Emotion focused interventions to promote support for peace in intractable conflicts	
10:55 - 11:25	<b>Calvin Lai</b> Reducing hidden biases in the lab and in the field	
11:25 - 12:15	<b>Jenna Clark &amp; Rahul Ladhania</b> New research models for intervening at scale: Improving health through large-scale research partnerships	
12:15 - 1:20	<b>Lunch &amp; Poster Session:</b> Lunch is served 12:15-1; Visit posters 12:30-1:15	
1:20 - 2:00	<b>Early Career Data Blitz: Christina Bauer, Mitchell Campbell, &amp; Lindsay Branham</b>	
2:00 - 2:30	<b>Valerie Purdie Greenaway</b> <i>We know it works... now what?:</i> From interventions to institutional transformation	
2:30 - 3:00	<b>Sarah Townsend</b> The benefits of difference-education persist over time and across settings	
3:00 - 3:20	<b>PM Coffee Break</b>	
3:20 - 3:50	<b>Rebecca Littman</b> Intervening internationally: Intervention partnerships, design, and scaling-up in developing countries	
3:50 - 4:20	<b>Linda Tropp</b> Ambivalence about social relevance: Can our research have real-world impact? Should it? And are we the ones to do it?	
4:20 - 4:30	<b>Beyond Conflict Intervention Science Poster Awards &amp; Wrap Up</b>	

## Locations

## Overview

---

This year's preconference brings together researchers interested in turning social psychology outward to understand and address pressing societal problems. This year, we will discuss the science of field-based interventions that address social issues where they occur: in classrooms, college campuses, communities, health-focused organizations, and other settings, both in the US and internationally.

## Speakers

---

**CLAUDE STEELE**, Stanford University  
**The science of diverse community**  
csteele@stanford.edu

**NILANJANA DASGUPTA**, University of Massachusetts Amherst  
**People and places that are social vaccines for underrepresented students in STEM**  
nd@umass.edu

**ANA GANTMAN**, Brooklyn College  
**A behavioral science framework for understanding sexual assault on college campuses**  
ana.gantman@brooklyn.cuny.edu

**ERAN HALPERIN**, Hebrew University of Jerusalem  
**Emotion focused interventions to promote support for peace in intractable conflicts**  
eran.halperin@mail.huji.ac.il

**CALVIN LAI**, Washington University in St. Louis  
**Reducing hidden biases in the lab and in the field**  
calvinlai@wustl.edu

**JENNA CLARK**, Duke University Center for Advanced Hindsight  
**Some advanced hindsight on applied health research**  
jenna.clark@duke.edu

**RAHUL LADHANIA**, Behavior Change for Good Initiative, University of Pennsylvania  
**The mega study model for learning behavior change**  
ladhania@wharton.upenn.edu

**VALERIE PURDIE GREENAWAY**, Columbia University  
***We know it works... now what?: From interventions to institutional transformation***  
vjp12@columbia.edu

**SARAH TOWNSEND**, University of Southern California Marshall School of Business  
**The benefits of difference-education persist over time and across settings**  
sarahtow@marshall.usc.edu

**REBECCA LITTMAN**, Beyond Conflict & Massachusetts Institute of Technology  
**Intervening internationally: Intervention partnerships, design, and scaling-up in developing countries**  
rlittman@mit.edu

**LINDA TROPP**, University of Massachusetts Amherst  
**Ambivalence about social relevance: Can our research have real-world impact? Should it? And are we the ones to do it?**  
tropp@umass.edu

## Early Career Data Blitz

---

**CHRISTINA BAUER<sup>1</sup>, Rafael Boemelburg<sup>2</sup>, & Greg Walton<sup>2</sup>**

*<sup>1</sup>Free University Berlin, <sup>2</sup>Stanford University*

**Reframing refugees' identity as a source of strength and important skills enhances long-term academic engagement**

We developed and tested a brief intervention that reframed refugees' stigmatized identity as agentic and resourceful, not weak and deficient. The intervention boosted refugees' engagement at an online-university, as compared to controls: Over one year, refugees logged in 23% more often on the learning platform, which further predicted an increase in course completions.

**MITCHELL CAMPBELL<sup>1</sup>, Sohad Murrar<sup>2</sup>, & Markus Brauer<sup>1</sup>**

*<sup>1</sup>University of Wisconsin–Madison, <sup>2</sup>Governor's State University*

**Using descriptive social norms to improve intergroup outcomes**

Descriptive social norms interventions have been used to reduce teen drug use, increase conservation, etc. In four large experiments in college classrooms, we tested whether providing information about pro-diversity norms would alter intergroup attitudes and behaviors. There was consistent evidence that social norms information improved intergroup outcomes, including reducing the achievement gap.

**LINDSAY BRANHAM**

*University of Cambridge*

**Virtual immersive contact: A field experiment to reduce prejudice and discrimination in Central African Republic**

This study explores the efficacy of Virtual Immersive Contact through virtual reality (VR) technology to reduce prejudice and discrimination towards the Muslim minority in Central African Republic.

## Poster Presentations & Award Competition

---

Join our 24 poster presenters from **12:30-1:15 PM in the Celestin Foyer** to learn about their exciting intervention research. This year's poster award competition is sponsored by Beyond Conflict, an evidence-based, global non-profit working for positive social change. The 2020 Beyond Conflict Intervention Science Poster Award winner will receive a \$100 prize, and two presenters will receive \$50 Honorable Mentions. Awards will be announced during the closing remarks at 4:20pm. Beyond Conflict is excited to show their support for researchers engaged in intervention science!

**NICOLE ABI-ESBER<sup>1</sup>, Mike Yeomans<sup>1</sup>, Alison Wood Brooks<sup>1</sup>, & Jonah Berger<sup>2</sup>**

*<sup>1</sup>Harvard Business School, <sup>2</sup>The Wharton School of the University of Pennsylvania*

### **Plan ahead: Topic brainstorming leads to better conversations**

Conversations are a ubiquitous part of our social worlds. We attempt to achieve many goals in conversations: enjoying ourselves, being productive, and managing others' impressions of us-- but we know very little about how to best achieve these goals. In this project, we present a promising intervention: brainstorming topics ahead of time leads to more conversational enjoyment and productivity.

**MARGUERITE BEATTIE<sup>1</sup>, Hanna Konttinen<sup>1</sup>, Salla-Maarit Volanen<sup>1,2</sup>, & Nelli Hankonen<sup>1</sup>**

*<sup>1</sup>University of Helsinki, <sup>2</sup>Folkhälsan Research Center*

### **Who practices mindfulness after an intervention? Latent profile analyses of social cognitive responses**

Among adolescent participants of a school-based mindfulness intervention, latent profile analyses identified five different subgroups of mindfulness practice frequency trajectories and social cognition about mindfulness practice. Some of these subgroups were more frequently found in certain demographic groups than in others, suggesting that tailoring could improve intervention equity.

**ALEXANDRA BEAUCHAMP, Su-Jen Roberts, & Craig Piper**

*Wildlife Conservation Society*

### **Informal science institutions: An opportunity to improve science attitudes**

This project explores how informal science institutions, particularly zoos, can improve public science attitudes. Researchers used two studies to explore visitors' perceptions of zoos as science communicators and how signage can improve willingness to engage with science. Findings indicate that people see zoos as accessible, friendly places for science learning and can increase science engagement.

**KRISTEN BLACK & Man Yu Li**

*University of Louisiana at Lafayette*

### **The effects of a multiculturalism intervention**

The United States of America is often thought of as a place of opportunity and freedom. However, the recent surge in acts of violence motivated by intergroup biases show otherwise. The current

study will develop a virtual multiculturalism intervention and assess how such intervention may improve individuals' overall multicultural competence.

**ALEXANDER BROWMAN<sup>1</sup>, Ryan Svoboda<sup>2</sup>, & Mesmin Destin<sup>2</sup>**

*<sup>1</sup>Boston College, <sup>2</sup>Northwestern University*

**Promoting academically motivating identities among low-socioeconomic status youth: An interactive role model intervention**

We show that low-SES youth's beliefs about the likelihood of attaining mobility affects the extent to which they envision futures that hinge on education, which ultimately predict their academic intentions and performance. We then present a novel intervention for promoting the adoption of education-dependent futures among low-SES youth: highlighting multiple viable school-based paths to mobility.

**STEPHANIE CARPENTER<sup>1</sup>, Jamie Yap<sup>1</sup>, Cho Lam<sup>2</sup>, David Wetter<sup>2</sup>, & Inbal Nahum-Shani<sup>1</sup>**

*<sup>1</sup>University of Michigan, <sup>2</sup>University of Utah*

**Emotions impact engagement among smokers during a quit attempt**

Two mobile health observational studies revealed that smokers experiencing specific high intensity negative emotions (e.g., angry, irritable) were less likely to complete a study assessment delivered within the next 3 hours. These findings suggest that proximal emotions critically impact engagement among smokers during a quit attempt.

**EMILY N. CYR<sup>1</sup>, Jacob D. Pavicic<sup>1</sup>, Hilary B. Bergsieker<sup>1</sup>, Tara Dennehy<sup>2</sup>, Seth Mahon<sup>1</sup>, Stephen Wright<sup>3</sup>, & Steven Spencer<sup>4</sup>**

*<sup>1</sup>University of Waterloo, <sup>2</sup>University of British Columbia, <sup>3</sup>Simon Fraser University, <sup>4</sup>The Ohio State University*

**Open to everyone: PRISM interventions reduce boys' gender bias and improve girls' anticipated fit in STEM**

Adolescent boys (Ns = 88, 289, 327) who did a values affirmation, saw a latent ability video, and discussed how stereotypes conceal girls' abilities (vs. control) had improved beliefs of girls' STEM abilities. Girls (N = 257) who discussed communal value fit in STEM and watched a near-peers' STEM fit video (vs. control) had higher anticipated fit, efficacy and interest in STEM career trajectories.

**MATTHEW EASTERBROOK<sup>1</sup>, Marlon Nieuwenhuis<sup>2</sup>, Kerry Fox<sup>3</sup>, Peter Harris<sup>1</sup>, & Robin Banerjee<sup>1</sup>**

*<sup>1</sup>University of Sussex, <sup>2</sup>University of Twente, <sup>3</sup>University of Brighton*

**The content of self-affirmation essays: Results from a large self-affirmation trial targeting 15-16-year-old school pupils in England who are eligible for free school meals**

Results from a large randomised control trial (N = 5059) of self-affirmation exercises in 29 English schools found a small positive effect of the self-affirmation on exam results of 15-16-year-old pupils eligible for free school meals, but the effect was much stronger for pupils wrote essays that were coded as being very self-affirming and/or self-reflective.

**ISAAC HANDLEY-MINER, Erik Santoro, Eric Smith, & Alia Crum**

*Stanford University*

**Does intervening on meta-mindsets promote more durable mindset change than intervening on domain-specific mindsets?**

Adopting the mindset that stress is enhancing can improve work performance, mental health, and hormonal stress responses. Targeting meta-mindsets—e.g., the belief that one's mindsets are self-fulfilling and controllable—may offer people more agency over their stress mindsets, fortify them against non-adaptive mindsets, and allow for a more ethical approach to stress mindset interventions.

**NELLI HANKONEN<sup>1</sup>, Minttu Palsola<sup>1</sup>, Tommi Vasankari<sup>2</sup>, Vera Araujo-Soares<sup>3</sup>, Falko Sniehotta<sup>3</sup>, & Ari Haukkala<sup>1</sup>**

*<sup>1</sup>University of Helsinki, Finland, <sup>2</sup>UKK Institute, Finland, <sup>3</sup>University of Newcastle, United Kingdom*

**Does a school-based intervention based on social psychological theories and co-design increase physical activity? The Let's Move It cluster-randomised trial**

A school-based intervention to promote physical activity among older adolescents was designed based on social psychological theories. A cluster-randomised trial (n=1106) found no effects on objectively measured activity, except for light physical activity, nor the mediators. Methodological and conceptual challenges in development and evaluation of behaviour change interventions are discussed.

**RAYLENE LUNA<sup>1</sup>, Nicole Duong<sup>2</sup>, & Viviane Seyranian<sup>1</sup>**

*<sup>1</sup>California State Polytechnic University, Pomona, <sup>2</sup>Claremont Graduate University*

**Contextualizing social psychological interventions**

This poster delineates the iterative intervention design and contextualization model as a methodology to contextualize interventions to address social and cultural experiences of differing populations and provides case studies of successes and failures.

**JENNIFER MCCABE**

*Western Washington University*

**Overcoming barriers to perinatal mental health care: Feasibility of a text message intervention**

This project is in early stages of study design, with the primary goal evaluating the feasibility of an intervention that utilizes non-traditional treatment methods to address barriers to perinatal mental health care. I will collect information to identify issues that I need to address prior to completing a larger, controlled trial. Data collection is scheduled to begin in Spring 2020.

**SALLY MERRITT<sup>1</sup>, Aline Hitti<sup>2</sup>, & Laurie O'Brien<sup>1</sup>**

*<sup>1</sup>Tulane University, <sup>2</sup>University of San Francisco*

**Female STEM role models for diverse girls**

Girls in science workshops led by female role models (RM) wrote about their favorite or first leader. All had increases in science identity. RM identification was strong and associated with increases in science identity. Girls in the favorite leader condition focused on RM competence and

supportiveness. Underrepresented minority girls identified more with RM than well-represented girls.

**KATLYN MILLESS<sup>1</sup>, Maya Godbole<sup>1</sup>, Brianna Donaldson<sup>2</sup>, & Catherine Good<sup>3,1</sup>**

<sup>1</sup>The Graduate Center, City University of New York, <sup>2</sup>American Institute of Mathematics, <sup>3</sup>Baruch College

### **What is math? Shaping teachers' mindsets and views of math as a discipline through participation in Math Teachers' Circles**

Participation in Math Teachers' Circles, an intervention aimed at shaping K-12 math teachers' view of math, resulted in shifts toward healthy mindsets and pedagogy. Specifically, the MTC intervention led to teachers' increased belonging to and identification with math. This, in turn, led to higher endorsement of mastery (rather than performance) goals, mistake-making, and math confidence.

**ARIANA MUNOZ-SALGADO<sup>1</sup>, Taylor Ballinger<sup>2</sup>, & Jennifer Crocker<sup>2</sup>**

<sup>1</sup>University of Michigan, <sup>2</sup>The Ohio State University

### **It's Black and White: Expanding who benefits from diversity in order to increase support for diversity efforts**

This research examines whether Whites become more supportive of diversity efforts and more interested in interracial interactions after learning about how diversity can benefit Whites (vs. racial minorities). We also tested how the framing of a diversity message impacts Whites' support for diversity efforts by manipulating whether the benefits were described using a concrete or abstract construal.

**YEJI PARK, Katherine Milkman, Angela Duckworth, Dena Gromet, Joseph Kay, & 35 other scientists**

*University of Pennsylvania*

### **A mega-experiment promoting lasting exercise habits in 24 Hour Fitness gym members**

We conducted a "mega-study" comprised of 20 preregistered field experiments (N=62,746) aimed at promoting lasting exercise habits. 53 different digital behavioral science interventions were compared against a placebo control involving immediate payment of \$1.08. Compared to the placebo control, participants visited the gym more frequently in 30 of the interventions during the intervention period.

**MIAO QIAN<sup>1</sup>, Gail Heyman<sup>2</sup>, Paul Quinn<sup>3</sup>, & Kang Lee<sup>4</sup>**

<sup>1</sup>Harvard University, <sup>2</sup>University of California, San Diego, <sup>3</sup>University of Delaware, <sup>4</sup>University of Toronto

### **Every face has a name: Individuation reduces racial bias**

The tendency to view outgroup members as exemplars of a homogeneous category rather than as distinct individuals is one factor that underlies intergroup biases. Across 6 studies, we investigated the effectiveness of an individuation approach to reduce children's implicit racial biases and specify the parameters that will allow the promise to be fulfilled.

**LAUREN REPERT, Greta Poler, & Catherine Sanderson**

*Amherst College*

**Web-based mental health interventions targeting mental health stigma and treatment seeking behaviors of college students**

This study examined the effects of web-based educational interventions to reduce barriers to help-seeking and increase help-seeking behavior of college students. Students were assigned to a perfectionism intervention, a social belongingness intervention, or a control condition. Interventions lowered public stigma and increased help-seeking behavior, which varied with intervention and class-year.

**PETER RUBERTON<sup>1</sup>, Geoffrey Cohen<sup>2</sup>, Valerie Purdie Greenaway<sup>3</sup>, Josh Smyth<sup>1</sup>, Jackson Harper<sup>1</sup>, & Jonathan Cook<sup>1</sup>**

*<sup>1</sup>The Pennsylvania State University, <sup>2</sup>Stanford University, <sup>3</sup>Columbia University*

**A longitudinal study of affirmation and belonging interventions among Ph.D. students**

Attrition from graduate school is a considerable and growing problem among Ph.D. students, but little research has examined the psychological reasons that students leave. Using an EMA approach, this research examines the day-to-day psychological experiences of Ph.D. students and tests two interventions (values affirmation, belonging) intended to mitigate attrition.

**CLAIRE SANDMAN<sup>1</sup>, Linnea Ng<sup>2</sup>, & Mikki Hebl<sup>2</sup>**

*<sup>1</sup>Cornell University, <sup>2</sup>Rice University*

**The effect of active shooter training on stress and stigma**

I examine the effect an active shooter training has on employee stress, and whether that leads to an increase in mental illness stigma. This research provides evidence that certain active shooter training is not increasing stress or stigma but is increasing content knowledge. Additionally, people are making an incorrect and overgeneralized link between mass shootings and mental illness.

**SAMANTHA STEVENS<sup>1</sup>, Peter Ruberton<sup>1</sup>, Geoffrey Cohen<sup>2</sup>, Valerie Purdie Greenaway<sup>3</sup>, & Jonathan Cook<sup>1</sup>**

*<sup>1</sup>The Pennsylvania State University, <sup>2</sup>Stanford University, <sup>3</sup>Columbia University*

**A preliminary examination of an image-based, smartphone intervention on doctoral students' psychological experiences**

As part of an ongoing, longitudinal field study, Ph.D. students completed a novel, image-based intervention or control exercise at the end of their first year using their smartphones. Controlling for any effects of earlier interventions, results revealed less belonging uncertainty in the intervention conditions (affirmation or belonging) relative to the control, particularly for male students.

**H. ANNIE VU, Claudia M. Pinzon, & Luis M. Rivera**

*Rutgers University - Newark*

**Does self-affirmation improve academic performance via ingroup self-esteem?**

One experiment tests the hypothesis that self-affirmation will improve course performance by increasing ingroup self-esteem. Throughout the semester, we manipulated self-affirmation and

measured self-esteem and performance. Our findings hope to support self-affirmation interventions in higher education and provide insight into the psychological resources that promote self-affirmation effects.

**ELIZABETH WEITZ<sup>1</sup>, Juan Ospina<sup>2</sup>, & Gregory Walton<sup>1</sup>**

*<sup>1</sup>Stanford University, <sup>2</sup>Ohio State University*

### **Helping students and teachers connect reduces disciplinary citations and recidivism among students returning to school from juvenile detention**

For children who come into contact with the criminal justice system, a critical juncture occurs when they return to school. A field experiment (N=47) found that a brief exercise helping students think about their goals and values and a letter in which they introduced themselves to an adult they choose to support them reduced disciplinary citations and recidivism to juvenile detention.

**DEBORAH WU<sup>1</sup>, Kelsey Thiem<sup>2</sup>, & Nilanjana Dasgupta<sup>1</sup>**

*<sup>1</sup>University of Massachusetts Amherst, <sup>2</sup>Ball State University*

### **The long-term impact of female peer mentors for women in engineering from first-year through graduation**

We examined the long-term impact of peer mentorship for college women in engineering. Women were assigned a female mentor, a male mentor, or no mentor for 1 year, and were followed up each year through college graduation. Female peer mentors protected women's belonging, self-efficacy, motivation, and advanced degree intentions in engineering through graduation, years after the mentoring ended.

## **Preconference Sponsor: Beyond Conflict**

---

We thank this year's preconference sponsor, Beyond Conflict, for their generous support of the 2020 Intervention Science Poster Award Competition. Beyond Conflict is an evidence-based, global non-profit working for positive social change. Find out more about Beyond Conflict by visiting their website, [www.beyondconflictint.org](http://www.beyondconflictint.org), and social media accounts, @Beyond\_Conflict and @BeyondConflictInt.



## **Organizers**

---

**KATE TURETSKY**, Princeton University

**REBECCA LITTMAN**, Beyond Conflict & Massachusetts Institute of Technology

**VALERIE PURDIE GREENAWAY**, Columbia University