EDWARD H. CHANG

3730 Walnut Street 527.1 Jon M. Huntsman Hall Philadelphia, PA 19104 changed@wharton.upenn.edu

EDUCATION

The Wharton School, University of Pennsylvania

Expected 2020

Ph.D. Candidate in Operations, Information, and Decisions

Yale University 2010

B.A. in Mathematics and Philosophy, summa cum laude

RESEARCH INTERESTS

Behavior Change, Diversity, Discrimination

PUBLICATIONS

Chang, E.H., Milkman, K.L., Chugh, D., & Akinola, M. Diversity Thresholds: How Social Norms, Visibility, and Scrutiny Relate to Group Composition. Forthcoming at *Academy of Management Journal*.

SELECTED RESEARCH IN PROGRESS

Chang, E.H., Milkman, K.L., Massey, C., Duckworth, A.L., Grant, A.M., Gromet, D.M., & Rebele, R. The Heterogeneous Impact of Diversity Training on Attitudes and Behavior: A Field Experiment.

Chang, E.H., Eskreis-Winkler, L., Fishbach, A., Milkman, K.L., & Duckworth, A.L. Make It Fun: Focusing on Immediate Rewards to Establish Long-Term Exercise Habits.

Chang, E.H., Dai, H., Milkman, K.L., & Duckworth, A.L. Identity Labeling as a Means to Promote Exercise Habits.

Skowronek, S., **Chang, E.H.**, Milkman, K.L, Duckworth, A.L., & Rogers, T. "I Hear What You're Saying!" Affirming Others' Motivations to Increase Follow-Through Behavior.

AWARDS & HONORS

Baker Retailing Center Grant, 2018–2020

Graduate Student Travel Award, Society for Personality and Social Psychology, 2018 Best Micro Paper Award, East Coast Doctoral Conference, 2017 Winkelman Fellowship, 2017–2020

• Awarded to two third-year PhD students who have shown the greatest academic job potential across all departments at Wharton

Highest Rated Paper Presented by a Graduate Student at Society for Judgment and Decision Making Conference, 2016

Marjorie Weiler Prize for Excellence in Writing, 2016

Russell Ackoff Doctoral Student Fellowship, 2016, 2017

Wharton Doctoral Programs Travel Grant, 2016, 2017

Graduate and Professional Student Assembly of the University of Pennsylvania Travel Grant, 2016, 2017

CONFERENCE PRESENTATIONS

A Field Experiment Testing the Impact of Diversity Training on Attitudes and Behavior

- Society for Personality and Social Psychology, Atlanta, GA, 2018
- Society for Judgment and Decision Making, Vancouver, Canada, 2017
- Wharton-INSEAD Doctoral Consortium, Philadelphia, PA, 2017
- Academy of Management Annual Meeting, Atlanta, GA, 2017

Diversity Thresholds: How Social Norms, Visibility, and Scrutiny Affect Group Composition

- Trans-Atlantic Doctoral Conference, London, United Kingdom, 2017
- East Coast Doctoral Conference, New York, NY, 2017
- Society for Personality and Social Psychology, San Antonio, TX, 2017
 - Symposium chosen by the Diversity and Climate Committee to be the featured Diversity Symposium of SPSP 2017
- Wharton-INSEAD Doctoral Consortium, Singapore, 2016
- Society for Judgment and Decision Making, Boston, MA, 2016
 - Selected as best paper co-authored by a student
- Wharton People and Organizations Conference, Philadelphia, PA, 2016
- Academy of Management Annual Meeting, Anaheim, CA, 2016
- Behavioral Decision Research in Management Conference, Toronto, Canada, 2016
- Yale Whitebox Doctoral Conference, New Haven, CT, 2016

SERVICE

Ad Hoc Reviewer for Management Science, 2017–Present

Student Representative for Society of Judgment and Decision Making Executive Board, 2017–2018

Co-Organizer of Women in Business Academia Conference, 2016, 2017

Vice President of Wharton Society for Advancement of Women in Business Academia, 2017 Event Chair of Wharton Society for Advancement of Women in Business Academia, 2016 Organizer of Operations, Information, Decisions PhD Student Seminar, 2016–2018 PhD Social Chair of Operations, Information, Decisions Department, 2017

OTHER PROFESSIONAL EXPERIENCE

Machine Learning Lead, Square, 2011–2015, San Francisco, CA Data Scientist, Redfin, 2010–2011, Seattle, WA

SELECTED RESEARCH ABSTRACTS

Chang, E.H., Milkman, K.L., Chugh, D., & Akinola, M. "Diversity Thresholds: How Social Norms, Visibility, and Scrutiny Relate to Group Composition." Forthcoming at Academy of Management Journal.

Across a field study and four experiments, we examine how social norms and scrutiny affect decisions about adding members of underrepresented populations (e.g., women, racial minorities) to groups. When groups are scrutinized, we theorize that decision makers strive to match the diversity observed in peer groups due to impression management concerns, thereby conforming to the descriptive social norm. We examine this first in the context of U.S. corporate boards where firms face pressure to increase gender diversity. Analyses of S&P 1500 boards reveal that significantly more boards include exactly two women (the descriptive social norm) than would be expected by chance. This overrepresentation of two-women boards—a phenomenon we call "twokenism"—is more pronounced among more visible companies, consistent with our theorizing around impression management and scrutiny. Experimental data corroborate these findings and provide support for our theoretical mechanism: decision makers are discontinuously less likely to add a woman to a board once it includes two women (the social norm), and decision makers' likelihood of adding a woman or minority to a group is influenced by the descriptive social norms and scrutiny faced. Together, these findings provide a new perspective on the persistent underrepresentation of women and minorities in organizations.

Chang, E.H., Milkman, K.L., Massey, C., Duckworth, A.L., Grant, A.M., Gromet, D.M., & Rebele, R. "The Heterogeneous Impact of Diversity Training on Attitudes and Behavior: A Field Experiment."

We present results from a large (N=3,016) field experiment testing whether an hour-long, science-based online diversity training can change attitudes and behaviors towards women in the workplace. We build on past theories of behavior change and propose that when attitudes are poorly aligned with an intervention's message, the targets of the intervention will be receptive to attitude change but not yet ready to change their behavior. On the other hand, when attitudes are well-aligned with an intervention's message, attitude change may not be feasible or necessary, but we predict the targets of the intervention will change their behavior. Our pre-registered field experiment tested the efficacy of a diversity training intervention, included thousands of employees at a global professional services firm, included an active placebo control, and measured participants' attitudes and workplace decisions post-intervention. Our treatment significantly decreased modern sexism, but this was driven by employees in our pre-registered subgroups whose attitudes were initially most sexist: international employees and men. Women in the U.S.-those whose attitudes were initially least sexist-showed no attitude change but were the only subgroup to significantly improve their behavior, consistent with our theorizing. We also find evidence of positive spillovers from our diversity training: a training focused entirely on gender bias and stereotyping improved attitudes and behaviors toward racial minorities. This study extends our knowledge about the pathways to attitude and behavior change in the context of prejudice reduction and suggests that short, inexpensive diversity training programs can have a meaningful impact.