EDWARD H. CHANG

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EDUCATION

The Wharton School, University of Pennsylvania Ph.D. Candidate in Operations, Information, and Decisions

Yale University

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

2010

Expected 2020

RESEARCH INTERESTS

Diversity, Discrimination, Gender, Race, Behavioral Change

WORKING PAPERS

Chang, E.H., Milkman, K.L., Chugh, D., & Akinola, M. "Twokenism" is the New Tokenism: Gender Diversity on U.S. Corporate Boards. Revise and resubmit 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. A Field Experiment Testing the Impact of Gender Bias Training on Attitudes and Decisions.

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

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 Gender Bias Training on Attitudes and Decisions

- Society for Judgment and Decision Making, Vancouver, Canada, 2017 (scheduled)
- Academy of Management Annual Meeting, Atlanta, GA, 2017

"Twokenism" is the New Tokenism: Gender Diversity on U.S. Corporate Boards

- Trans-Atlantic Doctoral Conference, London, United Kingdom, 2017
- East Coast Doctoral Conference, New York, NY, 2017
 - Winner of Best Micro Paper Award
- Society for Personality and Social Psychology Meeting, San Antonio, TX, 2017
 - Symposium chosen by the Diversity and Climate Committee to be the featured Diversity Symposium of SPSP 2017
- Wharton-INSEAD Doctoral Conference, 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, 2016–2017 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. "'Twokenism' is the New Tokenism: Gender Diversity on U.S. Corporate Boards."

We examine how threshold effects and social norms affect the inclusion of women in groups that face pressures to achieve gender diversity. We theorize that groups may look to include the normative number of women seen in peer groups, and this conformity to the peer norm should be heightened as impression management concerns rise. Analyses of S&P 1500 boards reveal that

significantly more boards include exactly two women (the "social norm" or average number of women per board) than would be expected by chance, a phenomenon we call "twokenism". This overrepresentation of two-woman boards is more pronounced among companies facing greater media scrutiny, consistent with our theorizing that impression management concerns loom larger for more scrutinized companies. Further, historical analyses show changing social norms predict when S&P 1500 boards displayed tokenism (an overabundance of one-woman boards) and twokenism. Laboratory data also reveal twokenism: individuals are discontinuously less likely to add a woman to a board once it includes two women (the social norm) than when it falls below the social norm, and perceived gender diversity mediates this effect. Together, these findings provide new insights into the sources of persistent underrepresentation of women at the highest echelons of organizations.

Chang, E.H., Milkman, K.L., Grant, A.M., Duckworth, A.L., Massey, C., Gromet, D.M., & Rebele, R. "A Field Experiment Testing the Impact of Gender Bias Training on Attitudes and Decisions."

We present results from a field experiment testing the ability of an hour-long, online gender bias training to change sexist attitudes and behaviors in the workplace. Our pre-registered experiment was well-powered (n=3,017), conducted at a global professional services firm, included an active placebo control, and measured real downstream decisions made by participants (which were not linked to the research from the participants' perspective) in addition to attitudes. Our treatment significantly decreased modern sexism (p=0.0002), driven entirely by men and international employees. Women in the U.S. showed no attitudinal change but were the only group to significantly change (and improve) their behavior (p=0.0094). More generally, we found a significant interaction such that our treatment led to more inclusive behavior among those who were lowest in modern sexism (p=0.004). Our study provides some of the first rigorous, empirical evidence that diversity training can be used to reduce sexist attitudes and behavior change and the conditions for reducing biases.