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"Where are you really from?": Mitigating Unconscious Bias on Campus

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***Abstract*—This experience paper describes an ongoing effort at Carnegie Mellon University (CMU) that works to mitigate the negative effects of unconscious bias among the campus community. Our paper describes the BiasBusters@CMU program, session details, logistics, and preliminary findings from the analysis of pre and post session surveys. Our goals are to illustrate how research findings can be used in practice in higher education a) to help mitigate bias, b) to promote bias awareness, and c) to share our experiences with others who might be interested in bringing bias and inclusivity programming to their campus.**

***Keywords*—Unconscious bias, culture, stereotypes, higher education, intervention, diversity, inclusion**

I. INTRODUCTION

This experience paper describes an ongoing effort at Carnegie Mellon University (CMU) that works to mitigate the negative effects of unconscious bias among the campus community. Our paper describes the Google-inspired origins of the BiasBusters@CMU program, session details, logistics, and preliminary findings from the analysis of pre and post session surveys. Our goals in this paper are to illustrate how research findings can be used in practice in higher education a) to help mitigate bias, b) to promote bias awareness, and c) to share our experiences with others who might be interested in bringing bias and inclusivity programming to their campus.

Unconscious bias is a persistent and pressing social issue with significant negative consequences especially for populations which bear the brunt of stereotyping. Indeed, evidence of bias impacting fields such as medicine [10] [13] [25], the legal system [2] [17], and education [9] [12] [23] [28], are well documented. Some aspects of academic research have revealed far more bias than scientific models would have us believe [5] [11] [26]. Evidence suggests that the field of higher education is not immune: unconscious gender and racial biases pervade academia [19] [20] [21] [22].

Unconscious bias, also known as implicit bias, is a natural and necessary part of our thinking processes. Indeed, the fast-thinking aspects of unconscious bias may be beneficial when presented with life or death situations. But the automatic and unintentional nature of unconscious bias often leads to quick and potentially harmful judgments about people, judgements endorsed by misleading cultural stereotypes. Even those of us who believe we are fair and unbiased in our interactions can all too easily perpetrate "the hidden biases of good people" [1].

Efforts to combat the harmful impacts of unconscious bias are now widespread [14] across industry (e.g., Google, Facebook, Pinterest) and academia (e.g., Emory, University of Wisconsin, University of Washington, Northwestern). The Google-CMU collaboration is largely fueled by the lack of diversity in computer science and engineering [6] and the recognition that bias is hampering the advocacy of diversity in our communities and workplaces. At CMU, diversity and inclusion are part of the institution's value system and embedded in the strategic plan, in part because research has shown that diversity is a means to: better problem solving, higher productivity, and greater innovation. At Google, CEO Sundar Pichai says "A diverse mix of voices leads to better discussions, decisions, and outcomes for everyone."

II. BIASBUSTERS@CMU

BiasBusters@CMU is modeled on Google's Bias Busting@ Work program, created as an extension of the Unconscious Bias @ Work Workshop (UB@Work), a course aimed at raising awareness of how unconscious biases work, and how they can negatively influence workplace interactions. In the spring and summer of 2015, Google and CMU collaborated to create the Bias Busting @ University program; the program is inspired and informed by the Ada Initiative and their Ally Skills workshop.

BiasBusters@CMU is the version specifically tailored for CMU and designed by CMU faculty. The program was piloted in the School of Computer Science (SCS) and the College of Engineering (Carnegie Institute of Technology or CIT) to engage over issues of bias, diversity, and inclusion. One of the major goals of the program is to create an expanding

community of allies across campus, allies who recognize bias and support each other in their efforts to mitigate the impact of bias. BiasBusters sessions are led by members of the CMU community who have volunteered to be trained as program facilitators. Program facilitators have a huge influence on the BiasBusters experience so we take great care in selecting and preparing facilitators who are passionate about mitigating bias within the community, curious to learn the science, and willing to engage in potentially sensitive conversations.

Enthusiasm for, and engagement with, BiasBusters@CMU surpassed the expectations of the program's leaders. BiasBusters@CMU now reaches communities across the CMU campus and well over 1,500 faculty, staff and students have participated. Requests for these optional sessions occur frequently. Keeping the program optional is a deliberate approach in response to studies that suggest making such programs mandatory can lead to backfire and less, rather than more, openness towards diversity issues [18].

III. Several things distinguish BiasBusters@CMU from similar programs

First is the framing: the program has an academic tone, focusing on summaries of research evidence into which discussions of experience are woven. Most importantly, discussions include the personal experiences and acknowledgement of bias from the session facilitators.

Second is the recognition of situations and bias triggers: the program includes discussion, videos, and some specific situations that are most likely to be common bias triggers. These situations are set up as scenarios for the role play. They also provide an opportunity for the facilitators to collect new examples of biased situations and assess those experiences that participants find difficult and sensitive to deal with.

Third is the role-playing: role-playing is based on relevant and real life scenarios (provided by the CMU community), which has proved to be a powerful and effective approach for engaging participants, both at Google and at CMU, creating commitments to greater inclusion.

This framework is based on research findings which suggest that mitigating the effects of unconscious bias requires a) recognizing what it is and how it works (homework, research evidence and discussion), b) recognizing that certain situations and interactions (scenarios) are more likely to trigger bias, and c) providing practice (role-play) and tips for breaking what Devine calls "the mental habit" of prejudice [7]. One well-known example of situational approaches is Jane Elliott's "blue eyes/brown eyes" activity in which participants are discriminated against based on their eye color. The use of situational approaches has been empirically validated and found to be far more effective at reducing bias than simply educating people about bias [24].

Certain research findings presented in the sessions are selected so they support the specific focus of the group of attendees. As discussed later, in CIT we have created versions of BiasBusters@CMU with faculty recruiting, promotion and tenure, or graduate admissions in mind, thereby providing in each case evidence on how unconscious biases relate to gender, race, nationality, or even academic lineage, and how they may affect decision making in these situations [3] [8] [21]. These BiasBusters@CMU sessions were paired with specific guidelines and checklists that committees had to follow during the selection process [4].

BiasBusters@CMU also makes use of videos and short exercises which are particularly effective at promoting discussion. For example, towards the beginning of the session we hand out playing cards which are designed with left handed players in mind. Without telling the participants about the "lefty cards" we simply ask them to sort the cards as if they were going to play a game. We then discuss the experience. We use this as a simple, non-threatening way to introduce the idea that the world is often made for the majority and ignores, even makes life difficult for, those who do not fit what we think of as "societal norms."

IV. Homework

We ask participants to do a little homework ahead of time. Facilitators have found this valuable for keeping the discussion on track without unnecessary diversions. The homework includes asking participants to take at least one Implicit Association Test (IAT). Taking the Harvard IAT helps participants understand how this type of bias creeps in when making quick decisions without time for thoughtful reflection. We also ask that they watch (most of) the video "Unconscious Bias @ Work" by Dr. Brian Welle, a Director, People Analytics at Google, in order to gain a sense of the research evidence and to see Google's efforts at reducing the impact of unconscious bias in the workplace.

V. The fear and fun of role-play

The role play and scenarios are an essential part of each session. Facilitators recognize that this can seem intimidating to some people, indeed some participants have confessed they were going to avoid the sessions because of the fear of role-play. To put people at ease facilitators now include a quick and entertaining "roleplay demo" early in the session, using common bias scenarios such as "Where are you really from?" or "You don't look like an engineer". The scenario is revisited and discussed later in the session. Role play places participants in situations in small groups, usually 3 or 4, and most agree afterwards, even those with trepidation, that the experience is extremely valuable and even when dealing with serious situations they have fun with it. BiasBusters@CMU also provides and discusses tips for interrupting bias. Participants can refer to these tips, developed by Google, as they take on roles in the role play.

VI. Participants

The majority of our BiasBusters sessions involve a mix of faculty, staff and graduate students with a few for undergraduates, especially those in leadership positions such as Teaching Assistants and Resident Assistants. Some sessions have been designed specifically for faculty. These sessions are particularly relevant and valuable in decision making situations such as faculty reviews, faculty hiring, reviewing graduate school applications and committee selection. In faculty sessions, facilitators focus on things like Confirmation Bias (the tendency to seek evidence that confirms our

decisions and ignore evidence that refutes them), Affinity Bias (the bias toward people we view as being "like us"), and Elitist Bias (bias which changes your perception of a person based on where they are from, what school they went to, or who they worked for, etc. This can make you overvalue or undervalue an application. Neither is good).

VII. Evaluation

BiasBusters@CMU also includes an evaluation component to assess participant experiences and the effectiveness of the sessions. The evaluation is comprised of a pre and post assessment survey. At the beginning of the session, a pre-assessment survey is used to gather information about the participants': 1) awareness of unconscious bias; 2) understanding of strategies that can be used to interrupt bias (conscious or unconscious); and 3) ability to use strategies to interrupt bias (conscious or unconscious). At the conclusion of the session, a post-assessment survey is used to gather information on the participants' learning outcomes, their qualitative feedback on the session and their demographics. Responses are confidential (no identifying information is collected) and participation is voluntary.

Surveys were administered to a total of participants including a range of members from the university community: undergraduate students, graduate students, staff, faculty, and post docs. The gender distribution was balanced and the ethnic identity of the participants include a range of backgrounds.

We found the participants experienced three significant outcomes. First, participants reported an increased awareness of unconscious bias after completing the session. Qualitative comments support this finding as well – as one participant explained – the best part of the session was "awareness - the more we learn about it, the more we can combat biases." Second, participants also reported an increased understanding of strategies that can be used to interrupt bias. Qualitative comments support this finding as well – participants explained – the best part of the session was "learning how to intervene" and "starting the conversation." Finally, participants reported an increased likelihood to intervene and interrupt bias. Qualitative comments suggest the role playing was critical in this change – participants explained – the best part of the session was "the role play really brings everyone into the situation" and "practicing allyship in the context of our real experiences."

Initial results suggest that BiasBusters@CMU plays a positive role in the understanding of unconscious bias and interventions that can be used to combat it. Going forward, additional evaluation will be needed to understand the long term impact. Follow-up surveys or interviews may be used investigate the number of reported incidents and where the program proved successful to intervene against bias.

VIII. BiasBusters@University

With the successful experience of BiasBusters@CMU the Google-CMU collaboration moved forward with BiasBusters@University. The goal is to make the generic program available to any college or university interested in bringing bias and inclusivity programming to their campus. Schools adopting this program would ideally "pay it forward," helping the next school learn from their experiences, and conduct train-the-facilitator sessions with interested teams at the next school. Google hosted a one-day train-the-facilitator session with CMU for other interested schools. Basic guides, case studies and relevant tools are also available at rework.withgoogle.com.

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