## Research Statement

The long-term health of our global society depends on humans' ability to live cooperatively in diverse groups. From local government discussions about defunding the police to national political election coverage, it is easy to find evidence of racial discord running through our society. How race and racial issues impact the perceptions and experiences of individuals is a central question of my research program in my field of social psychology.

Specifically, my research program asks questions about how people perceive and interact with individuals with backgrounds and appearances different from their own. The underlying goal of my research is to illuminate the contemporary experiences of stigmatized or marginalized groups while also advancing fundamental knowledge about social psychological processes. A comprehensive visual depiction of my research agenda is depicted in Figure 1. In the remainder of this statement, I describe two major lines of my research in more depth, including both past contributions and current and future directions.

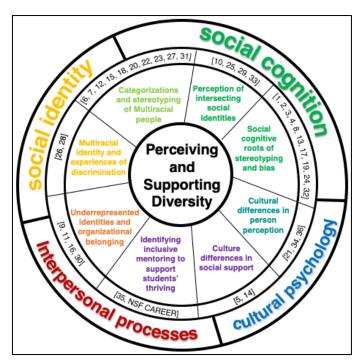


Figure 1 (left). A visual depiction of my research agenda. The major goal—understanding perceptions of diversity and facilitating diverse groups—is approached using theory and methods from four major areas of social psychology. Under the areas are specific research topics and supporting publications [numbers correspond to publications enumerated in my CV].

I. The Perception of Multiracial People. It is estimated that, by 2050, approximately one in every five Americans will be Multiracial (Farley, 2001). In the early 2000s, awareness of the rising Multiracial population in the U.S. illuminated a gap in the social psychology literature: past research on race focused almost exclusively on identifying the consequences of racial categorization

rather than the *process* of racial categorization. That a growing number of individuals might appear racially ambiguous or fit into multiple racial groups were possibilities unaddressed by the existing theoretical models and empirical results of the previous decades. Therefore, by studying the assumptions and beliefs that people use when they perceive Multiracial people, we can improve understanding of social perceptions directly relevant for the future of race relations in the U.S. and also shed light on assumptions and beliefs that people hold about race more broadly. For example, why do people generally consider Barack Obama to be Black rather than Multiracial? And why did some Black Americans question Obama's Black identity, viewing him as only a partial ingroup member? These questions illustrate the important issues raised by considering

Multiracial person perception, and their answers increase our understanding of the psychology of race perception and racial identity.

The predominant early approach to Multiracial person perception, taken by other researchers, was to focus on when and why perceivers might apply existing monoracial categories to Multiracial targets. In contrast, I investigated whether and on what basis perceivers will adopt a novel "Multiracial" category to accommodate the increasing diversity in their social environments. There are societies (e.g., Brazil) in which mixedrace categories are fully cognitively developed and frequently used. However, due to the culturally reinforced view of existing monoracial categories as mutually exclusive and legitimate, I predicted that perceivers would have difficulty using a "multiracial" category. In Chen and Hamilton (2012), I established that perceivers do not use the Multiracial category with the same accuracy and efficiency that they use White, Black, and Asian categories, and its use is further inhibited by the perception that monoracial categories are important, meaningful, and legitimate. In follow-up research (Chen, Moons, Gaither, Hamilton, & Sherman, 2014), I found that individuals with strong egalitarian values were more likely to use the Multiracial category when categorizing Black-White multiracial faces. Our findings suggest that egalitarian people are more willing to validate non-traditional identities.

In the meantime, research on the application of monoracial categories to Multiracial individuals grew but focused almost exclusively on White American perceivers. Those studies established that White American perceivers (a) typically categorize Black-White multiracials according to a rule of *hypodescent*, associating them more with their lower status parent group than their higher status parent group, and (b) do so in part to preserve the hierarchical status quo. While these findings are important, I proposed that they might not generalize to more diverse samples, and consequently that researchers need to prioritize understanding the psychology of people with marginalized identities (e.g., Chen & Norman, 2016; Gaither, Chen, & Rule, 2020). I then spearheaded efforts to extend this literature to understand the factors that determine how racial minorities perceive part-ingroup/part-White multiracials, in particular whether they engage in hypodescent and why or why not (Chen. Kteily, & Ho. 2019; Chen & Ratliff, 2015; Ho, Kteily, & Chen, 2017). Importantly, some of my work showed evidence for hypodescent (on average, Black Americans see Black-White Multiracials as Black; Chen & Ratliff, 2015; Ho et al., 2017) and other work showed patterns opposite of hypodescent (on average, Asian Americans see Asian-White Multiracials as White; Chen et al., 2019). Thus, throughout my work in this area, I have only found moderate support for hypodescent.

Despite this, the existing literature suggests that hypodescent is the *primary* mechanism by which people, especially White Americans, categorize Black-White Multiracial faces. I have argued that the field needs to develop a more systematic understanding of the dispositional and contextual moderators of hypodescent. In Gaither, Chen, Pauker, and Sommers (2019), we showed that the type of biracial face stimuli used (computer-generated versus real) and the categorization task (Black/White vs. Black/Multiracial/White) dramatically impact the likelihood of hypodescent.

Moreover, I propose that the overestimation of hypodescent in the literature is misleading and in fact problematic, because the specific racial categorizations of faces lead to race-specific consequences for downstream processes such as stereotyping

and discrimination. Therefore, we must obtain a deeper understanding of what categories are applied to multiracial individuals most frequently and why. Chen, Pauker, Gaither, Hamilton, and Sherman (2018) documented a novel categorization bias, the minority bias, in the categorization of Multiracial people: specifically, when people encounter racially ambiguous Black-White faces, they quickly judge them to be "non-White" and then generate alternative plausible categories to which they could belong. We found that the most frequent categorizations of Biracial faces were Latinx or Middle Eastern, suggesting that Biracial people may experience stereotyping and discrimination based on these social identities (as opposed to Black). These findings were independently confirmed by another research team (Skinner & Nicolas; 2019).

My leadership role in the Multiracial person perception literature is evidenced by several factors. First, I am an author on two of the three review articles of this literature. Specifically, I was the sole author on a review of how people form impressions of Multiracial individuals (Chen, 2019), and I co-authored a review that discussed sociopolitical motivations and attitudes that could influence people of color's perceptions of Multiracial individuals (Ho, Kteily, & Chen, 2020). Second, I published the first database of Multiracial face stimuli, the American Multiracial Faces Database, that is publicly available and free to academic researchers (Chen, Norman, & Nam, 2020). Since its release in July 2020, 275 scientists from across North and South America, Europe, and Asia have downloaded it. Third, I was invited to serve as Associate Editor of a special issue of the Sage journal Self & Identity, "Perceptions and experiences of unconventional identities." One third of the articles in the issue examined Multiracial identity topics.

In ongoing and future research, I continue to address existing gaps in the literature by diversifying the perceivers studied and broadening the types of targets examined. Specifically, I am examining cultural differences in how Multiracial people are categorized in Brazil (Chen, Couto, Sacci, & Dunham, 2017; Jacob & Chen, under review) and South Korea (Nam & Chen, 2021). I also recruited a graduate student who will investigate the factors that impact perceptions and identity dynamics among Multiracial Latinx people.

II. Factors that Impact Minorities' Belonging and Thriving in Organizations. A second area of my research focuses on the expectations and experiences of individuals in historically majority-dominated contexts. For decades now, researchers and public leaders alike have been asking why certain scientific fields are lack diversity, and funding agencies have prioritized research that seeks to understand this phenomenon. Solving this problem, that is, broadening participation in science, technology, engineering, and math (STEM), is critical for sustaining national economic strength and innovation.

Speaking to this issue, social psychologists have now established that simply being underrepresented can decrease students' motivation and engagement and, ultimately, their performance. I have proposed that the next major step in our field will be to identify the factors that can mitigate the deleterious effects of being underrepresented and actually promote underrepresented minority (URM) students' thriving in higher education. I further argue that interpersonal factors will be key to cultivating students' capacity to thrive. In earlier research, I showed that URM students' interest in a field depends on how they expect others will treat them in it (Chen &

Moons, 2015; Goodwin, Dodson, Chen, & Diekman, 2020; Norman, Fuesting, Geerling, Chen, Gable, & Diekman, 2021).

Because the lack of diversity in STEM fields is multiply caused by complex and interlocking forces, there is no single solution. However, scientists themselves routinely advance the idea that mentorship can help to solve the problem. The general thinking is that, if enough scientists take early career URMs under their wing, the diversity of the field will increase. While there are many personal essays and opinion pieces on how to be a good mentor, there is very little empirical research on the characteristics and qualifies that make a good mentor. Even less well understood are what aspects of mentorship might be particularly beneficial for URMs and why.

In ongoing research, I have proposed that specific characteristics of high-quality social relationships increase students' capacity for academic success, especially when they are underrepresented in a given context (Norman et al., 2021). I have conceptualized a theoretical model to articulate how professional mentoring relationships can facilitate URMs' academic thriving (Chen, Geerling, Norman, Espino-Pérez, & Gable, in prep). I was awarded an NSF CAREER grant to apply this model to understanding how STEM faculty mentors can contribute to women's thriving in PhD programs ("Fostering broader participation and thriving in STEM: A comprehensive investigation of faculty mentorship of doctoral students," Total Costs: \$803,244). This work will identify: a) the faculty support behaviors that URM and majority doctoral students identify as essential to their success, b) the types of faculty support that facilitate doctoral students' thriving over time, and c) the extent to which the effectiveness of different types of faculty support depend on faculty and student demographics. This research will provide exciting new developments for social psychology and related fields. It will also generate validated recommendations to increase academia's capacity to support and encourage diversity in its own ranks.

III. Interdisciplinary Collaborations at the University of Utah. I have ongoing collaborations with other Utah faculty that build on my passion for using interdisciplinary frameworks and methods to understand critical social issues. These collaborative teams are proactively seeking external funding. In Fall 2017, I was instrumental in developing an institutional grant proposal ("Organizational change to optimize women's leadership in STEM at the University of Utah," PI: Diane Pataki) that was submitted to NSF ADVANCE. Although the proposal was not funded, the collaboration fostered crossdisciplinary connections among women faculty leaders across all four STEM Colleges at the University. I would be interested to pursuing another submission to NSF ADVANCE in the next three years. Currently, I am collaborating with Profs. Jason Wiese and Vivek Srikumar (Computing) and Prof. A.J. Metz (Educational Psychology) to develop an Alenabled technological intervention to reduce disparities in undergraduates' academic achievement. To date, this collaboration has resulted in three federal grant submissions to date and the receipt of one NSF planning grant (PI: Wiese, Total Costs: \$150,000.00). Our team is currently working on two additional NSF grant submissions. I look forward to strengthening and deepening my interdisciplinary network at Utah even further over the next several years.

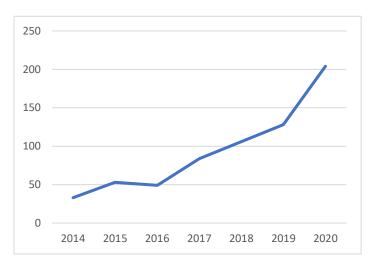


Figure 2. My citation count between 2014-2020. Source: Google Scholar (May 2021).

IV. Conclusion. I have a sustained record of strong research contributions to multiple areas of social psychology. According to Google Scholar (May 2021), my publications have been cited 802 times. As seen in Figure 2, my citation rate over the past seven years indicates a strong upward trajectory, providing evidence of my

growing impact on the field. Moreover, I currently have an h-index of 15. Of my 15 top cited papers, I am the first author (lead contributor) on 10 of them.

Motivating all of my work is the guiding philosophy that scientific empiricism is an essential tool in our collective effort to achieve diversity, inclusion, and social justice. In the next phase of my career, I seek to build on my previous findings to advance novel theories about how organizations, institutions, and societies can best support members of marginalized groups.