The maximum length of a proposal is four single-spaced pages, excluding budget and bibliography (with standard **11 or 12-point font, and 1-inch margins**). Proposals should outline the rationale of the research, clearly state the question(s) under study and the methods and analytic approach to be employed. The proposal should briefly discuss the project’s relevance to the foundation’s programs and how it would contribute to RSF's mission to improve social and living conditions in the U.S.

**Motivation and Research Question:**

A large body of literature in economics has demonstrated that discrimination - whether it be racial, religious, ethnic or gender in origin - is widespread in labor markets. However, almost all the literature has tended to investigate the issue on the premise that discrimination is driven by the employers i.e. employers have some animus (Becker, 1957) or negative beliefs/stereotypes about the productivity of workers (Arrow, 1973; Phelps, 1972) from a group and that leads them to discriminate against the equally productive workers from this group in favor of workers from the other group. In this study, we investigate the issue from a different angle and see whether discrimination can run in the opposite direction i.e. whether a *worker* from one group may exhibit a bias towards the *employer* from the other group.

A large literature in behavioral economics has established that other-regarding or social preferences play an important role in economic interactions (Fehr and Fishbacher 2002). In the environment when contracts cannot be perfectly defined or enforced, social preferences take a crucial role. There is widespread empirical evidence on the existence of these preferences all over the world (Falk et al. 2018). However, there is not much evidence on whether workers exhibit a difference in these preferences based on their employer’s group identity.

Therefore, **we explore whether workers exhibit discrimination in social preferences based on employer's racial identity?** To our knowledge, the possibility of discrimination in social preferences from the worker side has not been explored in the economics literature.

It is important to understand what we mean by discrimination from the worker side and why is it an important issue that merits investigation. We define worker discrimination as when employers from one group are treated differently (less favorably) than employers from another group with identical characteristics. For example, workers discriminate when they under-provide effort to employers from one group as compared to the other group with otherwise identical characteristics (such as wages, job conditions etc.). The investigation of this issue is important for several reasons. First, in the absence of perfectly enforceable contracts, this form of discrimination directly affects the profitability of the employers because of workers under-performance. Second, it can provide a partial explanation for why employers tend to have lower callbacks for workers from the opposite group, as observed in studies such as Bertrand and Mullainathan (2004). That is, if employers expect that workers from a particular group are going to under-provide effort then it is rational for even unbiased employers to not hire from that group. Finally, this line of research can also explain why discrimination, even after various affirmative action policies by governments all over the world, continue to exist in one form or another (Bayer & Charles, 2017). One possible explanation for why those policies haven't achieved the discrimination-free society could be that those policies were aimed at employers and they were perceived as the only entity responsible for causing discrimination. However, our research aims to investigate if discrimination can independently be driven by the worker side and if it is, then one needs to target both sides of the market to address the issue of discrimination (Craig & Fryer, 2018).

Fundamentally, economists view discrimination as arising in one of two ways. Becker (1957) introduced the notion of taste-based discrimination postulating that discrimination exists because of prejudice/animus of the advantaged group toward the disadvantaged group. Phelps (1972) and Arrow (1973) rather view discrimination as statistical, in which an employer, lacking information about the worker's productivity, forms a belief about the worker's productivity based on worker's group identity using the aggregate distribution of worker's group traits. For the purpose of our research, we make a similar distinction about the discrimination from the worker side. We define taste-based discrimination as the discrimination that results because of animus or prejudice of workers towards the employer's group identity. For example, if a White worker prefers working for a White employer as compared to the equally rewarding opportunity from a Black employer, then we call this taste-based discrimination against the Black employer. Statistical discrimination from the worker side would be the discrimination that results when a worker, lacking information on the employer, forms beliefs about the desirability of the job with the employer using stereotypes about the group of employers. For example, a female worker may believe that a male-dominated firm may not have an environment suitable for women to work and thrive and therefore a female worker may discriminate against the male-dominated firm in favor of a job that is “friendlier” for females. As mentioned earlier, we are interested in studying discrimination in social preferences, so we are essentially studying the possibility of taste-based discrimination in the absence of any statistical discrimination.

Our research question is close to Glover, Pallais, and Pariente (2017); in their study, the authors found that disadvantaged-group workers under-provide effort when working under biased managers. However, our study is different in the sense that we argue that workers may under-provide effort even in the absence of bias from the employer. Another closely related study is by Ayalew, Manian and Sheth 2018, in which authors find evidence of statistical discrimination from the worker side towards women leaders in Ethiopia. Ours is the only study which explores the possibility of the bias in social preferences driven from the worker side in the absence of any discrimination or anticipation of discrimination from the employer side. Another closely related study is Craig and Fryer (2018), in which the authors build a theoretical model allowing for the possibility of statistical discrimination from both the worker and employer side. However, the authors do not allow for the possibility of taste bias from the worker side. They also do not provide any empirical evidence to support the claim. Ours is the first study to explore the possibility of taste bias from the worker side and presents a piece of experimental evidence to test the claim.

The discrimination by workers can be on various margins, however, in this paper, we explore the discrimination in social preferences (as measured from their effort choices) by the workers towards the employer's racial identity. Specifically, we are interested in answering whether workers provide more/less effort for White employers as compared to Black employers given that they are already working for the employer and thus there is no option of choosing an employer. So, we need a setting in which 1) workers work on a task in which productivity can be measured 2) they do not choose their employer and 3) employer identity can be revealed to workers in an unobtrusive way.

To summarize, we propose to answer do workers discriminate in social preferences (altruism and reciprocity) towards the employer? The investigation into the worker side of discrimination is important to better understand the issue of discrimination and potentially come up with policies that are targeted at both sides of the market.

**Methodology**

To answer our research question, we design an artefactual field experiment on Amazon’s Mechanical Turk (MTurk). Our experimental design for this study is based on a model of behavior to identify the parameters of social preferences (altruism and reciprocity). Based on the model, we come up with ten treatments which can be categorized into three categories; piece rate treatments (4 treatments), altruism treatments (3 treatments) and reciprocity treatments (3 treatments).

Piece rate treatments are designed to back out the parameters of the cost of effort function. In these treatments, workers observe the piece rate and then work on the task. In the altruism treatments, a worker will be matched with an employer and he/she will be told (truthfully) that their matched employer will earn from his/her effort. In the reciprocity treatments, a worker will be given a monetary gift from the matched employer before he/she starts working on the task. Workers will be informed of the return to the employer from their effort.

Here is how we propose to implement the experiment; 1) we will recruit black and white students from Iowa State University who will perform the role of employer for this experiment 2) after employers are recruited, we will recruit workers from MTurk to work on a simple task 3) each worker will be randomly assigned to one of the ten treatments 4) based on the assigned treatment, worker will watch a video demonstrating the task and will then work on the task. Social preference treatments will have the matched employer demonstrating the task and the race of the employer will be revealed in the video in an unobtrusive way. 5) after workers are done working on the task, they will be asked some questions aimed at eliciting their beliefs about the matched employer and their social preferences towards the two racial groups.

The data from the experiment will allow us to calculate treatment effects as driven from the social preference towards each race. We will also be able to estimate the parameters of our structural model using the data and calculate the welfare implications of discrimination in social preferences in our experimental setting.

**Project’s relevance to the foundation’s programs and how it would contribute to RSF's mission to improve social and living conditions in the U.S.**

This project is directly related to the foundation’s program on behavioral economics. Our results will help understand whether workers exhibit differences in psychological preferences depending on the race of their employer. Understanding of the discrimination in these preferences has far-reaching implications for policy when it comes to affirmative action.