

Merit, Identity, and Redistribution: Experimental Evidence on Affirmative Action*

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Abstract

We study whether opposition to affirmative action reflects general aversion to preferential treatment or bias against the social identity of beneficiaries. Using an incentivized online experiment with university students in India, we compare perceptions and behavior toward candidates admitted through caste-based versus income-based affirmative action. Evaluators assessed test-takers’ competence and allocated monetary rewards under different selection rules. We find that caste-based beneficiaries from India’s historically stigmatized and marginalised groups (Scheduled Castes and Tribes, or SC-ST), particularly from high-income households, are perceived as less competent, while income-based beneficiaries from non-marginalised groups are viewed more favorably. Yet, these negative perceptions do not translate into penalties: caste-based beneficiaries—especially those from low-income households—receive allocations beyond what their grades predict, whereas income-based beneficiaries are rewarded in line with perceived competence. Results highlight a duality: affirmative action elicits both identity-driven stigma and redistributive generosity. These findings show that shifting from caste to income criteria does not eliminate bias, underscoring the persistent salience of social identity in redistributive policies.

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1 Introduction

Affirmative action (AA) policies are often contested on the grounds that they are anti-meritocratic, easing entry for individuals with lower credentials. Evidence also suggests that beneficiaries of these policies face a stigma within institutions, being perceived as having gained entry through unfair means (Bowen and Bok; 2000; Deshpande; 2019a). It remains unclear, however, to what extent such stigma reflects opposition to the idea of affirmative action per se, as distinct from the underlying bias against the social groups these policies are designed to support.

In this paper we directly investigate this question, using an online experiment conducted with university students in India. India offers a compelling context, as it features both long-standing group-based quotas for the marginalised and discriminated groups –Scheduled Castes (SCs) and Scheduled Tribes (STs)– and a newer, ostensibly neutral, income-based quota introduced in 2019. The coexistence of two types of affirmative action –group-based (caste) and income-based– provides a unique opportunity to examine attitudes toward beneficiaries among students who are familiar with such policies through their lived experience in institutions that implement them.

Our experiment examines whether attitudes toward affirmative action beneficiaries vary on the basis of eligibility - social identity versus economic deprivation - and the identity of the recipient. We measure two types of attitudes toward affirmative action beneficiaries: beliefs, captured through perceived competence ratings, and behavior, observed through the allocation of monetary rewards. While reward allocations are specific to the experimental context, they conceptually mirror real-world distributive decisions under resource constraints - such as hiring, promotions, or scholarships.

Our first comparison evaluates whether recipients of caste-based and income-based affirmative action are treated differently—a contrast that simultaneously varies both the eligibility criterion and the social identity of the beneficiary. If opposition to affirmative action reflects a generalized aversion to preferential treatment, independent of its basis or recipient, we should expect similarly negative attitudes toward all beneficiaries.

Our second comparison holds the policy criterion constant by presenting both a Scheduled Caste/Scheduled Tribe (SC-ST) individual and a non-SC-ST individual as qualifying for affirmative action on the basis of income. Although SC-ST individuals are not eligible for income-based affirmative action in India, we incorporate this feature into our experimental framework to assess whether attitudes vary solely by social identity, given that the policy rationale is identical.

The experiment unfolds in two stages. In the first stage of our experiment, a set of participants, the *test-takers*, complete a real cognitive ability task and provide demographic

information, including their caste and household income. Although this group is not the primary focus of our study, their performance in the cognitive ability task serves an important function: they create incentive-compatible conditions for the second stage. In the second stage, a different set of participants, the *evaluators*, assess the performance of test-takers and allocate monetary rewards among them, knowing their decisions directly affect real individuals' earnings.

In all arms of the experiment described below, evaluators assess small groups of test-takers, within which only some individuals are eligible for bonus payments. Each evaluator is assigned four such groups. For each group, evaluators are shown each test-taker's grade – A (75-100%), B (50-74%), C (25-49%), or D (0-24%) – and asked to guess the exact percentage score within that range. Next, they allocate monetary rewards among the group members, with the total available reward pie determined by the actual performance of the test-takers in the real-effort task.

The experiment includes three arms. In the control arm, all eligible test-takers are selected purely on their score, that is, the performance in the cognitive ability task. In the two treatment arms, one slot is reserved for a beneficiary under either a caste-based or income-based affirmative action policy. Evaluators are randomly assigned to one of these selection mechanisms. Within the treatment arms, the identity of the beneficiary varies across the four groups presented to the evaluator: in the caste-based affirmative action treatment, SC-ST beneficiaries¹ can be high or low-income; in the income-based affirmative action treatment, the low-income beneficiary can be SC-ST or from the residual group of mostly higher ranked castes that are not beneficiaries of group-based affirmative action, commonly referred to as "General Category (GC)". This design allows us to isolate the effects of policy type, beneficiary identity, and their interaction.

Our results on perceived competence, as proxied by evaluators' guessed scores, reveal no overall stigma of incompetence toward affirmative action (AA) beneficiaries. However, this average masks important heterogeneity by policy type and beneficiary identity. Individuals admitted through caste-based AA are perceived to have scored 0.16 standard deviations (SD) lower on the cognitive test, relative to non-beneficiaries. In contrast, income-based AA beneficiaries are assessed to have scored 0.12 SD higher, though this difference is not statistically significant at conventional levels.

Further disaggregation reveals that the negative perception toward caste-based AA beneficiaries is concentrated towards those from high-income households. High-income SC-ST individuals are perceived to have scored 0.40 SD lower than their peers, whereas low-income SC-ST beneficiaries face no such penalty. Low-income GC beneficiaries, by contrast, are

¹While we intended to sample both SC and ST students, our sample ended up consisting of only SC students.

positively evaluated, with an estimated 0.18 SD increase in perceived scores.

Comparing SC-ST to GC individuals admitted through the same income-based AA policy shows a clear divergence. GC beneficiaries are perceived as 0.33 SD units more competent on the cognitive task than non-beneficiaries, whereas low-income SC-ST beneficiaries receive no such boost. This contrast, despite identical policy eligibility, reveals the role of identity and highlights that individuals from lower-ranked caste groups continue to bear a stigma of incompetence.

Interestingly, these negative perceptions - particularly toward higher-income SC-ST individuals - do not translate into lower reward allocations. On average, AA beneficiaries are overcompensated: they receive 0.40 SD units more than non-beneficiaries. However, this average masks variation. Caste-based beneficiaries receive 0.31 SD more, while income-based beneficiaries receive nearly double that – 0.60 SD. Among caste-based recipients, the premium is limited to those from low-income households (0.43 SD), with no gain for higher-income individuals. Income-based GC beneficiaries receive the highest premium, at 0.69 SD.

When holding the policy constant, GC and SC-ST individuals receiving income-based affirmative action are rewarded very differently: GC beneficiaries receive 0.44 SD units more, while SC-ST beneficiaries receive a benefit half that size and statistically indistinguishable from zero. These results echo the competence findings and make clear that identity – not just policy – shapes both perception and behavior.

We further examine whether the share of rewards allocated within groups differs from the share implied by evaluators’ score guesses, assuming rewards were to be distributed solely in proportion to each member’s contribution to the group’s total score. The results indicate that caste-based beneficiaries receive a positive and statistically significant allocation beyond what their guessed score alone would predict, whereas income-based beneficiaries do not. This suggests that evaluators do not penalize affirmative action beneficiaries even when they think their performance falls short of their peers; indeed, caste-based beneficiaries appear to receive slightly more than their inferred score performance would warrant. The divergence between the two groups highlights that caste- and income-based affirmative action elicit distinct evaluative responses: caste-based policies result in generate compensatory treatment, while income-based policies do not. This underscores the continuing salience of caste as a social marker in shaping evaluative judgments in ways that economic disadvantage alone does not.

Together, these findings point to the central role of perceived deservingness, with social identity shaping both how merit is inferred and how rewards are distributed—even when eligibility criteria are held constant. Evaluators’ allocations suggest that their response towards GC beneficiaries of income-based AA is motivated by deservingness, whereas their response towards SC-ST beneficiaries of caste-based AA does not reflect considerations of deserving-

ness. Such differences reveal that perceived deservingness is not simply about disadvantage *per se*, but about how disadvantage is socially constructed. Our results indicate that group-based AA policies continue to be relevant, as re-framing affirmative action around economic disadvantage alone may not in itself be sufficient to overcome the social biases attached to historically marginalized groups.

Our paper contributes to the growing body of literature on attitudes toward beneficiaries of social policies, particularly affirmative action programs, across three key dimensions. First, we provide novel experimental evidence that disentangles two potential sources of stigma: the identity of affirmative action recipients and ideological opposition to the policy itself. Most existing studies document backlash without identifying whether it stems from who benefits or how they benefit. By leveraging the Indian context – where AA is both group and income-based – we are able to separate identity-based effects from opposition to the AA policy itself.

Importantly, our experimental setting departs from the precise institutional design in India, and it is this feature that allows us to isolate the two sources of stigma. This design enhances the external validity of our findings compared to earlier studies that rely on artificial group labels (e.g., colored badges or fictitious categories) to avoid confounds (Gille; 2022). For instance, Petters and Schroeder (2020) show that recipients of randomly assigned affirmative action (i.e., not based on true participant characteristics) are rated lower in performance, particularly by raters who themselves benefited from the policy. Our study builds on and extends this approach. The closest designs to ours are those of Balafoutas et al. (2016) and Dorrough et al. (2016), who compare responses to gender-based quotas versus benefits assigned through artificial criteria. Balafoutas et al. (2016) find that the nature of the beneficiary group matters for performance evaluations, while Dorrough et al. (2016) find no effect on cooperative behavior.

Second, we examine two distinct responses to affirmative action – the stigma of incompetence and behavioral backlash – within a unified, incentive-compatible experimental framework that connects evaluators’ beliefs to their material decisions. Prior work has typically treated these dimensions separately: women perceived to be hired through affirmative action are often viewed as less competent (Heilman et al.; 1992, 1997), with similar perceptions documented in the Indian context towards students admitted on caste-based AA (Deshpande; 2019b); while other studies show that affirmative action can lead to peer backlash against women leaders selected through quotas (Gangadharan et al.; 2016), or to the systematic under-reporting of women’s performance in competitive settings with peer evaluations (Leibbrandt et al.; 2018). Our study brings these strands together by observing how beliefs about competence translate into concrete distributive behavior.

Finally, our findings speak to broader debates on perceptions of fairness and redistributive

preferences. A well-established literature demonstrates that inequality is regarded as more acceptable when it is perceived to arise from merit or effort (e.g., Alesina and Angeletos; 2005; Almås et al.; 2010; Cappelen et al.; 2007, 2013; Fong; 2001; Konow; 2000). More recently, Henkel et al. (2025) show that misperceptions of inequality are systematically shaped by individuals’ social preferences. Our evidence that support for affirmative action varies both by policy type and by beneficiary identity extends research showing that quotas for disadvantaged groups are often perceived as more legitimate (Balafoutas et al.; 2016; Ip et al.; 2020). In contrast to these studies, which manipulate disadvantage directly, we demonstrate that even under identical eligibility criteria, attitudes differ depending on the recipient’s identity. This suggests that opposition to affirmative action reflects not only concerns about meritocracy but also the salience of social identity and perceptions of deservingness.

The rest of the paper is organised as follows. Section 2 outlines the context and institutional setting in India. Section 3 contains the experimental design. Section 4 outlines the estimation framework. Section 5 outlines the results. Section 6 offers a discussion and concludes.

2 Context and Institutional Setting

India’s affirmative action (AA) programme is complex in terms of its design and vast in terms of coverage. It is primarily quota-based, with positions reserved for eligible candidates in government-run higher educational institutions, government jobs and electoral seats. Thus, it is called the *reservation policy*. In addition to reservation of positions, there are also financial measures such as fee concessions or priority credit for designated purposes that together make up the AA policy. Reservations in India are both “vertical” for mutually exclusive groups, i.e., individuals cannot simultaneously belong to more than one category (e.g., castes or tribes), and “horizontal”, targeting categories that are cross-cutting across the vertical categories (e.g., women or people with disabilities).

There are four groups eligible for vertical AA. The Scheduled Castes (SCs) is a group of jatis or castes that are at the bottom of the caste hierarchy, and were historically subjected to the highly degrading and stigmatising practice of untouchability. Untouchability has been legally abolished in independent India, and it is a criminal offense, but the stigma of belonging to a formerly untouchable jati runs deep, with covert and overt instances of untouchability continuing to be practiced (Thorat and Joshi; 2020). Distinct from the caste system, India is home to indigenous and tribal populations. Several of these are targeted for AA under the second vertical category called the Scheduled Tribes (STs). According to the reservation policy, 22.5% of seats in government-run educational institutions for students, teachers and administrative staff, as well as jobs in public sector enterprises and in government bureaucracy are

reserved for the Scheduled Castes and Scheduled Tribes (SC-ST). The third group in the vertical reservations scheme is called *Other Backward Classes* (OBCs), which is a heterogeneous group of castes and communities that are, in principle, low in socioeconomic hierarchy but have not been subjected to the stigma of untouchability. An additional 27 percent positions are reserved for OBCs. We do not consider this group in our experiment.

In 2019, through a constitutional amendment, another category called *Economically Weaker Sections* (EWS) was added to the vertical reservations with an additional 10 percent quota. This was, in principle, meant to address class or income-based deprivation, distinct from the earlier group-based quotas. While the concept of EWS was meant to invoke the poor, in reality, the income cut-off set to identify the EWS (those with annual household incomes below INR 800,000) is set so high that over 95 percent of Indians would be eligible². Additionally, by making this a vertical category, members belonging to SC, ST, or OBC categories are excluded from it, thereby effectively making it a quota for the so-called upper castes (Deshpande and Ramachandran; 2022). This was challenged in the courts, but was upheld by the Supreme Court in 2022.

India also passed “The Right of Children to Free and Compulsory Education (RTE) Act, 2009” for school children. Under this Act, private schools have to reserve seats for EWS children and provide education free of cost. The income limit for the EWS category for the purpose of RTE is INR 100,000 which captures economic deprivation much more accurately compared to the income cut-off for the quotas in higher education. In this paper, we have used the RTE EWS cut-off, since we want to assess attitudes towards redistribution towards the economically deprived.

In addition, there is a parallel component of the affirmative action programme in the electoral sphere, which consists of seats reserved for SC-STs at all electoral levels, and for women at the local body levels.

3 Experimental Design

We implement an online experiment with college and university students from three cities, Delhi, Pune, and Mumbai. The experiment consists of two parts. In the first part, participants that we refer to as *test-takers* are asked to complete a cognitive ability test. In the second part, a different set of participants that we refer to as the *evaluators* are asked to evaluate the performance of groups of test-takers and additionally allocate a bonus reward among these groups. Depending on the treatment, those that are selected to be eligible for receiving a

²There are very few reliable sources of data for income distribution. Our estimates from the unit-level data of the Consumer Pyramids Household Survey (CPHS), gathered by Centre for Monitoring Indian Economy (CMIE), reveals that almost 98 percent of households have an income below INR 8,00,000

bonus reward are either the top scorers in the cognitive ability test (within their group), or a combination of top scorers and affirmative action beneficiaries. Our analysis in this paper focuses on the second part of the experiment. The first part is conducted primarily to ensure that evaluators respond to the performance of real individuals and they are aware that their allocations result in actual monetary transfers to beneficiaries.

3.1 Test-taker Tasks

The test-takers are asked to complete a cognitive ability test. Specifically, they are asked to complete a short version of the Raven Advanced Progressive Matrices (APM) (Raven; 1962). This is a non-verbal test which abstracts from any language or math skills. It is widely used to measure fluid intelligence and has received increased attention in the recent economics literature (some examples: Basteck and Mantovani; 2018; Carpenter et al.; 2013; Charness et al.; 2018; Gill and Prowse; 2016; Proto et al.; 2019, 2022). Given that we implement the experiment online, shortening the duration of the test was important. Hence, we follow Bors and Stokes (1998) in using 12 out of a total of 36 matrices from Set II of the APM. This specific test is typically used to elicit the ability of above average intelligence individuals. Thus, it is objectively a cognitively difficult test. The participants are allowed a maximum of eight minutes to complete this test. For each question, a 3×3 matrix of images is displayed on the participants' screen with the image in the bottom right corner missing. The participants are then asked to complete the pattern choosing one out of eight possible choices presented on the screen. The 12 matrices are presented in increasing order of difficulty exactly as sequenced in Set II of the APM. During the eight minutes, participants are allowed to switch back and forth across the 12 matrices and change their answers. For each correct answer, participants are rewarded with INR 25.

Once participants complete the Raven test they are asked to respond to a demographic questionnaire about their age, gender, caste, and household income. The complete questionnaire is included in the Appendix (see figures 5 and 6 in Appendix B.1). There was no payment for completing this part.

After completing the questionnaire, participants are informed about how much they have earned including a show-up fee of INR 200. On this last screen, participants are also informed that they may potentially be selected to receive an additional bonus in the coming weeks (see Figure 7 in Appendix B.1 for the exact phrasing).

3.2 Group Formation

From the set of all test-takers, we form groups of five. We always ensure that each group of five includes GC and SC-ST individuals, as well as test-takers that are from both low and high-income households. Within each group, four group members are selected to receive a bonus reward. Selection is either based exclusively on Raven scores, or one position is reserved for an SC-ST or low-income individual.

The total reward available to be distributed depends on the Raven scores of the four test-takers that are selected from each group of five. For example, if the scores of the four selected individuals were 74, 68, 52, and 60, this would yield a pot of 254 Experimental Currency Units (ECU) to be allocated. We intentionally make the pot size contingent on the scores of those selected so that affirmative action can directly influence overall efficiency.

3.3 Affirmative Action Treatments

Table 1 describes how groups are formed in the three arms: one control and two affirmative action treatments.

Table 1: Treatment overview

	(1) Control No AA	(2) AA-Caste Caste-based AA	(3) AA-Income Income-based AA	
		Institutional	Institutional	Extended
Selection rule	Top four overall No reserved position	Top three overall + One reserved for SC-ST	Top three overall + One reserved for low-income GC	Top three overall + One reserved for low-income GC or SC-ST

Notes: The table summarizes the allocation rules across treatments. In the control condition, the four highest scorers in each group are selected. Under the institutional caste-based rule, three highest scorers are chosen plus one reserved slot for an SC-ST candidate. Under the institutional income-based rule, the reserved slot is given to a low-income General Category (GC) candidate. In the extended income-based rule, the reserved slot is open to any low-income candidate, including SC-ST. “GC” refers to General Category individuals, i.e. non-SC-ST-OBC groups.

In the control arm (column 1), the four highest-scoring test-takers out of each group of five are selected to receive the bonus reward. In this scenario there are no reserved positions. In the caste-based AA treatment (column 2), which reflects the reservation policy first established in 1950, the reserved slot is allotted to a SC-ST candidate: if both of the remaining candidates are SC-ST, the higher scorer receives the slot, while if only one is SC-ST, that individual is automatically selected. In the income-based AA treatment (column 3), which parallels the

more recent extension of quotas to the Economically Weaker Sections (EWS), the reserved slot is allotted to a low-income candidate.

Within the income-based AA treatment, the *Institutional* selection rule mimics the affirmative action policies embedded in India’s institutional framework: the reserved slot is allotted to a low-income General Category (GC).³ The *Extended* selection rule modifies the institutional arrangement by reserving the last slot for all low-income candidates, including those from the SC-ST category.

3.4 Evaluator Tasks

The focus of our experiment is on the behavior of evaluators. Evaluators are split across the three treatments in a between-subjects design. Treatment variation arises from whether the evaluated groups of test-takers are ranked and selected entirely on the basis of their scores (control), or whether one reserved position is set aside for SC-ST individuals (AA-Caste treatment) or for low-income individuals (AA-Income treatment).

Evaluation of competence. Evaluators are first asked to guess the scores of four different groups of test-takers, which are formed as described in Section 3.2. Depending on the treatment arm, evaluators are informed about the criteria used to select recipients from each group for the reward (as described in section 3.3). When making their guesses, evaluators are shown a grade corresponding to a range of scores (see Table 2) and asked to provide their best estimate of the actual score.⁴ If a guess falls outside the range associated with a grade, the evaluator is alerted and asked to revise it. Score guesses are incentivized using the binarised scoring rule (Hossain and Okui; 2013), and following Danz et al. (2022), we emphasize that accurate reporting yields the highest expected payoff. One of the four groups is randomly selected, and for that group the evaluator can earn a bonus of INR 35 for each of the five guesses, calculated with the binarised scoring rule. Additional details of the payment procedure are available through supplementary information accessible by clicking a button on the screen.⁵ In addition, they receive information on the test-taker’s caste, whether the test-taker’s income is below INR 100,000, and — when relevant in the affirmative action treatments — whether

³Since these are the non-SC-ST-OBC individuals, among Hindus they serve as a proxy for higher-ranked or so-called upper castes.

⁴Evaluators see test-takers listed in descending order of grades. This design mechanically implies that guessed scores should decline with position, which serves as a basic check of task comprehension. In analyzing competence evaluations, we therefore focus on treatment differences by comparing guessed scores for participants in position 4 across the control and AA treatments. The mechanical decline within groups is, thus, not a concern for our results.

⁵See Figures 10, 11, and 12 in Appendix B.2.

the test-taker is an affirmative action beneficiary.⁶

Table 2: Evaluators: Grade & Percentage Score Correspondence

<u>Grade</u>	A	B	C	D
<u>Score Range</u>	75 – 100	50 – 74	25 – 49	0 – 24

Notes: The table shows the correspondence between grades and percentage score ranges provided to evaluators. Grades were used to summarize test-takers’ performance, and evaluators entered point estimates within the corresponding range.

Reward allocation. The second task requires evaluators to allocate bonuses among the four individuals selected from each group of five test-takers. They are informed that the groups are the same ones for which they previously guessed scores. Evaluators are also told that the total pot available for distribution equals the sum of the percentage scores of the selected individuals. This rule is implemented to make salient the potential perception of efficiency loss arising from affirmative action. For each ECU allocated to a test-taker, evaluators earn INR 0.1 (e.g., 100 ECUs = INR 10). Importantly, they are explicitly informed that their own payment is unaffected by how they allocate rewards, but their decisions determine the additional bonus received by the selected test-takers.⁷ While allocating rewards, evaluators are shown each test-taker’s grade, caste, and whether their household income is below INR 100,000. In the AA treatments, they are additionally informed of each test-taker’s affirmative action status.

Other measures. After completing the allocation task, evaluators are asked to complete a cognitive reflection test (CRT).⁸ Additionally, evaluators are asked to respond to a demographics questionnaire.⁹ After evaluators are informed about their earnings, we also include a set of de-briefing questions.¹⁰

3.5 Implementation

The test-takers were recruited through Prolific, and in total 59 participated, with an average payment of INR 332.30. The main experiment was administered online using oTree (Chen

⁶See Figures 19 - 30 in Appendix B.2 for the screen interface for each of the four groups across all three treatments.

⁷Evaluators are not told how many other participants are also making allocation decisions.

⁸This is a test that was introduced by Frederick (2005) and evaluates the extent to which an individual is more intuitive or reflective. The questions are shown in figure 44 in appendix B.2. We do not exploit the answers to this test in this paper.

⁹The full questionnaire is in figures 45, 46, and 47 in appendix B.2.

¹⁰See figure 49 in appendix B.2.

et al.; 2016). Evaluators were recruited from the college student population at the University of Delhi and from colleges in Mumbai and Pune. Data were collected in two waves: Wave 1 in December 2022 with 201 evaluators, and Wave 2 in April 2023 with 90 evaluators. The average payment for evaluators was INR 414.40. To ensure that evaluators understood the selection process for allocating bonus rewards, we administered a short comprehension quiz (see Figures 13–18 in Appendix B.2). In addition, we included checks throughout the study to verify that evaluators were attentive. The full set of screens and instructions is provided in Appendix B.

3.6 Descriptive statistics

Table 3: Comparison of evaluators’ demographic characteristics across treatments

	Control	AA-Caste	AA-Income	(2)-(1)	(3)-(1)
Age	20.75 (4.05)	20.72 (2.17)	20.73 (2.39)	0.03 (0.46)	0.03 (0.48)
Female	0.41 (0.49)	0.48 (0.50)	0.40 (0.49)	-0.07 (0.07)	0.01 (0.07)
Hindu	0.79 (0.41)	0.77 (0.42)	0.76 (0.43)	0.02 (0.06)	0.03 (0.06)
General Category	0.69 (0.47)	0.69 (0.46)	0.75 (0.44)	-0.00 (0.07)	-0.06 (0.06)
OBC	0.22 (0.41)	0.21 (0.41)	0.16 (0.37)	0.01 (0.06)	0.05 (0.06)
SC/ST	0.10 (0.30)	0.10 (0.31)	0.09 (0.28)	-0.01 (0.04)	0.01 (0.04)
Income < INR 100 000	0.18 (0.38)	0.23 (0.42)	0.23 (0.42)	-0.05 (0.06)	-0.05 (0.06)
Economics Major	0.68 (0.47)	0.73 (0.45)	0.70 (0.46)	-0.06 (0.06)	-0.02 (0.07)
N observations	102	97	92		

Notes: This table reports mean demographic characteristics of evaluators across the three treatment groups. Standard deviations are in parentheses. Columns (4) and (5) show mean differences relative to the control group. None of the observed differences are statistically significant, indicating that random assignment generated balanced samples across treatments. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3 presents descriptive statistics for the 291 evaluators included in our experiment, disaggregated by treatment allocation: control, AA-Caste, and AA-Income. The table reports mean values, with standard deviations shown in parentheses. Columns 4 and 5 test for statistically significant differences across treatment arms. The results indicate that evaluators’

characteristics are balanced across conditions, which is expected given the random assignment. In the control group, the average evaluator is approximately 21 years old, consistent with the typical age of an undergraduate student in India. Around 41 percent are women, and approximately 79 percent identify as Hindu. Roughly 69 percent belong to the general caste category, about 18 percent come from households with annual incomes below INR 100,000, and 68 percent are enrolled in economics majors.

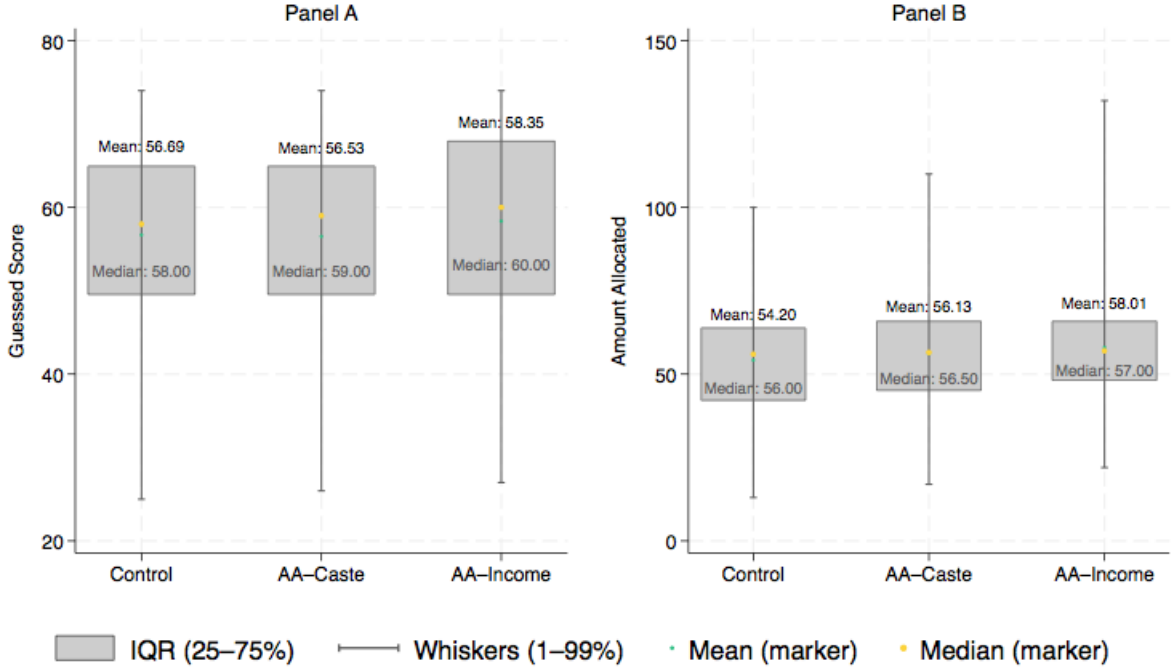


Figure 1: Boxplot of guessed scores and share allocated for candidates in position 4

Notes: Figure 1 plots the mean, median, the inter-quartile range (25–75%), and the whiskers (1st and 99th percentile) of the guessed score and amount allocated under the control and two treatments for candidates benefiting from affirmative action and for comparable candidates in the same position without affirmative action in the control condition, i.e. position 4.

Figure 1 presents the average guessed scores (Panel A) and reward allocations (Panel B) for candidates benefiting from affirmative action and for comparable candidates in the same position without affirmative action in the control condition. At the aggregate level, the averages look very similar across treatment conditions, with only small differences. As we show in the regression analysis below, however, these similarities in the averages mask important patterns that emerge once we account for the income and caste identities of beneficiaries.

4 Estimation framework

4.1 Institutional Setting

The random allocation to the different arms implies our baseline specification is as follows, where c denotes the candidate and e denotes the evaluator:

$$Y_{e,c} = \alpha_0 + \alpha_1 \text{AA-Treatment}_e \times 4^{th} \text{position}_c + \alpha_2 \text{AA-Treatment}_e + \alpha_3 4^{th} \text{position}_c \\ + \alpha_4 \text{SC}_c + \alpha_5 \text{Low-Income}_c + \alpha_6 \text{Grade}_c + \alpha_7 X_e + \alpha_8 \text{Wave}_e + \epsilon_{e,c} \quad (1)$$

Here, $Y_{e,c}$ denotes the outcome of interest, either the score guessed by evaluator e for candidate c , or the reward allocated to candidate c by evaluator e . AA-Treatment is a dummy indicating the treatment status of the evaluator, equal to 1 if the evaluator is in an affirmative action treatment. The variable 4^{th}position is a dummy equal to 1 when the candidate is presented in the fourth position; in the treatment arms, this position is signalled as benefiting from affirmative action. We also include controls for candidate characteristics—caste (SC_c), income (Low-Income_c), and grade (Grade_c)—as well as socio-demographic characteristics of evaluators (X_e). Wave_e is a dummy for the wave of data collection. The coefficient α_1 captures the effect of being an affirmative action beneficiary on the score guesses and reward allocations made by evaluators.

In the institutional setting, we expand the baseline specification to account for separate affirmative action treatments. Specifically, we decompose the AA treatment term into AA-Caste and AA-Income treatments, interacting each with the 4^{th} position dummy to explore how treatment types influence the outcome:

$$Y_{e,c} = \beta_0 + \beta_1 \text{AA-Caste}_e \times 4^{th} \text{position}_c + \beta_2 \text{AA-Income}_e \times 4^{th} \text{position}_c \\ + \beta_3 \text{AA-Caste}_e + \beta_4 \text{AA-Income}_e + \beta_5 4^{th} \text{position}_c + \beta_6 \text{SC}_c \\ + \beta_7 \text{Low-Income}_c + \beta_8 \text{Grade}_c + \beta_9 X_e + \beta_{10} \text{Wave}_e + \epsilon_{e,c} \quad (2)$$

The coefficients β_1 and β_2 evaluate the effects of caste- and income-based affirmative action on perceptions and reward allocations, respectively. Next, we further augment this equation to examine whether the effect of the AA-Caste treatment differs by the income status of the beneficiary:

$$\begin{aligned}
Y_{e,c} = & \gamma_0 + \gamma_1 \text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{Low-Income}_c + \\
& \gamma_2 \text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{Not Low-Income}_c + \gamma_3 \text{AA-Income}_e \times 4^{\text{th}} \text{position}_c + \\
& \gamma_4 \text{AA-Caste}_e + \gamma_5 \text{AA-Income}_e + \gamma_6 4^{\text{th}} \text{position}_c + \gamma_7 \text{SC}_c + \\
& \gamma_8 \text{Low-Income}_c + \gamma_9 \text{Grade}_c + \gamma_{10} X_e + \gamma_{11} \text{Wave}_e + \epsilon_{e,c} \quad (3)
\end{aligned}$$

In this specification, the coefficients γ_1 and γ_2 , on the triple interactions $\text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{LowIncome}_c$ and $\text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{Not Low-Income}_c$, separate the effect of the caste treatment for low-income SC beneficiaries and SC beneficiaries who are not categorized as low-income.

4.2 Extended Setting

In the extended setting, we further expand the model to account for the fact that even low-income SC individuals are eligible for income-based affirmative action. Specifically, we include interaction terms that allow us to explore whether SC individuals under income-based affirmative action are treated differently from General Category beneficiaries:

$$\begin{aligned}
Y_{e,c} = & \delta_0 + \delta_1 \text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{Low-Income}_c + \delta_2 \text{AA-Caste}_e \times 4^{\text{th}} \text{position}_c \times \text{Not Low-Income}_c \\
& + \delta_3 \text{AA-Income}_e \times 4^{\text{th}} \text{position}_c \times \text{SC}_c + \delta_4 \text{AA-Income}_e \times 4^{\text{th}} \text{position}_c \times \text{General Category}_c \\
& + \delta_5 \text{AA-Caste}_e + \delta_6 \text{AA-Income}_e + \delta_7 4^{\text{th}} \text{position}_c + \delta_8 \text{SC}_c \\
& + \delta_9 \text{Low-Income}_c + \delta_{10} \text{Grade}_c + \delta_{11} X_e + \delta_{12} \text{Wave}_e + \epsilon_{e,c} \quad (4)
\end{aligned}$$

In this specification, the coefficients δ_3 and δ_4 , on the interaction terms $\text{AA-Income}_e \times 4^{\text{th}} \text{position}_c \times \text{SC}_c$ and $\text{AA-Income}_e \times 4^{\text{th}} \text{position}_c \times \text{General Category}_c$ separate the effect of income-based affirmative action for SC and General Category beneficiaries, while δ_1 and δ_2 , once again separate the effect of caste-based affirmative action for low-income SC beneficiaries and SC beneficiaries who are not categorized as low-income.

5 Results

5.1 Perceptions of competence

Institutional Setting. Column 1 of Table 1 presents results from estimating Equation 1. We find that, on average, SC-ST individuals and low-income individuals are perceived to be of lower competence by 0.234 and 0.186 standard deviation (SD) units, respectively - even after controlling for grade. Turning to the coefficient of interest, β_1 , which captures the interaction between being in the AA treatment and being an affirmative action beneficiary, the estimate suggests a modest penalty of 0.08 SD units, which moreover, is not statistically significant.

Column 2 presents the results from estimating Equation 2, which distinguishes between caste-based and income-based affirmative action treatments. Again, both SC-ST and low-income individuals are perceived as less competent for the same grade level, with average penalties of 0.187 and 0.179 SD units, respectively.

The two key coefficients of interest, β_2 and β_3 , now reveal that the null effect observed in Column 1 masks divergent responses to different forms of affirmative action. Specifically, the interaction between being in the AA-Caste treatment and being a beneficiary shows a negative effect of 0.16 SD units on guessed scores, which is significant at the 10% level. In contrast, the interaction between the AA income treatment and being a beneficiary yields a positive coefficient of 0.12 SD units though this effect is not statistically significant.

Column 3 presents the results from estimating Equation 3, which distinguishes between SC-ST individuals who receive affirmative action under the caste treatment based on their income status. The findings reveal some notable patterns.

Among SC-ST who receive affirmative action under the caste treatment, only individuals who are not classified as low-income face a stigma of incompetence, which amounts to almost 0.4 SD units. However, when an individual is an SC-ST beneficiary under the caste treatment and classified as low-income, their guessed score is similar to the one of SC-ST in the 4th position in the control group. In contrast, individuals who benefit from income-based affirmative action continue to be perceived more favorably. The coefficient on the interaction between being in the AA income treatment and being in the 4th position remains positive and is statistically significant at the 10% level, with an estimated effect of 0.18 SD units.

Columns (1)-(3) indicate that perceptions of competence among AA beneficiaries are shaped by the nature of the AA program and the identity of beneficiaries. While the competence of high-income caste-based beneficiaries is negatively perceived, low-income beneficiaries of caste-based affirmative action are considered as equally competent as low-income SC-ST in the control group, while income-based beneficiaries appear to benefit from a perceived increase in guessed scores.

Table 4: Impact of AA treatment on guessed score

	Outcome: Guessed Score			
	Institutional			Extended
	(1)	(2)	(3)	(4)
SC-ST	-0.234*** (0.0452)	-0.187*** (0.0430)	-0.187*** (0.0429)	-0.226*** (0.0431)
Low-Income	-0.186*** (0.0358)	-0.179*** (0.0356)	-0.176*** (0.0355)	-0.199*** (0.0372)
4 th position \times Low-Income	0.239*** (0.0799)	0.151* (0.0812)	-0.0723 (0.120)	-0.177 (0.141)
Low-Income \times SC-ST				0.174** (0.0795)
AA treatment	0.108** (0.0531)			
AA-Caste		0.117* (0.0611)	0.117* (0.0611)	0.111* (0.0621)
AA-Income		0.0827 (0.0654)	0.0842 (0.0654)	0.0455 (0.0626)
AA treatment \times 4 th position	-0.0837 (0.0793)			
AA-Caste \times 4 th position		-0.162* (0.0881)		
AA-Caste \times 4 th position \times Not Low-Income			-0.398*** (0.118)	-0.366*** (0.120)
AA-Caste \times 4 th position \times Low-Income			-0.0353 (0.104)	-0.0259 (0.105)
AA-Income \times 4 th position		0.121 (0.0954)	0.181* (0.101)	
AA-Income \times 4 th position \times SC-ST				0.0993 (0.121)
AA-Income \times 4 th position \times General Category				0.333*** (0.123)
Constant	0.0707 (0.183)	0.0659 (0.184)	0.0657 (0.184)	0.0191 (0.184)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	291	291	291	291
N Observations	4900	4900	4900	5820

Notes: The dependent variable is the evaluator's guessed score for test-takers. Column (1) corresponds to the baseline specification in Equation (1), Column (2) to the institutional specification in Equation (2), Column (3) to the institutional specification with income interactions in Equation (3), and Column (4) to the extended specification in Equation (4). All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Extended Setting. Column 4 presents results from the extended setting, where we allow beneficiaries of the income-based affirmative action treatment to include SC-ST individuals. Before turning to the coefficients of interest, we note that the main patterns observed in Columns 1 to 3 remain consistent. The number of observations increases from 4,900 to 5,820 in this specification, as the extended setting includes additional cases in which SC-ST individuals qualify for affirmative action under income-based criteria. While this does not reflect the current policy reality, it allows us to explore how perceptions vary when identity and eligibility are decoupled.

As in earlier columns, both low-income and SC-ST individuals are perceived to be of lower competence, even after controlling for grade. Beneficiaries under the AA-Caste treatment who are not classified as low-income face a significant penalty of approximately 0.37 SD units. However, when these individuals are classified as low-income, this penalty is completely offset.

Turning to income-based affirmative action, we again find a different effect depending on the identity of beneficiaries. The positive effect on score perceptions for income-based beneficiaries is driven by General Category individuals who have a positive and statistically significant boost in perceived competence, amounting to 0.33 SD units. However, when the income-based beneficiary is SC-ST, the benefit is substantially reduced to 0.10 SD units, which is not statistically significant at conventional levels.

5.2 Allocation of rewards

We now turn to the second key outcome: the allocation of rewards. As outlined in our estimation framework, we re-estimate Equations 1–4, using the reward allocated to individual group members as the outcome variable. This analysis examines how reward allocations vary based on treatment type, beneficiary status, and social identity. In particular, we are interested in whether individuals from disadvantaged caste groups receive different rewards when presented as income-eligible versus caste-eligible. We present results for the institutional and extended settings using the same structure as in the guessed score analysis.

Institutional Setting. Column 1 of Table 5 presents results from estimating Equation 1, with the outcome now being the reward allocated to each candidate. Interestingly, SC-ST individuals are treated more favorably in this context, receiving 0.23 SD units more, whereas low-income individuals do not receive any additional reward, holding grades constant.

Turning to the coefficient of interest, β_1 , which captures the interaction between being in the AA treatment and being a beneficiary, we find a large and statistically significant effect: AA beneficiaries receive 0.40 SD units more. These findings suggest that, although AA beneficiaries are perceived as less competent (as shown in Section 5.1), they are nonetheless

rewarded more generously – possibly reflecting altruistic or compensatory motives on the part of evaluators.

Column 2 estimates Equation 2, disaggregating the treatment by the type of affirmative action: caste-based or income-based. Beneficiaries under the caste-based AA treatment receive 0.31 SD units more, while those under the income-based AA treatment receive a substantially larger reward of 0.61 SD units. This nearly twofold difference points to a strong divergence in how the two types of beneficiaries are treated in resource allocation.

Column 3 further examines whether reward allocation varies for caste-based AA beneficiaries based on income status. SC-ST individuals who are not low-income and receive caste-based affirmative action do not receive any additional reward compared to not low-income SC-ST individuals in the control group.

In contrast, low-income SC-ST individuals under the same caste-based treatment receive an additional 0.43 SD units. The interaction term for income-based AA beneficiaries remains large, positive, and statistically significant, with these individuals receiving 0.69 SD units more.

Extended Setting. Column 4 turns to the extended setting, in which SC-ST individuals are also eligible for income-based affirmative action. The findings from earlier columns largely hold: high-income SC-ST beneficiaries under the caste-based treatment receive no additional reward, while low-income SC-ST beneficiaries under the same treatment continue to receive a reward premium of 0.43 SD units. Under income-based affirmative action, low-income GC beneficiaries are awarded 0.44 SD units more. However, when the income-based beneficiary is also SC-ST, this benefit is substantially reduced to just 0.22 SD units — approximately half the size — and it is not statistically significant at conventional levels. These results suggest that SC-ST individuals benefit significantly less from income-based affirmative action than their GC counterparts.

Table 5: Impact of AA treatment on reward allocation

	Outcome: Allocation			
	Institutional			Extended
	(1)	(2)	(3)	(4)
SC-ST	0.230*** (0.0465)	0.244*** (0.0376)	0.244*** (0.0376)	0.305*** (0.0387)
Low-Income	-0.0208 (0.0395)	-0.0303 (0.0397)	-0.0303 (0.0397)	0.0475 (0.0399)
4 th position \times Low-Income	0.523*** (0.0562)	0.461*** (0.0809)	0.200* (0.108)	0.267** (0.130)
Low-Income \times SC-ST				-0.145* (0.0742)
AA treatment	-0.140*** (0.0309)			
AA-Caste		-0.0930*** (0.0328)	-0.0930*** (0.0328)	-0.0925*** (0.0344)
AA-Income		-0.240*** (0.0436)	-0.240*** (0.0436)	-0.0728* (0.0424)
AA treatment \times 4 th position	0.403*** (0.123)			
AA-Caste \times 4 th position		0.311** (0.130)		
AA-Caste \times 4 th position \times Not Low-Income			0.0614 (0.115)	0.0609 (0.116)
AA-Caste \times 4 th position \times Low-Income			0.431*** (0.153)	0.430*** (0.154)
AA-Income \times 4 th position		0.605*** (0.197)	0.689*** (0.207)	
AA-Income \times 4 th position \times SC-ST				0.220 (0.182)
AA-Income \times 4 th position \times General Category				0.438** (0.203)
Constant	1.087*** (0.0582)	1.092*** (0.0569)	1.092*** (0.0569)	1.044*** (0.0562)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	291	291	291	291
N Observations	3920	3920	3920	4656

Notes: The dependent variable is the evaluator's allocation for the four selected test-takers. Column (1) corresponds to the baseline specification in Equation (1), Column (2) to the institutional specification in Equation (2), Column (3) to the institutional specification with income interactions in Equation (3), and Column (4) to the extended specification in Equation (4). All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.3 Competence Beliefs and Reward Patterns

Tables 4 and 5 showed a divergence between perceived competence and reward allocation. On the one hand, SC-ST beneficiaries of caste-based AA were perceived as less competent relative to non-beneficiaries, especially when they were not classified as low-income. On the other hand, GC beneficiaries of income-based AA were perceived as more competent than non-beneficiaries. For low-income SC-ST beneficiaries (in both caste- and income-based AA) we found no clear difference in perceived competence.

Reward allocations, however, revealed a more nuanced pattern. While some groups, which were perceived as less competent, faced no penalty in rewards, others received favorable allocations. In particular, low-income SC-ST beneficiaries in the AA-Caste treatment and General Category beneficiaries in the AA-Income treatment were both rewarded more generously than non-beneficiaries, despite differences in how they were viewed in terms of competence.

5.3.1 Reward Allocations Relative to Grades

Table 6 helps reconcile these patterns by examining the deviation from score-based contributions, that is, the difference between the reward share allocated and the share implied by the evaluator’s own score guesses for each test-taker. This approach allows us to test whether evaluators allocate more or less than their own assessments of competence would justify.

The results in Column 4 of Table 6 highlight three key findings. First, non-low-income SC-ST AA-Caste beneficiaries receive allocations that exceed their guessed scores by 0.33 SD units, indicating that evaluators compensate them with additional rewards despite lower perceived competence. Second, low-income SC-ST AA-Caste beneficiaries also receive allocations above their perceived contribution (0.42 SD), suggesting that their favorable treatment reflects altruistic or compensatory motives independent of competence perceptions. Finally, low-income GC beneficiaries under AA-Income obtain a positive but statistically insignificant deviation (0.27 SD), implying that their higher absolute rewards in Table 5 are explained by higher perceived competence rather than compensatory motives.

Taken together, these results indicate that reward allocations reflect two distinct mechanisms. For SC-ST-ST beneficiaries, particularly those perceived as less competent, evaluators appear to compensate by allocating extra rewards, consistent with altruistic or compensatory motives. For GC AA-Income beneficiaries, by contrast, positive allocations mirror their higher competence evaluations, pointing to merit-based generosity rather than compensatory behavior.

Table 6: Impact of AA treatment on reward allocation (Deviation from grade)

	Outcome: Share All. - Share Score			
	Institutional			Extended
	(1)	(2)	(3)	(4)
SC-ST	0.231*** (0.0533)	0.237*** (0.0470)	0.237*** (0.0470)	0.306*** (0.0497)
Low-Income	0.323*** (0.0555)	0.325*** (0.0555)	0.325*** (0.0555)	0.372*** (0.0602)
4 th position \times Low-Income	0.0887 (0.0813)	0.0801 (0.0905)	0.0189 (0.146)	0.167 (0.169)
Low-Income \times SC-ST				-0.196* (0.103)
AA treatment	-0.106*** (0.0371)			
AA-Caste		-0.111*** (0.0390)	-0.111*** (0.0390)	-0.104** (0.0409)
AA-Income		-0.0959* (0.0550)	-0.0959* (0.0550)	-0.0666 (0.0515)
AA treatment \times 4 th position	0.403*** (0.150)			
AA-Caste \times 4 th position		0.404*** (0.155)		
AA-Caste \times 4 th position \times Not Low-Income			0.345** (0.171)	0.338* (0.173)
AA-Caste \times 4 th position \times Low-Income			0.432** (0.173)	0.425** (0.175)
AA-Income \times 4 th position		0.408* (0.241)	0.428* (0.247)	
AA-Income \times 4 th position \times SC-ST				0.200 (0.211)
AA-Income \times 4 th position \times General Category				0.272 (0.241)
Constant	-0.0732 (0.0647)	-0.0748 (0.0646)	-0.0748 (0.0646)	-0.101 (0.0646)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	291	291	291	291
N Observations	3920	3920	3920	4656

Notes: The dependent variable is the difference between the guessed contribution of the test taker and the evaluator's allocation for the four selected test-takers. Column (1) corresponds to the baseline specification in Equation (1), Column (2) to the institutional specification in Equation (2), Column (3) to the institutional specification with income interactions in Equation (3), and Column (4) to the extended specification in Equation (4). All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.4 Robustness checks

Section A of the Appendix presents robustness checks for the three outcomes. Column (1) in Tables 7, 8, and 9 excludes the 13 evaluators who failed at least one attention check. Column (2) excludes the 12 evaluators who allocated the bonus equally across all participants. Columns (3) and (4) split the sample between economics and non-economics students. Restricting the sample as in Columns (1) and (2) produces no substantial changes in the coefficients of interest. By contrast, Columns (3) and (4) highlight differences in behavior towards high-income caste-AA beneficiaries: non-economics students display a stronger stigma of incompetence and allocate less, so that the generosity observed towards this group is primarily driven by economics students (Table 9).

6 Discussion and Concluding Comments

Our results point to an important duality in evaluator behavior. On the one hand, affirmative action beneficiaries from disadvantaged caste groups face stigma in terms of perceived competence. On the other hand, they are simultaneously rewarded more generously, consistent with compensatory motives. This duality highlights that affirmative action does not simply provoke backlash but also encourages redistributive generosity.

From an economics perspective, these results connect to the literature on fairness preferences and inequality aversion (e.g., Cappelen et al.; 2007, 2013; Fong; 2001). The compensatory rewards allocated to SC-ST beneficiaries are consistent with evaluators exhibiting a form of inequality-aversion or compensatory fairness, whereby individuals disadvantaged in one domain (here, competence perceptions) are granted additional resources in another. This pattern also aligns with the broader experimental literature on redistribution and altruism, where generosity may be motivated by fairness concerns or a “warm glow” from giving (Andreoni; 1989). By contrast, the rewards to GC income-based beneficiaries align with a merit-driven allocation logic, since their generosity appears to be tied directly to higher competence evaluations.

A natural caveat is that these compensatory allocations may in part reflect experimental demand effects. Evaluators, drawn from university student populations, may have been sensitive to social desirability concerns or to the explicit framing of affirmative action, which could have induced them to allocate additional resources to disadvantaged groups. While this does not undermine the internal validity of the experiment, it cautions against interpreting the generosity toward SC-ST beneficiaries as purely altruistic.

Overall, the findings underscore that affirmative action shapes outcomes through two distinct mechanisms: (i) identity-based stigma that lowers perceived competence, and (ii) re-

distributive generosity that compensates disadvantaged groups. Recognizing the coexistence of these forces helps explain the persistent contestation of affirmative action—not only on grounds of meritocracy, but also because of underlying social biases and heterogeneous fairness preferences.

In conclusion, our paper examines how evaluators respond to affirmative action candidates when eligibility is framed around caste versus income. Using incentivized experiments, we disentangle perceptions of competence from the allocation of rewards. The results reveal a clear divergence across groups. For SC-ST beneficiaries of caste-based affirmative action, evaluators perceive lower competence only among non-low-income candidates, yet nonetheless allocate them additional rewards beyond what grades alone would justify, consistent with compensatory motives. By contrast, low-income SC-ST caste beneficiaries are not perceived as less competent, but they too are allocated more than their grades predict—suggesting that generosity here reflects altruistic or compensatory impulses rather than a correction for deficits. For GC beneficiaries of income-based affirmative action, evaluators perceive higher competence and grant higher absolute rewards, though these allocations are fully explained by performance rather than compensation. Meanwhile, SC-ST beneficiaries of income-based affirmative action are not perceived as more competent, nor do they receive compensatory allocations—leaving them no better off than comparable non-beneficiaries.

These patterns underscore how social identity shapes both perceptions of merit and the generosity of allocations. Caste-based policies elicit compensatory responses, while income-based policies reward perceived performance. Yet the persistence of stigma for SC-ST candidates, even under income-based affirmative action, highlights that economic criteria alone cannot erase the social biases attached to historically marginalized groups.

More broadly, the study contributes to debates in economics on redistribution, equity, and the design of affirmative action policies. By disentangling perceptions of competence from allocation behavior, it shows how entrenched hierarchies mediate responses to redistributive instruments and why the framing of eligibility matters. The findings suggest that replacing caste with income in affirmative action may not address the stigma and compensatory dynamics that continue to shape outcomes for marginalized groups.

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A Robustness checks

Table 7: Robustness checks for guessed scores

	Outcome: Guessed Score			
	Attention	Alloc. uneq	Non-econ	Econ
	(1)	(2)	(3)	(4)
SC-ST	-0.229*** (0.0439)	-0.244*** (0.0443)	-0.279*** (0.102)	-0.204*** (0.0435)
Low-Income	-0.217*** (0.0377)	-0.204*** (0.0383)	-0.190** (0.0777)	-0.203*** (0.0418)
4 th position \times Low-Income	-0.188 (0.145)	-0.194 (0.146)	-0.236 (0.303)	-0.151 (0.151)
Low-Income \times SC-ST	0.187** (0.0817)	0.213*** (0.0812)	0.0499 (0.166)	0.222** (0.0896)
AA-Caste	0.109* (0.0637)	0.112* (0.0642)	0.231* (0.122)	0.0360 (0.0676)
AA-Income	0.0365 (0.0643)	0.0684 (0.0636)	0.307*** (0.111)	-0.0713 (0.0719)
AA-Caste \times 4 th position \times Not Low-Income	-0.403*** (0.124)	-0.321*** (0.123)	-0.649** (0.249)	-0.255* (0.133)
AA-Caste \times 4 th position \times Low-Income	-0.0145 (0.108)	-0.000765 (0.109)	-0.0143 (0.242)	-0.0251 (0.110)
AA-Income \times 4 th position \times SC-ST	0.125 (0.124)	0.109 (0.125)	-0.124 (0.269)	0.198 (0.127)
AA-Income \times 4 th position \times General Category	0.351*** (0.127)	0.362*** (0.127)	0.207 (0.266)	0.384*** (0.134)
Constant	0.0211 (0.190)	0.0600 (0.187)	0.797 (0.738)	0.0420 (0.206)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	278	279	87	204
N Observations	5560	5580	1740	4080

Notes: The dependent variable is the evaluator's guessed score for test-takers. All columns correspond to the extended specification in Equation (4). Column (1) in Tables 7, 8, and 9 excludes the evaluators who failed at least one attention check. Column (2) excludes the evaluators who allocated the bonus equally across all participants. Columns (3) and (4) split the sample between economics and non-economics students. All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Robustness checks for rewards allocations

	Outcome: Allocation			
	Attention	Alloc. uneq	Non-econ	Econ
	(1)	(2)	(3)	(4)
SC-ST	0.314*** (0.0392)	0.303*** (0.0403)	0.238*** (0.0715)	0.333*** (0.0461)
Low-Income	0.0462 (0.0416)	0.0648 (0.0413)	0.0387 (0.0608)	0.0514 (0.0509)
4 th position \times Low-Income	0.232* (0.134)	0.246* (0.135)	0.193 (0.254)	0.296* (0.153)
Low-Income \times SC-ST	-0.146* (0.0767)	-0.138* (0.0774)	-0.130 (0.166)	-0.152* (0.0821)
AA-Caste	-0.0934*** (0.0357)	-0.0982*** (0.0358)	-0.0571 (0.0593)	-0.107** (0.0431)
AA-Income	-0.0695 (0.0435)	-0.0781* (0.0440)	-0.0699 (0.0566)	-0.0746 (0.0563)
AA-Caste \times 4 th position \times Not Low-Income	0.0337 (0.122)	0.0787 (0.120)	-0.125 (0.184)	0.134 (0.149)
AA-Caste \times 4 th position \times Low-Income	0.443*** (0.160)	0.449*** (0.161)	0.330 (0.260)	0.474** (0.194)
AA-Income \times 4 th position \times SC-ST	0.207 (0.186)	0.242 (0.188)	0.153 (0.283)	0.251 (0.232)
AA-Income \times 4 th position \times General Category	0.451** (0.209)	0.461** (0.211)	0.463 (0.307)	0.429 (0.262)
Constant	1.044*** (0.0579)	1.077*** (0.0578)	1.056*** (0.0978)	1.040*** (0.0692)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	278	279	87	204
N Observations	4448	4464	1392	3264

Notes: The dependent variable is the evaluator's allocation for the four selected test-takers. All columns correspond to the extended specification in Equation (4). Column (1) in Tables 7, 8, and 9 excludes the evaluators who failed at least one attention check. Column (2) excludes the evaluators who allocated the bonus equally across all participants. Columns (3) and (4) split the sample between economics and non-economics students. All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 9: Robustness checks for rewards allocations (Deviation from grade)

	Outcome: Share All. - Share Score			
	Attention	Alloc. uneq	Non-econ	Econ
	(1)	(2)	(3)	(4)
SC-ST	0.324*** (0.0505)	0.314*** (0.0516)	0.259*** (0.0931)	0.326*** (0.0591)
Low-Income	0.378*** (0.0626)	0.400*** (0.0622)	0.354*** (0.106)	0.381*** (0.0735)
4 th position \times Low-Income	0.128 (0.174)	0.151 (0.175)	0.105 (0.333)	0.196 (0.199)
Low-Income \times SC-ST	-0.208* (0.106)	-0.203* (0.107)	-0.201 (0.220)	-0.195* (0.116)
AA-Caste	-0.106** (0.0425)	-0.107** (0.0426)	-0.0668 (0.0709)	-0.119** (0.0512)
AA-Income	-0.0605 (0.0528)	-0.0707 (0.0535)	-0.0724 (0.0659)	-0.0646 (0.0688)
AA-Caste \times 4 th position \times Not Low-Income	0.308* (0.181)	0.343* (0.178)	0.145 (0.273)	0.419* (0.222)
AA-Caste \times 4 th position \times Low-Income	0.440** (0.181)	0.433** (0.183)	0.312 (0.301)	0.471** (0.218)
AA-Income \times 4 th position \times SC-ST	0.173 (0.216)	0.218 (0.219)	0.208 (0.303)	0.198 (0.275)
AA-Income \times 4 th position \times General Category	0.278 (0.247)	0.285 (0.250)	0.301 (0.379)	0.259 (0.308)
Constant	-0.106 (0.0665)	-0.0699 (0.0668)	-0.116 (0.114)	-0.0941 (0.0791)
Evaluator's characteristics	Yes	Yes	Yes	Yes
Position	Yes	Yes	Yes	Yes
N evaluators	278	279	87	204
N Observations	4448	4464	1392	3264

Notes: The dependent variable is the difference between the guessed contribution of the test taker and the evaluator's allocation for the four selected test-takers. All columns correspond to the extended specification in Equation (4). Column (1) in Tables 7, 8, and 9 excludes the evaluators who failed at least one attention check. Column (2) excludes the evaluators who allocated the bonus equally across all participants. Columns (3) and (4) split the sample between economics and non-economics students. All regressions include evaluator socio-demographic characteristics, grade fixed effects, and controls for test-taker position and its interaction with low-income status. Robust standard errors are clustered at the evaluator level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

B Experimental Instructions

B.1 Test-taker instructions

Figure 2: Introduction & Consent

Introduction

This survey is part of a research project from Ashoka University. Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. You would need to fill an online survey and answer some questions. It will take approximately 15 minutes.

If you complete all the tasks, you will receive a participation fee of INR 200 and an additional amount depending on your answers. The maximum additional amount that you can receive is INR 300. You will earn between INR 200 and 500.

I understand that all the data collected from my responses will only be used for research and my identity will be kept anonymous.

- ☐ I consent
☐ I do not consent

Next

Figure 3: Raven Instructions

Instructions

You will now play a pattern game, where you are asked to solve some puzzles. On the screen, you will see a set of abstract pictures with one of the pictures missing. You need to choose a picture from the choices below to complete the pattern.

You will have a total of 8 minutes to complete 12 such puzzles. During these 8 minutes you will be able to move forwards and backwards and change your answers using the buttons and tabs on your screen.

Once the 8 minutes have passed, the pattern game will be automatically submitted and you will proceed to the results. You can submit all your answers once you reach the last puzzle by clicking on the button that will appear and be labelled "Finish and proceed to next step".

At the end of the experiment, you will earn 25 INR for each correct answer you submit.

You can only take part in the experiment once and so you can only use your unique ID once. Take care to complete all the tasks in one go, otherwise you risk not being able to complete all the tasks and receive payment.

Please enter your ID here:

Click on "next" to proceed to the pattern game.

Next

Figure 4: Raven Screen (the Raven matrix is not printed as the images are copyrighted)

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

Picture 7

Picture 8

Picture 9


Picture 10

Picture 11

Picture 12

Time left to complete this page: 7:52

Picture 2



1

2

3

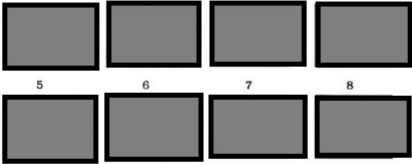
4

5

6

7

8



Please, indicate which of the eight options completes the pattern in the picture.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8

Back

Next

Figure 5: Demographics Questionnaire - Part 1

Demographic Questions

What is your age (in years)?

What is your sex assigned at birth?

What is your Gender?

What is your religion?

What is your Jati?

What type of school did you attend?

What is your caste group?

How many people live in your household (including yourself)?

How many years of education have you completed?

What is your field of study?

Year of study (i.e. 2nd Year, UG, 5th Year, PG etc.):

Next

Figure 6: Demographics Questionnaire - Part 2

Demographic Questions

What is your father's occupation? If retired please specify the last occupation

----- ▾

What is your mother's occupation? If retired please specify the last occupation

----- ▾

What is your father's education?

----- ▾

What is your mother's education?

----- ▾

Is your family income less than INR 100,000 per year?

☐ Yes

☐ No

What is your State of residence?

----- ▾

Do you live in an urban or rural area?

----- ▾

Next

Figure 7: Results Page

Results

Your overall payoff (including ₹ 200.00 show-up fee and ₹ 0.00 for the pattern game) is: ₹ 200.00

Some of you will be randomly selected and potentially receive an additional bonus in the next few weeks. You will be notified accordingly if you are selected and what additional bonus you would receive.

Finish experiment

B.2 Evaluator instructions

Figure 8: Introduction & Consent

Consent

This survey is part of a research project from Ashoka University. Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. You would need to fill an online survey and answer some questions. It will take approximately 15 minutes.

If you complete all the tasks, you will receive a participation fee of 200 INR and an additional amount depending on your answers. The maximum additional amount that you can receive is 275 INR. You will earn between 200 INR and 475 INR.

I understand that all the data collected from my responses will only be used for research and my identity will be kept anonymous.

Figure 9: Introduction & Attention Check

The experiment is about to start.

Below we ask you a general question to ensure that you are reading through the information with attention. We will include similar questions throughout the various tasks. If you fail to answer any of these correctly then you will not receive payment.

Some people like the colour red. Some people like the colour blue. What is the sum of 12 and 14?

You can only take part in the experiment once and so you can only use your unique ID once. Take care to complete all the tasks in one go, otherwise you risk not being able to complete all the tasks and receive payment.

Please enter your ID here:

You may now proceed to the experiment:

Figure 10: Score guessing introduction - Control

Introduction

5 participants solved a test. 4 are selected to receive a reward. We selected the 4 best performers among these 5 people.

On the next screen, the computer will show you some information about these 5 participants, including their "grade", which will tell you the range of their marks out of 100. These are the ranges per grade:

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Based on the information on the next screen, please write what you think the actual score (marks) of each participant was.

- You may earn a bonus of 35 INR for each score report you make for the 5 test-takers.
- **The likelihood of you receiving the bonus of 35 INR is higher, the closer your reported score is to the true score of a test-taker.**
- If you report your estimates accurately and truthfully, this will be best for you in terms of your expected payment from the experiment.
- Below we will explain the [payment procedure](#) and some [examples](#) of how it will work. You can review these if you would like. Please note that they are not necessary to understand the experiment and can be skipped without any harm if you are not interested.

You will be asked to perform this four times. One of the four times will be randomly chosen to determine your monetary earnings from performing this task.

Payment procedure (click to expand):

Examples (click to expand):

How many times have you had a fatal heart attack?

Next

Figure 11: Score guessing introduction - AA-Caste

Introduction

5 participants solved a test. 4 are selected to receive a reward. 3 of the 4 are the top scorers in the group of 5. The remaining 1 seat is reserved for the best performing SC candidates.

On the next screen, the computer will show you some information about these 5 participants, including their "grade", which will tell you the range of their marks out of 100. These are the ranges per grade:

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Based on the information on the next screen, please write what you think the actual score (marks) of each participant was.

- You may earn a bonus of 35 INR for each score report you make for the 5 test-takers.
- **The likelihood of you receiving the bonus of 35 INR is higher, the closer your reported score is to the true score of a test-taker.**
- If you report your estimates accurately and truthfully, this will be best for you in terms of your expected payment from the experiment.
- Below we will explain the [payment procedure](#) and some [examples](#) of how it will work. You can review these if you would like. Please note that they are not necessary to understand the experiment and can be skipped without any harm if you are not interested.

You will be asked to perform this four times. One of the four times will be randomly chosen to determine your monetary earnings from performing this task.

Payment procedure (click to expand):

Examples (click to expand):

How many times have you had a fatal heart attack?

Next

Figure 12: Score guessing introduction - AA-Income

Introduction

5 participants solved a test. 4 are selected to receive a reward. 3 of the 4 are the top scorers in the group of 5. The remaining 1 seat is reserved for the best performing candidates with annual income less than 1 Lakh.

On the next screen, the computer will show you some information about these 5 participants, including their "grade", which will tell you the range of their marks out of 100. These are the ranges per grade:

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Based on the information on the next screen, please write what you think the actual score (marks) of each participant was.

- You may earn a bonus of 35 INR for each score report you make for the 5 test-takers.
- **The likelihood of you receiving the bonus of 35 INR is higher, the closer your reported score is to the true score of a test-taker.**
- If you report your estimates accurately and truthfully, this will be best for you in terms of your expected payment from the experiment.
- Below we will explain the [payment procedure](#) and some [examples](#) of how it will work. You can review these if you would like. Please note that they are not necessary to understand the experiment and can be skipped without any harm if you are not interested.

You will be asked to perform this four times. One of the four times will be randomly chosen to determine your monetary earnings from performing this task.

Payment procedure (click to expand):

Examples (click to expand):

How many times have you had a fatal heart attack?

Next

Figure 13: Score guessing quiz - Control

Comprehension Check

We will now make sure that you understood the instructions. When you have answered the questions below, please click the button at the bottom of the screen to proceed. If any of your answers are incorrect, the computer will tell you so and provide you with the correct answer.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☐ The 4 selected candidates are the top performers in the group of 5

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☐ The probability to receive 35 rupees increases with how close I am to the true score

Next

Figure 14: Score guessing quiz - AA-Caste

Comprehension Check

We will now make sure that you understood the instructions. When you have answered the questions below, please click the button at the bottom of the screen to proceed. If any of your answers are incorrect, the computer will tell you so and provide you with the correct answer.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☐ 3 of the 4 are the top performers in the group of 5. The remaining 1 selected is the best performing SC candidate.

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☐ The probability to receive 35 rupees increases with how close I am to the true score

Next

Figure 15: Score guessing quiz - AA-Income

Comprehension Check

We will now make sure that you understood the instructions. When you have answered the questions below, please click the button at the bottom of the screen to proceed. If any of your answers are incorrect, the computer will tell you so and provide you with the correct answer.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☐ 3 of the 4 are the top performers in the group of 5. The remaining 1 selected is the best performing with annual income less than 1 Lakh.

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☐ The probability to receive 35 rupees increases with how close I am to the true score

Next

Figure 16: Score guessing quiz feedback - Control

Comprehension Check Results

Here are your answers along with the solutions.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☒ The 4 selected candidates are the top performers in the group of 5

Correct.

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☒ The probability to receive 35 rupees increases with how close I am to the true score

Correct.

Next

Figure 17: Score guessing quiz feedback - AA-Caste

Comprehension Check Results

Here are your answers along with the solutions.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☒ 3 of the 4 are the top performers in the group of 5. The remaining 1 selected is the best performing SC candidate.

Correct.

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☒ The probability to receive 35 rupees increases with how close I am to the true score

Correct.

Next

Figure 18: Score guessing quiz feedback - AA-Income

Comprehension Check Results

Here are your answers along with the solutions.

How were the 5 candidates selected?

- ☐ The 4 candidates have been selected randomly within a pool of 5 candidates
- ☒ 3 of the 4 are the top performers in the group of 5. The remaining 1 selected is the best performing with annual income less than 1 Lakh.

Correct.

How is your payment going to be calculated for the next task? (select the correct answer)

- ☐ I won't get paid specifically for this task, I will get a fixed amount for my participation in the experiment
- ☐ I will receive 35 rupees per correct guess
- ☒ The probability to receive 35 rupees increases with how close I am to the true score

Correct.

Next

Figure 19: Score guessing: Task 1 - Control

Task 1

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Score
ID1	A	General Category	no	<input type="text"/> %
ID2	A	SC/ST	no	<input type="text"/> %
ID3	B	General Category	no	<input type="text"/> %
ID4	B	SC/ST	yes	<input type="text"/> %
ID5	B	General Category	yes	<input type="text"/> %

Next

Figure 20: Score guessing: Task 1 - AA-Caste

Task 1

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	A	General Category	no	no	<input type="text"/> %
ID2	A	SC/ST	no	no	<input type="text"/> %
ID3	B	General Category	no	no	<input type="text"/> %
ID4	B	SC/ST	yes	yes	<input type="text"/> %
ID5	B	General Category	yes	no	<input type="text"/> %

Next

Figure 21: Score guessing: Task 1 - AA-Income

Task 1

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	A	General Category	no	no	<input type="text"/> %
ID2	A	SC/ST	no	no	<input type="text"/> %
ID3	B	General Category	no	no	<input type="text"/> %
ID4	B	General Category	yes	yes	<input type="text"/> %
ID5	B	SC/ST	yes	no	<input type="text"/> %

Next

Figure 22: Score guessing: Task 2 - Control

Task 2

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Score
ID1	B	General Category	no	<input type="text"/> %
ID2	B	General Category	no	<input type="text"/> %
ID3	B	General Category	yes	<input type="text"/> %
ID4	C	SC/ST	no	<input type="text"/> %
ID5	C	General Category	yes	<input type="text"/> %

Next

Figure 23: Score guessing: Task 2 - AA-Caste

Task 2

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	B	General Category	no	no	<input type="text"/> %
ID2	B	General Category	no	no	<input type="text"/> %
ID3	B	General Category	yes	no	<input type="text"/> %
ID4	C	SC/ST	no	yes	<input type="text"/> %
ID5	C	General Category	yes	no	<input type="text"/> %

Next

Figure 24: Score guessing: Task 2 - AA-Income

Task 2

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	B	General Category	no	no	<input type="text"/> %
ID2	B	General Category	no	no	<input type="text"/> %
ID3	B	General Category	yes	no	<input type="text"/> %
ID4	C	General Category	yes	yes	<input type="text"/> %
ID5	C	SC/ST	no	no	<input type="text"/> %

Next

Figure 25: Score guessing: Task 3 - Control

Task 3

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Score
ID1	A	General Category	no	<input type="text"/> %
ID2	B	SC/ST	no	<input type="text"/> %
ID3	B	General Category	no	<input type="text"/> %
ID4	B	SC/ST	yes	<input type="text"/> %
ID5	B	General Category	no	<input type="text"/> %

Next

Figure 26: Score guessing: Task 3 - AA-Caste

Task 3

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	A	General Category	no	no	<input type="text"/> %
ID2	B	SC/ST	no	no	<input type="text"/> %
ID3	B	General Category	no	no	<input type="text"/> %
ID4	B	SC/ST	yes	yes	<input type="text"/> %
ID5	B	General Category	no	no	<input type="text"/> %

Next

Figure 27: Score guessing: Task 3 - AA-Income

Task 3

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	A	General Category	no	no	<input type="text"/> %
ID2	B	SC/ST	no	no	<input type="text"/> %
ID3	B	General Category	no	no	<input type="text"/> %
ID4	B	SC/ST	yes	yes	<input type="text"/> %
ID5	B	General Category	no	no	<input type="text"/> %

Next

Figure 28: Score guessing: Task 4 - Control

Task 4

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Score
ID1	B	General Category	no	<input type="text"/> %
ID2	B	General Category	yes	<input type="text"/> %
ID3	B	General Category	no	<input type="text"/> %
ID4	B	SC/ST	yes	<input type="text"/> %
ID5	B	SC/ST	no	<input type="text"/> %

Next

Figure 29: Score guessing: Task 4 - AA-Caste

Task 4

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	B	General Category	no	no	<input type="text"/> %
ID2	B	General Category	yes	no	<input type="text"/> %
ID3	B	SC/ST	yes	no	<input type="text"/> %
ID4	B	SC/ST	no	yes	<input type="text"/> %
ID5	B	General Category	no	no	<input type="text"/> %

Next

Figure 30: Score guessing: Task 4 - AA-Income

Task 4

Grade	Range
A	75 - 100
B	50 - 74
C	25 - 49
D	0 - 24

Those highlighted in blue are those selected to receive the reward.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Score
ID1	B	General Category	no	no	<input type="text"/> %
ID2	B	General Category	yes	no	<input type="text"/> %
ID3	B	General Category	no	no	<input type="text"/> %
ID4	B	SC/ST	yes	yes	<input type="text"/> %
ID5	B	SC/ST	no	no	<input type="text"/> %

Next

Figure 31: Bonus allocation instructions

Next task - allocate the bonus to those selected

In the next four screens you will again see individuals listed with their grades and their other information similarly to the task you have just completed. The individuals you will see listed will be the same ones you were just estimating their exact scores.

Your task now will be to decide how the bonus that is available should be distributed across the four selected participants. The total bonus that is available depends exactly on the total scores of those selected. That is, if individual 1 scored 78, individual 2 scored 75, individual 3 scored 69, and individual 4 scored 68, then the total bonus to be shared will equal to 290. If instead, all individuals have the same scores but individual 3 instead had a score of 60, then the total bonus to be shared would equal to 281.

Each of the bonus points to be allocated correspond to 0.1 INR. That is, 150 bonus points correspond to 15 INR.

You will be asked to decide on the allocation of the bonus four times. Once for each of the four different groups of individuals that you have just given us your best estimates for their individual scores in the test. One of these four allocations will be randomly chosen and the allocation you have decided will be implemented to divide the bonus across those selected participants as you have decided.

Your own payment will not be affected by these decisions, but the additional bonus that the participants selected will receive depends on your own decision in this task.

Next

Figure 32: Allocation: Task 1 - Control

Allocation 1

The 4 selected participants qualify to share a bonus of 283 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 283 points. You can give anything up to the total amount of 283 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Allocation
ID1	A	General Category	no	<input type="text"/>
ID2	A	SC/ST	no	<input type="text"/>
ID3	B	General Category	no	<input type="text"/>
ID4	B	SC/ST	yes	<input type="text"/>

Next

Figure 33: Allocation: Task 1 - AA-Caste

Allocation 1

The 4 selected participants qualify to share a bonus of 283 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 283 points. You can give anything up to the total amount of 283 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	A	General Category	no	no	<input type="text"/>
ID2	A	SC/ST	no	no	<input type="text"/>
ID3	B	General Category	no	no	<input type="text"/>
ID4	B	SC/ST	yes	yes	<input type="text"/>

Next

Figure 34: Allocation: Task 1 - AA-Income

Allocation 1

The 4 selected participants qualify to share a bonus of 283 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 283 points. You can give anything up to the total amount of 283 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	A	General Category	no	no	<input type="text"/>
ID2	A	SC/ST	no	no	<input type="text"/>
ID3	B	General Category	no	no	<input type="text"/>
ID4	B	General Category	yes	yes	<input type="text"/>

Next

Figure 35: Allocation: Task 2 - Control

Allocation 2

The 4 selected participants qualify to share a bonus of 192 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 192 points. You can give anything up to the total amount of 192 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Allocation
ID1	B	General Category	no	<input type="text"/>
ID2	B	General Category	no	<input type="text"/>
ID3	B	General Category	yes	<input type="text"/>
ID4	C	SC/ST	no	<input type="text"/>

Next

Figure 36: Allocation: Task 2 - AA-Caste

Allocation 2

The 4 selected participants qualify to share a bonus of 192 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 192 points. You can give anything up to the total amount of 192 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	B	General Category	no	no	<input type="text"/>
ID2	B	General Category	no	no	<input type="text"/>
ID3	B	General Category	yes	no	<input type="text"/>
ID4	C	SC/ST	no	yes	<input type="text"/>

Next

Figure 37: Allocation: Task 2 - AA-Income

Allocation 2

The 4 selected participants qualify to share a bonus of 192 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 192 points. You can give anything up to the total amount of 192 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	B	General Category	no	no	<input type="text"/>
ID2	B	General Category	no	no	<input type="text"/>
ID3	B	General Category	yes	no	<input type="text"/>
ID4	C	General Category	yes	yes	<input type="text"/>

Next

Figure 38: Allocation: Task 3 - Control

Allocation 3

The 4 selected participants qualify to share a bonus of 267 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 267 points. You can give anything up to the total amount of 267 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Allocation
ID1	A	General Category	no	<input type="text"/>
ID2	B	SC/ST	no	<input type="text"/>
ID3	B	General Category	no	<input type="text"/>
ID4	B	SC/ST	yes	<input type="text"/>

Next

Figure 39: Allocation: Task 3 - AA-Caste

Allocation 3

The 4 selected participants qualify to share a bonus of 267 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 267 points. You can give anything up to the total amount of 267 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	A	General Category	no	no	<input type="text"/>
ID2	B	SC/ST	no	no	<input type="text"/>
ID3	B	General Category	no	no	<input type="text"/>
ID4	B	SC/ST	yes	yes	<input type="text"/>

Next

Figure 40: Allocation: Task 3 - AA-Income

Allocation 3

The 4 selected participants qualify to share a bonus of 267 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 267 points. You can give anything up to the total amount of 267 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	A	General Category	no	no	<input type="text"/>
ID2	B	SC/ST	no	no	<input type="text"/>
ID3	B	General Category	no	no	<input type="text"/>
ID4	B	SC/ST	yes	yes	<input type="text"/>

Next

Figure 41: Allocation: Task 4 - Control

Allocation 4

The 4 selected participants qualify to share a bonus of 241 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 241 points. You can give anything up to the total amount of 241 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Allocation
ID1	B	General Category	no	<input type="text"/>
ID2	B	General Category	yes	<input type="text"/>
ID3	B	General Category	no	<input type="text"/>
ID4	B	SC/ST	yes	<input type="text"/>

Next

Figure 42: Allocation: Task 4 - AA-Caste

Allocation 4

The 4 selected participants qualify to share a bonus of 233 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 233 points. You can give anything up to the total amount of 233 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	B	General Category	no	no	<input type="text"/>
ID2	B	General Category	yes	no	<input type="text"/>
ID3	B	SC/ST	yes	no	<input type="text"/>
ID4	B	SC/ST	no	yes	<input type="text"/>

Next

Figure 43: Allocation: Task 4 - AA-Income

Allocation 4

The 4 selected participants qualify to share a bonus of 241 points. You have to decide how this bonus will be allocated across these 4 participants. Please fill the last column with the sum you choose to allocate to each participant. The total sum needs to be 241 points. You can give anything up to the total amount of 241 points to each individual and everything needs to be allocated.

Participant ID	Grade	Caste	Income less than 1 Lakh	Affirmative action status	Allocation
ID1	B	General Category	no	no	<input type="text"/>
ID2	B	General Category	yes	no	<input type="text"/>
ID3	B	General Category	no	no	<input type="text"/>
ID4	B	SC/ST	yes	yes	<input type="text"/>

Next

Figure 44: CRT

Short Quiz

Please answer the questions below. For each correct answer you will receive 20 INR.

1. If it takes 2 nurses 2 minutes to check 2 patients, how many minutes does it take 40 nurses to check 40 patients?

2. On a loaf of bread, there is a patch of mold. Every day, the patch doubles in size. If it takes 24 days for the patch to cover the entire loaf of bread, how many days would it take for the patch to cover half of the loaf of bread?

3. If Anita can drink ten litres of water in 6 days, and Archana can drink ten litres of water in 12 days, how many days would it take for the two of them together to have drunk a total of ten litres of water?

4. Avinash received both the 15th highest and the 15th lowest mark in the class. How many students are in the class?

5. A tortoise starts crawling up a 6-yard-high rock wall in the morning. During each day it crawls 3 yards and during the night it slips back 2 yards. How many days will it take the tortoise to reach the top of the wall?

Next

Figure 45: Demographics Questionnaire - Part 1

Demographic questions

What is your age?

What is your sex assigned at birth?

What is your Gender?

What is your religion?

What is your Jati? (leave empty if you prefer not to answer)

What type of school did you attend?

What is your caste group?

How many people live in your household?

Figure 46: Demographics Questionnaire - Part 2

Select the word that ends with an 'e'

- ☐ Candidate
- ☐ Test
- ☐ Scores

How many years of education have you completed?

What is your father's occupation?

- ☐ cultivation own land
- ☐ cultivation leased land
- ☐ agricultural labour
- ☐ animal husbandry
- ☐ rental income
- ☐ self-employment
- ☐ skilled labour (electrician, plumber, tailor, carpenter, mason)
- ☐ unskilled labour (construction worker, helper, stone cutter, NREGA work etc)
- ☐ non farm petty business (kirana store, tailoring shop, carpentry shop, handicrafts business, fishing etc)
- ☐ Salaried in private firm
- ☐ Salaried in govt enterprise
- ☐ Household work
- ☐ Consultant/freelance
- ☐ Gig worker (Ola, Uber, Zomato, Swiggy etc.)
- ☐ Others, specify

What is your mother's occupation?

- ☐ cultivation own land
- ☐ cultivation leased land
- ☐ agricultural labour
- ☐ animal husbandry
- ☐ rental income
- ☐ self-employment
- ☐ skilled labour (electrician, plumber, tailor, carpenter, mason)
- ☐ unskilled labour (construction worker, helper, stone cutter, NREGA work etc)
- ☐ non farm petty business (kirana store, tailoring shop, carpentry shop, handicrafts business, fishing etc)
- ☐ Salaried in private firm
- ☐ Salaried in govt enterprise
- ☐ Household work
- ☐ Consultant/freelance
- ☐ Gig worker (Ola, Uber, Zomato, Swiggy etc.)
- ☐ Others, specify

Figure 47: Demographics Questionnaire - Part 3

What is your father's education?

----- ▾

What is your mother's education?

----- ▾

Is your family income less than INR 100,000 per year?

☐ Yes

☐ No

What is your State of residence?

----- ▾

Do you live in an urban or rural area?

----- ▾

What is your field of study?

Year of study (i.e. 2nd Year, UG, 5th Year, PG etc.):

Next

Figure 48: Results Screen

Thank you!

Thank you for your participation. Below you see how much you have earned in each task:

Show-up fee:	200
Bonus for short quiz:	20.0
Score guessing task(s) relevant for payoff:	1
Bonus from relevant score guessing task(s):	175.0
Sum:	₹ 395.00

Next

Figure 49: De-briefing questions

Some de-briefing questions

I believe that affirmative action policies are useful and necessary to aid those disadvantaged in society

I believe that affirmative action policies should target lower income earners irrespective of identity

I believe that affirmative action policies should target specific identity groups that are disadvantaged irrespective of income

What was the criterion on the basis of which affirmative action was provided in the tasks presented to you?

What was the criterion on the basis of which SC candidates were provided affirmative action?

Did you get sufficient information on the candidates for you to make your decision on their scores? Please comment.

Were the instructions clear or confusing?

Was the goal of the experiment obvious?(it should not have been)

Next