Justification as a Key Determinant of the Success of Affirmative Action

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Research Question

What is the impact of justification for AA on the effectiveness of quotas?

In this project, we

- present a **novel experimental approach** to study the role of justification of AA in a peer-review environment
- use a **gender-neutral framing**
- **vary** whether or not the affirmed group faces **unequal opportunities** ex-ante

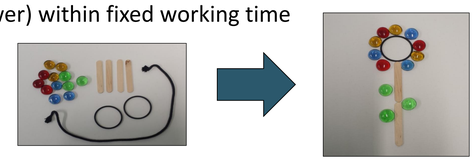
Experimental Design

Tournament with 4 players:

- Each subjects is randomly assigned a type – yellow or green
- Equal split of types in each tournament round
- Total of **3 rounds** with random rematching within groups of eight
- Each round consists of 2 stages:

1. Working stage

- **Real-effort task**:
  - Subjects receive set of materials
  - Task is to illustrate a predefined object with these materials (e.g. flower) within fixed working time



  - Within working time subjects are asked to take pictures of their illustration
  - In treatments with **unequal opportunities**, disadvantaged subjects have a **reduced time** to work on the task

2. Peer review stage

- Each subjects rates peers' illustrations on a scale from 0.0 to 10.0
- Prizes are awarded according to the sum of peer ratings
- In treatments with a **quota**, **at least one prize** has to be awarded to the **affirmed type** (which is randomized between yellow and green)

- Performance measured through evaluation of **independent online-raters**

Treatments

	Equal Opportunities	Unequal Opportunities
No Quota	**Base_equal** *No quota* *Equal working time for all* *N=160; N=20*	**Base_unequal** *No quota* *Disadvantaged type has reduced working time* *N=160; N=20*
Quota	**Quota_equal** *At least one prize awarded to affirmed type* *Equal working time for all* *N=160; N=20*	**Quota_unequal** *At least one prize awarded to affirmed & disadvantaged type* *Affirmed & disadvantaged type has reduced working time* *N=152; N=19*

Conclusion

- It **matters** in which environment – equal vs. unequal opportunities – AA is introduced and thus whether or not its introduction is **justified**
- We find, that in **equal opportunities** settings, quotas lead to
  - a **reduced performance** of affirmed types
  - **more biased reviews** of affirmed types
    - which is driven by **non-affirmed types giving lower ratings**
- In an **unequal opportunities** setting, quotas do not bear these undesirable effects
  - with ex-ante inequality quotas help to **debias** peer reviews
- Important implications also for policy makers and organizations implementing quotas as a tool of AA:
  - If **not justified**, AA might have **detrimental effects** for those who are supposed to benefit
  - **Anticipation** of effects can have **negative selection effects** on career choices
  - **Information** on existing inequality **needed** to raise awareness and thus increase **perceived justification of AA**

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Results

Does AA affect performance?

Dependent variable: Independent Rating	(1) Equal opportunities	(2) Unequal opportunities
Disadvantaged		-0.495***
		(0.183)
Affirmed	-0.303*	-0.257
	(0.161)	(0.220)
Non-affirmed	-0.125	-0.029
	(0.150)	(0.211)
Constant	6.281***	6.209***
	(0.084)	(0.130)
Observations	960	936
Number of participants	320	312
Number of groups	40	39

Random-effects model. allowing for creator random effects. In both specifications robust standard errors are clustered by matching groups of eight participants. Standard errors in parentheses. *** p<0.01. ** p<0.05. * p<0.1.

Are peer reviews biased as a result of AA?

Dependent variable: Peer Review (received)	(1) Equal opportunities	(2) Unequal opportunities
Disadvantaged		0.178
		(0.118)
Affirmed	-0,538**	0,100
	(0,233)	(0,281)
Non-affirmed	-0,036	0,645**
	(0,240)	(0,300)
Independent Rating	0,341***	0,382***
	(0,026)	(0,026)
Constant	0,734***	0,012
	(0,214)	(0,247)
Observations	960	936
Number of participants	320	312
Number of groups	40	39

Two-way error component linear model. allowing for creator and evaluator random effects. In both specifications robust standard errors are clustered by matching groups of eight participants. Standard errors in parentheses. *** p<0.01. ** p<0.05. * p<0.1.

Who gives biased reviews?

Dependent variable: Peer Review (sent)	(1) Equal opportunities	(2) Unequal opportunities
Disadvantaged		-0,361*
		(0,201)
Affirmed	0,126	0,758**
	(0,290)	(0,313)
Non-affirmed	-0,788***	-0,122
	(0,266)	(0,359)
Constant	2,880***	2,558***
	(0,169)	(0,218)
Observations	960	936
Number of participants	320	312
Number of groups	40	39

Two-way error component linear model. allowing for creator and evaluator random effects. In both specifications robust standard errors are clustered by matching groups of eight participants. Standard errors in parentheses. *** p<0.01. ** p<0.05. * p<0.1.