

# Distributive Justice and Reference Points Revisited

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#### DFG Research Group FOR 2104 - Need-Based Justice and Distribution Procedures





#### Thinking About Need



Bauer et al. 2025



#### Study

- vignette study
- two treatments (between-subjects)
- two tasks (within-subject)
- n = 116
- WiSo experimental laboratory at the University of Hamburg, 2016
- role of need satisfaction in non-comparative justice ratings about endowments
- justice evaluation function (JEF) as a quantitative measurement of justice evaluations



#### Vignette (1/2)

Please imagine the following:

In the region of Bergtal, a new village is going to be established. It is the task of the Public Housing Association of Bergtal to build housing. All households in this region want to live in the largest living space possible. The residents of the region have collectively decided on a minimum amount of living space, under which living a decent life in this community is not possible. Between the households in the region, there are no noteworthy differences and the minimum amounts are the same for each household: Each household should have 1000 regional—i. e., common to the region—area units of living space in order to be able to live a decent life. To have a living space with the equivalent area means for a household to live in close quarters, but it will be just enough to lead a decent life.



#### Vignette (2/2)

There are enough means to be able to build up to 2000 regional area units of living space for each household. The Regional Parliament decides how much living space will actually be built for the residents of the new village. The decision has otherwise no noteworthy consequences. For the construction of living space, no additional area would be consumed. The new village will be built in the area of an old village that was abandoned after a fire destroyed the houses.

In its decision, the Regional Parliament wants to take into account how impartial people—like you—judge the justice of different scenarios. Your task is, therefore, to indicate for each scenario how just you hold the distribution of living space to be.



#### Global Rating Task (1/2)

The following scenarios differ in how much living space shall be built for each household according to the decision of the Regional Parliament.

Please indicate for each following distribution how just you regard it to be. 100 percent means that you judge the distribution to be completely just. Percentages close to 100 percent mean that you judge the distribution to be almost completely just. Percentages far from 100 percent mean that you judge the distribution to be significantly less just.

Please familiarize yourself now with each of the given distributions before answering the questions.



#### Global Rating Task (2/2)





#### Relative Rating Task (1/2)

On the coming pages, we will present to you each time two differing scenarios. We will ask you furthermore to indicate on a scale from 1 (equally just or unjust) to 11 (much more just) how just you regard each scenario compared to the other one to be.



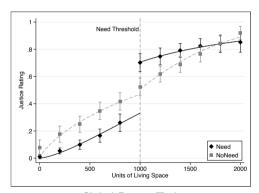
#### Relative Rating Task (2/2)







#### Results (1/3)



Global Rating Task



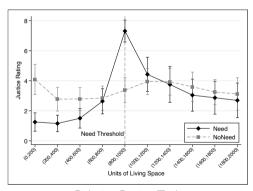
#### Results (2/3)

	Need		NoNeed	
Hump-Shaped	8	(15.38%)	2	(3.51%)
Binary	4	(7.69%)	5	(8.77%)
Flat at/above Need Threshold	7	(13.46%)	1	(1.75%)
Zero below Need Threshold	15	(28.85%)	5	(8.77%)
Increasing	17	(32.69%)	36	(63.16%)
Other	1	(1.92%)	8	(14.04%)
	52	(100.00%)	57	(100.00%)

Global Rating Task



# Results (3/3)



Relative Rating Task



#### **Some Shortcomings**

- small and homogeneous sample
- no non-normative reference point as control treatment
- no separate presentation of scenarios





#### Vignette (1/2)

Please imagine the following:

The Müller family has a certain need for living space. That means they require an apartment with a specific number of square meters in order to live in decency. If they receive exactly this number of square meters, their need for living space is exactly met. If they receive less, their need is underfulfilled. If they receive more, their need is overfulfilled. The Müller family requires 100 square meters. On the next page, we will show you various scenarios in which the actual size of the apartment they receive differs.



#### Vignette (2/2)

Please evaluate how well the number of square meters fulfil the Müller family's need in each case [how just the number of square meters is in regard to the Müller family's need in each case]. You can do this by providing a number. 0 indicate that their need is exactly fulfilled [that they receive a just amount]. Negative values indicate that their need is underfulfilled [that they receive less than would be just]. Positive values indicate that their need is overfulfilled [that they receive more than would be just.]. The more strongly the need is under- or overfulfilled [the allocation deviates from what is fair], the higher the value should be. Please base your judgments on your own personal assessment. There are no right or wrong answers.



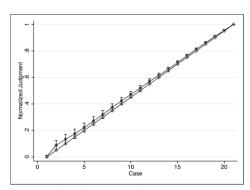
#### Task



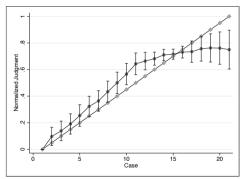
Relative Rating Task



#### Results



Non-Normative Formulation (n = 74)



Normative Formulation (n = 24)



#### **Takeaway Points**

- presence of a need-based reference point alters the sense of what is fair (Bauer et al. 2025)
- not merely the existence of a reference point matters—but its normative framing (pilot study)





#### **Dimensions**

- Descriptive Hypotheses: How do different reference points affect evaluations of distributive justice?
- Explanatory Questions: What is the (cognitive) nature of such evaluations? Does the influence of a reference point reflect a cognitive bias?



#### **Descriptive Hypotheses**

- Hypothesis 1 (Normativity): Non-normative reference points have no effect on justice evaluations, whereas normative ones do.
- Hypothesis 2 (Principles and Context): Need-based reference points will lead to stronger effects than merit-based reference points in contexts where vulnerability or basic sufficiency is salient (e.g., medical care), whereas merit-based anchors will lead to stronger effects in contexts where individual effort is normatively expected (e.g., workplace settings).
- Hypothesis 3 (Kinds of Needs): More fundamental kinds of needs have a stronger effect on evaluations of justice than less fundamental kinds of needs. (Bauer et al. 2023)



#### **Explanatory Questions**

- Question 1 (Numerical Sensitivity): Do justice evaluations depend on quantitative differences in the value of normative reference points?
- Question 2 (Reflective Sensitivity): Are intuitive justice evaluations more strongly influenced by reference points than reflective evaluations?
- Question 3 (Cultural Sensitivity): Does the influence of reference points on justice evaluations vary between subjects from different cultural backgrounds?



#### References

Bauer, Alexander Max, Jan Romann, Mark Siebel, and Stefan Traub (2023): "Winter is Coming. How Laypeople Think About Different Kinds of Needs," *PLOS ONE* 18 (11), e0294572.

Bauer, Alexander Max, Adele Diederich, Stefan Traub, and Arne Robert Weiss (2025): "Thinking About Need. A Vignette Experiment on Need-Based Distributive Justice," *The Journal of Economic Inequality*.