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Psych 251

Research Paradigm

**Study Overview**

***Original article:*** “Does poverty promote a different and harmful way of thinking? The links between economic scarcity, concrete construal level and risk behaviors”

***Goal of study:*** Test the relationship between economic scarcity, concrete construal level and risk behaviors. Specifically, Study 2 of the paper (which I am replicating) tests how much inducing the subjective experience of scarcity promotes a more concrete style of thinking.

***Hypothesis:*** Resource scarcity produces a cognitive limitation that makes it more difficult to consider long-term consequences during decision making.

***Theoretical framework:*** Scarcity mindset, construal level theory

**Design Summary**

* ***Design type:*** pretest-posttest experimental design
  + - Between-subject: Scarcity condition
    - Within-subject: Pre/post BIF index test (for construal level construct)
* ***Independent variables:*** Scarcity condition (scarcity vs non-scarcity)
* ***Dependent variable:*** Construal level (measured by BIF index)
* ***Conditions:*** 
  + - Scarcity assignment (n = 61) Assigned to lowest income group in “Bimboola” (less than B€400 / month); below defined poverty line
    - Non-scarcity assignment (n = 59) Assigned to middle-income group (B€1,201-3,000/ month); enough to live comfortably in “Bimboola”
    - Within-subjects factor: Time (BIF pre vs post)

***Procedure:***

* **Pre-measure:** 12 BIF items (random subset of Vallacher & Wegner) to assess baseline construal (abstract vs concrete).
* **Economic prime** (made up country of Bimboola): Read 5-tier income ladder in Bimboola; assigned to condition-specific tier. Make four forced choices (house, vehicle, phone, leisure) from tier-appropriate sets while viewing higher-tier alternatives.
* **Manipulation checks:** “My group is poor/rich” Likert items + monthly income recall in Bimboola.
* **Post-measure:** 12 new BIF items (non-overlapping with pre) to assess construal after the prime.
* **Delivery:** Online Qualtrics, tested in separate lab cubicles. Random assignment to condition; order of BIF blocks counterbalanced by Qualtrics (pre block always before prime; post block after). This will need to be modified to be online.

***Sample Details:***

* N = 120 undergraduate students; 102 women; M age = 19.05 (SD = 1.48).
* Scarcity: n=61; Non-scarcity: n=59. **I don’t think it would take more than 30 minutes for each participant to complete the pre-test, Bimboola manipulation, post-test, and manipulation check + demographics.**
* Language: Spanish-speaking university context (as in original paper).
* Inclusion/exclusion: Course-credit volunteers; no exclusions reported beyond normal completion.
* Ethics/setting: Lab-based survey sessions; individual testing stations.

**Materials and Measures**

* [Bimboola Paradigm](https://github.com/psych251/caballero2021/blob/07f846175bfb4f84a1e1e2311d5b5091c53dbc43/Bimboola%20Activity%20English.odt) (Jetten et al., 2015 adaptation): Simulated society with five income tiers. Participants were randomly assigned to either a scarcity (5th tier, ≤400 B€) or non-scarcity (3rd tier, 1201–3000 B€) condition. Selected four choices (house, vehicle, phone, leisure) while viewing higher-tier alternatives to visually reinforce perceived inequality. **This document (linked to my github above) was sent by the original author and was used in the original study. The author adapted it from Spanish to English. I’ll still need to upload these photos to Qualtrics this weekend before testing.**
* [Behavioral Identification Form](https://stanforduniversity.qualtrics.com/jfe/preview/previewId/ef5384e4-a448-4241-b35b-2e668cc20c49/SV_9NahsFIiwV8fMfY?Q_CHL=preview&Q_SurveyVersionID=current) (BIF; Vallacher & Wegner, 1989): 24 items (split into 12 pre + 12 post). Each item presented two descriptions of an action one abstract (“why”) and one concrete (“how”). Number of abstract choices = degree of abstraction. **Draft Qualtrics survey created and linked above.**
* Three Likert-scale items (“My group is poor,” “My group is rich,” monthly income recall) for manipulation checks **(Located in the first document, will likely need to create a separate document)**
* Demographics collected on age & gender **(still need to create)**

**Analysis Plan**

* Mixed-design ANOVA with:
  + Between-subjects factor: Condition (Scarcity vs Non-scarcity)
  + Within-subjects factor: Time (Pre vs Post BIF)
  + Dependent variable: Number of abstract responses (BIF score)
  + Expectation: Scarcity condition decreases abstraction from pre to post, while non-scarcity increases abstraction.
  + Manipulation check analyzed with one-way ANOVA
  + Significance threshold = α ± 0.05; effect sizes reported Cohen's f.

Replication Notes

References