

# Competitive climates increase material and symbolic zero-sum beliefs

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# **Motivation and Background**

Many scholars have linked competition and zero-sum beliefs (ZSBs) conceptually, and empirical work suggests zero-sum beliefs arise in situations of threat and resource scarcity (Wilkins et al., 2022; Kuchynka et al., 2018; Sirola & Pitesa, 2017). Scarce work directly tests whether a competitive climate causes zero-sum beliefs.

In this research, we investigate:

- Q1: Do competitive climates increase ZSBs for material resources that are inherently limited (e.g., money)?
- Q2: Do competitive climates increase ZSBs for symbolic resources that need not be limited (e.g., respect)?
- Q3: Can signaling resource abundance mitigate ZSBs, especially in competitive climates?

This research's theoretical contributions are threefold. First, it is among the first to test whether competitive climates foster ZSBs. Second, it develops a new ZSBs scale to measure both material that are limited as well as symbolic resources that need not be limited. Third, it utilizes a psychological mechanism, resource abundance, to mitigate ZSBs.

Our practical contribution is we develop an easily implementable intervention strategy to reduce ZSBs.

# **Hypotheses**

- H1: Competitive climates will be associated with and cause greater endorsement of ZSBs for both material and symbolic resources.
- H2: In a competitive environment, people prompted with resource abundance will endorse less material and symbolic ZSBs

# **Experimental Designs**

#### Study 1 & 2: Various Work Climates (Mturk, Ns = 1367s), Tests H1

**Task:** Participants read about a fictional company with either a competitive, collaborative, or neutral work climate

**IV:** Climate (3 between-subjects conditions; Competitive, Collaborative, Empty Control)

**DV:** ZSBs for Material Resources (e.g., *When certain employees make economic gains, others lose out economically*)

ZSBs for Symbolic Resources (e.g., *If certain employees are given more respect, others may get less respect than they are used to getting*)

### Study 3: Real organization (correlational) (MBA students, N = 481), Tests H1,

**Task:** MBA students are asked to report how competitive vs. collaborative they perceive their MBA program.

**DV:** ZSBs for Material Resources ZSBs for Material Resources Helping other students

Study 4: Interventions signaling resource abundance (Prolific Ns = 1441), Tests H2

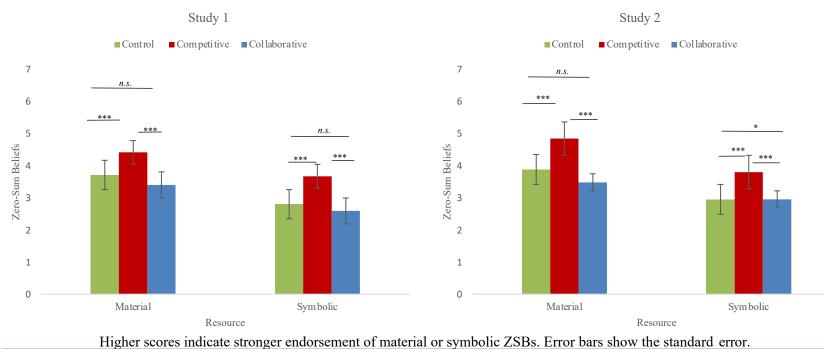
**Task: Participants read about a fictional company** with either a competitive, or collaborative work climate (as in Studies 1 and 2). Then, we signal either resource abundance or not with text and an experiential task.

**IV:** Climate (2 between-subjects condition; Competitive vs. Collaborative) x Resource Amount (3 between-subjects condition: Abundant vs. Limited vs. Empty Control)

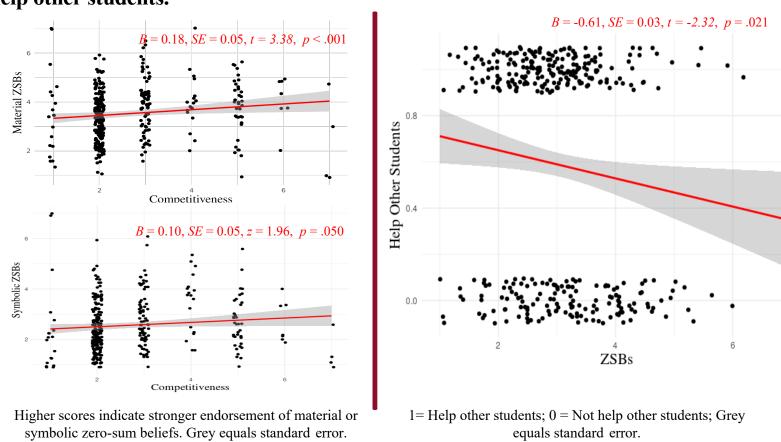
**DV:** ZSBs for Material Resources ZSBs for Symbolic Resources

# **Our Findings**

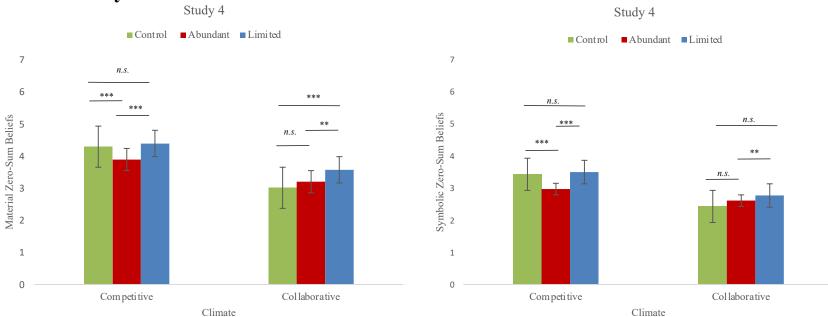
Study 1 & 2: People exposed to a competitive work climate report more material and symbolic zero-sum beliefs compared to a collaborative or control work climate.



Study 3: MBA students who perceive their MBA program as more competitive report stronger material and symbolic zero-sum beliefs, which were associated with less willingness to help other students.



Study 4: In competitive climates, signaling material resource abundance reduces both material and symbolic zero-sum beliefs.



Higher scores indicate stronger endorsement of material or symbolic ZSBs. Error bars show the standard error

# Tasks/Manipulations

#### Study 1 & 2: Various Work Climates

**All participants read**: Imagine that you work at the company Cast Technologies. Cast Technologies is one of the nation's premiere technology firms, with an everexpanding network of clients, consumers, and markets.

Competitive Climate Condition: Cast prides itself on fostering an ambitious and competitive work environment...At Cast, employees see each other as competitors who push each other to be better...

Collaborative Climate Condition: Cast prides itself on fostering a collaborative work environment....At Cast, employees see each other as partners and team members...

#### **Study 3: Real organization (correlational)**

**All participants**: In the following questions, you will be asked to reflect on your time at [business school] as an MBA student. To what extent would you consider the work environment at [business school] to be competitive or collaborative?

#### **Study 4: Intervention signaling resource abundance**

Participants completed a task to furnish their office at Cast. They were either given a budget amount of \$1500 in the resource abundant condition or \$400 in the resource limited condition.

	Chair	Desk	Monit	or	Guest seating	Storage Space
Basic	1		19"		A	1
Standard			24'	24"		L
Executive	-	7	43" Cur	43" Curved		
	Chair	Desk	Monitor	Gue	st seating	Storage Space
Basic	50	100	100		50	50
Ctandard	100	200	200	100		100

## **Summary**

• Competitive climates increase ZSBs concerning material and symbolic resources

300

200

Executive

- In an MBA program, students who perceived the program climate as more competitive reported higher ZSBs for material and symbolic resources. Higher endorsement for ZSBs was associated with less willingness to help other students and less willingness to donate to the university.
- Within competitive climates, signaling resource abundance can reduce ZSBs for both material and symbolic resources.

### References

Kuchynka, S. L., Bosson, J. K., Vandello, J. A., & Puryear, C. (2018). Zero-sum thinking and the masculinity contest: Perceived intergroup competition and workplace gender bias. *Journal of Social Issues*, 74(3), 529-

Sirola, N., & Pitesa, M. (2017). Economic downturns undermine workplace helping by promoting a zero-sum construal of success. *Academy of Management Journal*, 60(4), 1339-1359.

Wilkins, C. L., Wellman, J. D., Toosi, N. R., Miller, C. A., Lisnek, J. A., & Martin, L. A. (2022). Is LGBT progress seen as an attack on Christians?: Examining Christian/sexual orientation zero-sum beliefs. *Journal of personality and social psychology*, 122(1), 73.

Please Direct Your Comments and Questions Regarding the Project to: roman.gallardo@chicagobooth.edu