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Income Inequality and Economic Social Comparison

Nicolas Sommet^{1*} @ 0000-0001-8585-1274

Andrew J. Elliot² @ 0000-0002-1664-6426

¹LIVES Centre, University of Lausanne, Switzerland

²Department of Psychology, University of Rochester, NY, USA

*Correspondence to: Nicolas.Sommet@unil.ch

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Nicolas Sommet is Head of Research at the Swiss National Centre of Competence in Research LIVES,

University of Lausanne. Andrew J. Elliot is Professor in the Department of Psychology at the

University of Rochester. Correspondence to: Nicolas Sommet, Bâtiment Géopolis, Bureau #5785,

Quartier UNIL-Mouline, Université de Lausanne, Switzerland; +41 (0)21 692 32 55;

nicolas.sommet@unil.ch

Abstract

It is widely assumed, yet largely untested, that income inequality fuels social comparison and that comparison is emotionally harmful. We conducted two U.S. studies (N > 7,000) using local income inequality to test these two assumptions and downstream consequences. Confirming the first assumption, residents of more unequal areas reported stronger and more frequent upward and downward economic comparisons. These associations were mediated by perceived competitiveness. Challenging the second assumption, income inequality was associated with a mix of emotional responses to comparison: Inequality consistently predicted resentment when comparing with better-off others and compassion when comparing with worse-off others. Inequality also predicted shame, hope, relief, contempt, and anxiety in one study but not the other. Finally, inequality predicted support for redistribution, an association mediated by resentment and compassion. Together, the findings confirm that income inequality fuels social comparison but reveal that its emotional and attitudinal consequences are more nuanced than commonly assumed.

Keywords: income inequality, social comparison, competitiveness, assimilative emotion, contrastive emotion, redistribution

Income Inequality and Economic Social Comparison

In the U.S., the top 20% of income earners receive more than half of all wages, whereas the bottom 20% receive only 3% (Shrider et al. 2021), making this country one of the most unequal in the Western world (Chancel et al. 2022). Such inequality is widely assumed to fuel harmful social comparison, an idea long invoked to explain links between inequality and political conflict (Lichbach 1989), violent crime (Hsieh and Pugh 1993), subjective well-being (Diener, Diener, and Diener 1995), health status (Kawachi and Kennedy 1999) and social cohesion (Wilkinson 1999). This idea remains influential today, with recent reviews often highlighting social comparison as a central mechanism accounting for the undesirable psychological consequences of income inequality (for example, see Buttrick, Heintzelman, and Oishi 2017; Du 2024; Jetten et al. 2017; Orford 2025; Tibber et al. 2022). Epidemiologists Richard Wilkinson and Kate Pickett (2020) encapsulate this idea in their latest book, arguing that in unequal contexts, "social comparisons become more fraught, increasing insecurities about self-worth" (p. 31).

This idea, which we believe reflects the current consensus in the literature, rests on two core assumptions: (i) exposure to income inequality leads people to engage in social comparisons more often, and (ii) these comparisons are experienced as emotionally negative. Surprisingly, these assumptions have virtually never been tested empirically, despite being endorsed for over 30 years (see Wilkinson 1994). The present article reports two studies designed to test these assumptions.

Specifically, we examined whether U.S. residents living in areas with greater local income inequality reported more frequent and more intense economic social comparisons (testing assumption 1), whether these comparisons elicited specific emotional responses (testing assumption 2), and whether these emotional responses influenced a key political outcome, namely, support for economic redistribution (testing a downstream consequence).

Testing Assumption 1: Income Inequality and Economic Social Comparison

Income inequality increases the salience of economic segmentation (Wilkinson 1997). Simply put, in contexts where income inequality is greater, the poorest and wealthiest groups are farther apart on the income scale, making economic differences more noticeable. As a consequence, people living

in unequal environments are more likely to divide society into "haves" and "have-nots" (Peters et al. 2022), define their social status based on income (Kim and Sommet 2025), and place greater importance on personal success (Du, Götz, et al. 2024). Together, these factors breed an ethos of competitiveness wherein individuals are more inclined to vie for social status (for a review, see Sommet and Elliot 2023a). Accordingly, cross-sectional and longitudinal studies show that residents of areas with greater or rising income inequality perceive others as more competitive and become more competitive themselves (Sommet and Elliot 2023b; Sommet et al. 2019; Sommet, Weissman, and Elliot 2023). Experimental studies further show that individuals asked to imagine a society with high income inequality perceive its residents as more competitive and report that they themselves would behave more competitively in such a context (Cambon 2025; Cheng, Hao, and Wang 2021; Sánchez-Rodríguez et al. 2019).

As contexts of income inequality intensify competition among individuals, they should also heighten social comparison (for theoretical work on competition and social comparison, see Garcia, Reese, and Tor 2020). The theoretical argument is twofold. First, environments with a wider gap between high and low earners offer more potential targets for upward economic comparison (with those above oneself) and downward economic comparison (with those below oneself). Second, such environments make it important to assess one's position on the income ladder to know where one stands in the economic competition, prompting individuals to compare themselves with others. In sum, theory suggests that inequality provides more opportunities for economic social comparison, while the ethos of competitiveness elicited by inequality intensifies the motivation to compare with others.

Despite strong theoretical grounding, empirical evidence that income inequality fuels economic social comparison is almost exclusively indirect. For instance, Cheung and Lucas (2016) found that residents of more unequal U.S. counties were more strongly influenced by their neighbors' incomes, which they interpreted as evidence that "higher income inequality is associated with stronger social comparison of income" (p. 340). As another example, Gao et al. (2022) found that in Chinese regions, upward wealth inequality (a larger gap between oneself and better-off others) and downward wealth inequality (a larger gap between oneself and worse-off others) had opposite effects on happiness, a finding they attributed to "the mechanism of comparison-driven inequality aversion" (p. 5). Finally,

Posel and Rogan (2019) found that in South Africa, greater district-level inequality predicted higher income aspirations, which they tied to "social comparisons with those who are relatively better off" (p. 105). Though valuable, these studies infer the role of social comparison from its presumed outcomes rather than measuring social comparison directly (for other examples of indirect evidence, see Kang, Lee, and Song 2020; Katic and Ingram 2018; Kondo et al. 2008; Schneider 2019).

There is also empirical evidence that induced and perceived income inequality fuel economic social comparison. Payne et al. (2017) showed that the effect of induced inequality on risk-taking in an economic game was driven by participants' tendency to make upward comparisons (for related experiments, see Condon and Wichowsky 2020; Hannay, Payne, and Brown-Iannuzzi 2021; Pepe and Alinaghizadeh 2025; Sánchez-Rodríguez et al. 2019; Schmidt, Neyse, and Aleknonyte 2019). While informative, the ecological validity of such experiments is limited, as temporary inequality induced in the lab may not be comparable to chronic exposure to actual inequality in the real world (see Diener et al. 2022). In addition, Du et al. (2024) showed that Chinese college students who perceived greater inequality were more likely to compare themselves with both wealthier others (upward comparison) and poorer others (downward comparison). While also informative, the value of such correlational studies is likewise limited, as perceived inequality is endogenous, correlates with many sociodemographic characteristics such as income, and is only weakly associated with actual inequality (García-Castro et al. 2022).

To our knowledge, only two papers have investigated the main effect of *actual* income inequality on economic social comparison outcomes. Using the third wave of the European Social Survey, Van Deurzen et al. (2015) documented a null association between national income inequality and the importance of economic comparison, measured by the item "How important is it for you to compare your income with other people's incomes?" This null effect may be unsurprising because (i) social comparisons tend to occur at more local levels rather than in broader national contexts (Buckingham, Zell, and Schurtz 2012), and (ii) the sample only included 23 countries, which provided very low statistical power to detect higher-level effects (Arend and Schäfer 2019). Partially addressing these limitations, Park et al. (2021) showed that U.S. participants who grew up in counties with greater income inequality between ages 12 and 16 reported a greater tendency to make upward financial

comparisons in adulthood. While this study is the closest to testing the association between actual income inequality and economic social comparison, it focused on past—not current—inequality and assessed only upward economic comparison. In the present research, we examined the association between current local income inequality and a comprehensive set of measures of economic social comparison, while investigating perceived economic competitiveness as a mediating process. We formulated the following hypotheses:

Hypothesis 1. Income inequality is a positive predictor of a general orientation toward economic social comparison and the frequency of both downward and upward economic comparisons; these associations are mediated by perceived economic competitiveness.

Testing Assumption 2: Income Inequality and Emotional Responses to Economic Comparison

Many scholars not only assume that income inequality triggers social comparison processes but also that these processes are inherently harmful (for foundational work, see Wilkinson and Pickett 2010). This view has roots in relative deprivation theory and posits that income inequality fosters a culture of upward economic comparison that, in turn, fuels self-evaluative threat (for a review, see Schneider 2016). This theoretical framework is known by several names, including "Wilkinson's income inequality hypothesis" (Jen, Jones, and Johnston 2009), "the psychosocial interpretation" (Kawachi, Subramanian, and Almeida-Filho 2002) and—the one that we prefer—the "status anxiety hypothesis" (Layte 2012). In a recent handbook on the topic, psychologist Jim Orford (2025) presents this as the leading theory in the field and summarizes it as follows: "inequality fosters social evaluation anxieties and the making of upward social comparisons, increased feelings of social identity threat, shame, and inferiority" (p. 61).

Importantly, the 'status anxiety hypothesis' is only partially consistent with social comparison theory. In a review on this topic, Cheung and Lucas (2020) argued that existing research on the psychological consequences of income inequality "has assumed that people compare upward with individuals with high income" and that people "become worse off from upward comparison" (p. 363) (for additional reviews on how income inequality affects social comparison processes, see Bratanova et al. 2019; Galvan and Payne 2024). However, the authors noted that income inequality offers

opportunities for both upward and downward comparison, and that neither type of comparison is inherently harmful. Indeed, research on social comparison shows that both downward and upward comparison can be either contrastive (focusing on differences from the comparison target) or assimilative (focusing on similarity to the comparison target), with very different psychological implications (Mussweiler, Rüter, and Epstude 2004; Suls, Martin, and Wheeler 2002). For instance, someone may compare themself with a better-off other and feel hopeless about being so poor, but also hopeful about becoming richer one day. Conversely, someone may compare themself with a worse-off other and feel anxious about becoming that poor in the future, but also relieved to be richer at present.

Smith (2000) offered a systematic taxonomy of emotional responses to social comparison that varies by direction (upward versus downward), process (contrastive versus assimilative), and focus (self versus other). **Table 1** presents an adaptation of this taxonomy applied to economic social comparison. As shown in panel A, when we compare ourselves to a person who is economically better off, our reactions fall into four categories: (1) *Contrastive and Self-Focused*: This response occurs when the other's wealth is viewed as highlighting one's own perceived inferiority, triggering feelings such as shame; (2) *Contrastive and Other-Focused*: This response occurs when the other's wealth is viewed as reflecting an undeserved status, triggering feelings such as resentment; (3) *Assimilative and Self-Focused*: This response occurs when the other's wealth is viewed as an attainable possibility for oneself, triggering feelings such as hope; (4) *Assimilative and Other-Focused*: This response occurs when the other's wealth is viewed as a reflection of their achievements, triggering feelings such as sympathetic joy. There is evidence that income inequality may elicit several of these emotions, including shame (Sommet et al. 2019), resentment (Godoy et al. 2006), and hope (Cheung 2016).

Furthermore, as shown in **table 1** (panel B), when we compare ourselves to a person who is economically worse off, our reactions also fall into four categories: (1) *Contrastive and Self-Focused*: This reaction occurs when the other's poverty is viewed as highlighting one's favorable position, triggering feelings such as relief; (2) *Contrastive and Other-Focused*: This reaction occurs when the other's poverty is viewed as a reflection of their shortcomings, triggering feelings such as contempt; (3) *Assimilative and Self-Focused*: This reaction occurs when the other's poverty is viewed as a threatening possibility for oneself, triggering feelings such as anxiety; (4) *Assimilative and Other-*

Focused: This reaction occurs when the other's poverty is viewed as a form of undeserved suffering, triggering feelings such as compassion. There is again evidence that income inequality may elicit several of these emotions, including anxiety (Melita, Willis, and Rodríguez-Bailón 2021) and compassion (Elbæk et al., 2023).

Accordingly, we aimed to examine the association between local income inequality and each of the eight emotional responses to upward and downward comparison discussed above. We did not formulate ex-ante hypotheses about which specific emotions income inequality would predict; rather, we formulated a nondirectional hypothesis and expected inequality to predict emotions across directions, processes, and foci, without assuming these emotions to be necessarily harmful:

Hypothesis 2. Income inequality is a positive predictor of a range of emotional responses to upward and downward economic comparison.

Table 1. Emotional Responses to Upward (Panel A) and Downward (Panel B) Economic Social Comparison (Adapted from Smith, 2000)

Panel A: Emo	tional Responses to Upward Economic Co	mparison
	Contrastive Process	Assimilative Process
Self-Focus	Shame	Норе
Sen-rocus	I feel ashamed for not being as wealthy	One day I can be as wealthy as the other
Other-Focus	Resentment	Sympathetic joy
Other-rocus	I resent the other for being so wealthy	I feel happy for the other being wealthy
Panel B: Emo	tional Responses to Downward Economic	Comparison
	Contrastive Process	Assimilative Process
C-16 E	Relief	Anxiety
Self-Focus	I feel relieved not to be as poor	One day I could become as poor as the other
Other Francis	Contempt	Compassion
Other-Focus	I look down on the other for being poor	I feel compassion for the other who is poor

Testing a Downstream Consequence: Income Inequality and Support for Redistribution

Emotional responses to social comparison are not only key to understanding fundamental psychological processes, they also have significant implications for real-world phenomena. Here we focus on one such implication: support for redistribution. A large literature links income inequality to redistributive preferences (for a review, see Trump 2021). Recent large-scale cross-country evidence suggests that, contrary to common assumptions, higher national income inequality is generally associated with greater, not lesser, support for redistribution (Hillen and Steiner 2025; Velev and Schmidt-Catran 2024; Wiesner 2025; but see Trump 2023). These findings also hold at the local level. For instance, Newman (2020) showed that U.S. participants living in ZIP codes with higher levels of income inequality express greater support for increasing taxes over cutting spending programs (see also Domènech-Arumí 2025; Sands and de Kadt 2020). Social comparison processes are often cited as a mechanism to explain this pattern, whereby upward comparison creates discomfort and an increased demand for social spending (Condon and Wichowsky 2020).

To clarify the mechanism, we connect the literature on income inequality and redistribution to work on the motives underlying redistribution preferences. Classic work shows that support for redistribution is shaped not only by self-interest (Meltzer and Richard 1981) but also by spite-based and egalitarian motives (Schoeck 1969). Beyond self-interest, Sznycer and colleagues (2017) confirmed, across 6,000+ participants in the U.S. and other countries, that two core motivations underlie support for redistribution: envy (reducing the welfare of the better-off) and compassion (increasing the welfare of the worse-off). In our framework, specific comparison-elicited emotions instantiate these motivations. On one hand, contrastive, other-focused emotional responses to upward comparison (resentment toward the wealthy) align with envy-based punitive motives. On the other hand, assimilative, other-focused emotional responses to downward comparison (compassion toward the poor) align with compassion-based egalitarian motives. Accordingly, we expect that emotions elicited by social comparison may provide the channel linking local income inequality to redistributive preferences. As with Hypothesis 2, we do not specify ex ante which emotion predominates.

Hypothesis 3. Income inequality positively predicts support for redistribution; this association is mediated by emotional responses to upward and downward economic comparison.

Overview of the Studies

We conducted two studies in the U.S. (one preregistered) with a combined N of over 7,000 participants. We report them together given their similarity, and to clearly emphasize both consistent and inconsistent findings. In each study, we operationalized income inequality at the ZIP code-level, the most local geographic unit available. This choice was intended to increase statistical power and enhance ecological validity, as social comparisons are most likely to occur in one's immediate surroundings (Buckingham, Zell, and Schurtz 2012). In both studies, we tested whether local income inequality predicted economic comparison orientation and the frequency of both upward and downward economic comparisons, and whether perceived economic competitiveness mediated these associations (Hypothesis 1). We also developed a scale to assess the eight emotional responses to social comparison identified in **table 1**, and we examined whether local income inequality predicted these emotions (Hypothesis 2). Finally, in Study 2, we additionally tested whether local income inequality predicted support for redistribution and whether the emotions accounted for this association (Hypothesis 3). **Table 2** summarizes the hypotheses and findings.

Table 2. Summary of Hypotheses and Main Findings Across Studies

Tab	le 2. Summary of Hypotheses and Main Findings Across Studies		
	Hypotheses	Main F	indings
	(marked with 'PREREG' when preregistered for Study 2)	Study 1	Study 2
	(marked with Prefeed when prefegistered for study 2)	N = 1,935	N = 5,201
H1	Inequality → economic comparison orientation PREREG	+	+
	Inequality → upward economic comparison ^{PREREG}	+	+
	Inequality → downward economic comparison PREREG	+	+
	The three associations are mediated by perceived competitiveness PREREG	+	+
H2	Income inequality → emotional response to upward comparison PREREG		
	Shame	+	Ø
	Resentment	+	+
	Hope	+	Ø
	Sympathetic joy	Ø	_
	Income inequality \rightarrow emotional response to downward comparison PREREG		
	Relief	+	Ø
	Contempt	+	Ø
	Anxiety	+	Ø
	Compassion	+	+
Н3	Income inequality → support for redistribution	n/a	+
	The association is mediated by emotional responses	n/a	+ a

Notes. Findings: positive (+), negative (-), null (\emptyset) , or n/a = not applicable. Authors' table.

^a In Study 2, mediation was observed via resentment and compassion.

Method

Transparency and Openness

Analyses were not preregistered for Study 1. Hypotheses 1 and 2 (not 3), and the corresponding analysis plan, were preregistered for Study 2. Unless otherwise noted, we followed the preregistration plan. In both studies, we reported all data exclusions, manipulations, and measures analyzed. The preregistration (for Study 2), along with materials, data, scripts, and supplementary materials, is available on the OSF: https://osf.io/cukzg/?view_only=4a5e7599319040f582df38f44ef7a620

Samples

Study 1 was conducted in 2018. We recruited 2,052 U.S. residents via Amazon Mechanical Turk. We excluded 86 individuals who stopped participating before viewing any focal scale and 31 individuals who provided an invalid ZIP code (5.7% missing). The final sample was 1,935 participants from 1,620 ZIP codes. Study 2 was conducted in 2023. We recruited 5,482 U.S. residents via ResearchMatch, a national volunteer research registry. We again excluded 149 individuals who stopped participating before viewing any focal scale and 85 participants who provided an invalid ZIP code (4.3% missing). The final sample was 5,201 participants from 3,332 ZIP codes. **Table 3** presents sample characteristics. Comparing the demographics for the two studies descriptively, participants in Study 1 came from more socioeconomically disadvantaged backgrounds (lower income, less education, lower proportion of White participants), whereas those in Study 2 came from more advantaged backgrounds (higher income, more education, higher proportion of White participants).

Variables

Unless otherwise noted, all survey variables were measured using a response scale ranging from $1 = not \ at \ all \ to \ 7 = completely$. **Table 4** presents Cronbach's alphas and descriptive statistics. All focal variables displayed approximately normal distributions and satisfactory reliability.

¹ In each study, we included measures of subjective well-being (happiness, life satisfaction, and meaning in life). In Study 2, we preregistered analyses testing opposing effects of income inequality on these outcomes via the eight emotions. Although the data often supported the hypotheses, we ultimately excluded these analyses because we lost confidence in the approach. The models involved conceptually overlapping constructs (subjective well-being and emotional response variables) and included indirect effects without corresponding total effects, raising concerns about causal interpretability (for relevant criticism, see Maxwell and Cole 2007).

Focal Predictor: Income Inequality

We merged each dataset with the corresponding 5-year estimates of the ZIP Code Tabulation Area (hereinafter "ZIP code") Gini coefficient from the American Community Survey (U.S. Census Bureau 2025). The Gini coefficient captures the distribution of household income within a given ZIP code and ranges from 0 (perfect equality: all households receive an equal share of income) to 1 (perfect inequality: a single household receives all the income). We treat local income inequality as a proxy for broader economic inequality, because income is a key determinant of wealth accumulation over time (Killewald, Pfeffer, and Schachner 2017). Accordingly, our follow-up measures of social comparison and competitiveness were not restricted to income alone. In preliminary analyses, we examined the correlation between the ZIP code-level Gini coefficient and Sommet et al.'s (2019) three-item perceived economic inequality scale (sample item: "In my town/city, there is a huge gap between rich and poor"). The correlations were r = .22 in Study 1 and r = .23 in Study 2 (ps < .001), indicating that residents of more unequal areas reported higher perceived economic inequality.

Table 3. Sample Characteristics

	Study 1	Study 2
Recruitment tool	Amazon Mechanical Turk	ResearchMatch
Proportion missing	5.7%	4.3%
Final sample size	1,935 U.S. residents from 1,620 ZIP codes	5,201 U.S. residents from 3,332 ZIP codes
Gender	Women 53.6%; Men 46.0%; Other 0.4%	Women 74.7%; Men 24.2%; Other 1.2%
Age	Median = 30 years	Median = 56 years
Race/ethnicity	White 70.9%; Black 10.9%; Hispanic (non-White) 6.7%; Asian 7.4%; Other 4.1%	White 89.6%; Black 4.6%; Hispanic (non-White) 2.2%; Asian 2.4%; Other 1.2%
Employment status	Working 66.1%; Not working 33.9% (including students, 2.9%, and retirees, 12.6%)	Working 52.8%; Not working 47.2% (including students, 3.0%, and retirees, 30.2%)
College degree (4-year or higher)	55.9%	73.2%
Equivalized household income	<i>Median</i> = \$31,819	Median = $$60,104$

Note. "Other" race/ethnicity includes Pacific Islander, Native American, and other non-specified races. The "Not working" category includes students, retirees, job seekers, homemakers or caregivers, individuals unable to work because of a disability, and others outside the labor force. Authors' table.

Table 4. List of Focal Variables, Sample Items, Reliability Coefficients, and Descriptive Statistics

Focal Predictor and Perception Check Gini coefficient in the ZIP code of residence		Study 1			Study 2			
			SD			SD		
Gini coefficient in the ZIP code of residence Ranging from $0 = perfect$ equality to $1 = perfect$ inequality	α n/a		.06					
Perceived inequality (3 items) "In my town/city, there is a huge gap between rich and poor"	.91	4.86	1.53	.91	4.99	1.46		
Hypothesis 1 Outcomes: Economic Social Comparison Processes		Study 1		Study 2		2		
Trypothesis i Outcomes. Economic Social Comparison i focesses	α	M	SD	α	M	SD		
Perceived economic competitiveness (4 items) "In my town people are competing economically"	.90	4.34	1.51	.89	3.79	1.43		
Economic comparison orientation (6 items) "I often compare how I am doing economically with other[s]"	.89	3.97	1.45	.88	2.81	1.32		
Upward economic comparison (1 item) "How often do you compare yourself with others who earn more?"	n/a	4.29	1.41	n/a	3.34	1.37		
Downward economic comparison (1 item) "How often do you compare yourself with others who earn less?"	n/a	3.67	1.40	n/a	3.20	1.35		
Hypothesis 2 Outcomes: Emotional Responses to Economic Comparison	on							
Emotional Responses to Upward Comparison	S	Study	1	S	Study	2		
Prompt: "When I compare myself with others who earn more:"	α	M	SD	α	M	SD		
Shame (3 items) "I am ashamed that I do not make as much money"	.91	3.11	1.70	.89	2.24	1.39		
Resentment (3 items) "I am kind of resentful toward the other person"	.92	3.23	1.77	.91	2.00	1.41		
Hope (3 items) "I feel hopeful regarding my future financial situation"	.78	4.48	1.46	.67	3.20	1.40		
Sympathetic joy (3 items) "I am happy that the other person is wealthy"	.88	4.76	1.43	.89	4.59	1.50		
Emotional Responses to Downward Comparison	Study 1			Study 2				
Prompt: "When I compare myself with others who earn less:"	α	M	SD	_α	M	SD		
Relief (3 items) "I am relieved to see that my financial situation is not that bad"	.81	3.93	1.53	.75	3.41	1.43		
Contempt (3 items) "I think rather poorly of the other person"	.91	2.14	1.49	.82	1.44	0.78		
Anxiety (3 items) "I feel anxious about my future financial situation"	.81	4.09	1.66	.75	3.10	1.66		
Compassion (3 items) "I sympathize with the other person who has so little"	.79	4.87	1.38	.81	4.98	1.38		
Hypothesis 3 Outcome: Support for Redistribution		Study			Study			
Support for redistribution (3 items) "The government should redistribute wealth [through] taxes"	No	t asse		α .93	4.89	SD 1.92		
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Note. n/a = "not applicable" (Cronbach's α cannot be computed for macro-indicators and single-item measures). All items used response scales from 1 = not at all to 7 = completely, except the upward and downward comparison items, which used a scale from 1 = never to 7 = always. Authors' table.

Hypothesis 1 Outcomes: Economic Social Comparison Processes

In each study, we assessed four variables related to economic social comparison:

Perceived Economic Competitiveness. We adapted Sommet and Elliot's (2023b) four-item perceived competitiveness scale to focus on the economic dimension (sample item: "In my town/city, people seem to value competition for wealth, material possessions, and property").

Economic Comparison Orientation. We adapted Gibbons and Buunk's (1999) six-item social comparison orientation scale to focus on the economic dimension (sample item: "I always pay a lot of attention to how much I have compared with how much others have").

Upward and Downward Economic Comparison. We adapted Buunk et al.'s (2005) frequency of social comparison scale to capture social comparison direction. Participants responded to two items using a scale ranging from 1 = never to 7 = always. One item asked how often they compare themselves to others "who earn more" or "have more wealth" (upward economic comparison). The other item asked how often they compare themselves to others "who earn less" or "have less wealth" (downward economic comparison).

Hypothesis 2 Outcomes: Measures of Emotional Responses to Economic Social Comparison

In each study, we developed two comprehensive scales to assess emotional responses to upward and downward comparison. The development of these scales was guided by Smith's (2000) theoretical work and drew on emotions commonly investigated in the literature on the psychology of economic inequality, as reviewed in the introduction (see **table 1**).

Emotional Responses to Upward Comparison. Participants rated statements about emotions they generally feel when comparing themselves with a person "who earns more, has more wealth, or has a better financial situation." There were four emotions, each assessed with three items: (1) shame, a self-focused contrastive emotional response (sample item: "I am ashamed that I do not make as much money as the other person"), (2) resentment, an other-focused contrastive emotional response (sample item: "I am kind of resentful towards the other person for being so wealthy"), (3) hope, a self-focused assimilative emotional response (sample item: "I feel hope that one day I will make as much money as the other person"), and (4) sympathetic joy, an other-focused assimilative emotional

response (sample item: "I am happy that the other person is wealthy").

Emotional Responses to Downward Comparison. Participants also rated statements about emotions they generally feel when comparing themselves with a person "who earns less, has less wealth, or has a worse financial situation." There were also four emotions, each assessed with three items: (1) relief, a self-focused contrastive emotional response (sample item: "It is comforting to me to know that I am not as poor as the other person"), (2) contempt, an other-focused contrastive emotional response (sample item: "I think rather poorly of the other person for making so little money"), (3) anxiety, a self-focused assimilative emotional response (sample item: "I am afraid that one day I too will make so little money"), and (4) compassion, an other-focused assimilative emotional response (sample item: "I feel sorry for the other person because s/he makes so little money").

Exploratory Factor Analysis. Because the two scales measuring emotional responses to upward and downward comparison were newly developed, we conducted exploratory factor analyses to test whether they had a theoretically consistent factor structure. We extracted factors using maximum likelihood and—as we expected the factors to correlate—we used oblimin (oblique) rotation (Thompson 2004). In line with recommendations and our a priori four-factor theoretical models, we based factor retention primarily on conceptual interpretability and the pattern of primary loadings and cross-loadings (Worthington and Whittaker 2006). Accordingly, we retained four factors in each analysis. As shown in **table 5**, all items loaded on their intended factor with $\lambda > .60$ and no cross-loadings exceeded .30. The only exceptions were two *hope* items with marginal loadings ($.50 \le \lambda < .60$), resulting in the factor having an eigenvalue slightly below 1. Nevertheless, the overall factorial structure was consistent with theoretical expectations.

Hypothesis 3 Outcome: Support for Redistribution

In Study 2, we measured support for redistribution using three widely used secondary survey items cataloged by Bresser and Knoef (2022). Participants rated their agreement with statements that the government should "redistribute wealth by heavy taxes on the rich," "take measures to reduce differences in income levels," and "reduce income differences between the rich and the poor by raising the taxes of wealthy families."

Table 5. Exploratory Factor Analysis for Scales Assessing Emotional Responses to Comparison

Panel A, Scale 1: Emotional Responses to Upward Comparison		Study 1				Study 2			
Panel A, Scale	e 1: Emotional Responses to Opward Comparison	1	2	3	4	1	2	3	4
Shame 1	I am ashamed that I do not make	02	02	.91	01	.03	.01	90	01
	as much money as the other person I feel shame when I realize that I am								
Shame 2	not as wealthy as the other person	01	.00	.91	.00	.02	.00	87	.05
	I am deeply embarrassed that my financial								
Shame 3	situation is not like that of the other person	.04	.02	.85	.02	02	.04	84	.00
Resentment 1	I in fact feel somewhat angry toward the	05	05	0.2	01	.02	00	02	70
Resemment 1	other person for making that much money	03	03	.03	.01	.02	09	.02	./0
Resentment 2	I am kind of resentful towards the	.03	.02	06	.95	03	.04	.07	.96
	other person for being so wealthy								
Resentment 3	I cannot help but feel resentment given the better financial situation of the other person	.01	.00	.06	.86	01	.02	10	.83
	I feel hope that one day I will make								
Hope 1	as much money as the other person	54	.06	.11	.08	.52	.00	22	.16
Hama 2	It makes me optimistic about the	90	05	Λ1	0.5	.94	0.2	02	1.0
Hope 2	wealth I will have tomorrow	09	03	01	03	.94	03	02	10
Hope 3	I feel hopeful regarding my	78	.03	- 10	03	.52	15	23	05
110p c 3	future financial situation	•,, 0	.05	.10	.05		110		.00
Joy 1	I think it is nice for the other person to make this much money	.02	.88	02	.02	.02	.82	04	.00
Joy 2	I am happy that the other person is wealthy	04	Q1	00	.00	00	90	.01	01
JOY 2	I believe it is good for the other person	04	.01	.00	.00	.00	.0)	.01	.01
Joy 3	to have achieved financial success	.00	.82	.01	04	02	.84	01	02
Eigenvalues		0.7	3.3	4.4	1.2	1.3	3.0	0.9	4.3
	variance explained					.11			
r			Stud					dy 2	
Panel B, Scale	e 2: Emotional Responses to Downward Comparison						Stu	uy Z	1
	1	1	,	3	4	1	2	3	4
	•	1	2	3	4	1	2	3	4
Relief 1	I feel relief in the fact that I make					<u>1</u> 67			
	•	74	06	05	.10	67	03	.12	.04
Relief 1 Relief 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person	74	06	05	.10		03	.12	.04
Relief 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my	74 82	06 07	05 03	.10	67 82	03 07	.12	.04
	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad	74 82	06 07	05 03	.10	67	03 07	.12	.04
Relief 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other	74 82 71	06 07	05 03	.10 .06 08	67 82	03 07	.12 .03 08	.04 .05 04
Relief 2 Relief 3 Contempt 1	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money	74 82 71 01	06 07 .10	05 03 .04 01	.10 .06 08	67 82 62	03 07 .08	.12 .03 08	.04 .05 04
Relief 2 Relief 3	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the	74 82 71 01	06 07 .10	05 03 .04 01	.10 .06 08	67 82 62	03 07 .08	.12 .03 08	.04 .05 04
Relief 2 Relief 3 Contempt 1 Contempt 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money	74 82 71 01	06 07 .10 .00	05 03 .04 01	.10 .06 08 .89	67 82 62 01	03 07 .08 .01 02	.12 .03 08 .02 01	.04 .05 04 .75
Relief 2 Relief 3 Contempt 1	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor	74 82 71 01	06 07 .10 .00	05 03 .04 01	.10 .06 08 .89	67 82 62	03 07 .08 .01 02	.12 .03 08 .02 01	.04 .05 04 .75
Relief 2 Relief 3 Contempt 1 Contempt 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person	74 82 71 01 .00 05	06 07 .10 .00 .01	05 03 .04 01 .00	.10 .06 08 .89 .88	67 82 62 01	03 07 .08 .01 02	.12 .03 08 .02 01	.04 .05 04 .75 .81
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation	74 82 71 01 .00 05 01	06 07 .10 .00 .01 .01	05 03 .04 01 .00 02 72	.10 .06 08 .89 .88 .85	67826201 .0101	03 07 .08 .01 02 .02	.12 .03 08 .02 01 02	.04 .05 044 .75 .81
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money	74 82 71 01 .00 05 01	06 07 .10 .00 .01 .01 .07 01	05 03 .04 01 .00 02 72	.10 .06 08 .89 .88 .85 .08	67 82 62 01 .01 01	03 07 .08 .01 02 .02 .03 02	.12 .03 08 .02 01 02 .70	.04 .05 04 .75 .81 .80
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1 Anxiety 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money I am worried about the wealth I will have tomorrow I feel anxious about my future financial situation I feel sorry for the other person	74 82 71 01 .00 05 01 01	06 07 .10 .00 .01 .01 .07 01	05 03 .04 01 .00 02 72 84	.10 .06 08 .89 .85 .08 01	67 82 62 01 .01 01 05	03 07 .08 .01 02 .02 .03 02	.12 .03 08 .02 01 02 .70 .86 .91	.04 .05 04 .75 .81 .80 .04 03
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1 Anxiety 2 Anxiety 3 Compassion 1 Compassion 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money I am worried about the wealth I will have tomorrow I feel anxious about my future financial situation I feel sorry for the other person because s/he makes so little money	74 82 71 01 .00 05 01 01 .01	06 07 .10 .00 .01 .01 .07 01 02	05 03 .04 01 .00 02 72 84 86	.10 .06 08 .89 .85 .08 01 04	67826201 .0101 .0105 .0408	03 07 .08 .01 02 .02 .03 02 .02	.12 .03 08 .02 01 02 .70 .86 .91	.04 .0504 .75 .81 .80 .040303
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1 Anxiety 2 Anxiety 3 Compassion 1 Compassion 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money I am worried about the wealth I will have tomorrow I feel anxious about my future financial situation I feel sorry for the other person because s/he makes so little money	74 82 71 01 .00 05 01 01 04 01	06 07 .10 .00 .01 .01 .07 01 02	05 03 .04 01 .00 02 72 84 86	.10 .06 08 .89 .85 .08 01 04	67826201 .0101 .0105 .0408 .03	03 07 .08 .01 02 .02 .03 02 .02 .70	.12 .03 08 .02 01 02 .70 .86 .91 .03	.04 .0504 .75 .81 .80 .04030303
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1 Anxiety 2 Anxiety 3 Compassion 1 Compassion 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money I am worried about the wealth I will have tomorrow I feel anxious about my future financial situation I feel sorry for the other person because s/he makes so little money	74 82 71 01 .00 05 01 01 04 01	06 07 .10 .00 .01 .01 .07 01 02	05 03 .04 01 .00 02 72 84 86	.10 .06 08 .89 .85 .08 01 04	67826201 .0101 .0105 .0408	03 07 .08 .01 02 .02 .03 02 .02 .70	.12 .03 08 .02 01 02 .70 .86 .91 .03	.04 .0504 .75 .81 .80 .04030303
Relief 2 Relief 3 Contempt 1 Contempt 2 Contempt 3 Anxiety 1 Anxiety 2 Anxiety 3 Compassion 1 Compassion 2	I feel relief in the fact that I make more money than the other person It is comforting to me to know that I am not as poor as the other person I am relieved to see that my financial situation is not that bad I think rather poorly of the other person for making so little money I do not have much respect for the other person because s/he is this poor I tend to look down on the other person for being in this financial situation I am afraid that one day I too will make so little money I am worried about the wealth I will have tomorrow I feel anxious about my future financial situation I feel sorry for the other person because s/he makes so little money I sympathize with the other person who has so little I feel bad for the other person	74 82 71 01 .00 05 01 .01 04 01	06 07 .10 .00 .01 .07 01 02 .74 .67	05 03 .04 01 .00 02 72 84 86	.10 .06 08 .89 .85 .08 01 04 .13	67826201 .0101 .0105 .0408 .03	03 07 .08 .01 02 .02 .03 02 .02 .70 .73	.12 .03 08 .02 01 02 .70 .86 .91 .03 .03	.04 .0504 .75 .81 .80 .04030303 .0707

Note. Loadings with $|\lambda| \ge .60$ are in bold; those with $.50 \le |\lambda| < .60$ are also italicized. Authors' table.

Results

Overview of the Analytical Strategy

Data Structure

In both studies, individuals were nested within ZIP codes. To assess whether multilevel modeling was necessary, we calculated the Design EFFect (*DEFF*), which corresponds to the intraclass correlation coefficient adjusted for the average number of participants per ZIP code (Muthén and Satorra 1995). Across variables and studies, the *DEFF* ranged from 1.00 to 1.07. When *DEFF* < 1.5, standard errors from traditional regressions are not biased, and multilevel modeling is not required (Lai and Kwok 2015). As preregistered in Study 2, we therefore used single-level modeling.

Path Analysis

In each study, we tested our hypotheses using a series of path models. First, we tested Hypothesis 1 using a path model in which income inequality predicted economic comparison orientation and upward and downward economic comparison, with perceived economic competitiveness mediating all paths (see **figure 1**). Second, we tested Hypothesis 2 using two path models: One examined whether income inequality predicted emotional responses to upward economic comparison (shame, resentment, hope, sympathetic joy) and the other examined emotional responses to downward economic comparison (relief, contempt, anxiety, compassion; see **figure 2**). Third, in Study 2 only, we tested Hypothesis 3 with a final path model assessing whether the emotional responses that were consistently associated with inequality across studies predicted support for redistribution (see **figure 3**). As preregistered, we computed indirect effects using the percentile bootstrap method with 50,000 resamples (Yzerbyt et al. 2018).

Control Variables and Standardization

We repeated all path model analyses including the set of control variables preregistered in Study 2. We controlled for six sociodemographic variables: sex (women, men, other), age, race/ethnicity (White Americans versus others), employment status (working versus not working), education (four-year college degree versus other), and household income. We equivalized household income using the OECD (2009) equivalence scale to adjust for household size, and we log-transformed it to reduce

skewness. We additionally controlled for two contextual confounders: (i) median income in the ZIP code, to disentangle the effect of relative income from absolute income in the area (Lynch et al. 2004), and (ii) population in the ZIP code, to account for variation in area size (Kanitsar 2022). All focal and control variables were standardized. Accordingly, β can be roughly interpreted as the magnitude of the association, with β = .05, β = .10, β = .17, and β = .24 corresponding to very small, small, medium, and large effect sizes, respectively (for a description of these benchmarks, see Sommet et al. 2023). Throughout the manuscript, we omit leading zeros for standardized coefficients to save space.

Analysis

Hypothesis 1: Does Income Inequality Predict Economic Social Comparison?

Short Answer. Across studies, income inequality predicted economic comparison orientation as well as upward and downward economic comparison, with all paths mediated by perceived economic competitiveness.

Detailed answer. Figure 1 provides a graphical summary of the path analysis. Consistent with Hypothesis 1, income inequality consistently predicted economic comparison orientation, upward comparison, and downward comparison, with standardized coefficients ranging from β = .04 to .07 and all ps < .001. Also consistent with our predictions, income inequality predicted perceived economic competitiveness, with β = .14 in Study 1 and β = .17 in Study 2, ps < .001. Finally, the associations between income inequality and economic comparison orientation, upward comparison, and downward comparison were systematically mediated by perceived economic competitiveness, with total effects reduced by 33% to 96% and all indirect effects significant at p < .001. As shown in **tables S1-S2**, the conclusions of the analysis remained unchanged when we included our control variables.

Hypothesis 2: Which Emotional Responses to Comparison Are Predicted by Inequality?

Short Answer. Across studies, income inequality predicted both contrastive and assimilative emotional responses to comparison, most consistently resentment when comparing upward and compassion when comparing downward.

Detailed answer. Figure 2 provides a graphical summary of the path analysis. Consistent with

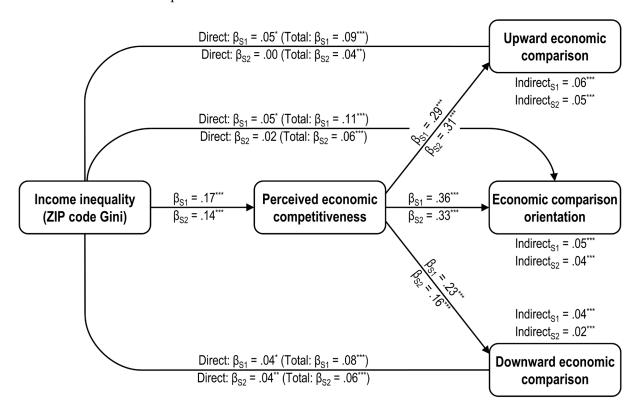
Hypothesis 2, income inequality predicted a mixture of contrastive and assimilative emotional responses to economic social comparison, although the associations were not always consistent across studies. On the consistent side, in both Study 1 and Study 2, income inequality was associated with (i) greater resentment when comparing with better-off others, $\beta = .14$, p < .001 (Study 1) and $\beta = .07$, p < .001 (Study 2), and (ii) greater compassion when comparing with worse-off others, $\beta = .06$, p = .011 (Study 1) and $\beta = .04$, p = .002 (Study 2). On the inconsistent side, in Study 1 (but not in Study 2), income inequality was associated with (i) greater shame and greater hope when comparing with wealthier others, $\beta = .05$, p = .014, and $\beta = .11$, p < .001, respectively, and (ii) greater relief, contempt, and anxiety when comparing with poorer others, $\beta = .04$, p = .047, $\beta = .07$, p = .002, and $\beta = .14$, p < .001, respectively. However, in Study 2 (but not in Study 1), income inequality was associated with lower levels of sympathetic joy when comparing with wealthier others, $\beta = -.06$, p < .001. As shown in **tables S3-S4**, the conclusions of the analysis remained unchanged when we included our control variables, except that the effects of income inequality on hope and relief became nonsignificant.

Hypothesis 3: Do Emotional Responses to Inequality Affect Support for Redistribution?

Short Answer. In Study 2, income inequality predicted higher support for redistribution, an association that was mediated by resentment when comparing upward and compassion when comparing downward.

Detailed answer. Figure 3 provides a graphical summary of the path analysis. Because support for redistribution was measured only in Study 2, the analysis was limited to that study. Consistent with Hypothesis 3, income inequality was positively associated with support for redistribution, $\beta = .11$, p < .001. Also consistent with our prediction, this association was mediated by (i) greater resentment when comparing with better-off others and (ii) greater compassion when comparing with worse-off others. Specifically, the total effect was reduced by 25%, and both indirect effects were significant, ps < .003. As shown in **table S5**, the conclusions of the analysis remained unchanged when we included our control variables.

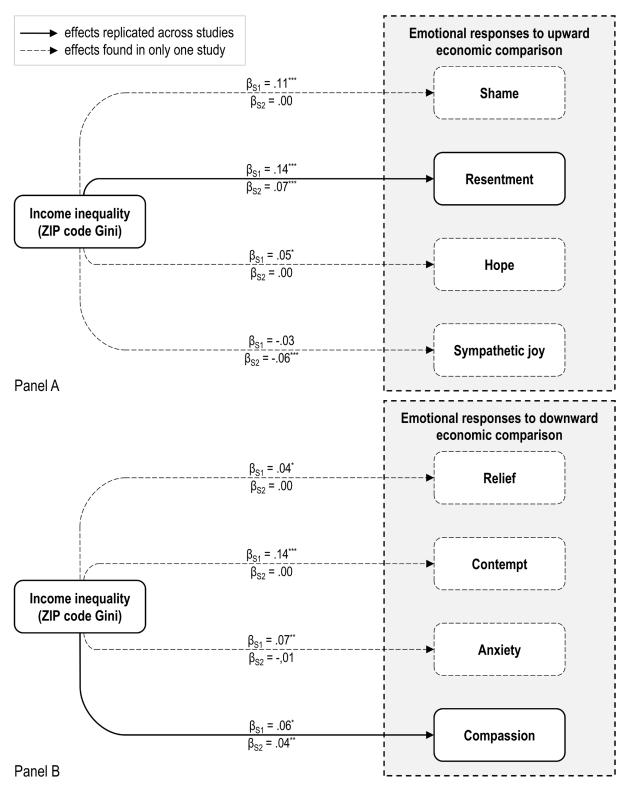
Figure 1. Hypothesis 1. Associations Between Income Inequality and Economic Comparison Orientation, Upward Economic Comparison, and Downward Economic Comparison, Mediated by Perceived Economic Competitiveness.



Note. Direct effects (controlling for the mediator) are shown outside parentheses, total effects (not controlling for the mediator) are shown in parentheses, and indirect effects (operating through the mediator) are shown above or below the outcome boxes. βs for Study 1 are shown above the arrows, with subscript 'S1,' whereas βs for Study 2 are shown below the arrows, with subscript 'S2.' Authors' figure.

^{*} p < .05, ** p < .01, *** p < .001.

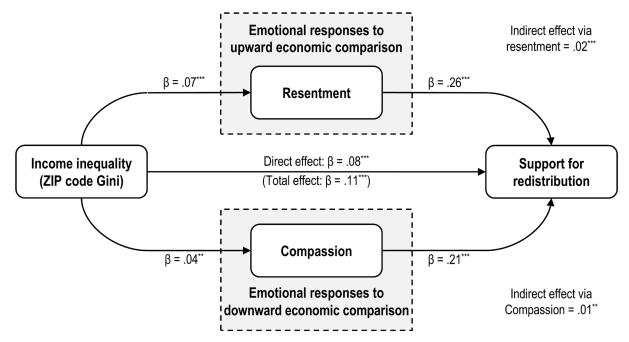
Figure 2. Hypothesis 2. Associations Between Income Inequality and Emotional Responses to Upward Economic Comparison (Panel A) and Downward Economic Comparison (Panel B).



Note. β s for Study 1 are shown above the arrows, with subscript 'S1,' whereas β s for Study 2 are shown below the arrows, with subscript 'S2.' Authors' figure.

^{*} p < .05, ** p < .01, *** p < .001.

Figure 3. Hypothesis 3. Associations Between Income Inequality and Support for Redistribution, Mediated by Resentment When Comparing Upward and Compassion When Comparing Downward.



Note. Direct effects (controlling for the mediator) are shown outside parentheses, total effects (not controlling for the mediator) are shown in parentheses, and indirect effects (operating through the mediator) are shown in the top-right and bottom-right corners. Authors' figure.

^{**} p < .01, *** p < .001.

Discussion

Brief Summary of Findings

As income inequality rises worldwide, psychologists have become increasingly interested in how unequal contexts shape thoughts, feelings, and attitudes (Du 2024; Gobel and Carvacho 2023; Orford 2025). Economic social comparison is assumed to play a key role in this process, yet whether and how income inequality fuels comparison has rarely been investigated empirically. In two large studies, we showed that U.S. residents living in locales with greater income inequality perceive those around them as more competitive, which in turn prompts them to adopt an economic comparison orientation and to engage more frequently in both upward and downward economic comparisons. Furthermore, we observed that people in these areas experience a range of emotions in response to comparison, most consistently resentment during upward comparison and compassion during downward comparison. Finally, we found that these two emotional responses accounted for about one-quarter of the association between inequality and support for redistribution.

Contributions

Income Inequality Predicts Economic Social Comparison

Our first contribution is to provide direct evidence that income inequality is associated with economic social comparison. Although scholars have long assumed that income inequality fosters such comparisons (Wilkinson 1997), only one cross-national study comparing a handful of countries has directly tested this link, yielding inconclusive results (Van Deurzen, Van Ingen, and Van Oorschot 2015). In our studies, we analyzed thousands of ZIP codes across the U.S. and found that higher local income inequality predicted more frequent and more pronounced economic social comparisons.

We also found that perceived economic competitiveness partly, and in some cases fully, mediated these associations. This finding supports the view that income inequality breeds a culture of competitiveness in which people engage in frequent local comparisons (Sommet and Elliot 2023a). These comparison tendencies may help explain a wide range of prior findings showing that, as income inequality rises, individuals take greater financial risks to improve their status (Gottesman and Morey 2025), work longer hours to keep up with economic competition (Filippi et al. 2023), and purchase

positional goods—such as luxury watches or designer clothing—to signal their wealth to others (Walasek, Bhatia, and Brown 2018).

Interestingly, income inequality was associated with similar increases in both upward and downward economic comparison, with standardized coefficients of comparable magnitude across studies. Social comparison theory holds that people preferentially compare themselves with those who are better off rather than worse off, a phenomenon known as the 'unidirectional drive upward' (Festinger 1954). Accordingly, meta-analytic evidence shows that when given a choice, people choose upward targets of comparison about 1.3 times more often than downward targets (Gerber, Wheeler, and Suls 2018). This tendency is often taken to suggest that inequality should primarily foster upward comparison (Galvan and Payne 2024). Yet in our data, inequality increased the frequency of both "looking up" at better-off others and "looking down" at worse-off others.

Upward and downward comparison are traditionally understood to serve distinct functions (Corcoran, Crusius, and Mussweiler 2011). Upward comparison is often driven by self-improvement motivation (pushing), as people look to (slightly) better-off others for information on how to progress (Diel, Grelle, and Hofmann 2021). In contrast, downward comparison is typically driven by self-enhancement motivation (coasting), as people look to worse-off others for reassurance and to bolster their self-worth (Diel et al. 2025). However, the literature also points to additional motivations (Tigges 2009), and our findings suggest that people may engage in upward economic comparison to scrutinize the better-off for perceived unfair advantage (fueling resentment), while they may engage in downward economic comparison to stay attuned to the plight of the less fortunate (fueling compassion). Thus, income inequality may prompt individuals to engage in both upward and downward comparison for a range of motives, including forming moral judgments about others.

Income Inequality Predicts Various Emotional Responses to Comparison

Our work revealed two consistent findings regarding emotional responses to social comparison. Across both studies, income inequality evoked resentment during upward comparison and compassion during downward comparison. Following Smith's (2000) framework, these results suggest that income inequality can trigger both (i) a contrastive emotion, namely, resentment toward the rich ("they have

more, why do I have less?") and (ii) an assimilative emotion, namely, compassion toward the poor ("they have less, why do I have more?"). The first finding echoes earlier evidence that inequality can spark anger (Godoy et al. 2006), hostility (Denti and Faggian 2021), and perceptions of the wealthy as unfriendly or immoral (Tanjitpiyanond, Jetten, and Peters 2022; but see Ellis 2017). The second finding aligns with Elbæk et al. (2023), who unexpectedly found that people in more unequal countries placed greater value on moral traits such as compassion. Together, these results help explain and reconcile prior evidence by showing that inequality intensifies economic social comparison, which can elicit both resentment and compassion.

Our work, however, also revealed a series of less systematic findings: Only in Study 1 did income inequality evoke emotions such as shame, hope, relief, contempt, and anxiety, whereas only in Study 2 did it evoke lower levels of sympathetic joy (the effects for hope and relief were not robust to the inclusion of control variables, and thus should be interpreted with caution). These results are consistent with prior evidence that income inequality can elicit shame arising from feeling looked down upon (Layte and Whelan 2014), as well as hope (Cheung 2016) and anxiety (Claes et al. 2024). Yet each association was observed in one study but not the other. A likely explanation for these inconsistencies lies in differences in sample composition. Participants in Study 1 were much younger than those in Study 2 (30 versus 56 years) and much less likely to be retired (12% versus 30%). In addition, the median annual income in Study 1 was about half that of Study 2 (~\$31K versus ~\$60K). According to socioemotional selectivity theory, younger adults tend to pursue future-oriented, statusrelated goals, whereas older adults focus more on present-oriented, emotionally rewarding goals (Carstensen 1995; Shi et al. 2023). Thus, for the younger, less affluent participants in Study 1, competition and economic social comparison prompted by inequality likely carried more weight: The wealth of others could inspire hope yet also provoke shame, while the poverty of others could offer relief yet also trigger anxiety. By contrast, for the older, wealthier participants in Study 2, these processes were likely less relevant, and their emotional responses were more muted.

Resentment and Compassion Explain Why Inequality Predicts Support for Redistribution

Finally, Study 2 showed that the emotions triggered by income inequality are not only a matter

of basic affective processes but also translate into political attitudes. First, Study 2 replicated earlier evidence that local income inequality is positively associated with support for redistribution (Domènech-Arumí 2025; Newman 2020; Sands and de Kadt 2020). Second, and more importantly, Study 2 showed that this association is simultaneously mediated by resentment evoked by upward economic comparison and compassion evoked by downward economic comparison. This finding aligns with existing evidence showing that redistributive preferences are shaped both (i) by antipathy toward the rich, where envy and resentment motivate people to bring the wealthiest group down, and (ii) by empathy toward the poor, where benevolence and compassion motivate people to lift the poorest group up (Lin and Bates 2024; Sznycer et al. 2017; Witko and Moldogaziev 2025). A substantial body of work has examined interventions aimed to increase support for redistribution, such as emphasizing the unfairness of inequality (Dolifka, Christensen, and Shaddy 2025), highlighting how redistribution may serve one's self-interest (Ashok 2018), and correcting biased perceptions about one's position on the social ladder (Cruces, Perez-Truglia, and Tetaz 2013; but see Henkel et al. 2025). Our findings suggest that another promising approach is to underscore how inequality disproportionately benefits the rich or harms the poor in ways that activate the dual emotional pathways (compassion-based and resentment-based) that jointly underpin support for redistribution.

Limitations

The present research used two large samples of U.S. residents and offered a detailed and nuanced account of how local income inequality shapes economic social comparison processes and their consequences. However, the contributions of this work should be considered in light of several limitations.

First, the cross-sectional design of our study limits our ability to draw causal inferences. This limitation is particularly relevant for measurement-of-mediation analyses, which are vulnerable to reverse causality (Lemmer and Gollwitzer 2017; Maxwell and Cole 2007). Nevertheless, we contend that the causal sequence specified in our models—from contextual conditions to individual outcomes—is more plausible than the reverse. For example, consider our finding that the Gini coefficient (an exogenous contextual indicator) predicts perceived economic competitiveness (a

perceived contextual feature), which in turn predicts economic comparison orientation (a self-reported individual outcome). This causal direction (from the macro- to the micro-level) seems far more likely than the alternative, in which an individual's orientation would determine the competitive ethos of their environment and influence the actual level of local income inequality. Even so, future research should use longitudinal designs, such as tracking the same communities over time as inequality rises or falls (Sommet, Morselli, and Spini 2018), and natural experiments that exploit sharp breaks in redistributive policy (reforms) to identify the causal effects of changes in income inequality (Grönqvist, Johansson, and Niknami 2012).

Second, although most of our measures relied on validated multi-item scales, the frequency of upward and downward economic comparison was assessed using single-item scales. Even with our large samples, such single-item measures are subject to observational error and can bias coefficients downward (Diamantopoulos et al. 2012). Moreover, we developed two new scales to assess emotional responses to economic comparison. While these scales showed generally satisfactory psychometric properties, the "Hope" factor in one of them exhibited validity issues (eigenvalue < 1). More generally, our scales covered only 2 \times 4 emotions, and future work might include additional relevant emotions, such as envy and admiration when comparing with better-off others, and pride or schadenfreude when comparing with worse-off others (Fiske 2010; Smith 2000).

Third, our studies relied on opt-in, nonprobability samples, which limits the generalizability of our findings to the broader U.S. population (for a related discussion, see Lakens 2025). Each study, however, used a different recruitment tool and thus captured distinct segments of the national population: Study 1 included participants who were generally younger, poorer, and more racially diverse, whereas Study 2 included participants who were older, wealthier, and more likely to be White. The consistency of our results across these heterogeneous samples increases our confidence that the observed links between inequality and comparison tendencies, frequencies, and emotions (specifically, resentment and compassion) are likely to extend beyond the current samples. Nonetheless, replication with a nationally representative sample is warranted.

Implications for the U.S. Context and Conclusion

This manuscript was prepared in response to the Russell Sage Foundation's special issue titled "Inequality in America: Beliefs, Attitudes, and Actions." The call for papers emphasized the need for "cross-level (micro and macro) research" that bridges distinct domains. Our research is a prime example of this approach, as it links a macro-level economic indicator (local income inequality) to a sequence of micro-level individual variables (perceptions, emotions, attitudes), thereby connecting the economic, psychological, and political domains. Research of this kind helps explain how broad structural realities translate into concrete personal experiences and ideologies.

The special issue seeks to document these associations in the U.S. context. The U.S. differs not only from developing economies (Henrich 2020), but also from other developed economies (Muthukrishna et al. 2020). In particular, its citizens hold deeply entrenched beliefs in equality of opportunity, economic mobility, and meritocracy (Davidai 2018). Accordingly, the patterns documented here should not be assumed to generalize universally; they may be specific to the U.S., particularly regarding the mixed emotions associated with inequality, which may combine resentment, hope, compassion, and contempt. In societies with stronger egalitarian norms, such as Japan (Oishi, Bak, and Caluori 2022) or France (Jetten, Mols, and Selvanathan 2020), inequality may more consistently elicit moral disapproval of the advantaged and empathy for the disadvantaged.

The U.S. also differs from many other developed economies by offering comparatively limited state-based social protection (Aspalter 2023), with the belief in the American Dream—that hard work leads to upward mobility—further dampening support for redistribution (Alesina, Stantcheva, and Teso 2018). Nevertheless, our findings indicate that residents of more unequal ZIP codes are not indifferent to income inequality: They perceive it, engage in more social comparisons, feel greater resentment during upward comparison, and feel greater compassion during downward comparison. Furthermore, these emotions translate into stronger support for redistributive policies. Our research therefore ends on an optimistic note: Once local income inequality reaches a certain threshold in the U.S., it may evoke emotions that foster, rather than erode, public will for redistribution, and help break the cycle of inequality.

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