



OPEN Psychological predictors of noticing and interpreting inequality in daily life

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Despite growing interest in socioeconomic inequality, little research has examined how it is perceived in naturalistic, everyday settings. This study employed the Experience Sampling Method to investigate individuals' real-time experiences of inequality, operationalized as perceptions of social class differences. Based on 6,150 momentary reports from 301 participants in Asia, we identified individual-level variables associated with these perceptions. Our findings suggest that inequality is not always salient in daily life—people do not constantly notice it, and even when they do, they may not compare themselves to others or view the differences as unfair. Notably, individual differences strongly shape these perceptions: social-comparison orientation was consistently associated with two key outcomes—attending to class differences and engaging in self-comparison. Additionally, participants with stronger power distance beliefs and greater fear-based xenophobia toward migrant workers were more likely to perceive class differences. Those scoring high on social dominance orientation, materialism, and fear-based xenophobia toward expatriates were more inclined to compare themselves to others, while those with greater fear-based xenophobia toward expatriates and stronger egalitarian beliefs (lower social dominance orientation) perceived class differences as less fair. These findings shed light on psychological mechanisms that shape how inequality is experienced and evaluated in daily life.

Keywords Perceived inequality, Social class differences, Experience sampling method, Individual differences, Social comparison, Fairness

The United Nations' designation of reduced inequality as a core sustainable development goal (Goal 10) in 2015 highlights inequality as a central challenge for achieving long-term sustainability¹. Research has linked inequality to lower economic growth^{2,3}, higher crime rates^{4,5}, and poorer physical^{6,7} and mental health outcomes^{8,9}. Much of this research relies on both objective statistical indicators, such as the Gini coefficient and Palmer ratio, which quantify income distribution across geographical regions (e.g.^{10,11}), and subjective assessments of inequality capturing people's global perceptions of the divide between the rich and the poor (e.g.^{12–14}). However, these macro-level measures do not necessarily capture how individuals experience inequality in their daily lives. People do not typically conceptualize inequality in numerical terms; instead, they perceive environmental cues that lead them to recognise the existence of class disparities^{15,16}.

Only two studies have examined perceptions of inequality in naturally occurring environments. They include a field experiment in which participants encountered a confederate who signaled either wealth or poverty through clothing and body language in an affluent neighborhood¹⁷, and an investigation of air rage incidents among airline passengers exposed to tiered seating arrangements, such as economy-class travelers passing through first-class cabins¹⁸. However, these studies focused on specific contexts and might not generalize to broader daily experiences of inequality. The present research addresses this gap by examining individuals' lived experiences of inequality.

We build on Phillips et al.'s¹⁹ framework which conceptualizes perception of inequality as a five-stage process: access, attention, comprehension, motivated processing, and meaningful summary. Although described sequentially for conceptual clarity, these processes may unfold rapidly and in parallel rather than as strictly ordered stages. Based on this framework, we define inequality experiences as everyday contexts that offer access to cues that signal the existence of social class differences. Awareness of inequality thereby refers to the entrance of these cues into a person's conscious attention in the moment. Our research examines how individual differences shape perceived inequality, specifically people's attention to accessible cues of inequality

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in their everyday environments, how these cues are comprehended and motivationally processed through self-relevant social comparisons, and how they are ultimately integrated into broader judgments about the fairness of observed class differences.

Why is it important to study how people perceive inequality in everyday life? Despite the extent and rising trend of inequality in many countries, individuals often do not express commensurate concern and support for corrective policies^{19,20}. One possible explanation is that inequality may not be perceived uniformly across all individuals. In other words, individual differences play a role in whether people perceive inequality. For instance, individuals with stronger egalitarian beliefs tend to estimate greater levels of inequality between disadvantaged and advantaged groups²¹ and are more attuned to disparities that disproportionately impact marginalized communities²². Investigating trait differences provides insight into why some individuals are more sensitive to perceiving inequality than others, shaping their policy preferences and social attitudes. Indeed, awareness of disparities seems crucial for fostering support for equity-enhancing policies¹⁷.

Many studies assume that perception of inequality necessarily entails self-comparison. These studies manipulate perceived inequality by having participants consider individuals from lower or higher socioeconomic classes^{23–25}, imagine themselves as members of different income groups within fictional societies with varying levels of inequality^{26–28}, or participate in distributive economic games where top earners receive either slightly or substantially higher rewards than lower earners^{29,30}. In this research, we question this assumption by examining whether awareness of social class differences necessarily elicit self-comparison, and which traits predict a greater tendency to engage in it.

In addition, we examine whether individuals interpret these disparities as just or unjust. Relative deprivation theory proposes that people's beliefs about their own or their group's relative status are more predictive of responses to inequality than objective circumstances³¹. Empirical work has shown that feelings of deprivation arising from such comparisons are associated with negative emotional and behavioral responses to inequality^{31,32}. Similarly, research on justice sensitivity highlights stable individual differences in people's readiness to perceive injustice (e.g.^{33,34}). Finally, social identity approaches suggest that inequality is more likely to be perceived as unfair when boundaries between wealth groups are seen as difficult to cross, when the social system is viewed as unstable, and when wealth differences are interpreted as illegitimate rather than deserved^{35,36}.

Examining both the tendency to compare oneself to others and perceptions of fairness is crucial, as these responses shape how inequality is psychologically experienced and are closely linked to subjective well-being. Social comparison has been associated with increased depression and anxiety³⁷, while perceived unfairness has been shown to mediate the relationship between inequality and well-being outcomes^{38,39}. Beyond psychological consequences, fairness perceptions carry broader societal implications. Research suggests that individuals who perceive inequality as unfair are more likely to support income redistribution and equity-enhancing policies^{40,41}. Moreover, perceptions of unfairness—unlike perceived inequality—are often more emotionally charged and subjective, making them a powerful motivator for prosocial behavior and collective action⁴².

To capture a representative sample of people's lived experiences of inequality, we conducted a pre-registered Experience Sampling Method (ESM) study, in which participants provided self-reports of perceived inequality at random moments throughout their daily lives^{43,44}. We operationalized access and attention to inequality as self-reported awareness of cues highlighting social class differences⁴⁵, consistent with research suggesting that inequality is conveyed through observable class signals that can be rapidly detected by perceivers¹⁵ in their daily social environments. Importantly, our awareness measure was intentionally designed to be target-agnostic to capture observations of social class differences without specifying whether these differences involve the self or occur between others. We then examined whether noticed class differences give rise to self-comparison, reflecting the comprehension and motivated processing stages of perceived inequality, and to judgments of unfairness, which represent the meaningful summarization of these differences. We note that different operationalizations of perceived inequality (e.g., perceived economic gaps among acquaintances versus broader disparities between rich and poor groups) may capture distinct aspects of inequality experience and therefore yield different results (see⁴⁶ for a discussion).

In sum, prior research on inequality perception has primarily focused on coarse-grained approaches, including lab-based experiments using artificial manipulations that presuppose self-comparison (e.g.⁴⁷), cross-sectional surveys that isolate single determinants (e.g.⁴⁹), and macro-level data nested within geographical regions (e.g.¹⁰). Although informative, these approaches are limited in their ability to capture how inequality is encountered and noticed in everyday life. Traditional one-time surveys also require individuals to retrospectively aggregate their everyday experiences into a global judgment. Using the ESM, the present study captures the components of perceived inequality as they unfold in daily life across diverse real-world contexts, offering a nuanced moment-to-moment understanding of who becomes attuned to social class disparities and how they respond to them.

Building on prior research, we examine a broad set of individual-level factors known to influence how people interpret class-based differences and assess fairness. Specifically, we focus on (1) beliefs about oneself (e.g., subjective social status^{48,49} and personal power⁵⁰ and beliefs about society (e.g., distributive and procedural fairness⁵¹ and social mobility⁵²; (2) attitudes, including egalitarian values²¹, xenophobia⁵³, materialism⁵⁴, power distance⁵⁵, and trust in government⁵⁶; and (3) psychological traits, such as social comparison orientation⁵⁷, self-esteem³¹, and regulatory focus⁵⁸. Aside from recent work by Kteily, Sheehy-Skeffington, and colleagues^{21,22} and Goudarzi et al.⁴⁹ that primarily investigate ideological orientations, few studies have examined how these individual-level factors shape the perception of inequality in naturalistic, day-to-day settings. We hence broaden the scope to a more comprehensive set of beliefs, attitudes, and traits that may potentially shape how inequality is experienced in daily life.

Materials and methods

Participants

The study was conducted in Singapore, a context well suited for examining inequality-related perceptions due to its relatively high level of market-income inequality. In 2022, Singapore's Gini coefficient was 0.437 prior to taxes and transfers and 0.378 after redistribution⁵⁹. We aimed to sample 300 Singaporean working adults through the SONA system of a business school in Singapore. The total number of sign-ups during the three-week sign-up period and completions of the qualifying intake survey determined our sample, which comprised 308 participants. They were asked to complete a one-off intake survey, the same experience sampling survey on 24 occasions, and a one-off exit survey. In exchange for their participation, they received up to S\$160 based on their completion rate of the surveys.

As pre-registered, we excluded participants who failed an attention check in the intake survey, which required them to indicate a specific response to a particular question, as well as outliers who were defined as participants whose total number of observations of social class differences during the experience sampling period exceeded three standard deviations above the sample mean of the total number of observations. Seven participants (2.3%) were excluded based on the exclusion criteria, leading to a final sample of 301 participants (58.9% female, 39.8% male, 1.3% preferred not to answer). Their average age was 31.0 years (SD = 8.27, range = 20–61), and 91.6% were Chinese, 4.0% were Indian, 2.7% were Malay, and 4.5% reported other racial backgrounds. The complete demographic profiles of the participants are presented in Supplementary Table S1.

Procedure

The study's procedures and materials were approved by the Institutional Review Board at the corresponding authors' universities (IRB-2020-11-006-02 and ID-202096) prior to data collection. All research was conducted in accordance with the Declaration of Helsinki. Informed consent was obtained from all participants before the study began. This study was preregistered (https://aspredicted.org/B12_7SQ).

The entire data collection period took place in one wave from October 2022 to November 2022. In an intake survey, participants gave their informed consent and completed various individual-difference and demographic measures (see Supplementary Information for the complete list of measures). On the following day, they were administered the experience sampling survey through a mobile application on their smartphone (97% of residents in Singapore own a smartphone⁶⁰). Participants were notified by the application to complete the same survey four times a day over a six-day period. This time frame was chosen to ensure that our data assessed participants' experiences on both weekdays and weekends while minimizing study fatigue.

Following Silvia and Cotter's⁶¹ recommendations to obtain a random, yet representative, sample of participants' daily lives, each day participants received a notification at a randomized time within each of the following four time periods: 9am–12pm, 12–3pm, 3–6pm, and 6–9pm. Randomizing the timing of the notification within each time period prevents participants from anticipating the signal and hence altering their daily routines to accommodate the completion of the survey. Upon receiving the notification, they were given up to 45 min to complete the survey, after which failure to complete the survey was recorded as a missing response for that timing. After the six-day experience sampling period, participants were given access to an exit survey, which comprised a series of individual difference measures and a debrief about the study.

Intake survey

All the surveys in this study were in English, which is the main language used in Singapore. The intake survey was administered through SONA and included measures such as the MacArthur Scale of Subjective Social Status⁶², Belief in a Just World Scale⁶³, Beliefs About Social Mobility Scale⁶⁴, Iowa-Netherlands Comparison Orientation Measure (short version)⁶⁵, Power Distance Belief⁶⁵, and Material Values Scale⁶⁶. After completing these measures, participants reported their demographic information and were asked to download the mobile application.

Experience sampling survey

Participants received notifications from the mobile application to complete the experience sampling survey. In total, we collected 6,150 complete responses for the survey over the six-day period. Participants completed it, on average, 20.4 times out of the 24 times they received notifications to complete it (SD = 4.2, Median = 21).

In the first part of the survey, participants answered questions about their current context: where they currently are, what they were doing in the past 10 min, whether they were with anyone else (yes or no), and if yes, who, whether, and how they were interacting with them. Next, participants indicated how aware they were of social class differences in their environment or context in the last 10 min (1 = Not at all, 5 = To a very large extent). Instead of asking if any social class differences were observed in the exact moment, we asked participants to recall their experiences in the past 10 min to increase the likelihood of capturing salient observations. This measure was intended to assess the extent of momentary attentional engagement with accessible inequality-related cues⁴⁵. However, as there were few responses indicating various degrees of awareness (i.e., 2–5 on the scale) relative to the number of responses reflecting an absence of awareness, this variable was recoded into a binary variable (0 = Not aware, 1 = Aware) for our analyses. This is in accordance with MacCallum et al.'s⁶⁷ defensible instances of dichotomization, where “zero” is substantively meaningful (i.e., no social class differences observed). Results do not meaningfully change when the untransformed variable is used instead (See Supplementary Table S10).

Participants who noticed social class differences were subsequently asked to provide more details about their observation, for instance, what specific indicators signaled the social class differences, how these indicators conveyed status, and the social class signaled in the episodes of social class differences they were aware of (see Supplementary Materials). They then rated the degree to which they compared their own social class to those being signaled (1 = Not at all, 5 = To a very large extent), as well as how fair they thought it was for these social class differences to exist in their current contexts (1 = Very unfair, 5 = Very fair). At the end of the survey, all

participants completed a series of questions about their emotional states, which are not the focus of this paper (reported in Supplementary Tables S4 to S6 as part of our pre-registration).

Exit survey

After the six-day period, participants received a notification from the mobile application with a link to the exit survey. The exit survey included more individual-difference measures such as the Personal Sense of Power Scale⁶⁸, Social Dominance Orientation Scale⁶⁹, Fear-based Xenophobia towards Migrant Workers and Expatriates Scale⁷⁰, and a 3-item measure that assessed participants’ trust in the government’s handling of inequality⁷¹. Among the 301 participants included in the final sample, 25 did not complete the exit survey (8.3%).

Results

All analyses were conducted in SPSS. Observation-level variables were measured via experience-sampling surveys (e.g., momentary social class difference observations), whereas individual-level variables were measured in the intake and exit surveys (e.g., social comparison orientation). Multilevel models treated observations as nested within individuals. Each of the participants’ responses (and null responses) to the experience sampling survey was numbered in order (1, 2, 3...24) to form a time of measurement variable, which was included as a covariate and random slope in all the multilevel regression analyses. All individual difference measures were grand mean centered. Sample sizes differed across analyses because some analyses involved only responses which included observations of social class differences and not every participant in the eventual sample completed the individual measures in the exit survey.

Descriptive analyses

Out of the 6,150 completed experience sampling surveys, 17.6% (*n*=1,081) included reports of participants noticing social class differences. Over the 6-day experience sampling period, participants reported an average of 3.59 instances of perceived social class differences (*SD*=3.21, range=0–14). This corresponds to a median of 13.6% of the total surveys each participant completed. On average, participants identified 1.65 indicators per observation of social class differences (*SD*=1.11, range=1–10). The most frequently reported indicators were people’s appearance or dressing (24.7% of observations), job or profession (21.5%), and location or surroundings (21.3%).

Additionally, participants were more likely to notice social class differences in public places (32.7%), transportation (29.9%), or workplaces (19.5%), and least likely to do so at home (10%). They were also more likely to notice these differences while commuting (29.4%) or running errands (27.5%) than while eating (19.2%), working (15.8%), or engaging in leisure activities (13.6%). Finally, social class differences were most often noticed when participants were with a group of strangers (44.6%), compared to when they were with friends (27.3%), colleagues (22.1%), family members (15.7%), or alone (11.9%).

Main results

We examined which individual-level variables were associated with awareness of social class differences by running separate multilevel binary logistic regressions for each predictor, which included participants’ demographics and individual difference measures (see Supplementary Tables S7 to S9). This approach minimized multicollinearity and accounted for reduced sample sizes due to incomplete exit survey responses. We then included all significant predictors that remained significant after applying a Bonferroni correction for multiple comparisons in a final regression model to assess their joint associations with participants’ perception of social class differences (see Table 1). The results indicated that participants with higher social comparison orientation, stronger power distance beliefs, and greater fear-based xenophobia toward migrant workers were more likely to perceive social class differences.

Multilevel linear regressions were conducted to examine the effects of individual-level variables on participants’ tendency to compare their own social class to others (*M*=2.24, *SD* = 0.89, range = 1–5; see Table 2) and their perceptions of fairness regarding observed class differences (*M*=3.07, *SD* = 0.82, range = 1–5; see Table 3). These analyses were restricted to instances in which participants reported noticing social class differences, because comparison and fairness judgments were assessed only in those cases. Each model included only the individual-difference measures that were significantly correlated with the respective outcome, after applying the Bonferroni

Predictors	t	p	Odds Ratio	95% CI for Odds Ratio	
				LL	UL
Social Comparison Orientation	2.066	0.039	1.143	1.007	1.299
Power Distance Beliefs	2.222	0.026	1.031	1.004	1.059
Material Values	0.797	0.425	1.059	0.920	1.219
Self-Esteem	-1.139	0.255	0.993	0.980	1.005
Fear-based Xenophobia of Migrants	3.261	0.001	1.221	1.083	1.377
Time of Measurement	-4.951	<0.001	0.968	0.956	0.981

Table 1. Multilevel logistic regression of dichotomized social class difference observations on individual differences. Note. This model contains only the individual-difference measures with univariable associations (controlling for time of measurement) with awareness (0 = Not Aware, 1 = Aware).

Predictor	B	SE	t	p	95% CI	
					LL	UL
Procedural Justice: Self	-0.016	0.009	-1.759	0.080	-0.034	0.002
Social Comparison Orientation	0.086	0.038	2.277	0.024	0.012	0.160
Material Values	0.122	0.041	2.995	0.003	0.042	0.201
Self-Esteem	-0.002	0.004	-0.539	0.591	-0.009	0.005
Fear-based Xenophobia of Migrants	0.007	0.045	0.152	0.879	-0.082	0.095
Fear-based Xenophobia of Expats	0.149	0.049	3.004	0.003	0.051	0.246
Time of Measurement	0.009	0.004	2.428	0.016	0.002	0.016

Table 2. Multilevel linear regression of tendency to compare on individual differences. Note. This model contains only the individual-difference measures with univariable associations (controlling for time of measurement) with tendency to compare.

Predictor	B	SE	t	p	95% CI	
					LL	UL
Social Dominance Orientation	0.236	0.046	5.087	<0.001	0.144	0.327
Fear-based Xenophobia of Expats	-0.170	0.038	-4.508	<0.001	-0.245	-0.096
Trust in Government	0.026	0.016	1.621	0.106	-0.006	0.057
Time of Measurement	0.002	0.003	0.586	0.558	-0.004	0.008

Table 3. Multilevel linear regression of perceived fairness on individual differences. Note. This model contains only the individual-difference measures with univariable associations (controlling for time of measurement) with perceived fairness.

Predictor	B	SE	t	p	95% CI	
					LL	UL
Momentary Comparison (WP)	-0.078	0.037	-2.146	0.034	-0.151	-0.006
Average Momentary Comparison (BP)	-0.295	0.058	-5.100	<0.001	-0.409	-0.181
Time of Measurement	0.001	0.003	0.471	0.638	-0.004	0.007

Table 4. Fixed Effects for multilevel mixed model regressing perceived fairness on decomposed momentary comparison. Note. WP = Within-person component. BP = Between-person component.

correction. Results indicated that participants with higher social comparison orientation, stronger materialistic values, and greater fear-based xenophobia toward expatriates were more likely to compare their own social class to others. Additionally, those with higher social dominance orientation and greater fear-based xenophobia toward expatriates perceived the observed social class differences as less fair. As perceptions of fairness can depend on the extent of internal comparisons between the self and target, we additionally control for momentary comparisons as a robustness test (19.7% of observations did not involve such comparisons). Results remain substantively unchanged when controlling for momentary self-comparisons (see Supplementary Table S11), suggesting that these associations reflect stable individual differences in how people interpret observed class differences rather than differences in the extent to which they engage in self-comparison.

Lastly, we examined whether momentary fluctuations in social comparison, relative to an individual's own typical level, are associated with perceived fairness during moments when class differences are observed. To do so, we decomposed comparison into a person-mean component and a within-person deviation from person-mean component. This allows us to estimate the effects of both between- and within-person momentary comparison on perceived fairness. We included a random intercept and random slope for within-person deviations of momentary comparison.

Results revealed a within-person effect: when participants compared more than their own usual level in a given moment, they reported lower perceived fairness ($B = -0.078$, $SE = 0.037$, $t = -2.146$, $p = .034$, 95% CI $[-0.151, -0.006]$). In other words, relative to their personal average, heightened comparison in the moment was associated with a significant reduction in perceived fairness. In addition, we also find that participants who, on average, compared more across moments reported substantially lower fairness overall ($B = -0.295$, $SE = 0.058$, $t = -5.100$, $p < .001$, 95% CI $[-0.409, -0.181]$). This indicates significant individual differences in comparison propensity are linked to lower fairness perceptions (see Table 4).

Importantly, this within-person association was not uniform across participants (see Supplementary Table S12). The random slope for momentary comparison showed reliable between-person heterogeneity ($Var = 0.077$), indicating that the extent to which increases in comparison relative to one's own typical level coincides with

lower fairness varies meaningfully across individuals. In other words, although the average within-person effect is negative, there is substantial variability across participants: many show a much weaker association, and some even show the opposite pattern. This suggests that engaging in daily comparisons does not necessarily translate into perceptions of unfairness for everyone.

Moreover, the intercept–slope correlation was moderate ($r = .423$), suggesting that participants who reported higher baseline fairness tended to exhibit less negative (more attenuated) comparison–fairness associations. Taken together, these random-effect patterns suggest that the within-person linkage varies across individuals, providing a rationale for testing cross-level moderation using stable individual differences. However, these analyses did not reveal any significant cross-level interactions (see Supplementary Table S13).

Discussion

When is inequality perceived?

Our research offers a novel lens into the psychology of inequality by examining how people perceive social class differences in the context of their everyday, mundane activities. Over a six-day period, our experience sampling method captured when and where participants noticed social class differences in real time. As our findings show, despite the broader societal context of inequality, individuals do not experience or notice these disparities all the time. In fact, social class differences were reported in only a minority of moments. People tend to notice such differences more in certain contexts—such as during commuting or when surrounded by strangers—and less so during activities that may more fully occupy their attention, such as working or spending time with family and friends. This suggests that many other experiences compete for our attention in daily life, making social class disparities less salient than we might expect. One could argue that prompting participants to reflect on inequality might have heightened their sensitivity to inequality-related cues, which would bias our estimates upward. Yet even with this potential sensitization, the proportion of observations involving perceived inequality remained relatively small.

Who tends to perceive inequality?

Our findings underscore the importance of accounting for individual differences when evaluating the psychological impact of inequality. While much of the existing literature tends to examine one predictor at a time, such an approach may obscure the complex interplay between variables, especially when these factors covary. Our design enabled us to assess a broader set of individual-difference variables simultaneously, allowing us to identify the most robust correlates of inequality perception while controlling for others. Notably, social comparison orientation emerged as a correlate of noticing social class differences and tendency to compare: individuals high in social comparison orientation were more likely to notice social class differences, and not surprisingly, compare themselves to others. This aligns with classic social comparison theory⁷², which suggests that people have a fundamental need to evaluate themselves, often by comparing with others—especially in ambiguous situations. When cues of success or status are unclear, individuals rely on social benchmarks to assess their standing. In unequal societies, this often takes the form of upward comparisons—measuring oneself against those better off⁷³. Such comparisons, however, have been linked to negative psychological outcomes²⁹. This raises an important question: how can harmful social comparisons be reduced? At the individual level, interventions like mindfulness, self-compassion and gratitude, may help mitigate their negative impact^{74–76}. At a broader level, public messaging and policy can shift societal focus away from competition and toward community-oriented values⁷⁷.

There was also a positive association between power distance beliefs and noticing social class differences. Power distance beliefs reflect the extent to which individuals view hierarchical differences as expected and meaningful features of social life⁷⁸. As a result, individuals higher in power distance beliefs may be more attuned to hierarchical cues in their environment, increasing the likelihood that they notice social class differences when they arise. Importantly, this heightened sensitivity does not appear to entail self-comparison in our data but instead reflects greater perceptual readiness to encode inequality-related information. Particularly concerning is the positive association between xenophobia toward blue-collar migrant workers and increased awareness of social class differences. This finding echoes recent research in Germany, where higher levels of inequality were linked to increased hate crimes against refugees through heightened feelings of relative deprivation and perceived status threat among lower-status natives⁵³. While the present study does not test this causal pathway, the observed association suggests that threat- and status-relevant motivations may lead individuals to treat social class cues as more informative, making class differences more likely to enter attention in daily life.

Who compares themselves to others and perceives unfairness?

Noticing social class differences does not automatically lead individuals to compare themselves or perceive these differences as unfair. This highlights the importance of identifying who is more likely to be negatively affected upon perceiving such disparities. Our results show that individuals with stronger fear-based xenophobia toward expatriates were more inclined to engage in class comparisons and perceive the differences as less fair. This may stem from a perception of expatriates as economic or cultural threats, which reinforces an *us-versus-them* mentality and activates social categorization processes^{79,80}. When people view others as belonging to a competing outgroup, they are more prone to compare across social category boundaries, heightening feelings of threat and competitiveness⁷⁷. Perceived group threats may also heighten sensitivity to distributive unfairness, especially when resources or privileges appear to be allocated in favor of the outgroup.

Additionally, participants who endorsed stronger materialistic values—believing that happiness and success are derived from material possessions⁸¹—were more likely to compare their own social class to that of others. This is consistent with research linking materialism to a heightened focus on external markers of status and success^{81,82}. For individuals who define their self-worth through possessions and wealth, social comparisons

become a key means of assessing personal standing, making them more attuned to cues that signal relative advantage or disadvantage.

Finally, individuals with lower social dominance orientation—reflecting stronger egalitarian beliefs—were more likely to perceive the observed class differences as less fair. This finding aligns with previous research showing that egalitarians are more sensitive to disparities that disproportionately impact marginalized communities²². Notably, among the various psychological constructs examined, attitudes—such as social dominance orientation, materialism, and xenophobia—emerged as particularly strong correlates of individuals' responses to perceived inequality. These findings highlight the psychological pathways through which class disparities may evoke either defensive, self-focused reactions or broader social concern, depending on individuals' underlying worldviews. However, given the correlational nature of the study, causal inferences cannot be drawn. Future research should build on these insights using experimental designs to more precisely isolate the mechanisms shaping responses to inequality.

Theoretical contributions

Recent work has called for greater specificity in how perceived economic inequality is conceptualized and measured, rather than treating it as a single, aggregated construct^{45,46}. Consistent with this perspective, we treat our experience-sampling measure as indexing a specific component of perceived inequality, namely individuals' momentary awareness of social class differences in their everyday environments. Guided by Phillips et al.'s¹⁹ process framework, which conceptualizes perceived economic inequality as unfolding from exposure to social class cues, to motivated processing and sense-making, we focus on isolating the initial stage of accessing and attending to inequality-relevant cues from subsequent psychological processes. This approach allows us to examine whether, and for whom, awareness of social class cues gives rise to downstream responses such as self-comparison and feelings of unfairness. Using the ESM, we demonstrate that different individual characteristics are associated with distinct stages of the inequality perception process—including noticing social class cues, engaging in social comparison, and forming judgments about fairness—highlighting the value of decomposing inequality experiences into their constituent stages.

Consistent with existing theories of inequality, our findings showed that perceiving social class differences does not uniformly translate into social comparison or judgments of unfairness. The observed associations between the individual traits and downstream responses lent support to predictions derived from these theoretical accounts. Relative deprivation and social comparison perspectives specify how perceived disparities become psychologically consequential once construed as self-relevant disadvantage^{10,32,72,83}. Justice sensitivity research highlights individual differences in the tendency to appraise such disparities as unfair once they are interpreted in moral terms^{33,84}, while social identity approaches emphasize how inequality becomes impactful when class-based categories are salient and self-defining^{35,85,86}.

In summary, the present research underscores the importance of context and individual differences in shaping how inequality is psychologically experienced, offering a more nuanced understanding that can inform both future research and targeted policy interventions.

Limitations and future directions

Despite these contributions, we acknowledge some limitations of our design. First, although ESM reduces retrospective bias and captures substantial within-person variability, the data remains observational and relies on self-reports, so coefficients should be interpreted as associations rather than evidence of causal direction. This is especially the case for the individual difference measures. Future designs could assess key dispositions repeatedly across the sampling window to test temporal dynamics between momentary class observations and day-by-day variations in trait-like dispositions (e.g.⁸⁷).

Second, it is possible that the wording of the awareness item may have influenced responses—for example, by implying that relevant cues might exist even if participants had not consciously noticed them, or because the concept of “social class” may make respondents hesitant to categorize others in fixed hierarchical terms—resulting in a floor effect and a quasi-binomial distribution. At the same time, two features of the study design may have mitigated reputational concerns associated with explicitly classifying others by social class. Responses were collected privately using experience sampling, and the follow-up item asked participants to evaluate the status signaled by previously described indicators rather than explicitly assign individuals to a social class category. Alternatively, it is possible that the frequency with which people consciously notice social class differences is genuinely low, as multiple competing demands shape attention in everyday life. Future research could therefore explore alternative operationalizations of inequality awareness to determine whether different measures yield similar patterns of results.

Third, there may have been overreporting of self-comparisons. Because the response scale of the prior item capturing the social class signaled allowed participants to report only a single class, episodes involving disparities between two other individuals or groups may have been more difficult to represent. In such cases, participants may have anchored the reported class relative to themselves, increasing the likelihood of reporting self-oriented comparison. Future work could explicitly measure or manipulate these target frames to better understand how target orientation influences judgments of perceived inequality. In addition, participants were asked about comparison and fairness only when they reported noticing social class differences. Although this approach is theoretically consistent with the idea that comparison and fairness judgments follow awareness of inequality cues, it constrains the ability to examine these processes more dynamically. The possible floor effect and quasi-binomial distribution of the awareness item may have further limited more fine-grained multilevel analyses linking awareness of class cues to subsequent social comparison and fairness judgments. Future research could address these limitations by directly sampling comparison and fairness judgments in daily life.

Finally, the study was conducted in a single national context. However, we argue for theoretical generalizability in the basic process by which accessible social class cues capture attention and are interpreted through social comparison and perceived fairness, shaped by individual differences in motivated cue processing⁴⁵. While the form and meaning of class cues will vary across societies, we expect this core process to be generalizable as people routinely infer social standing from everyday signals^{15,88}. By eliciting participants' own noticed moments rather than imposing a researcher-defined cue set, our approach is designed to capture this common process even when the specific cues that trigger it differ. Furthermore, much of the existing research on perceived inequality has been conducted in WEIRD (Western, Educated, Industrialized, Rich, Democratic) societies, where discussions of inequality are often highly politicized²². In contrast, our study was conducted in an Asian context where inequality is less politicized, offering a valuable cross-cultural perspective. Nevertheless, empirical investigations in other cultural and national contexts will add credibility to the process account of perceiving inequality⁴⁵.

Data availability

All materials, data, and analysis code are publicly available on our OSF page: [https://osf.io/wdm9j/overview?view_only=92510a4af0a64ff092d42014fe766367](https://osf.io/wdm9j/overview?view_only=92510a4af0a64ff092d42014fe766367) .

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Author contributions

Conceptualization: CYC, KAN, AJYMethodology: CYC, KAN, AJYProject administration: CYCInvestigation: CYCFormal analysis: CYC, JWKVisualization: CYC, JWKWriting – original draft: CYC, JWKWriting – review & editing: CYC, JWK, AJY, KAN.

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Declarations

Competing interests

The authors declare no competing interests.

Additional information

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