ORIGINAL RESEARCH



Perceived Economic Inequality Is Negatively Associated with Subjective Well-being through Status Anxiety and Social Trust

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Accepted: 1 January 2024 / Published online: 1 February 2024 © The Author(s), under exclusive licence to Springer Nature B.V. 2024

Abstract

The relationship between economic inequality and subjective well-being has produced mixed results in the literature. Conflicting evidence may be due to overlooking the role of psychosocial processes that translate socioeconomic conditions into subjective evaluations. We argue that perceiving high economic inequality erodes social capital, undermining people's subjective well-being. We rely on the Psychosocial Model of Perceived Economic Inequality and Subjective Well-Being (PEISW), which posits that perceived economic inequality negatively affects subjective well-being by increasing status anxiety and decreasing social trust. Furthermore, these indirect effects from perceived inequality to subjective well-being will be moderated by system-justifying ideologies. The present article provides the first empirical test of this model using a national survey from Spain (N=1,536). We confirmed that perceived economic inequality is negatively associated with well-being. We also found that perceived economic inequality had an indirect negative effect on subjective well-being via increasing status anxiety and reducing social trust. We found no evidence that system-justifying ideologies (i.e., social dominance orientation) moderated the association between perceived economic inequality and subjective well-being. We discuss that perceived economic inequality is crucial to understanding the link between economic inequality and subjective well-being and elaborate on the role of psychosocial mechanisms that promote competition and undermine social cohesion.

Keywords Perceived economic inequality · Income inequality · Status anxiety · Social trust · Social dominance orientation · Subjective well-being

The effect of economic inequality on well-being is one of the most discussed findings in the literature about the consequences of economic inequality. Previous research has shown that higher levels of economic inequality are associated with lower levels of happiness and well-being (Oishi et al., 2011; Oishi & Kesebir, 2015). However, further evidence indicates





the association between economic inequality and subjective well-being is still unclear since empirical studies have provided contradictory results (Evans et al., 2019; Ngamaba et al., 2018; Sommet et al., 2018; Sommet & Elliot, 2022) and it may depend on other social and cultural variables (Joshanloo & Weijers, 2016).

Recently, Willis et al. (2022) argued that the mixed results regarding the association between objective economic inequality and subjective well-being could be partially explained by perceptions of economic inequality. Building on previous literature (Buttrick et al., 2017; Wilkinson & Pickett, 2010), Willis and colleagues (2022) argue that perceiving higher levels of economic inequality decreases subjective well-being because it increases status anxiety and reduces social trust. This theoretical model has compiled empirical evidence from social psychology to explain why and when economic inequality can influence subjective well-being. Unlike other psychosocial models of inequality that stress alternative mechanisms, such as identity (Jetten et al., 2021) and relative deprivation (Osborne et al., 2019), the Willis et al. (2022) model focuses on the interplay between perceptions of inequality and system-justifying ideologies on shaping psychosocial mechanisms that lead to subjective well-being.

In this paper, we aim to provide the first empirical test of the psychosocial model of economic inequality and subjective well-being proposed by Willis et al. (2022). This model relies on three components: the perceptions of economic inequality (predictor), psychosocial mechanisms (mediators, such as status anxiety and social trust), and ideological differences (moderators). Although every model component is empirically supported in the literature, there is no empirical evidence testing this integrative framework.

This study extends the literature on subjective inequality and subjective well-being in several ways. First, we focused on perceptions of economic inequality rather than objective economic inequality. Previous research has shown that people misperceive the extent of economic inequality (Gimpelson & Treisman, 2018). Thus, considering that perceiving inequality is a crucial input to the subsequent psychosocial consequences (Jetten et al., 2021; Willis et al., 2022), we argue that perceived inequality is a better predictor of well-being than objective economic inequality. Moreover, we focused on perception rather than fairness evaluations, concerns, and beliefs about inequality (Alesina et al., 2004; Schneider, 2016). Perceived economic inequality refers to a descriptive estimate of the extent of current economic disparities between groups in a given context, distinct from the attitudinal component related to judgments and beliefs about inequality commonly used in the literature (Janmaat, 2014)¹.

Second, we accounted for psychosocial mechanisms explaining the relationship between perceived economic inequality based on a theoretical model that integrates sparse findings from the literature. For instance, the *Spirit Level Theory* proposes that status anxiety would explain the deterrent effects of inequality on well-being (Wilkinson & Pickett, 2010). Complementarily, it has been argued that social trust can also explain why inequality undermines well-being (Buttrick et al., 2017; Delhey & Dragolov, 2014). Other researchers have also posited that anger and personal economic concerns (Vezzoli et al., 2023) or approach/avoidance motivations (Sommet et al., 2019) can explain the relationship between perceived

¹ We use the construct "perceived inequality" instead of "subjective inequality" given that the perceived inequality capture a descriptive estimate about the extent of inequality, while subjective inequality cover a bifactorial construct that includes qualitative statements about inequality and fairness evaluations of such inequality (Schmalor & Heine, 2022).



inequality and psychological health. However, these mechanisms are conceptualized as consequences of the negative evaluation of inequality, which may be confounded with ideological differences and do not account for people's perceptions of the extent of inequality. Additionally, personal economic concerns may indicate alternative exogenous indicators, such as socioeconomic status or economic vulnerability, that are unlikely to be caused by perceived economic inequality and could constrain their hypotheses to most disadvantaged groups. Therefore, we propose a more parsimonious and encompassing model based on psychosocial mechanisms that work along the entire social ladder and are widely theorized in the literature: status anxiety and social trust (Buttrick et al., 2017; Willis et al., 2022).

Third, we examined whether system-justifying ideologies (i.e., social dominance orientation) moderate the relationship between perceived economic inequality and well-being. Although ideologies have proved to be crucial moderators in the effects of perceived economic inequality (García-Sánchez et al., 2019, 2021), this moderating role has not been tested on the association between perceived economic inequality and well-being. Accounting for ideologies in the psychosocial inequality model is important because they may buffer psychological distress that fosters subjective well-being (Napier et al., 2020). Thus, ideological beliefs are expected to shape perceived inequality's effect on people's reported well-being.

1 Subjective Well-Being and Economic Inequality

Subjective well-being, broadly conceived, refers to people's appraisals and evaluations of their lives, and it is usually captured through interchangeable terms, such as life satisfaction and happiness (Diener et al., 2018). Subjective well-being taps into cognitive and emotional appraisals that do not necessarily correspond to objective well-being indicators (e.g., long life expectancy, low morbidity, etc. Hurka, 2014). The overall level of life satisfaction (i.e., a cognitive appraisal) is one of the most common indicators used to measure subjective well-being because it tends to be more stable than emotional experiences that reflect transitional states (Diener et al., 2018). Thus, life satisfaction captures a cognitive evaluation less susceptible to fluctuation with isolated experiences, which makes it a reliable indicator of people's subjective well-being experience.

A wide variety of contextual factors can influence subjective well-being. Previous research has shown that subjective well-being is positively predicted by economic prosperity, household income, strong social relationships, and religiosity (Diener et al., 1995; 2018). Economic inequality is a popular contextual indicator associated with subjective well-being (Wilkinson & Pickett, 2017).

However, empirical research on economic inequality and subjective well-being has provided mixed findings. Some researchers have found that economic inequality negatively predicts well-being (Alesina et al., 2004; Delhey & Dragolov, 2014; Oishi et al., 2011; Schneider, 2019) while others found a positive (Cheung, 2015; Kelley & Evans, 2016; Ng & Diener, 2019), or non-significant association (Reyes-García et al., 2018; Sánchez-Rodríguez et al., 2023; Sommet & Elliot, 2022). Indeed, meta-analytical evidence suggests that the relationship between economic inequality and well-being is likely to be null or negligible (Ngamaba et al., 2018). Thus, the relationship between economic inequality and subjective well-being needs further clarification.



Social psychological literature attempts to fill this gap by emphasizing the role of perceptions and ideologies of inequality to disentangle when and why economic inequality undermines subjective well-being. The psychosocial model of perceived economic inequality and subjective well-being (PEISW; Willis et al., 2022) aims to account for the cognitive and motivational processes underlying the relationship between economic inequality and subjective well-being. This model's core assumption is that the psychosocial effects of economic inequality depend on people's perceptions of inequality. This is not to say that objective economic inequality has to be overlooked and does not influence psychological processes. Instead, it argues that inequality's main consequences on people's attitudes and behaviors depend on how people perceive and make sense of such inequality. This claim relies on extensive research showing that people's responses toward inequality are better explained by perceived rather than by objective economic inequality (Gimpelson & Treisman, 2018; Hauser & Norton, 2017; Jetten et al., 2021; Rodríguez-Bailón et al., 2020; Wienk et al., 2022).

2 The Importance of Status Anxiety and Social Trust

The relationship between perceived economic inequality and subjective well-being can be explained by two psychosocial mechanisms: status anxiety and social trust. The Spirit Level model theorized that unequal contexts increase social comparisons and reduce social capital by exacerbating status anxiety and undermining social trust (Wilkinson & Pickett, 2010). Indeed, empirical research has shown that economic inequality reduces trust and increases anxiety, undermining subjective well-being (Delhey & Dragolov, 2014; Oishi et al., 2011).

However, empirical evidence on the relationship between economic inequality, status anxiety, and social trust is mixed. Some researchers have found that economic inequality is positively related to status anxiety and social distrust (Delhey & Dragolov, 2014; Elgar & Aiken, 2011; García-Sánchez et al., 2024; Graafland & Lous, 2019; Layte, 2012; Layte & Whelan, 2014; Uslaner & Brown, 2005); but other researchers have found non-significant (Delhey & Steckermeier, 2020; Hastings, 2018; Kim et al., 2021) or negative associations (Paskov et al., 2017). These inconsistent effects may again reflect that it is not exclusively about objective inequality, but it also needs to account for perceived economic inequality (Willis et al., 2022). As such, perceived economic inequality is likely to show a more consistent effect on status anxiety and social trust than objective indicators of economic inequality.

On the one hand, recent studies have shown that perceiving high levels of economic inequality is associated with higher status anxiety, willingness to seek status, and engage in consumption to gain status and prestige (Melita et al., 2021; Velandia-Morales et al., 2022). This is because perceived economic inequality alters people's perceptions of themselves and how others value them. Particularly, perceived economic inequality increases people's levels of materialism and social-class entitativity that foster social comparisons based on material rank (Peters & Jetten, 2023; Walasek & Brown, 2015); leads to a higher perceived competitive climate (Melita et al., 2021; Sánchez-Rodríguez et al., 2020; Sommet et al., 2019); and trigger upward comparisons that boost relative deprivation (Cheung & Lucas, 2016; Osborne et al., 2019). Thus, perceived economic inequality increases the feeling of being constantly evaluated based on social standing, fueling status anxiety and undermining subjective well-being.



On the other hand, perceived economic inequality reduces social trust. As such, perceiving greater levels of economic inequality decreases generalized trust (e.g., they show higher social vigilance (Cheng et al., 2021) and makes people infer more individualistic values in their society (Sánchez-Rodríguez et al., 2019). Similarly, perceived economic inequality makes people perceive social groups as less trustworthy (e.g., men and women, Moreno-Bella et al., 2022; low- and high-SES, Tanjitpiyanond et al., 2022). As such, perceived economic inequality tears us apart by undermining social trust, ultimately reducing subjective well-being.

3 Ideologies Moderate the Effects of Perceived Economic Inequality

Perceived economic inequality does not affect everyone equally. One possible explanation for when perceived economic inequality may affect people's well-being is related to ideological differences. Ideologies are belief systems that explain and prescribe how the world should be (Jost et al., 2008). As such, ideologies are crucial in informing people's understanding of the world and guiding their responses toward social issues. System-justifying ideologies are beliefs that legitimize and maintain the status quo, including social dominance orientation, meritocratic ideology, and beliefs in a just world (Jost & Hunyady, 2005). Because system-justifying ideologies influence how people understand and make sense of inequality, they can shape the effect of perceived economic inequality on status anxiety and social trust.

Social Dominance Orientation is one of the system justification ideologies that has generated significant interest in social sciences due to its explanatory and overarching framework (Ho et al., 2015). Social Dominance Orientation is the motivation for maintaining social hierarchy and intergroup domination, integrating social and subjective factors implied in the relationship between social structure and individual behavior (Fischer et al., 2012). Social Dominance Orientation influences how people perceive and respond to their context. For instance, Social Dominance Orientation is associated with an overall view that the world is a competitive jungle (Duckitt & Sibley, 2017) and with hostile reactions toward out-groups to maintain inequality (Ho et al., 2015). Furthermore, Social Dominance Orientation was positively correlated with intrinsic goal pursuit, a proxy indicator of subjective well-being (Onraet et al., 2017), and can moderate the relationship between socioeconomic status and subjective well-being (Whitt et al., 2019). Thus, as a system-justifying ideology, Social Dominance Orientation may shape how people perceive inequality and its effects on status anxiety and social trust.

In this regard, social dominance orientation is likely to moderate the effect of perceived economic inequality on status anxiety and social trust. Given that system-justifying ideologies legitimate social hierarchies, perceived economic inequality finds ideological support to reassure the idea that competitiveness between social groups is normative and desirable in unequal contexts (Sánchez-Rodríguez et al., 2019; Sommet et al., 2019). As such, system-justifying ideologies can increase the positive effect of perceived economic inequality on status anxiety because social standing becomes more relevant, inflating expectations of economic success (De Botton, 2005) and making low socioeconomic status more threatening (Kraus et al., 2011). Similarly, system-justifying ideologies augment the negative effect of perceived economic inequality on social trust because they promote a sense of fierce com-



petition for resources that makes people feel socially disconnected and wary of others taking advantage of them (Becker et al., 2021).

In addition, social dominance orientation can shape the association of status anxiety and social trust with subjective well-being. On one hand, social dominance orientation may increase the negative effect of status anxiety on subjective well-being. For example, system-justifying ideologies, such as social dominance, meritocracy, and zero-sum beliefs, blame people for their economic performance and promote social antagonism, generating frustration and impairing subjective well-being (García-Sierra, 2023; Różycka-Tran et al., 2021).

On the other hand, system-justifying ideologies can buffer the positive association between social trust and subjective well-being. Social dominance orientation can weaken social ties by fostering individualism, competition, and dominance (Duckitt & Sibley, 2017) and reducing prosocial behavior and subjective well-being (Yang et al., 2019). Similarly, meritocracy beliefs increase the perceived merit gap between the rich and the poor, fostering prejudice and social distancing (Heiserman & Simpson, 2017). Neoliberal ideologies can also justify inequality, but at the same time, widen social distance and create social disconnection that compromises people's well-being (Becker et al., 2021). Thus, system-justifying ideologies can weaken social relations threatened by social distrust derived from perceived inequality.

Alternatively, system-justifying ideologies can also attenuate the discomfort produced by inequality-related situations (Napier et al., 2020). For example, system-justifying ideologies reduced moral outrage derived from inequality and muted people's physiological and psychological responses to inequality (Goudarzi et al., 2020; Wakslak et al., 2007). System-justifying ideologies can buffer discomfort derived from losing status (Weiss & Blöchl, 2023) and alleviate discrimination-related distress by minimizing and justifying such inequalities (Bahamondes et al., 2019, 2021). Therefore, system-justifying ideologies can also attenuate the adverse effects of status anxiety and social distrust on subjective well-being.

4 The Present Research

This study aims to test the psychosocial model of economic inequality on subjective well-being (PEISW) proposed by Willis and colleagues (2022). Thus, we pre-registered the following hypotheses (available at: https://osf.io/c8472/):

- H1: Perceived economic inequality would be positively associated with status anxiety (H1a) but negatively associated with social trust (H1b) and subjective well-being (H1c).
- H2: Participants with higher (vs. lower) scores on Social Dominance Orientation (SDO)
 would show a stronger positive association between perceived inequality and status
 anxiety (H2a), and a stronger negative association between perceived inequality and
 social trust (H2b).
- H3: Participants with higher (vs. lower) scores on Social Dominance Orientation (SDO) would show a stronger negative relationship between status anxiety and subjective wellbeing (H3a) but a weaker positive relationship between social trust and subjective wellbeing (H3b).
- H4: Perceived economic inequality would have a negative indirect effect on subjective well-being through status anxiety (H4a) and social trust (H4b).



H5: SDO would moderate the indirect effect of perceived economic inequality on subjective well-being through status anxiety (H5a) and social trust (H5b). In both cases, we expected the negative indirect effects to be stronger for those who report high (vs. low) levels of SDO.

An overview of the pre-registered hypotheses is depicted in Fig. 1. Materials and data are available at: https://osf.io/c8472/.

5 Method

5.1 Participants and Procedures

A national sample from Spain (N=1,536, 51.43% women, 48.57% men, M_{age} = 48.41 years, SD=17.21; see Table S1) was collected through an online survey research company (i.e., NETQUEST). The sample size was determined based on resource availability (Lakens, 2022), aiming to obtain a sample size similar to other surveys that map national attitudes on subjective inequality (e.g., ISSP Research Group, 2020). A sensitivity power analysis indicates that our sample size could reliably detect correlations $r \ge .09$ (β =95%, α =0.05 two-tailed).

In addition to quality checks implemented by the survey company, respondents who failed more than one of the three attention checks set during data collection were screened out of the sample (e.g., "Please check option 7 'Strongly Agree' if you are paying attention while answering this survey"). The sample was stratified by quotas based on social class by gender, age, and region of residence (as established by the Nielsen standards) following

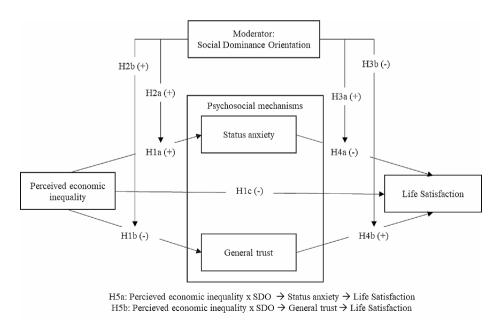


Fig. 1 Overview of the hypotheses



the distribution of the Spanish population stated by the Instituto Nacional de Estadística of Spain. Detailed sociodemographic information is provided in Table S1 in the supplementary material. The University Ethics Committee approved this study before data collection, and all participants provided informed consent following the Declaration of Helsinki.

6 Measures

6.1 Perceived Economic Inequality

We used two items previously used in the literature (Sánchez-Rodríguez et al., 2019): "To what extent do you think that the distribution of the resources in Spain is equal?" (reverse item); "To what extent do you think that the distribution of the resources in Spain is unequal?". Answers were provided on a 7-point Likert scale ranging from 1 (*Not at all*) to 7 (*Completely*). We calculated the mean between the two items for each participant, showing appropriate reliability given that the indicators were highly and consistently correlated ($rho_{Spearman-Brown} = 0.61$, p < .001). Higher scores indicate high perceived economic inequality.

6.2 Social Trust

We used three items from the Spanish version of the General Trust Scale (e.g., "Most people are trustworthy"; Montoro et al., 2014, adapted from Yamagishi & Yamagishi, 1994). We used a 7-point Likert response scale ranging from 1 (*Totally disagree*) to 7 (*Totally agree*). We calculated the mean between the three items for each participant. Higher scores indicate high social trust (α =0.88).

6.3 Status Anxiety

We used a shortened version of the Status Anxiety Scale validated in Spain. Three items were included in the survey and were selected by their construct representativeness and high factor loadings in the original scale (e.g., "I am concerned that my current position in life is too low" Melita et al., 2021). Answers were provided on a 7-point Likert scale ranging from 1 (*Totally disagree*) to 7 (*Totally agree*). We calculated the mean between the three items for each participant. Higher scores indicate high-status anxiety (α =0.88).

6.4 Social Dominance Orientation

We used four items of the short version of the Social Dominance Orientation scale (Pratto et al., 2013) (e.g., "In setting priorities, we must take into account all social groups" (reverse item); "We should not push for equality among social groups"). Answers were provided on a 7-point Likert scale ranging from 1 (*Totally disagree*) to 7 (*Totally agree*). After inverting two items, we calculated the mean between the four items for each participant. Higher scores indicate high Social Dominance Orientation ($\alpha_{Chronbach} = 0.63$).



6.5 Subjective Well-Being

We used a single item capturing people's overall life satisfaction, as used in the European Social Survey (i.e., "All things considered, how satisfied are you with your life as a whole nowadays?"). Answers were provided on a 10-point scale ranging from 1 (*Very unsatisfied*) to 10 (*Very satisfied*). Life satisfaction has been widely used in the literature as a reliable indicator of subjective well-being (Diener et al., 2018) and has shown approximate metric and scalar invariance across different samples and surveys (Raudenská, 2023).

6.6 Covariates

The following sociodemographic covariates were included: age (in years), biological sex (0=Male, 1=Female), and objective socioeconomic status. Socioeconomic status used the classification created by the Spanish Asociación para la Investigación de Medios de Comunicación [Association of Market and Opinion Research] (2015), which is a sum index that combines the household size and income, education, and occupation of the participant's household. This index is classified into seven groups, ranging from the lowest to the highest socioeconomic status, 1=E2, the worst off, to 7=A1, the best off).

7 Analytical Procedure

Following the pre-registered analyses, we used a regression-based approach to test all our hypotheses. Thus, we ran linear regression analyses on subjective well-being, status anxiety, and social trust as outcome variables (H1). We included the hypothesized predictors and covariates in each regression model. Then, we used the PROCESS macro for R (Hayes, 2022), Model 1, to test whether the association between perceived economic inequality, status anxiety, and social trust was moderated by social dominance orientation (SDO). We replicated this procedure to test whether SDO moderated the association between status anxiety and social trust with subjective well-being. We also estimated the indirect effects by computing a parallel mediation model, following the recommendations of Hayes (2022) (using 5000 bootstraps and interpreting 95% CI) (H4). Finally, conditional process analyses were performed to examine whether the indirect effects of perceived economic inequality depended on people's levels of SDO (H5). As a robustness check, we tested whether an alternative system-justifying ideology, such as meritocratic beliefs, replicates the hypothesized moderating effects of Social Dominance Orientation (see Table S2). We also doublechecked whether the perception of economic inequality in everyday life (PEIEL), as another operationalization of perceived economic inequality (see Table S3), replicates our findings. We examined whether socioeconomic status moderated the hypothesized relations in further exploratory analyses.

Analyses were conducted in R (R Core Team, 2023) using the PROCESS macro (Hayes, 2022), the *lme4* (Bates et al., 2015), *psych* (Revelle, 2018), and *easystats* (Lüdecke et al., 2022) packages.



8 Results

8.1 Preliminary Results

Descriptive statistics and Pearson correlations between the variables included in this study are reported in Table 1.

8.2 Main Analysis

Hypothesis 1 We confirmed that perceived economic inequality was positively associated with status anxiety (H1a; β^2 =0.10, p<.001; 95% CI [0.05, 0.14]); and negatively related to social trust (H1b; β = -0.15, p<.001; 95% CI [-0.20, -0.11]) and subjective well-being (H1c; β = -0.13, p<.001; 95% CI [-0.18, -0.08]). In further exploratory analyses, we used multilevel modeling to account for objective levels of economic inequality and income per capita at the provincial level. We found that neither objective economic inequality nor Income per Capita at the Province level was associated with status anxiety, social trust, and subjective well-being (see supplementary material, Exploratory Analyses 3).

Hypotheses 2. We did not confirm our hypotheses that Social Dominance Orientation moderates the effect of perceived economic inequality on status anxiety (H2a: $\beta = -0.01$, p=.699; 95% CI [-0.05, 0.03]) and social trust (H2b: $\beta = 0.03$, p=.182; 95% CI [-0.01, 0.07]) (see Table 2, M1 and M2). For robustness tests, we examined whether replacing Social Dominance Orientation with another system-justifying ideology (i.e., meritocracy beliefs) would replicate this finding. Indeed, we found that meritocracy beliefs did not mod-

Table 1 Descriptive statistics and Pearson correlation between variables

	Mean	SD	1.	2.	3.	4.	5.	6.	7.
1. Sub- jective well-being	6.42	2.02							
2. Perceived Economic inequality	5.48	1.16	-0.13***						
3. Social Trust	4.18	1.23	0.20***	-0.15***					
4. Status Anxiety	4.40	1.70	-0.34***	0.10***	-0.06*				
5. Social Dominance Orientation	2.43	1.06	0.05*	-0.24***	-0.02	-0.03			
6. Objective Socio- economic Status	4.02	1.67	0.23***	-0.01	0.02	-0.21***	-0.01		
7. Age	48.41	17.21	0.04	0.01	0.22***	-0.07**	0.03	-0.11***	
8. Sex (Female)	0.51	0.50	-0.02	0.01	-0.06*	0.04	-0.12***	-0.00	-0.34***

 $^{^{2}\}beta$ =Standardized regression coefficient.



erate the effect of perceived economic inequality on status anxiety and social trust (see Table S2 in the supplementary material).

Hypotheses 3. We disconfirmed H3a that SDO strengthens the association between status anxiety and subjective well-being (H3a: β =0.04, p=.044; 95% CI [0.00, 0.09]. Although the interaction term was statistically significant, simple slope analyses showed that patterns of associations were contrary to our expectations. That is, the negative effect of status anxiety on subjective well-being was stronger for participants scoring lower in SDO (-1SD, β = -0.34, p<.001; 95% CI [-0.40, -0.27]) than for participants with greater levels of SDO (+1SD, β = -0.24, p<.001; 95% CI [-0.31, -0.17]). Regarding H3b, we found no evidence that Social Dominance Orientation moderated the association between social trust and subjective well-being (H3b: β = -0.01, p=.584; 95% CI [-0.06, 0.03]) (see Table 2).

Hypothesis 4 We confirmed our hypothesis that perceived economic inequality was negatively associated with subjective well-being through status anxiety (H4a: $\beta_{Indirect}$ =-0.03, SE=0.01; 95% CI [-0.04, -0.01]) and through social trust (H4b: $\beta_{Indirect}$ =-0.03, SE=0.01; 95% CI [-0.04, -0.01]). The direct effect of perceived economic inequality on subjective

Table 2 Standardized regression coefficients for multiple regression analyses on status anxiety, social trust, and subjective well-being (bold numbers indicate p <.05)

and subjective							7.7.4.6		7.55.5	
	M1. Status Anxiety (with interaction PEI x SDO)		M2. Social trust (with interaction PEI x SDO)		M3. Subjective well-being		M4. Subjective well-being (with interaction SA x SDO)		M5. Subjective well-being (with interaction ST x SDO)	
Predictors	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p
(Intercept)	-0.01 (0.04)	0.777	-0.00 (0.04)	0.949	-0.01 (0.03)	0.677	-0.01 (0.04)	0.671	-0.01 (0.04)	0.728
Perceived inequality (PEI)	0.10 (0.03)	< 0.001	-0.17 (0.03)	< 0.001						
Social Dominance Orientation (SDO)	-0.01 (0.03)	0.791	-0.07 (0.03)	0.006	0.05 (0.02)	0.024	0.05 (0.02)	0.056	0.06 (0.02)	0.013
Objective SES	-0.22 (0.02)	< 0.001	0.04 (0.02)	0.095	0.16 (0.02)	< 0.001	0.17 (0.02)	< 0.001	0.22 (0.02)	< 0.001
Age	-0.09 (0.03)	< 0.001	0.23 (0.03)	< 0.001	0.00 (0.03)	0.968	0.04 (0.03)	0.108	0.03 (0.03)	0.340
Sex (Female)	0.02 (0.05)	0.756	0.02 (0.05)	0.721	0.03 (0.05)	0.570	0.03 (0.05)	0.527	0.02 (0.05)	0.645
PEI x SDO	-0.01 (0.02)	0.700	0.03 (0.02)	0.183						
Status Anxiety (SA)					-0.29 (0.02)	< 0.001	-0.29 (0.02)	< 0.001		
Social Trust (ST)					0.18 (0.02)	< 0.001			0.19 (0.03)	< 0.001
Status Anxiety x SDO							0.05 (0.02)	0.044		
Social Trust x SDO									-0.01 (0.02)	0.584
R ² / R ² adjusted	0.064 / 0.061		0.078 / 0.074		0.173 / 0.170		0.143 / 0.139		0.094 / 0.091	
AIC	4271.787		4250.001		4079.463		4134.512		4218.811	



well-being was still negative and statistically significant after controlling for mediators (β_{Direct} =-0.08, SE=0.02; 95% CI [-0.12, -0.03]). Together, the indirect effects through status anxiety and social trust accounted for 40.45% of the total effect³ of perceived economic inequality on subjective well-being (β_{Total} =-0.05, SE=0.01; 95% CI [-0.07, -0.03]).

Hypotheses 5. We did not confirm H5a that SDO increases the indirect effect from perceived economic inequality to subjective well-being through status anxiety (β <0.05, t(1525)=2.04, p=.041). Although the effect was statistically significant, it was opposite to what we had pre-registered. That is, the negative indirect effect of perceived economic inequality on subjective well-being through status anxiety was higher for people with low SDO (-1SD, β = -0.03, SE=0.01, 95% CI [-0.06, <-0.00]) compared to those with high SDO (+1SD, β = -0.02, SE=0.00, 95% CI [-0.03, <-0.01]).

Regarding H5b, we disconfirmed our expectation that Social Dominance Orientation moderates the indirect effect of perceived economic inequality on subjective well-being through social trust (H5b: $\beta = -0.01$, t(1525) = -0.38, p = .705) (see Fig. 2 for the hypothesized model diagram).

9 Discussion

The linkage between structural economic inequality and well-being has provided mixed results in the literature. Some theoretical models highlight the relevance of perceptions of economic inequality to understand better why and when inequality undermines well-being. In this regard, the Perceived Economic Inequality and Subjective Well-being suggest

³ Computed as the ratio of the indirect effects to the total effect (Hayes, 2022, p. 149), $\beta_{Total\ indirect}$ / $\beta_{Total\ effect}$

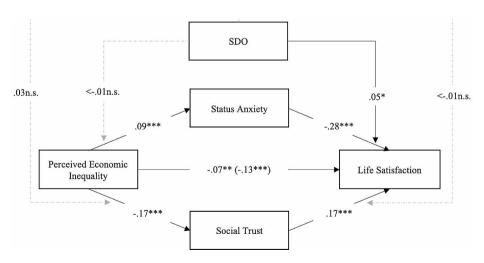


Fig. 2 Path diagram with standardized regression coefficients of the complete hypothesized model

=-0.053/-0.131.



that perceiving larger levels of economic inequality undermines subjective well-being via increased status anxiety and decreased social trust, and that this association is likely to be moderated by people's system-justifying ideologies (Willis et al., 2022). In this study, we provide one of the first empirical tests of this integrative model by using national survey data from Spain. In brief, we mostly confirmed that perceived inequality has direct and indirect (via status anxiety and social trust) negative effects on subjective well-being. Furthermore, these relationships seemed independent of people's levels of Social Dominance Orientation and structural economic inequality. There are three sets of findings to discuss from these findings.

The first set of findings refers to the direct effects of perceived inequality on subjective well-being, status anxiety, and social trust. These findings confirmed previous results from the literature related to the negative association between perceived economic inequality and subjective well-being (Knight & Gunatilaka, 2022; Oshio & Urakawa, 2013; Vezzoli et al., 2023). Indeed, we found that perceived, but not objective, economic inequality was negatively related to subjective well-being, replicating the results obtained by Vezzoli et al. (2023). Although objective inequality can still be negatively associated with subjective well-being, Knight et al. (2022) confirmed that perceived economic inequality is much more important in explaining subjective well-being than objective inequality. Therefore, our results highlight the importance of incorporating perceived economic inequality as a subjective process that can shed light on when economic inequality is linked to subjective well-being. In other words, people should be aware—at least to some extent—of economic inequality to be personally affected by it. To be clear, this is not to say that objective economic inequality does not matter, nor that we should reduce people's perceptions of economic inequality to improve their subjective well-being. Instead, we argue that reducing structural inequality can be reflected in people's perceptions of a fairer society and thus strengthen their social capital, ultimately promoting well-being (Bobzien, 2020; Ugur, 2021). In fact, despite the negative impact on subjective well-being, perceptions of economic inequality are important to motivate people to support measures aimed at reducing inequality (García-Castro et al., 2022; García-Sánchez et al., 2020). Thus, our findings suggest that structural indicators of economic inequality alone are not sufficient to explain the pernicious effects of economic inequality and that perceived economic inequality appears to be a relevant subjective process that may explain it (Jetten et al., 2021; Willis et al., 2022).

We also found that perceived economic inequality increased status anxiety and reduced social trust. These findings are aligned with two theoretical frameworks that complement each other. On the one hand, the Spirit Level model posits that status anxiety is at the core of the negative consequences of economic inequality (Wilkinson & Pickett, 2010). Thus, the positive relationship between perceived economic inequality and status anxiety confirms that the perception of larger income gaps increases the relevance of social class for navigating reality, leading people to feel anxious about losing their socioeconomic status (Jetten et al., 2020; Melita et al., 2021). Perceiving greater levels of economic inequality also fuels status-seeking, which imposes an additional psychological burden to accomplish societal expectancies, such as acquiring high-status products (Velandia-Morales et al., 2022). Interestingly, we found no association between objective economic inequality and status anxiety. This result is inconsistent with the proposal of status-related behavior and motivation (Walasek & Brown, 2015). This non-significant relationship between objective inequality and status anxiety can be due to low statistical power at the regional level (n=50) and can



reinforce the argument of Willis et al. (2022) that perceived economic inequality is a better predictor of individuals' outcomes, over and above structural indicators of inequality.

On the other hand, threats to social capital—e.g., weakening social ties and losing faith in institutions—can lead to economic inequality to negatively impact subjective well-being (Buttrick et al., 2017; Delhey & Dragolov, 2014; Sommet, 2023). This also confirms that perceiving higher economic inequality leads people to see their fellow citizens as more threatening (Cheng et al., 2021) and increases the social distance between social groups (Rodríguez-Bailón et al., 2020). Indeed, perceptions of economic inequality, along with reduced levels of social and political trust, threaten social cohesion (Delhey et al., 2018). Cultural differences (e.g., collectivism and individualism) could also influence the effect of perceived inequality on social trust. Thus, certain levels of social distrust may be adaptive to deal with contexts of high inequality and competitiveness (Sánchez-Rodríguez et al., 2022). Further research could explore the interplay between cultural and psychological factors that shape the correlates of economic inequality on people's well-being.

The second set of results indicates that status anxiety and social trust mediate the association between perceived economic inequality and subjective well-being. These results confirm prominent theoretical models proposing that status anxiety and social trust are pivotal in explaining the linkage between inequality and well-being (Buttrick et al., 2017; Wilkinson & Pickett, 2010). However, these models account for objective rather than perceived economic inequality. Importantly, we found that status anxiety and social trust explained two-thirds (59.31%) of the total effect of perceived economic inequality on subjective well-being. Thus, these mechanisms are likely to account for a significant portion of the association between perceived inequality and subjective well-being, over and above sociodemographic variables and objective economic inequality.

The role of status anxiety and social distrust in explaining the association between perceived economic inequality and subjective well-being confirms one of the core claims of Willis et al. (2022) that perceiving inequality is associated with increasing social distance and fostering competition between people. This idea is also supported by other theoretical models that explain the psychological underpinnings of economic inequality and well-being (Wilkinson & Pickett, 2010). For example, Jetten et al. (2021) argue that perceived economic inequality alters the signs of social class and fosters class-based identities that divide people and facilitate conflict. Similarly, Wienk et al. (2022) also reason that inequality perceptions weaken social ties and cooperation, harming people's subjective well-being. What these models have in common is that they all emphasize the role of social capital as a mechanism for explaining why perceptions of economic inequality can undermine well-being.

The third set of results concerns the conditional role of system-justifying on the correlates of perceived economic inequality. Contrary to our expectations, we found that Social Dominance Orientation (as a system-justifying ideology) did not moderate the effects of perceived economic inequality on status anxiety, social trust, and subjective well-being. Indeed, these results appear to be robust as an alternative ideology (i.e., meritocracy beliefs) did not moderate the effects of perceived economic inequality either. Thus, our findings suggest that perceived economic inequality increases status anxiety and social distrust regardless of people's ideological differences.

At least two reasons can explain the unexpected null effects of the moderating role of ideology. One explanation is that our sample did not cover people with high levels of SDO since the majority scored below the middle point of the scale (M=2.43, SD=1.06, Range=



[1, 7]). Therefore, respondents with above-average levels of SDO were still individuals who did not justify inequality. The low scores in SDO in our sample suggest that equality is a core cultural value in Spanish society. Future research should consider cultural differences in SDO to account for the relationship between perceived economic inequality and subjective well-being. Another potential explanation is that the content of SDO is more concerned about the legitimacy of inequality and dominance than about people's beliefs and feelings about themselves. Alternatively, socioeconomic status, rather than ideologies, might condition the effects of perceived economic inequality on subjective well-being, status anxiety, and social trust. Exploratory analyses, however, did not support this idea either, as objective socioeconomic status did not moderate the effects of perceived economic inequality (See Table S2 in the Supplementary Material). Therefore, our findings suggest that the Willis et al. (2022) model should be revised regarding which ideologies may condition the effect of perceived economic inequality on subjective well-being. One way to move forward is to be more specific about the ideologies that increase competition and individualism. Indeed, system-justifying ideologies may be too broad to capture the processes underlying the relationship between perceived inequality, status anxiety, and social trust. Further research could examine different ideologies to identify content-specific beliefs that shape the effect of perceived economic inequality on people's well-being (e.g., Social Darwinism or Belief in a Dangerous World).

Our study also has some limitations and opportunities for further improvement. Although we measured perceived economic inequality with two commonly used indicators that capture a broad sense of income disparities, this operationalization falls short of capturing the complexity of this construct. Some reviews have argued that perceptions of economic inequality can have different implications for people because of the groups of reference (close friends vs. overall society) or type of resources (income vs. wealth) that individuals have in mind when thinking about inequality (Jachimowicz et al., 2022). For instance, we partially replicated our findings using Perceived Economic Inequality in Everyday Life (PEIEL; García-Castro et al., 2019) as an alternative measure of perceived inequality (see Table S3 in the Supplementary Material). We found that PEIEL reduced subjective well-being through status anxiety (but not through social trust). This may suggest that perceived inequality at different levels may mobilize different mechanisms, affecting subjective well-being. Further research should try to validate our model by testing a more comprehensive set of measures of perceived economic inequality.

The use of a single item to measure life satisfaction also limits our ability to generalize our findings to all dimensions of subjective well-being. Although life satisfaction is a reliable and stable indicator of subjective well-being (Diener et al., 2018; Raudenská, 2023), future research should examine the effects of perceived economic inequality on other dimensions, such as positive or negative emotions, reduced symptoms of psychological distress, or overall happiness evaluations. Alternative measures of subjective well-being can capture other dimensions that fluctuate over time due to people's experiences, and such experiences are shaped by people's appraisals of inequality (Peters & Jetten, 2023). Therefore, perceptions of inequality could accompany fluctuations over time in emotional states. Experimental designs or experience sampling methods may assist in assessing the causal and longitudinal effects of perceived economic inequality on different dimensions of subjective well-being.



Another limitation of our study is the correlational nature of our data and the inability to rule out other potential mediators of the association between perceived economic inequality and subjective well-being. Although we pre-registered our hypotheses before collecting the data and relied on a sound theoretical model that synthesizes the extensive literature on the psychosocial consequences of inequality, we must still be cautious in interpreting causal relationships with correlational data. Therefore, we cannot rule out a potential reverse causality relationship, and there may be other potential mechanisms that were not accounted for. Still, our findings provide a starting point to build upon a causal research agenda in the future. We advocate for conducting experimental and longitudinal studies that manipulate perceived economic inequality and the psychosocial mechanisms (e.g., status anxiety and social trust) to provide stronger causal evidence. Regarding the inability to rule out other potential mediators, it is worth noticing that the psychology of economic inequality is still in its early stages of development (Jetten & Peters, 2019) and that we focused on a particular psychosocial model (Willis et al., 2022). However, other models can provide additional explanatory mechanisms helping to explain the complex relationship between perceived economic inequality and subjective well-being, such as relative deprivation (Osborne et al., 2019), perceived anomie (Sprong et al., 2019), and justice evaluations (Wienk et al., 2022). These mechanisms have the potential to make people feel unappreciated and unable to control their lives, impairing their subjective well-being.

In sum, our findings support the idea that perceived economic inequality undermines subjective well-being by increasing status anxiety and reducing social trust. As such, exacerbating status competition and widening social distance appear to explain why perceived economic inequality impairs people's well-being. Although system-justifying ideologies did not moderate any path of our model in the current research, the aim of future research could be to test if content-specific beliefs about personal or group economic success do so. The fact that objective economic inequality was not related to subjective well-being, status anxiety, and social trust does not mean that it is irrelevant to defining people's living conditions. Instead, we argue that perceptions of economic inequality, along with status anxiety and social trust, may help to understand why and when inequality can affect people's subjective well-being.

 $\label{lem:supplementary lnformation} Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s11205-024-03306-x.$

Funding This work was financially supported by the Grants PID2022-140252NB-I00 and PID2022-140048NB-I00 funded by MCIN/AEI/ 10.13039/501100011033, NORFACE Joint Research Programme on Democratic Governance in a Turbulent Age and co-funded by the Spain Research Agency [AEI, PCI2020-112285; PID2019-105643GB-I00], and the European Commission through Horizon 2020 under grant agreement No 822166. The sixth author of this manuscript received support from the University of Costa Rica (723-C4-004) and the Centre for Social Conflict and Cohesion Studies-COES (ANID/FONDAP/15130009).

Declarations

Ethics approval and consent to participate This study was approved by the Ethics Committee from the University of Granada, No. 969/CEIH/2019, following the ethical standards of the institutional and national research guidelines, and the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual involved in the study.

Competing Interests The authors have no relevant financial or non-financial interests to disclose.



Open Science Practices Data and materials used in this manuscript are publicly available at: https://osf.io/c8472/.

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