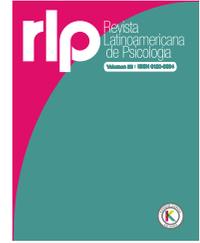# Revista Latinoamericana de Psicología

ORIGINAL

Concerns About Inequality in Health, Education and Income Jointly Predict Collective Actions

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Abstract Introduction: Income inequality is often tolerated and justified, but when it brings about disparities in other domains of life (e.g., health or education), it may be seen with different eyes. In this research, we aimed to explore concerns regarding economic inequality in health, education, and income, and its relationship to supporting collective actions to reduce inequality. **Method:** We used survey data (*N* = 20,204, 18 countries) from the Latinobarometer 2020. We conducted descriptive analyses, latent class analyses, and analyses of multilevel linear regression to test our hypothesis. **Results:** We found that people were more concerned about health access and education opportunities than income inequality. We also identified two classes of people: one class concerned about education and health and the other unconcerned about inequality in any domain. In addition, results showed that all concerns and class membership predicted greater support of collective actions to reduce inequality. **Conclusions:** These preliminary findings suggest that concerns about education and health disparities may serve to increase awareness of overall inequality and mobilise the public.

Las preocupaciones por la desigualdad en salud, educación e ingresos predicen conjuntamente las acciones colectivas

Resumen Introducción: La desigualdad de ingresos a menudo se tolera y justifica, pero cuando esta conlleva desigualdades en otros ámbitos de la vida (e.g., salud o educación), puede que se vea con ojos diferentes. En este artículo tratamos de explorar la preocupación por la desigualdad económica en salud, educación e ingresos, así como su relación con el apoyo a acciones colectivas para reducir la desigualdad. **Método:** Usamos datos secundarios (*N* = 20 204, 18 países) del Latinobarómetro 2020. Llevamos a cabo análisis descriptivos, análisis de clases latentes y análisis de regresión multinivel. **Resultados:** Encontramos que la gente estaba más preocupada por el acceso a la salud y las oportunidades en educación que por la desigualdad en el ingreso. También identificamos dos perfiles de personas: unas preocupadas por la educación y la salud, y otras poco preocupadas por la desigualdad en ninguno de los ámbitos. Además, los resultados mostraron que todas las preocupaciones y los distintos perfiles predecían un mayor apoyo a las acciones colectivas para reducir la desigualdad. **Conclusiones:** Estos hallazgos preliminares sugieren que la preocupación por las desigualdades en salud y educación podrían servir para aumentar la conciencia sobre la desigualdad general y movilizar al público.

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Economic inequality is a pervasive problem that spreads through distinct social spheres exceeding income or wealth disparities. For instance, socioeconomically disadvantaged individuals have a lower life expectancy, less access to medical services, greater probability of repeating a grade, and a lower performance in education than their counterparts with a higher socioeconomic status (OECD, 2016, 2019). Although there is general agreement that economic inequality is a serious issue, there is a lack of collective action and majority support for policies aimed at reducing it (OECD, 2021).

It is hypothesised that justice evaluations regarding the actual distribution of resources may lead to behaviours aimed at restoring justice (Jasso et al., 2016). More specifically, it is theoretically proposed that concerns about inequality would trigger engagement in collective actions (i.e., support of protests) to redress inequality when it is perceived as unfair (Jetten et al., 2021). Income inequality is not always judged as unfair (Starmans et al., 2017). As an example, salary-gaps might be seen as fair to the extent that they reflect differences in effort and deservingness (e.g., meritocratic beliefs; Barr & Miller, 2020, García-Sánchez et al., 2020). On the other hand, how fair is it that someone suffering from cancer cannot afford medical treatment? Recent evidence suggests people might be more concerned about economic inequality regarding health and education than income/wealth disparities (Macchia & Ariely, 2021). Importantly, greater concerns about inequality may lead to higher support of collective actions to reduce it (Jo & Choi, 2019).

In this research, we seek to corroborate and extend these preliminary findings by exploring concerns regarding economic inequality in various domains (health, education, and income) and their relationship in support of collective actions to reduce inequality. While most literature has focused exclusively on income or wealth, we also studied concerns about health access and education opportunities. Moreover, we explored whether concerns about inequality in each domain had a unique and independent effect on collective actions to reduce it, and if the combination of these concerns could better explain social mobilisation. Furthermore, we analysed these issues in Latin America, a unique and especially relevant context because it is one of the most inequitable regions in the world. Economic inequality in this region has been reduced in recent years, but the prevalence of protests and demonstrations has increased (Díaz Pabón & Palacio Ludeña, 2020; Justino & Martorano, 2016).

Concerns about inequality across domains

Literature on subjective economic inequality has mainly focused on perceptions and concerns about income gaps or wealth distributions (Castillo et al., 2022; Willis et al., 2022). This approach, however, involves several theoretical and methodological limitations (García-Castro et al., 2019; García-Sánchez et al., 2022). For instance, people may find it difficult to understand numeric and abstract representations of monetary resources, they could lack information about economic issues, and cognitive biases might influence their estimations (Castillo et al., 2022; Pedersen & Mutz, 2019). Furthermore, recent theoretical proposals and empirical research have shown that perceived inequality is a multidimensional phenomenon that encompasses various domains of people's everyday lives (García-Castro et al., 2021; García-Sánchez et al., 2022; London School of Economics and Political Science [LSE], 2018). Therefore, the view of economic inequality solely based on the distribution of wealth and income excludes other information relevant to the way people perceive their society. For instance, it does not consider differences in access to health services or education opportunities.

Importantly, from a multidimensional angle, concerns about inequality may vary across domains because different distributive justice principles may apply for each of them (Jasso et al., 2016; Starmans et al., 2017). For instance, people can justify income inequality by thinking that their socioeconomic position is the result of hard work (García-Sánchez et al., 2020). However, this belief could be less relevant to a person suffering from cancer who needs an unaffordable treatment. In this regard, while merit is a relevant aspect for distributing economic resources, health and education can be considered human rights (United Nations, 1948, art. 25 and 26), and therefore, might be less dependent on deservingness.

To our knowledge, very few studies to date have compared people's concerns about economic inequality in different domains. As an exception, Macchia and Ariely (2021) asked participants to imagine that they were moving to a different country and that their place within the income distribution would be randomly assigned. Next, they had to indicate how they would distribute wealth and good educational and good health resources, across income quintiles. Results showed that people accepted more inequality with respect to wealth than in the domains of health or education, in which they desired an almost egalitarian distribution. Consistently, Howarth et al. (2019) showed that the number of people preferring egalitarian sharing was much lower in the wealth domain than in the health sphere (e.g., 5% vs. 46%). Although this evidence is preliminary, it points out that some domains of economic inequality might be less accepted than others. Furthermore, researchers must investigate whether concerns about inequality, beyond monetary or financial resources, can be associated with participation in collective actions.

Concerns About Inequality and Collective Actions

Whether economic inequality can foster collective actions is still an open question. From a theoretical perspective, social grievances—such as the experience of large economic gaps—are at the heart of protests (Jetten et al., 2021; van Stekelenburg & Klandermans, 2013; van Zomeren et al., 2008). In fact, in an analysis of worldwide protests, Ortiz et al. (2020) observed that the lack of economic justice was the main reason that motivated people to protest. However, other empirical research has found that indicators of economic inequality at a macrolevel (e.g., Gini index) are marginally associated with collective actions to reduce it (Jo & Choi, 2019), or they may even be negatively associated (Dubrow et al., 2008; Solt, 2015).

Concerns about economic inequality, rather than objective indicators, might be a better predictor of people's responses to inequality (Jo & Choi, 2019; Willis et al., 2022). Although research on the relationship between concerns about economic inequality and support of collective actions

is surprisingly scarce, some studies show a positive association (Jo & Choi, 2019). For instance, the belief that the government should reduce income inequality between the rich and the poor was related to a greater participation in collective actions in Chile (Castillo et al., 2012) and Latin America (Justino & Martorano, 2016). Uniformly, using cross-national data from 45 countries, Jo and Choi (2019) showed that perceived income inequality and preferences for redistribution were positively associated with involvement in collective actions. Nevertheless, none of these studies have investigated whether concerns about economic inequality across various domains (e.g., health or education) could play a differential role in support of collective actions to reduce it.

Indirect evidence suggests that exploring the effect of concerns about economic inequality in domains such as health and education (beyond income disparities) on collective actions is a promising direction. For instance, Ortiz et al. (2020) showed that 12% of protests worldwide denounced inequalities in income and wealth, but another 17% of protests were driven by reforms that threaten the quality and quantity of public services, such as education and health. From this perspective, recent outstanding social movements have had education inequalities at their cores, such as in the cases of Chile (Huenupi, 2021), Colombia, and Brazil (Nava & Grigera, 2022). In addition, protests against health disparities have increased, becoming much more visible after the onset of the COVID-19 pandemic (Daniels, 2021; Kim et al., 2020; Rodríguez-Bailón, 2020). Thus, it seems that considering concerns across various domains —instead of just considering wealth or income inequality— could better explain participation in collective actions.

The present research

In this research, we addressed several limitations of previous literature. Although economic inequality permeates several social spheres, such as health or education, most of the studies in this field have focused exclusively on how people perceive and react to income or wealth disparities (e.g., salary gaps; Castillo et al., 2022). Therefore, concerns about economic inequality in other domains have been largely unexplored. Another important gap in the literature is that evidence regarding the relationship between concerns about economic inequality and support of collective actions is surprisingly scarce (Jo & Choi, 2019). Specifically, to our knowledge, no one had tested whether concerns about economic inequality in health and education would predict support of collective actions.

We established two main objectives. First, we analysed concerns about economic inequality in health, education, and income. We predicted that people would be more concerned about education opportunities or health access than income inequality (H1). Moreover, we identified people's profiles based on their concerns about health access, education opportunities, and income inequality. Second, we examined the relationship between concerns about inequality and support of collective actions to reduce inequality. We expected that concerns about health access, education opportunities, and income inequality would be associated with greater support of collective actions to reduce inequality (H2). In addition, we explored whether people's profiles

based on their concerns about inequality could predict support of collective actions to reduce inequality.

Furthermore, we used data from Latinobarometer 2020, which provides a unique perspective in the study of inequality. Latin America has one of the highest levels of income inequality in the world (UNU-WIDER, 2022), despite the reduction of inequality that the region has experienced in recent decades (Justino & Martorano, 2016). This pattern, however, may have been reversed by the COVID-19 pandemic, which has hit the most vulnerable social groups harder (Blofield et al., 2020). Moreover, Latin America was one of the regions with the largest incidence of protests between 2006-2020 (Ortiz et al. 2020), and this tendency continues to date (Díaz Pabón & Palacio Ludeña, 2020). Therefore, the social unrest in Latin America might not solely be driven by changes in objective economic indicators, but could rather be associated with a combination of subjective mechanisms, such as concerns about inequality.

Method

Participants

We used high quality survey data from the Latinobarometer 2020 (Corporación Latinobarómetro, 2020)[1]. The sample comprised 20,204 participants interviewed in 18 Latin American countries ($N_{average}$ = 1,122.4, Min = 1,000, Max = 1,204). Specifically, the countries included were Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. Because we used a listwise deletion method based on the variables of interest, the final dataset was composed of 16,463 cases (M_{age} = 40.35 years, SD = 16.21, Min = 16, Max = 96, 50.02% female) within the 18 countries ($N_{average}$ = 914.61, Min = 638, Max = 1,056). Statistics of each country are available in Supplementary Materials.

Measures

Concerns about inequality in income, education, and health. Concerns about inequality across domains were assessed with the following question: "In your opinion, which are the worst types of inequality in (country)?" Participants were provided a range of options and were able to choose (1) or not choose (0) any of them. Our main interests were the options "Education opportunities," "Access to health services," and "Income inequality". The other options participants could choose from are presented in Supplementary Material (p. 2). Participants selected one, two, all, or none of these options.

Support of collective actions to reduce inequality. We used three measures related to people's support of collective actions to reduce inequality: "How willing would you be to demonstrate and protest for *higher wages and better working conditions*?", "How willing would you be to demonstrate and protest for *better health and education*?",

and "How willing would you be to demonstrate and protest for *a more egalitarian society*?". All items had a 10-point Likert-response format ranging from 1 (*not at all willing*) to 10 (*completely willing*). The first two items reflected the intention to protest for reducing inequality in each specific domain. We also included the third item as we were interested in knowing whether concerns about health and education could also relate to the willingness to protest for equality in a broader sense.

Covariates

Political ideology. This covariate was assessed through a single-item measure ("In politics, people normally speak of "left" and "right." On a scale where 0 is left and 10 is right, where would you place yourself?"). Lower scores indicated more inclination to the left political ideology.

Educational attainment. To measure educational attainment, participants indicated their level of education. They specified if they had any studies, the last year of education, if they had complete (or incomplete) superior technical studies, or complete (or incomplete) university studies. Responses were coded from 0 to 17 to indicate higher levels of education as scores increased.

Subjective social class. Participants' subjective social class was assessed by a single-item measure ("People sometimes describe themselves as belonging to a social class. Would you describe yourself as belonging to…")? Responses could range from 1 (*upper class*) to 5 (*lower class*). Responses were recoded to indicate a higher social class as scores increased to facilitate the interpretation of results.

Gini and Human Development Index (HDI). The Gini was retrieved primarily from the World Income Inequality Database (UNU-WIDER, 2022). We used the World Bank (2022) data to retrieve economic indicators when we did not find information on several country-year groups. We retrieved HDI from the United Nations Development Programme (UNDP, 2022).

Analytical strategy

First, we explored concerns about economic inequality across domains. We analysed frequencies to find out which domains were more prevalent at individual and country levels. Moreover, we conducted a latent class analysis (LCA) to identify underlying latent classes of people based on their responses to concerns about education opportunities, access to health services, and income inequality. LCA is a statistical procedure used to identify qualitatively different subgroups within populations who share certain characteristics (Weller et al., 2020). This method has been used to describe common patterns in individuals' responses as to how they perceive economic inequality (García-Castro et al., 2021).

Secondly, we tested whether concerns about inequality across domains could be associated with greater support of collective actions to reduce inequality. We estimated two linear multilevel regression models for each outcome variable: one model included as main predictors concerns about (a) education opportunities, (b) access to health services, (c) and income inequality, along with covariates; in

the other model, we included the participant's class membership, resulting from the combination of concerns about inequality, as a predictor. These are two ways of evaluating Hypothesis 2; separate and combined inequality concerns in terms of education, health, and income would be associated with greater support of collective actions to reduce inequality. Models were conducted with random-intercepts and fixed-slope (using Maximum Likelihood estimator). We used Country as the clustering variable and estimated fixed effects for the predictors because of the limited number of countries to estimate random slopes. All fitted models accounted for the potential influence of individual- and contextual-level variables that can be associated with support for collective actions, such as political ideology, educational attainment, social subjective class, gender, age, Gini, and HDI (Justino & Martorano, 2016).

All the analyses reported in this paper were supported by R software (R Core Team, 2022). The R code to reproduce our analyses is available at: https://osf.io/b6f9m/

Results

Concerns about economic inequality across domains

In line with H1, analysing differences between proportions revealed that, in general, people worried more about education opportunities (χ^2 = 2264.7, p < .001, CI 95% [.22–.23]) and health access (χ^2 = 3009.6, p < .001, CI 95% [.26–.28]) than income inequality. A significant share of people mentioned education opportunities (43.1%; CI 95% [42.4–43.8%]) and health access (47.0%; CI 95% [46.3–47.7%]) as the worst expressions of inequality in their country. In contrast, only 20.2% (CI 95% [19.7–20.8%]) of people referred to income inequality. That is, the prevalence of inequality concerns in the domains of education and health was at least two times that of the domain of income inequality. At the country level, we observed the same tendency.

Despite finding some differences between countries[2], in general, concerns about education opportunities and health access were higher than concerns about income inequality (Figure 1). Likewise, the average percentages (between countries) of people who mentioned education and health domains were greater than the mean proportion of people who referred to income (Figure 2). Consistently, supplementary analyses showed that people were more willing to protest for better health and education than for higher wages and better working conditions (See Section 3.2. of Supplementary Materials).

We also found various profiles of people regarding inequality concerns through LCA. First, we estimated a one-class model, and then added classes until we identified the model with the best fit. We examined model fit based on our theoretical understanding of inequality concerns and

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2   In the cases of Uruguay and Costa Rica, we cannot observe differences between concerns about income inequality and concerns about education opportunities and health access. This might be due to the relative strength of public education and health systems of these countries in comparison with other Latin American countries (Cecchini et al., 2014).
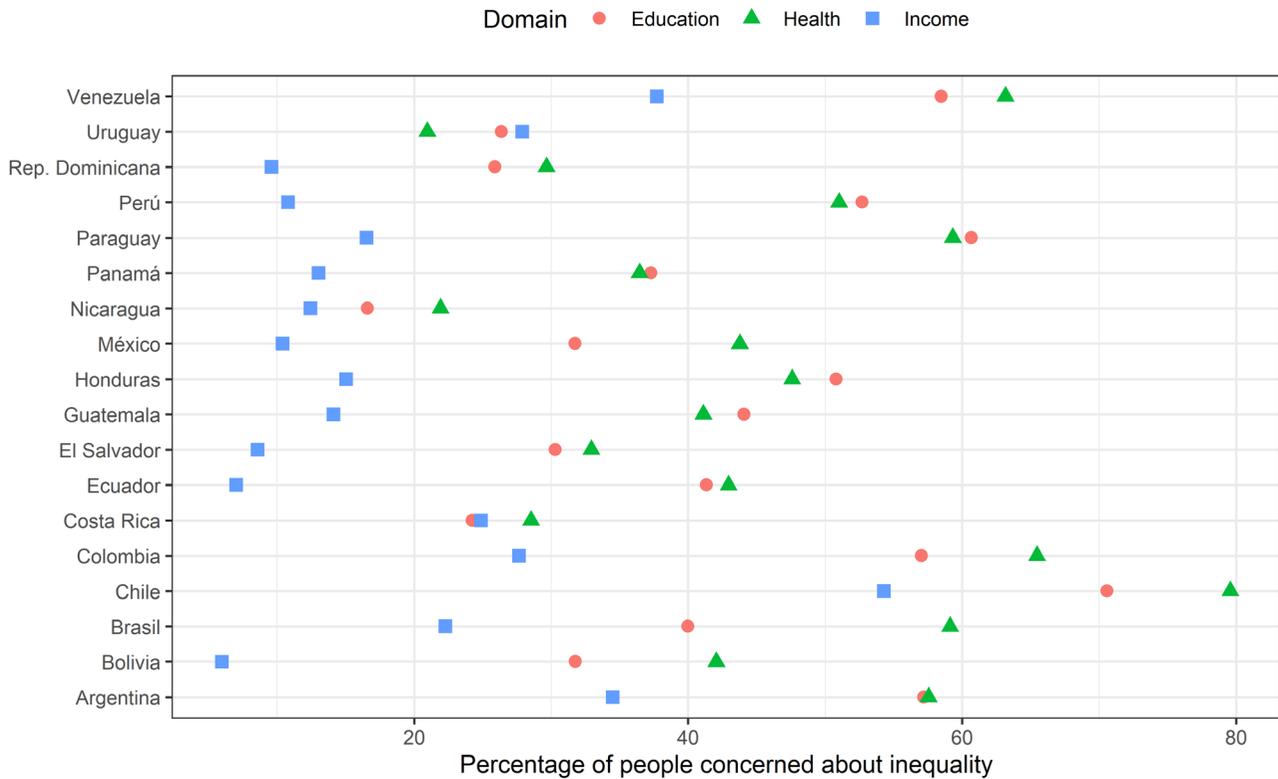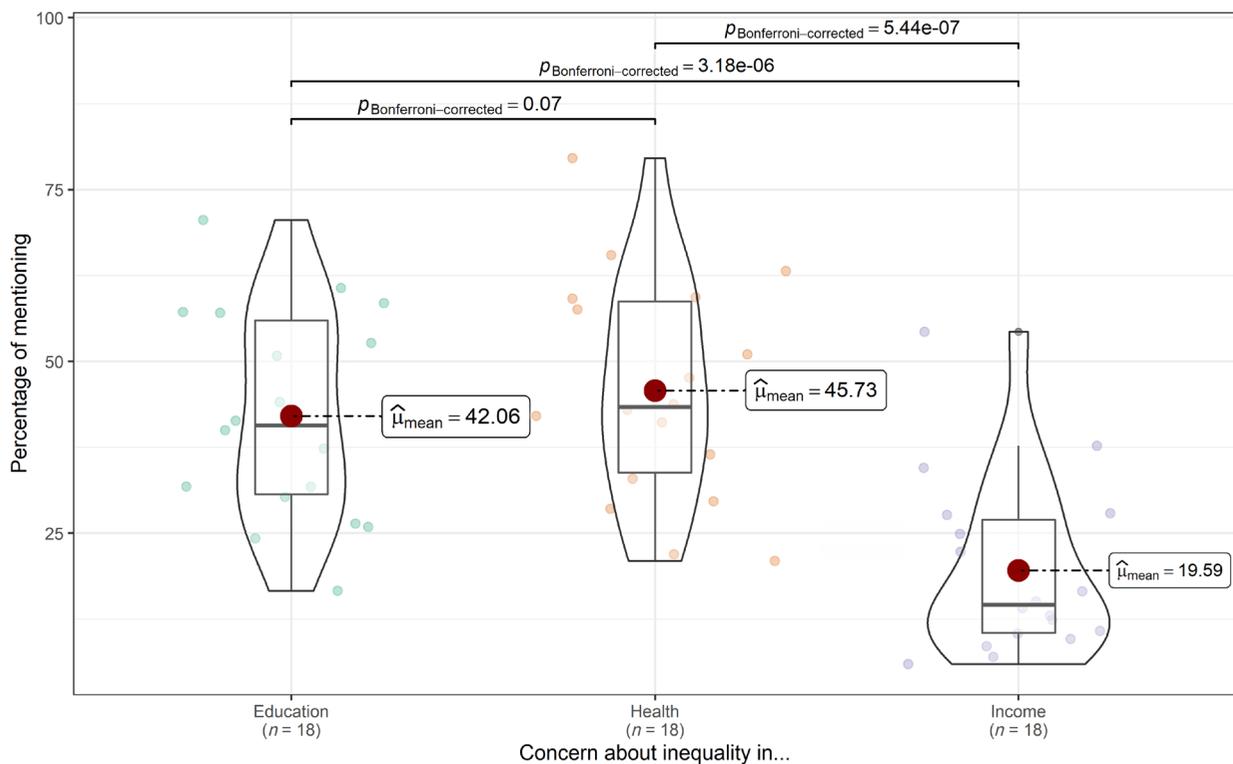
Figure 1. Percentage of people that mentioned each domain of economic inequality in each country

Note: Red dots indicate the average percentage of the 18 countries in each variable; width of each graph shows the form of the distribution of the data; boxplots indicate the interquartile range above the mean in each variable; horizontal lines show the median; and coloured small dots refer to the scores in each country; p values of comparison between means after Bonferroni correction are shown in the upper side.

Figure 2. Violin plot with average percentage (between countries) of people that mentioned each domain of economic inequality

the following statistical criteria (Weller et al., 2020): the Bayesian information criterion and the Akaike information criterion, with lower values of these statistics indicating better model fit (Nylund et al., 2007; Weller et al., 2020). Thus, we decided to retain a two-class model. Table 1 presents LCA results for various class models.

Regarding profiles in concerns about inequality, Class 1 was the most prevalent (69.36%, *n* = 11,419), while Class 2 was less frequent (30.64%, *n* = 5,044). Participants in Class 1 (unconcerned about inequality) had a low probability of mentioning education opportunities (23.78%) and health access (28.15%), and an even lower probability of considering income inequality (14.12%) one of the worst expressions of inequality in their country. In contrast, people in Class 2 (concerned for health and education inequalities) had a very high probability of mentioning education opportunities (97.34%) and health access (97.49%), and still a low probability of referring to income inequality (37.95%). Importantly, whereas people unconcerned about inequality were unlikely to mention any of the domains, people concerned about health and education were still less concerned about income inequality (Figure 3). See Supplementary materials (Table S3) to know about various determinants of class membership (e.g., age, gender, political ideology).

Concerns about economic inequality across domains and support of collective actions to reduce inequality

Consistent with H2, multilevel regression analyses revealed that concerns about inequality across domains might lead to greater support of collective actions to reduce inequality. Specifically, concerns about inequality in the domains of health and education were positive and significantly associated with support of collective actions across all three measures, even after controlling for income inequality concern (Table 2; M1a, M2a, M3a). We also controlled for covariates[3]. That is, the greater concern about health access and education opportunities, the greater willingness to participate and demonstrate for higher wages, better working conditions, better health and education, and a more egalitarian society.

Moreover, class membership obtained in the LCA was also a significant predictor of collective actions (Table 2; M1b, M2b, M3b). More specifically, people highly concerned (vs. unconcerned) about education and health were more willing to demonstrate and protest for higher wages, better working conditions, better health and education, and a more egalitarian society. All models confirmed our second hypothesis.

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3 Women (vs. men), youth, and left-wing people were more likely to support the three collective action indicators; subjective social class negatively predicted willingness to protest for higher wages and better working conditions and also for a more egalitarian society (the later only when we included class membership as predictor); and educational attainment was negatively related to willingness to protest for higher wages and working conditions but positively related to willingness to protest for a more egalitarian society. None of the predictors at the country level were significantly associated with support of collective actions.

Discussion

The first aim of our research was to explore concerns about economic inequality in three domains: health, education, and income. Confirming H1, in general and in almost every country, people were more concerned about health and education disparities than about income inequality. Notwithstanding, we observed variations between countries that may reflect differences in their political systems and should be further explored. Furthermore, we found two profiles of people (or classes) by combining their concerns about economic inequality across domains. The first class was people not concerned about economic inequality in any domain, and the second class was people concerned about health access and education opportunities. Crucially, both classes had a low probability of mentioning income inequality as one of the worst expressions of inequality in their country.

These results support findings of prior research showing that people might desire more egalitarian distribution in the domains of health and education compared to income or wealth (e.g., Howarth et al., 2019; Macchia & Ariely, 2021). More broadly, these results speak in favour of recent empirical evidence (García-Sánchez et al., 2018, 2022) and theoretical proposals (LSE, 2018) that point to economic inequality as a multidimensional phenomenon that goes beyond income or wealth domains. Importantly, our findings might signal that, compared to health and education, income could be a less relevant domain in people's concerns about economic inequality. This does not mean that income disparities are less important. Instead, we argue that taking into account other types of inequality, rather than only income disparities, could be critical to better understand people's concerns about economic inequality (Jachimowicz et al., 2020). As such, it may be important to increase awareness of inequality by encompassing all the domains that impact people's everyday lives.

Our second aim was to analyse the relationship between concerns about economic inequality and support of collective actions to reduce inequality. In line with the H2, we found that concerns about health access and education opportunities (besides income inequality) were positively associated with support of collective actions to reduce inequality. In the same line, results showed that people concerned about health and education (Class 2) were more prone to engage in collective actions than those unconcerned about inequality (Class 1).

These findings are consistent with theoretical approaches of distributive justice signaling the key role of justice evaluations about the actual distribution (e.g., concerns about inequality) as a driving force to restore justice (Jasso et al., 2016). In our study, concerns about inequality were associated with greater willingness to participate in collective actions to reduce economic inequality. Importantly, people were especially concerned about health and education, which may signal that redistributive justice principles could be different for each domain. We did not explore the different mechanisms that may operate in justice evaluations of inequality in each domain as it was beyond the scope of this research. Nevertheless, we hypothesise that while income inequality can be seen as fair by reasons of effort and deservingness (Barr & Miller, 2020, García-Sánchez et al., 2020), it may be harder to justify inequality in health and education with such meritocratic beliefs.

Table 1. Fit statistics for latent class model solutions of concerns about inequality of education, health, and income

Number of classes	AIC	BIC	G2	χ²	Entropy	MLL	df
1	62075.51	62098.63	3583.238	3855.743	1.885121	-31034.75	4
2	**58500.27**	**58554.23**	6.500481e-07	6.435309e-07	1.776294	-29243.13	0
3	58508.27	58593.07	7.850027e-08	7.273968e-08	1.776294	-29243.13	-4

AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; df = degrees of freedom; G^2 = likelihood ratio/deviance statistic; MLL = maximum log-likelihood; χ^2 = chi-square goodness of fit.

Table 2. Multilevel regression models of collective actions to reduce inequality

Predictors	Higher wages and better working conditions		Better health and education		A more egalitarian society	
	M1a Estimates	M1b Estimates	M2a Estimates	M2b Estimates	M3a Estimates	M3b Estimates
(Intercept)	7.68 *** (0.58)	7.94 *** (0.41)	8.39 *** (0.52)	8.41 *** (0.38)	8.20 *** (0.49)	8.12 *** (0.35)
Education opportunities	**0.21 *** (0.06)**		**0.19 *** (0.05)**		**0.24 *** (0.05)**	
Access to health services	**0.27 *** (0.06)**		**0.36 *** (0.05)**		**0.22 *** (0.05)**	
Income inequality	**0.15 * (0.07)**		**0.21 *** (0.06)**		**0.14 * (0.06)**	
Education opportunities (country-level)	0.57 (3.08)		1.77 (2.77)		1.30 (2.58)	
Access to health services (country-level)	1.49 (3.09)		-0.60 (2.77)		-0.81 (2.58)	
Income inequality (country-level)	-2.51 (1.91)		-2.91 (1.71)		-2.55 (1.60)	
Class membership		**0.45 *** (0.06)**		**0.52 *** (0.05)**		**0.45 *** (0.06)**
Class membership (country-level)		0.88 (1.19)		-0.01 (1.09)		-0.53 (1.00)
Political Ideology	**-0.01 *** (0.00)**	-0.01 *** (0.00)	-0.01 *** (0.00)	-0.01 *** (0.00)	**-0.01 *** (0.00)**	0.01 * (0.01)
Subjective Social Class	**-0.05 * (0.03)**	-0.05 * (0.03)	-0.00 (0.03)	-0.00 (0.03)	0.00 (0.03)	**-0.02 *** (0.00)**
Gender	**-0.34 *** (0.05)**	-0.33 *** (0.05)	-0.30 *** (0.05)	-0.30 *** (0.05)	**-0.31 *** (0.05)**	**-0.31 *** (0.05)**
Age	**-0.03 *** (0.00)**	-0.02 *** (0.00)	-0.02 *** (0.00)	-0.03 *** (0.00)	**-0.02 *** (0.00)**	**-0.02 *** (0.00)**
Educational attainment	**-0.02 ** (0.01)**	-0.02 ** (0.01)	0.00 (0.01)	0.00 (0.01)	**0.01 * (0.01)**	**0.01 * (0.01)**
Gini Index (country-level)	3.61 (4.43)	3.24 (3.95)	2.83 (3.98)	1.24 (3.62)	1.55 (3.71)	-0.03 (3.33)
HDI (country-level)	5.30 (3.11)	3.54 (2.72)	2.90 (2.79)	0.71 (2.49)	2.54 (2.60)	0.60 (2.30)
Random Effects						
Within-country variance	10.53	10.53	8.96	8.96	9.56	9.56
Between-country variance	0.48	0.48	0.39	0.41	0.33	0.34
Intraclass correlation	0.04	0.04	0.04	0.04	0.03	0.03
N (countries)	18	18	18	18	18	18
N (participants)	16463	16463	16463	16463	16463	16463
Marginal R² / Conditional R²	0.043 / 0.085	0.037 / 0.079	0.035 / 0.075	0.026 / 0.068	0.025 / 0.058	0.019 / 0.053

Note. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Results also speak in favour of theoretical models of collective actions describing that concerns about inequality may trigger social mobilisation (Jetten et al., 2021; van Stekelenburg & Klandermans, 2013; van Zomeren et al., 2008). In the same line, previous empirical evidence has shown that concerns about income inequality may promote collective actions (e.g., Jo & Choi, 2019; Justino & Martorano, 2016). However, our research might add that concerns about economic inequality across different domains (e.g., health or education) could play a differential role in participation in collective actions to reduce it. That is, concerns about each domain may have independent effects that can contribute, all together, to collective actions aimed at reducing economic inequality. In this sense, we argue that taking into account that people understand and react to economic inequality in different dimensions might be relevant for pursuing social change.

Another important contribution of our research is that it may help to understand the case of Latin America, where economic inequality has decreased but protests have risen in last decades (Díaz Pabón & Palacio Ludeña, 2020; Justino & Martorano, 2016; Ortiz et al., 2020). Some have argued that despite reductions of inequality, people remained dissatisfied with the quality of public services, such as education or health (Justino & Martorano, 2016). For instance, Chile's recent social movement in favour of public education illustrates this reality (Huenupi, 2021). Our findings highlight the importance of concerns about economic inequality in these domains and their clear connection with participation in collective actions to reduce inequality. This research might shed some light on a path for the emergence of social movements to reduce economic inequality in Latin America, still one of the most unequal regions in the world (UNU-WIDER, 2021).

At this point, we acknowledge some limitations of this research and outline some directions for future investigations. First, this study design does not allow probing relationships of causality. Future studies should implement experimental designs to test whether concerns about economic inequality in different domains could actually promote collective actions. Second, we analysed responses to single-item measures, which have limited psychometric properties. Nevertheless, the series of results presented were based on various collective-actions indicators used in survey research. In the future, we encourage other researchers to use other measures, such as scales with several indicators, registering participation in collective actions, or designing behavioural tasks. Third, the characteristics of the sample may jeopardise the generalisation of our findings in other regions of the world, where public services of health and education might be covered more efficiently (such as Europe). Future studies should explore this question in different regions of the world, so we can examine potential differences between political systems, cultures, economic models, and so forth.
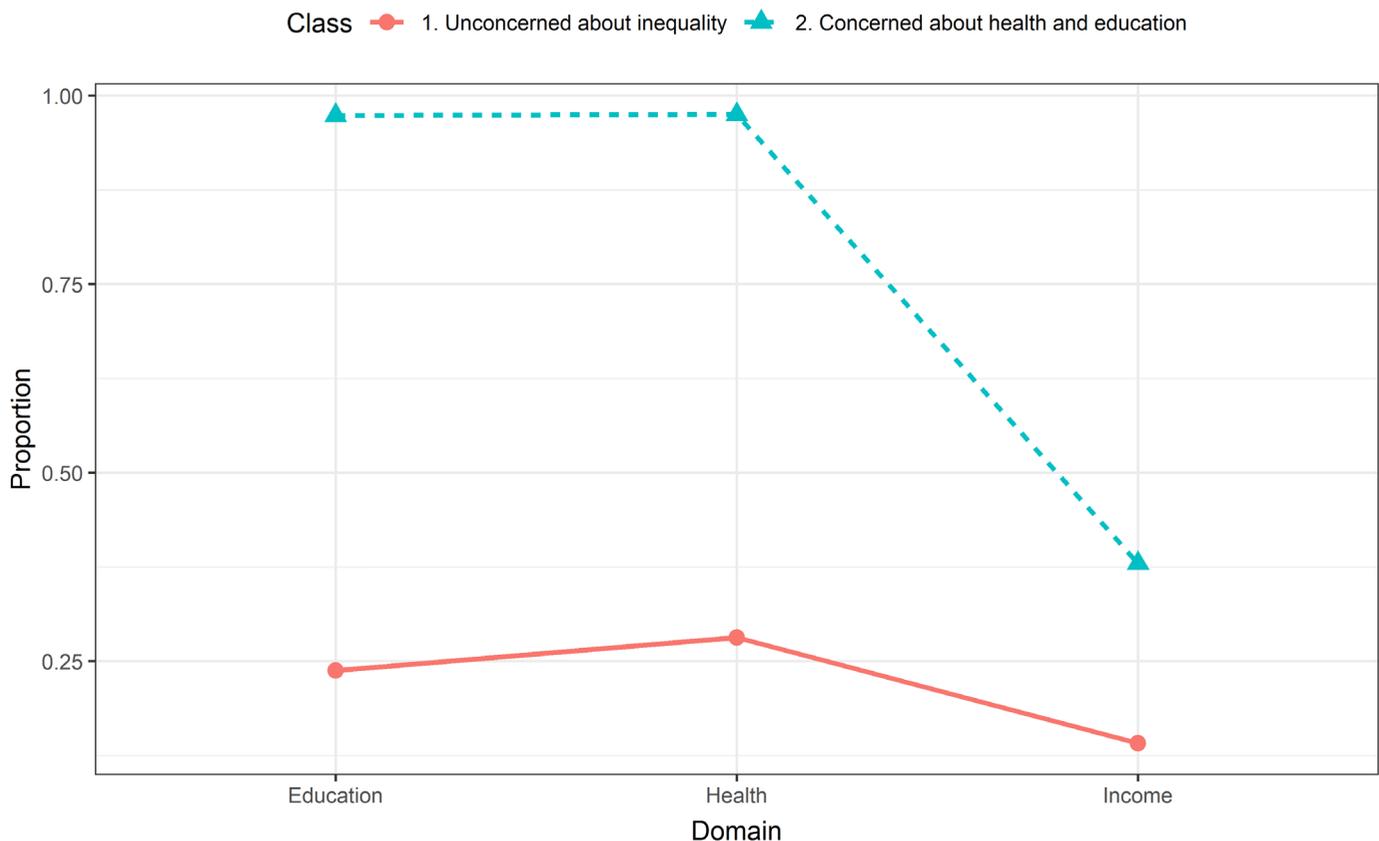

Figure 3. Probability of mentioning each domain of economic inequality as a function of latent class membership

Conclusions

One key idea that we can take away from this research is that people might be more concerned about other domains of economic inequality (e.g., health access or education opportunities) rather than income differences. Nevertheless, the message is not that income inequality does not matter, as income disparities are at the base of economic and social inequalities. In this sense, our findings may denote a lack of connection between income differences and their effect on related domains such as health or education. We must reduce income disparities to reduce inequality in the other domains. Working only on education or health inequalities would have a minor impact on economic inequality (Breen & Chung, 2015) and its several negative effects for individuals and our society.

The other important message of our research is that concerns about other domains of inequality besides income disparities (e.g., health, education, or other unexplored domains) may contribute to social mobilisation. In this regard, as concerns about health and education could be higher than concern about income inequality, they might serve as a common ground for initiating collective actions to reduce economic inequality. This preliminary evidence may have important implications for policy implementation. Specifically, media and political discourses could emphasise the effect of economic inequality in health and education as a way of increasing concerns about economic inequality and mobilising the public to reduce it.

Declaration of interest

None.

Data availability statement

The data that support the findings are available at https://www.latinobarometro.org/latContents.jsp.

Acknowledgments

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