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Legitimacy Moderates the Relation Between Perceived and Ideal Economic Inequalities

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Abstract In this paper we examined the joint effects of perceived economic inequality and legitimacy on ideal economic inequality. We hypothesized that only for those individuals who legitimize inequality, perceived inequality will be positively related to ideal inequality. Conversely, for individuals that do not legitimize inequality, a weaker relation between these variables will be observed. We tested these ideas in two studies. In Study 1, we measured perceived and ideal inequalities (i.e., pay gap) and individual differences in the legitimization of inequality. In Study 2, we measured perceived and ideal inequalities using a novel abacus procedure in which participants had to allocate resources to the different income quintiles, and we then manipulated the legitimacy (vs. illegitimacy) of economic inequality. According to our hypothesis, in both studies we found that when individuals legitimize inequality (vs. when they do not), the relation between perceived and ideal economic inequalities tends to be stronger.

Keywords Economic inequality · Income inequality · Pay gap · Legitimacy · System justification

Introduction

Economic inequality has become a pervasive phenomenon in today's societies (Jencks, 2002; Neckerman & Torche, 2007). The economic gap between the most and the least privileged individuals has become wider during the past few decades in

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the most affluent societies (Pickett & Wilkinson, 2010), and Spain has been no exception. In fact, from 2007 to 2012, economic inequality in Spain has severely increased (CES, 2013). In 2007, at the beginning of the economic crisis, the richest 20 % earned 5.5 times more than the poorest 20 %. By 2014, this difference increased to 6.8 times more (EUROSTAT, 2014).

Economic inequality tends to be associated with undesirable effects. It correlates negatively with the health of the population and positively with the level of crime and unwanted pregnancy (Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997; Kennedy, Kawachi, Prothrow-Stith, Lochner, & Gupta, 1998; Pickett & Wilkinson, 2010). Economic inequality is also related to lower levels of happiness (Alesina, Di Tella, & MacCulloch, 2004; Oishi, Kesebir, & Diener, 2011) and trust (Delhey & Dragolov, 2013; Kawachi et al., 1997; Uslaner & Brown, 2005). All in all, economic inequality is one of the predictors of social dysfunction, affecting members of both disadvantaged and advantaged groups (Pickett & Wilkinson, 2010).

Although individuals usually agree we should be living in a more equal society (Norton & Ariely, 2011; Norton, Neal, Govan, Ariely, & Holland, 2014), they differ in their ideal level of economic inequality; for instance, they differ in their opinion on the ideal earning difference between a blue-collar worker and a chief executive officer (Kiatpongsan & Norton, 2014).

What influences individuals' opinions on the ideal or fair level of inequality? Several studies have shown one of the best predictors of ideal inequality is the perceived current level of inequality (Castillo, 2011; Hadler, 2005; Shepelak & Alwin, 1986; Osberg & Smeeding, 2006). In other words, how much inequality individuals perceive could determine how much inequality they think there should be.

In this paper, we examined whether this relation between perceived and ideal inequalities has a motivational basis. Although previous studies have shown that the way things are provides a frame of reference of how one believes they should be (Kay et al., 2009), these studies were not focused on the justification of the economic system. Thus, in this study, using correlational and experimental methods, we investigated whether the relation between perceived and ideal economic inequalities has a motivational ground. We predicted that the relation between these two variables would be stronger for those individuals who are more ideologically motivated for justifying the status quo than for those who are not.

Additionally, we used a novel approach for measuring perceived and ideal inequalities. Perceived inequality has been measured through a pay gap index, that is, the difference between the earnings of high- and low-status workers (Castillo, 2011; Kelley & Evans, 1993; Osberg & Smeeding, 2006). However, the pay gap measure could be affected by different variables. For instance, participants tend to think about their own earnings when they think about the average earnings (Wegener, 1990), and information about high salaries could be difficult to estimate for individuals who earn much less (Castillo, 2011). In this study, we used the inequality abacus paradigm, an intuitive measure that is not affected by participants' previous knowledge about the salaries in their society.

Perceived and Ideal Levels of Inequality

It has been argued that individuals do not necessarily use absolute standards of justice to decide on the ideal level of inequality (Shepelak & Alwin, 1986). Given that justice tends to be defined in the presence of a stable frame of reference (Berger, Fisek, Norman & Wagner, 1998), individuals might develop expectations about the ideal level of economic inequality using the current perceived level of inequality as an anchor.

In line with the above argument, several studies have shown a positive relation between the perceived pay gap and the ideal pay gap (Castillo, 2011; Hadler, 2005; Kelley & Evans, 1993; Osberg & Smeeding, 2006). For instance, Gijsberts (2002) found that after Eastern European socialist economies were transformed to market-based economies, the ideal (or legitimate) level of inequality increased as the actual level of economic inequality increased, and the best predictor of ideal inequality at the individual level was the perceived level of inequality.

Cognitive and motivational processes could explain the relation between the perceived and the ideal levels of inequality. From a cognitive perspective, this relation could be explained by a status quo bias (Samuelson & Zeckhauser, 1988), that is, the general tendency to prefer the current status quo to any alternative. Such preference could be explained by the operation of different cognitive processes (Eidelman & Crandall, 2009, 2012). Given that the current status quo has a higher cognitive accessibility than different alternatives, the status quo is likely to serve as a starting-point value from which individuals judge reality. Thus, the perceived level of inequality serves as an anchoring heuristic (Tversky & Kahneman, 1974), which individuals use for deciding on the ideal way of distributing economic resources.

From a motivational perspective, system justification theory offers a comprehensive explanation for how individuals support and defend the status quo (Jost & Banaji, 1994; Jost & van der Toorn, 2012). Accordingly, in order to cope with the existential threats of living within a system that they do not control, individuals are motivated to justify and legitimate the current social arrangements, viewing them as a desirable state of affairs (Kay et al., 2009). From this perspective, individuals may be motivated to use their perceived levels of inequality as a reference point when deciding on the ideal level of inequality, and they may do so for justifying the status quo.

Importantly, it has been argued that dispositional or situational variables may enhance individual's motivation to justify the status quo. On the one hand, legitimizing ideologies might exacerbate individuals' system-justifying tendencies (Jost, Bount, Pfeffer, & Hunyady, 2003; Jost & Thompson, 2000). These ideologies—called legitimizing ideologies, myths in social-psychological research (e.g., Pratto, Sidanius, Stallworth, & Malle, 1994), or justice ideologies (e.g., Verwiebe & Wegener, 2000) in the sociological literature—could provide a moral and intellectual justification for the status quo (Pratto et al., 1994; Sidanius & Pratto, 2001). On the other hand, contextual variables, such as system threat, dependence, or inescapability, might also promote system justification (Kay & Friesen, 2011).

In this paper, we examined, using correlational and experimental methods, whether legitimizing ideologies moderate the effects of perceived inequality on ideal inequality. Considering legitimizing ideologies as a moderator variable is important because it allows us to examine whether the effects of perceived inequality have a more cognitive or motivational basis. From a cognitive explanation, individuals will tend to use the most accessible information (i.e., the perceived level of inequality) as an anchoring heuristic to determine the ideal level of inequality. Thus, independently of individuals' legitimizing ideologies, perceived and ideal inequalities will be positively related. However, from a motivational account, only when the motivation to justify the status quo is high, people are more likely to exhibit system-justifying tendencies (Kay & Friesen, 2011). Given that individuals endorsing legitimizing ideologies are more motivated to exhibit system-justifying tendencies (Jost et al., 2003; Jost & Thompson, 2000), these individuals, but to a less extent those low in legitimizing ideologies, will use perceived inequality as a reference point for judging the ideal level of inequality.

Building on this motivational process, we predicted that only for those individuals who highly legitimate inequality, perceived inequality will be positively related to ideal inequality. Conversely, for individuals low in inequality legitimization, a weaker relation between these two variables will be observed. We tested these ideas in two different studies. In Study 1, perceived and ideal inequalities were measured by the perceived earning gaps between high- and low-status workers (Castillo, 2011; Kelley & Evans, 1993; Verwiebe & Wegener, 2000), whereas in Study 2 we used a new approach for measuring perceived and ideal inequalities. In the second study, participants performed a task that allowed them to freely distribute resources among a population divided into quintiles. They had to allocate different green beads (which represented resources) among five wooden posts using a vertical abacus. This distribution was then quantified using a pseudo-Gini index. Additionally, in Study 1, legitimization ideologies were measured through one dimension of the original scale of social dominance orientation (SDO, Pratto et al., 1994), named *opposition to equality* (OEQ) scale, whereas in Study 2 legitimacy of inequality was experimentally manipulated.

Study 1

In Study 1, we used a correlational design to test our hypothesis. Perceived and ideal inequalities were measured as the perceived and the ideal earning gaps between the highest- and lowest-status workers (Castillo, 2011; Kelley & Evans, 1993; Verwiebe & Wegener, 2000). In this study, we also measured the legitimization of inequality using the *opposition to equality* scale (Pratto et al., 1994). This ideology has been considered a type of system justification, and it refers to "the desire to preserve existing hierarchical arrangements" (Jost & Thompson, 2000, p. 117). We predicted that for individuals high in OEQ, perceived and ideal earning gaps would be positively related, whereas for those low in OEQ, the relation between these two variables would be weaker.

Method

Participants

Two hundred and seventy-five Spanish people volunteered to participate in this study.[1] The age of the participants varied from 18 to 62 years, with a mean age of 26.38 years (SD = 9.33), and 55 % were female.

Instruments

Participants answered a questionnaire with the following measures:

Perceived Gap   This variable refers to participants' perceptions of the occupational earning gap between the 1 % of population who earns the highest salary and the 1 % of population who earns the lowest salary in Spain. Participants were asked to indicate how much do the 1 % with the highest salaries and the 1 % with the lowest salaries in Spain earn. The perceived earning gap was operationalized as the logarithmic ratio between the perceived actual salary for high-status occupation and low-status occupation people (see Castillo, 2011): ln (perceived earning highest status/perceived earning lowest status). Higher values on the perceived gap index correspond to higher perception of earning inequalities.

Ideal Gap   This variable refers to the inequality gap participants reported in their ideal society. Participants were asked how many euros should the 1 % with the highest and the 1 % with the lowest salaries earn. It was operationalized as the logarithmic ratio between the just salary for the 1 % who earns the highest salaries and the 1 % who earns the lowest salaries: ln (just earning high status/just earning low status). Absolute equality would be represented by a ratio of 0. Higher values in the ideal gap index would indicate a higher ideal gap between the 1 % at the top and the 1 % at the bottom.

Opposition to Equality (OEQ)   Generally considered a sub-scale of the general SDO scale, OEQ is composed of eight items (α = .92). Examples of items include: *All groups should be given an equal chance in life*, and *we should do what we can to equalize conditions for different groups*. We used a version translated to Spanish by Cárdenas, Meza, Lague, and Yañez (2010).

Procedure

Participants were recruited using incidental (or accidental) sampling; that is, they were selected accidentally from the population simply because they were present

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[1] Although more participants agreed to participate in the study, only 275 answered to the three main variables of our study (i.e., perceived gap, ideal gap, and opposition to equality). Given that our goal was to examine the relation among these three variables, only these 275 participants are described in this section.

when the study was ran. The incidental sampling was carried out by research assistants at a bus station and at a public library in Granada (Spain).[2] The research assistants approached participants and asked them to answer a questionnaire about social issues. Those who accepted to participate gave their informed consent and took around 5 min to anonymously answer the questionnaire. Participants did not receive any economic compensation, but were thanked and debriefed for their participation.

Results

Preliminary Results

Six participants were omitted from the following analyses because they did not follow the instructions when reporting the salaries for the 1 % who earned the highest salary and the 1 % who earned the lowest salary in Spain. These participants inverted the values reporting contradictory amounts. Three additional participants were omitted from the analyses because their scores were 4 SD over the mean of ideal gap (with standardized values of 5.33, 5.61, and 5.96). Variables were standardized for those analyses that included variables measured with different scales.

Perceived and Ideal Gaps

A t test for related samples revealed that participants desired a lower inequality gap ($M = 1.41$; CI 95 % 1.26, 1.55; SD $= 1.18$) than the perceived current gap that actually perceived in the society ($M = 6.61$; CI 95 % 5.9079, 7.3187; SD $= 5.84$), $t_{(265)} = -14.76$, $p < .001$ (CI 95 % 4.51, 5.90), $d = 1.16$.[3] In line with previous studies, perceived gap was positively related to ideal gap, $r_{(266)} = .18$, $p = .004$. That is, the more participants perceived a high level of inequality, the more they seemed to desire (or tolerate) it.

Perceived Gap, Ideal Gap, and Legitimizing Ideologies

As expected, ideal gap was positively related to OEQ, $r_{(266)} = .33$, $p < .001$. However, OEQ and perceived gap were not related, $r_{(266)} = -.08$, $p = .214$.

We then computed a difference score between both variables (i.e., perceived gap—ideal gap), with positive values indicating that people perceived more actual inequality than they desired. This discrepancy was inversely related to OEQ, $r_{(266)} = -.15$, $p = .017$. That is, those participants who scored higher on the OEQ measure perceived a smaller absolute difference between the actual and ideal inequality in society.

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[2] Forty-three participants did the study at the public library, whereas 232 did it at the bus station. There were no significant differences between these two groups in any of the measured variables (ts < 1.3; *n.s.*).

[3] This effect size has been calculated considering dependent t test, using the following Web site: http://www.psychometrica.de/effect_size.html.

Moderation

In order to ascertain whether the OEQ (M) moderates the relation between perceived gap (X) and ideal gap (Y), a moderation model was delimited using the macro PROCESS for SPSS developed by Hayes (2013).

The two-way interaction between perceived gap and the OEQ was significant, which entailed that the relation between perceived gap and ideal gap depended on the legitimating ideology, OEQ (see Table 1).

As shown in Fig. 1, and in line with our hypotheses, perceived gap only predicted ideal gap when there was a high OEQ, $b = .27$ (.07), $t = 4.12$, $p < .001$ (CI 95 % .14, .40), but not when there was a low OEQ, $b = .07$ (.06), $t = 1.20$, $p = .233$ (CI 95 % −.05, .20).

Another way to interpret the interaction between perceived inequality and the legitimation of inequality revealed that ideology (OEQ) predicted ideal inequality more strongly when participants perceived that there was high inequality, $b = .39$ (.06), $t = 5.98$, $p < .001$ (CI 95 % .26, .51) compared to when they perceived less inequality, $b = .19$ (.06), $t = 2.99$, $p = .003$ (CI 95 % .06, .31).

Discussion

These results showed a positive relation between ideal gap and both the perceived actual gap and OEQ. More importantly, and as predicted, the positive relation between perceived and ideal gaps was moderated by the OEQ. It seems that the perception of inequality (measured by the gap between those who earn more and those who earn less) only led to more desire (or tolerance) for inequality when participants maintained a high OEQ, namely when they showed an ideological motivation for legitimizing the system. Conversely, for those who did not show OEQ (i.e., individuals who agree more with social equality), their perception of inequality did not predict their desire for inequality.

Table 1 Results from a regression analysis examining the moderation of OEQ on the effect of perceived gap on ideal gap in Study 1

		Ideal gap					
		Coeff.	SE	t	p	CI 95 %	
Intercept	i_1	−.01	.05	−.06	.951	−.093	.087
Perceived gap (X')	b_1	.18	.05	3.83	<.001	.086	.268
OEQ (M')	b_2	.29	.05	6.21	<.001	.196	.376
Perceived gap $\times$ OEQ ($X'M'$)	b_3	.10	.04	2.22	.027	.011	.187
		R^2 increase due to interaction = .02					
		Model $R^2 = .17$; $F_{(3,262)} = 17.75$, $p < .001$					

Perceived gap, ideal gap, and OEQ were standardized before performing the analysis. Regression coefficients are unstandardized
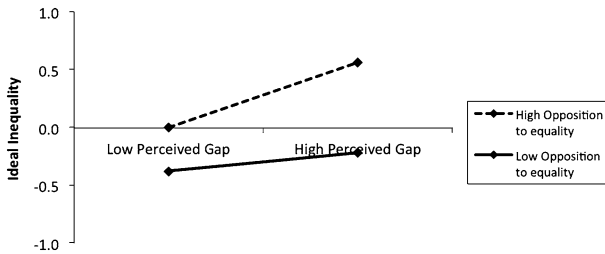
OEQ opposition to equality

Fig. 1 Opposition to equality moderates the effect of perceived gap on ideal gap in Study 1

Study 2

In Study 2, the legitimacy of inequality was directly manipulated by creating two different conditions: a legitimate inequality condition, where a news fragment supported the benefits of social inequality, and an illegitimate inequality condition, where a news fragment pointed out the negative consequences of economic inequality.

In this study, we used a new measure of inequality, with participants being asked to distribute resources between the different earning quintiles of the population through which they reported their perception of the actual and ideal levels of inequality in Spain. In line with the results of Study 1, in Study 2 we predicted the relation between perceived and ideal inequalities would be moderated by ideologies supporting the legitimacy of inequality.

Method

Participants

Sixty-six undergraduate psychology students from the University of Granada participated in exchange for course credit. The study was advertised in an introductory social psychology course as an experiment about "social and economic issues." The sample was finally conformed by 49 participants[4] (83 % female, $M_{age} = 19.70$, SD = 3.92), most of them with Spanish nationality (97.9 %).

Instruments

Participants answered a questionnaire with the following measures:

Manipulation of the Legitimacy of Inequality   Participants were randomly assigned to two different groups, each reading a news fragment titled *Keys of the current economic performance*. The content of the fragment varied as a function of the

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[4] Sixteen cases were removed from the analyses because these participants answered the abacus measure incorrectly. One participant was considered an outlier (with more than 3 SD over the mean in the ideal inequality abacus measure) and was also skipped in the analyses.

experimental condition. The legitimate inequality group ($n = 24$) was presented with a news fragment where an expert highlights the benefits of economic inequality:

Dr. William Atkins, Nobel in Economy and currently professor of Economic Sociology in the European Academic of Sciences, highlights the keys for an optimum economic performance in the current Western societies. After a comparative analysis, Dr. Atkins and his team have concluded that economic resources inequality increases people's competence and skills and, in the long term, it contributes to generate more wealth in the country. According to their research, these differences motivate people to strive and outdo themselves, gaining in efficiency and productivity. Moreover, people seem to feel more satisfied when they are rewarded over others. Similarly, the studies of this group have shown that those countries where there is more economic resources inequality are also the countries that have a higher quality of life.

On the contrary, participants in the illegitimate condition group ($n = 25$) read an article regarding the negative consequences of economic inequality:

Dr. Atkins and his team have concluded that economic resources inequality decreases people's competence and skills and, in the long term, it contributes to reduce the wealth in the country. According to their research, these differences demotivate people to strive and outdo themselves, losing in efficiency and productivity. Moreover, people seem to feel less satisfied when they are rewarded over others. Similarly, the studies of this group have shown that those countries where there is more economic resources inequality are also the countries that have a lower quality of life. Immediately after reading the news extract, we controlled participants' attention by asking them to write a key word that summarized the text they had just read. Then, they were asked about the following:
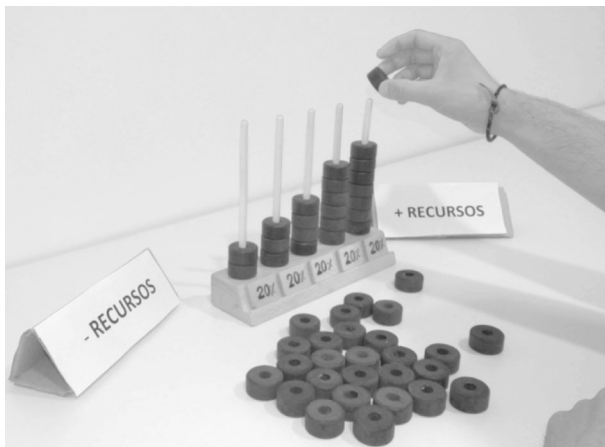

Fig. 2 Abacus inequality paradigm used in Study 2

Perceived Inequality   Participants reported how they perceived the distribution of resources in Spain. In order to do so, participants conducted a behavioral task in which they had to allocate different green beads (which represented resources) among five wooden posts using a vertical abacus in order to represent how resources were distributed in the Spanish society (see Fig. 2). They read the following instructions: *Imagine this abacus represents the SPANISH SOCIETY, divided into five sectors (posts), each one representing the 20 % of the population. The beads of the abacus would represent the resources of the Spanish society. Please try to represent the Spanish society, just as you perceive it, by distributing the resources (beads) among the five sectors of the population (the five posts). Consider that the right post represents the 20 % of the population with more resources in Spain, whereas the left post represents the 20 % of the population with fewer resources. Please, allocate the resources according to how you perceive the current situation in Spain, using as many beads as you need (if you do not wish to do so, you do not have to use all the beads).*[5] Once participants completed this task, the experimenter took a picture. As we had five different values (one for each wooden post), which represented the resources of each sector, this distribution was quantified calculating a pseudo-Gini coefficient for each participant. This pseudo-Gini index represented the perception of resource distribution, namely the perception of inequality in Spain, with higher values indicating higher inequality.[6]

Ideal Inequality   Participants then reported the distribution of resources of their ideal society using the same procedure. Participants read: *Taking into account the beads you have just used for representing the current Spanish society, think about your IDEAL SOCIETY, that is, how you would like the Spanish society to be. Using the abacus again, try to represent HOW THE IDEAL SPANISH SOCIETY WOULD BE.* Once again, a pseudo-Gini index was calculated for each participant in order to represent his/her preferred index of inequality.

Results

All participants first wrote a key word related to the text they had read, showing they had paid attention to the manipulation.

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[5] As previously reported, almost a quarter of participants did not understand the instructions. However, in a different study, conducted within a different research line, we found that changing the instructions given to participants made it so that only 2 out of 44 (4.45 %) participants performed the task incorrectly. In the new instructions, we first asked participants to build the most egalitarian society and the most unequal society possible. The experimenter helped those who did not follow the instructions. Then participants were asked to build their perceived and ideal societies, as in Study 2.

[6] The pseudo-Gini index can be computed using the following calculator: economics-files.pomona.edu/cconrad/GiniA.xls. The formula to calculate the Gini coefficient is: $\text{Gini} = \left(\frac{2}{\mu \cdot n^2} \cdot \sum_{k=1}^{n} k \cdot W_k \right) - \frac{n+1}{n}$. Taking into account that μ is the arithmetic mean of resources (green beads) assigned among the quintiles of the society (the five abacus wooden posts); W_k is the amount of resources assigned to each quintile, and it is ranked in ascending order (e.g., $k = 1, 2, 3, \ldots, n$); and n is the total number of individuals among which the resources are distributed. Considering that we used a fictional society divided into quintiles, $n = 5$.

Perceived and Ideal Inequalities

A t test for related samples revealed that participants desired less inequality ($M = .10$; CI 95 % .08, .12; SD = .06) than what they perceived in the real Spanish society ($M = .35$; CI 95 % .33, .37; SD = .08), $t_{(48)} = 18.82$, $p < .001$ (CI 95 % .23, .28), $d = 3.67$ (see footnote 3). Overall, perceived and ideal inequalities were not significantly related, $r_{(49)} = .07$, $p = .638$.

Legitimacy Effect

In order to ascertain whether the manipulation of legitimacy of inequality affected participants' perceived and ideal inequalities, a *t test for two independent samples* was performed. As shown in Fig. 3, participants reported higher levels of ideal inequality ($M = .12$; CI 95 % .09, .15; SD = .08) in the legitimate condition compared to the illegitimate condition ($M = .08$; CI 95 % .07, .10; SD = .04): $t_{(32,80)} = -2.08$, $p = .046$ (CI 95 % $-.07$, $-.00$), $d = .59$. However, their perceived inequality was not affected by the manipulation of legitimacy: Participants perceived the same level of inequality in the legitimate and illegitimate conditions: $t_{(47)} = .44$, $p = .663$ (CI 95 % $-.03$, .05), $d = .13$; with $M_{\text{Legit}} = .35$ (CI 95 % .32, 38; SD = .08) and $M_{\text{Legit}} = .36$ (CI 95 % .33, .39; SD = .08).

We also examined whether the manipulation of legitimacy influenced the difference between perceived and ideal inequalities (i.e., perceived inequality—ideal inequality). Results showed a marginal effect, $t_{(47)} = 1.71$, $p = .095$ (CI 95 % $-.01$, .10), $d = .56$. In the illegitimate condition, participants reported a greater gap between perceived and ideal inequalities ($M = .28$; CI 95 % .24, .31; SD = .09) than that in the legitimate condition ($M = .23$; CI 95 % .19, .26; SD = .09).

Moderation

In order to test our hypothesis that the legitimacy of inequality (M) moderates the relationship between perceived inequality (X) and ideal inequality (Y), a moderation model was delimited using the macro PROCESS for SPSS developed by Hayes (2008).

As shown in Table 2, the two-way interaction between perceived inequality and the legitimacy of inequality was marginally significant, which entailed, as predicted, that the relation between the perceived inequality of the Spanish society and participants' ideal inequality was not completely independent from the legitimacy of inequality. As it can be seen in Fig. 4, perceived inequality marginally predicted ideal inequality in the legitimate condition, $b = .32$ (.17), $t = 1.85$, $p = .071$ (CI 95 % $-.03$, .66), but not in the illegitimate condition, $b = -.15$ (.17), $t = -.91$, $p = .370$ (CI 95 % $-.49$, .18).

As in Study 1, we interpreted this interaction also using perceived inequality as M and legitimacy as inequality as X. Results revealed that legitimacy of inequality only predicted ideal inequality when participants perceived that there was high inequality, $b = -.50$ (.17), $t = 2.93$, $p = .005$ (CI 95 % $-.84$, $-.16$), but not when
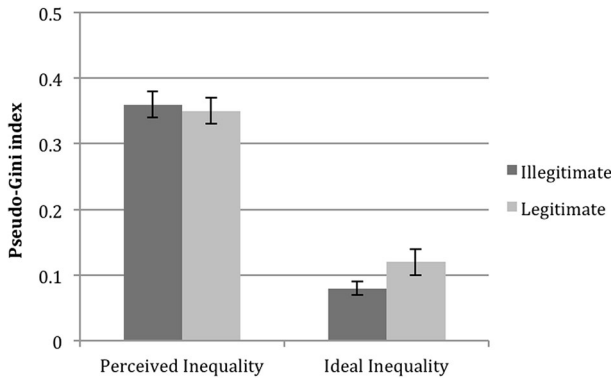
Fig. 3 Legitimacy effects on ideal and perceived inequality in Study 2 (*bars* represent the standard error of the mean)

Table 2 Results from a regression analysis examining the moderation of legitimacy of inequality on the effect of perceived inequality on ideal inequality in Study 2

		Ideal inequality					
		Coeff.	SE	t	p	CI 95 %	
Intercept	i_1	−.05	.12	−.41	.682	−.289	.191
Perceived inequality (X')	b_1	.08	.12	.69	.491	−.157	.323
LI (M')	b_2	−.26	.12	−2.19	.034	−.501	−.021
Perceived inequality × LI ($X'M'$)	b_4	−.23	.12	−1.96	.056	−.474	.007
		R^2 increase due to interaction = .07					
		Model $R^2 = .16$; $F_{(3,45)} = 2.96$, $p = .042$					

Perceived inequality, ideal inequality, and LI were standardized before performing the analysis. Regression coefficients are unstandardized

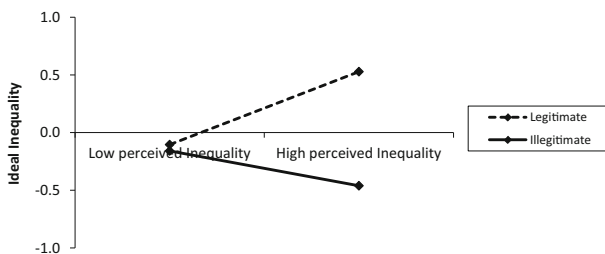*LI* legitimacy of inequality (−1 = legitimacy; 1 = illegitimacy)

Fig. 4 Legitimacy moderates the effect of perceived inequality on ideal inequality in Study 2

they perceived low inequality in Spain, $b = .03$ (.17), $t = -.15$, $p = .880$ (CI 95 % $-.37, .31$).

Discussion

In Study 2, using an experimental procedure, we found a causal relation between the legitimacy of inequality and its ideal level. Thus, we found that when participants read a newspaper article that legitimates economic inequality (as opposed to a newspaper article that illegitimates it), they tolerated higher levels of inequality. Perceived inequality marginally increased ideal inequality when inequality was presented as legitimate but did not when it was not legitimized.

General Discussion

In this paper, we examined, using experimental and correlational designs, the effects of the perceived level of inequality on the ideal level of inequality and whether this relation might be moderated by the legitimization of inequality. In the two studies, we found that both variables play a role but are not independent when predicting ideal inequality. As such, in both studies we found an interaction effect between the perceived level of inequality and its ideological justification: Perceived inequality only predicted the ideal levels of inequality when there was a prevailing high legitimation of inequality.

The importance of perceived inequality and legitimizing (or justice) ideologies have been previously addressed in the literature (Castillo, 2011; Hadler, 2005; Shepelak & Alwin, 1986; Osberg & Smeeding, 2006). However, in these previous studies, such variables have been considered independent paths for predicting the ideal level of economic inequality. In this paper, we aimed to advance the literature by finding that legitimizing ideologies moderate the relation between perceived and ideal inequalities and by experimentally manipulating such ideologies in Study 2.

Importantly, these results also suggest that the effects of perceived inequality on ideal inequality might have a motivational basis. If the effects of perceived inequality on ideal inequality were caused by an anchoring heuristic (Tversky & Kahneman, 1974), these variables should have correlated positively independently of participant's ideology. However, this positive relation between perceived inequality and ideal inequality was only found when the motivation to justify the status quo was high, either because of ideological inclinations (i.e., holding an opposition to inequality ideology) or because of contextual factors (i.e., reading a newspaper article that legitimizes inequality). These results are therefore consistent with the system justification framework (Jost & Banaji, 1994; Jost & van der Toorn, 2012), and with results showing that individuals are motivated to justify and legitimate the status quo, seeing the way things are as the way they should be (Kay et al., 2009).

Additionally, in both studies perceived legitimacy increased ideal inequality, but this relation depended on the perceived degree of inequality. In both studies, the relation between legitimacy and ideal inequality was stronger among those who

perceived a high level of inequality (than among those who perceived a low level). These results further support the motivational approach, showing that when individuals are motivated for legitimizing inequality but perceive inequality is low, they may be less motivated to support a high level of ideal level of inequality, as that was not their perceived status quo.

In this paper, we also provide a new measure of perceived inequality. In Study 1 and in past studies, perceived inequality has been measured through a pay gap index, that is, the difference between the earnings of high- and low-status workers (e.g., Castillo, 2011; Kelley & Evans, 1993; Verwiebe & Wegener, 2000). However, the pay gap measure could be affected by different biases (Castillo, 2011; Wegener, 1990). The inequality abacus paradigm allows us to measure perceived inequality and ideal inequality using a procedure that is not affected by participants' knowledge about salaries in their context.

Importantly, in this research we only correlated the perceived actual and ideal levels of inequality. However, the causal relation between these two variables was not tested. We have argued that the perceived current level of inequality affects the ideal levels of it. However, it could be that the ideal level of inequality also affects the perceived level, as individuals might also be biased for perceiving reality based on their ideals. Therefore, in future research it will be important to manipulate the perceived level of inequality, as this could determine whether there is an actual causal relation between these variables and the direction of it. Additionally, other studies should address the role of other legitimizing ideologies as potential moderators, such as meritocracy or Protestant work ethic (Furnham, 1984; Son Hing et al., 2011).

Despite limitations, these findings have relevant implications. Given that the current level of inequality influences individuals' ideal inequality and that the current level has been increasing during the last years in most developed societies (Pickett & Wilkinson, 2010), it could be that, in the future, this will lead individuals to tolerate more inequality. This could lead to a vicious cycle in which the current level predicts the ideal level, and the ideal level allows for the tolerating of greater levels of inequality. However, in these studies it has been shown that what it is does not necessarily determine what it should be, as individuals who ideologically do not legitimate inequality are not driven by the status quo.

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