

**Economic Inequality Shapes the Agency–Communion Content of Gender
Stereotypes**

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Abstract

Economic inequality is a main issue in current societies and it affects people's psychological processes. In this research, we propose that perceived economic inequality might affect how people perceive men and women. In two experiments carried out in Spain ($N = 170$) and Mexico ($N = 215$), we tested whether high (vs. low) economic inequality leads to changes in the perceived agency and communion of both men and women. Our findings suggest that when economic inequality is high (vs. low), the communal content in social perceptions of both men and women decreases. Specifically, under high (vs. low) inequality, the difference in agency and communion ascribed to a man becomes greater (i.e., men are perceived as even more agentic than communal), whereas this difference becomes smaller for women (i.e., women are still perceived as more communal than agentic, but this difference is smaller). We discuss these findings' implications regarding the psychosocial effects of economic inequality.

Keywords: economic inequality, agency and communion, gender stereotypes, person perception, social perception

Economic Inequality Shapes the Agency– Communion Content of Gender Stereotypes

Imagine a society in which economic differences between citizens are very high. Those at the top of the social ladder earn much more than those at the bottom do, they live in luxury houses, and they drive the most expensive cars, whereas those at the bottom can barely afford a decent house. Does this affect the perception of men, women, or both? In such an economically unequal society, are the men perceived as dominant or kind? What about the women? Would the perceptions of men and women be perceived differently in a more egalitarian society? In our research, we sought to answer these questions through examining the effect of perceived economic inequality on the agency and communion attributed to men and women.

Recent research has shown that perceived economic inequality influences how different individuals and groups are evaluated, but these studies have mainly focused on the social perception of different social classes (Connor et al., 2021; Moreno-Bella et al., 2019; Tanjitpiyanond et al., 2022). Otherwise, the effect of perceived economic inequality on the specific features attributed to men and women has received little attention. Economic inequality is actually closely intertwined with gender. For instance, studies provide suggestive evidence that economic inequality positively relates with gender inequality, and the status of women in economically unequal societies is worse compared to in more egalitarian societies (e.g., Gonzales et al., 2015; Wilkinson & Pickett, 2009). Considering the intersectionality between economic inequality and gender, as well as the novelty of studying the socioeconomic context as a factor that could change the content of gender stereotypes, in the present research, we explored how economic inequality affects descriptive gender stereotypes. Specifically, we sought

to contribute to the literature by examining the effect of economic inequality on the content features attributed to men and women along the Big Two: agency and communion (Abele & Wojciszke, 2007, 2019).

The Psychosocial Effects of Economic Inequality

Economic inequality has been defined as the asymmetric distribution of income and valued resources between those individuals or groups that have the most and the least resources within a society (Brown-Iannuzzi et al., 2017). Economic inequality is heightened today: The richest 10% of the world's population currently owns 52.2% of the total world income, while the bottom 50% only collects 8.4% of it (Chancel et al., 2022).

Economic inequality and its consequences at the individual and societal levels have attracted social psychologists' attention in recent years (e.g., Buttrick & Oishi, 2017; Jetten & Peters, 2019; Rodríguez-Bailón et al., 2020; Trump, 2020). For instance, research has shown that in environments that are more unequal, people trust others less (Elgar & Aitken, 2011; Graafland & Lous, 2019; Oishi et al., 2011; Uslander & Brown, 2005), tend to show less solidarity and generosity (Nishi et al., 2015; Paskov & Dewilde, 2012), and consider themselves less connected to others (Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, 2019). This research suggests that economic inequality may undermine social cohesion and cooperation between people.

Similarly, in highly economically unequal contexts, people compare themselves more with others (Cheung & Lucas, 2016, 2020), are more anxious about increasing—and not losing—their status (Buttrick & Oishi, 2017; Delhey & Dragolov, 2014; Layte & Whelan, 2014), and tend to view themselves as superior to others (Loughnan et al., 2011). In such unequal environments, people feel a greater need for achievement by

increasing other approach-avoidance motivation (Sommet et al., 2019). In other words, apart from diminishing the connection with other people (e.g., trust), economic inequality associates with an increase in people's concern about their relative social standing (e.g., Paskov et al., 2013). In sum, high economic inequality affects people's behaviour and attitudes, which implicitly involve their (lack of) connection with others.

Wilkinson and Pickett (2017) argued that different levels of economic inequality might have these and other effects because they provide diverse social environments to which individuals successfully adapt. Building on this perspective, research has proposed that unequal and equal environments tend to have different normative climates; that is, they involve distinct social norms about how most people are and behave (Sánchez-Rodríguez, Willis, et al., 2019). Therefore, it is crucial to understand people's inferences about the specific features of the normative climate, given that social norms have an important effect on their attitudes and behaviours (Asch, 1951; Cialdini et al., 1990; Sherif, 1936).

In examining economic inequality's effects on the normative climate, research has shown that when economic inequality is relatively high, people tend to infer that others are less cooperative and more competitive (Sánchez-Rodríguez, Willis, et al., 2019; Sommet et al., 2019) and pursue less guiding values that capture interest in others' welfare, namely self-transcendent values (Sánchez-Rodríguez et al., 2022). Likewise, people also tend to think that others have less traditional feminine (vs. masculine) traits (Moreno-Bella et al., 2019), and people believe that others are less interdependent (vs. independent), strive less for group goals (vs. personal goals), and are less interested in communal relationships (vs. exchange relationships; Sánchez-Rodríguez, Willis, et al., 2019). These findings suggest that high economic inequality

decreases communal (i.e., related to social ties and connection) over agentic (i.e., related to skills and assertiveness) content in the perceived normative climate.

Economic inequality's effects on the perceived normative climate also translate to how people evaluate and stereotype different social groups. For instance, when inequality is high (vs. low), people tend to show greater stereotype ambivalence (Durante et al., 2013). This is especially true when evaluating socioeconomic status (SES) groups (Durante et al., 2017). Indeed, experimental studies have also shown that high inequality amplifies the high-SES group stereotype as competent but less warm (e.g., Connor et al., 2021; Moreno-Bella et al., 2019). More concretely, Tanjitpiyanond et al. (2022) found that economic inequality changed how people characterised both high- and low-SES groups: In the high inequality condition, both groups were perceived with lower morality and sociability (i.e., lower communion) compared to the low inequality one. Importantly, the causal effect of inequality on how men and women are evaluated has not been examined via using an experimental approach. Therefore, in this paper, we will present two experiments investigating how manipulated economic inequality influences the agency and communion attributed to a typical man and woman in a particular societal context.

Agency and Communion in Gender Stereotypes

Gender stereotypes are people's shared beliefs about the features of men and women (Ellemers, 2018). These stereotypes can be *descriptive*, meaning the features men and women have, or *prescriptive*, meaning the features men and women should (or should not) have (Prentice & Carranza, 2002). In our research, we focused on descriptive gender stereotypes; that is, the characteristics that people consider men and women have.

When examining gender stereotypes, we focused on agency and communion, which represent the two fundamental dimensions of content in social evaluation (Abele & Wojciszke, 2014). Agency captures goal achievement, task functioning, and self-orientation, emphasizing assertiveness (i.e., feeling superior, dominant, and self-confident) and competence (i.e., capable, efficient, and clever). Communion represents the maintenance of relationships, social functioning, and other orientation, emphasizing warmth (i.e., caring, affectionate, and empathetic) and morality (i.e., reliable, trustworthy, and considerate; Wojciszke & Abele, 2019). The agentic and communal contents are essential when analysing gender stereotypes (Hentschel et al., 2019; Sczesny et al., 2019). Although gender stereotypes are dynamic and changing (Eagly et al., 2020; Haines et al., 2016), men are still perceived as more agentic than communal—although some data have not supported this difference (Moya & Moya-Garófano, 2021)—whereas women are considered more communal than agentic in most cultures (Ellemers, 2018; Moya & Moya-Garófano, 2021; Sczesny et al., 2019; see Cuddy et al., 2015; Steinmetz et al., 2014). In other words, agency prevails in the masculine stereotype, and communion in the feminine stereotype (Eagly et al., 2019). Given that the socioeconomic context affects the expression of particular social groups' stereotypes, such as those linked to social class (Grigoryan et al., 2020), we proposed that this could also be the case for gender stereotypes. In the next section, we describe how economic inequality could influence men's and women's ascribed agency and communion.

Economic Inequality and Gender Inequality

Researchers have mainly analysed economic inequality in terms of inequality between people of social classes; however, the concept cannot be reduced in this way

(Jetten & Peters, 2019). Resource differences do not solely reflect membership to a certain social class because membership to other categories, such as gender, also influences access to resources (Ukhova, 2015). Moreover, economic inequality and gender inequality are closely related. On the one hand, the more unequal a country is, the more economic inequality exists between men and women in that country. Thus, in societies that are more economically unequal, women also earn less money, are less socially and economically independent, and fewer women attain a high educational level (Kawachi et al., 1999; Wilkinson & Pickett, 2009). On the other hand, gender inequality reinforces and maintains economic inequality because gender wage gaps directly contribute to the aggregated level of income inequality (Gonzales et al., 2015).

Gender stereotypes relate to both gender economic inequality and general economic inequality (Cuddy et al., 2009; Fiske & Durante, 2019; Jost & Kay, 2005). In the case of gender economic inequality, gender stereotypes clearly contribute to justify and legitimate this inequality: Men have more because they deserve it (they are more competent or agentic); as such, men are perceived high in agency, whereas women are perceived low in this dimension. Gender stereotypes contribute to economic inequality between genders (Kulich & Chipeaux, 2019) to the extent that they influence the chances—mainly for women—to access different well-paid jobs and management positions that go against their gender role (Eagly & Karau, 2002; Eagly & Koenig, 2021). At the same time, this economic gender inequality further increases the overall levels of economic inequality because, as we have mentioned before, gender wage gaps directly contribute to the aggregated level of income inequality (Gonzales et al., 2015). In this paper, we examine whether the effect in the other direction also happens; that is, whether the levels of inequality in a society causally influence gender stereotypes. This

is important because economic inequality and gender inequality can create a vicious circle in which each variable causally influences the other.

What effects can economic inequality have on these stereotypes? The effect of increased economic inequality on gender stereotypes could lead to two different predictions depending on the system justification (Jost et al., 2004) or the normative climate (Wilkinson & Pickett, 2017) explanations. On the one hand, economic inequality could increase agency content and decrease the communion content with which men are perceived, but it could decrease agency and increase the communion content in the perception of women. From this perspective, economic inequality could reinforce traditional gender stereotypes (Eagly & Wood, 1999): Men would be even more agentic and less communal; women would be even less agentic and more communal. This is consistent with the prediction that in societies that have more inequality, people tend to have a greater motive for system justification (Jost et al., 2015). Indeed, past studies have shown that economic inequality increases the motivation for justifying social class differences (e.g., by increasing beliefs in meritocracy; Mijs, 2018, 2021); as such, this greater system justification motive in unequal societies may also translate to the justification of traditional gender stereotypes (Jost & Kay, 2005).

On the other hand, Wilkinson and Pickett (2017) maintained that in unequal environments, social rank became more important and more salient, thus competition and dominance seemed the preferred strategies to adapt successfully to such contexts. In fact, several studies have shown that high inequality creates a normative climate in which people tend to be more competitive and oriented towards power and dominance (Cheng et al., 2021; del Fresno-Díaz et al., 2021; Sánchez-Rodríguez et al., 2022;

Sánchez-Rodríguez, Willis, Jetten, et al., 2019; Sommet et al., 2019, 2022). As competition and dominance may be framed in the agency dimension (Abele et al., 2008, 2016; Diekmann & Eagly, 2000; Wojciszke & Abele, 2019), an increase in economic inequality could lead to giving the agency dimension greater importance. This could increase the perceived agency for both men and women (i.e., in an unequal world, agency is a necessary feature for everyone, whatever gender they may be), thus economic inequality will not affect the perceived differences between men and women. Both men and women will be perceived as more agentic, but the starting point difference between the groups will still exist.

In parallel to what happens with agency, the communion dimension may also decrease for both men and women in unequal contexts, given that it is not considered desirable in those contexts. This would be consistent with studies showing that in unequal societies, there is a normative climate in which people are less concerned about others (e.g., there is less cooperation and less interest in others' welfare; Sánchez-Rodríguez et al., 2020; Sánchez-Rodríguez, Willis, et al., 2019; Sommet et al., 2019; Tanjitpiyanond et al., 2022). This prediction also relates with studies showing that economic inequality reduces social cohesion and trust in others (Buttrick & Oishi, 2017; Rodríguez-Bailón et al., 2020), which are aspects more proximal to the communion dimension. As such, unequal societies may be characterised as less communal compared to societies that are more egalitarian. This may lead to perceiving less communion in both men as women.

In sum, in this paper, we shed light on the system justification and the normative climate account as frameworks of the effect of economic inequality on gender stereotypes. As such, we will examine whether economic inequality causally influences

gender stereotypes through increasing system justification—by exacerbating traditional gender stereotypes—or whether it creates a normative climate (with more agency and less communion) that similarly influences how people perceive both men and women.

The Present Research

This research aimed to examine the effect of perceived economic inequality on gender stereotypes. Research on perceived economic inequality and stereotyping has focused on SES group stereotypes (Connor et al., 2021; Durante et al., 2017; Moreno-Bella et al., 2019), but gender groups have received little attention, even though gender stratifies all societies, and gender is a primary factor in how people categorize others (Ellemers, 2018). Furthermore, Durante et al. (2013) measured stereotypes about men and women and examined their relationship with economic inequality. However, they used an ambivalence index that included various groups (not only gender), and they did not use an experimental approach. Thus, exclusive examination of the economic inequality causal effect on gender stereotypes has not been conducted, and it is worthy to elucidate it.

Taking into account the two possible predictions of the effect of perceived economic inequality on gender stereotypes (i.e., system justification and the normative climate predictions), we observe that the difference between agency and communion in the social perception of a man will be higher when economic inequality increases—people will perceive a man as more agentic and less communal in a unequal environment, which is consistent with both the system justification (Jost et al., 2004) and the normative climate (Wilkinson & Pickett, 2017) approaches. However, in the case of the social perception of a woman, the difference between agency and communion dimensions might increase (less agentic and more communal content) from

a system justification perspective, or decrease (more agentic and less communal) following the normative climate account.

Although we were interested in comparing both predictions, we preregistered our hypotheses following the normative climate approach (Wilkinson & Pickett, 2009; Sánchez-Rodríguez, Willis, Jetten, et al., 2019) because these predictions are more consistent with the current scholarship about the causal effects of economic inequality using experimental paradigms (Cheng et al., 2021; del Fresno-Díaz et al., 2021; Melita et al., 2021; Sánchez-Rodríguez et al., 2022; Sánchez-Rodríguez, Willis, Jetten, et al., 2019). Hence, we expected that economic inequality would similarly influence men and women; that is, it would increase agency and decrease communion in both men and women.

Specifically, and because men and women vary in their baseline level of the perceived level of agency and communion, we expected to find an interaction effect between the level of perceived economic inequality and the type of trait (agentic vs. communal) attributed to a typical man and woman in a given society. In this sense, we hypothesized that in a high (vs. low) economically unequal society, the difference between agency and communion trait ascriptions to men would become greater; that is, men would be perceived as more agentic than communal, but this difference would be higher and stronger in the high (vs. low) economic inequality condition (H1). In contrast, we hypothesized that in a high (vs. low) economically unequal society, such a difference between both dimensions in trait ascriptions would become smaller for women; in other words, women would be perceived as more communal than agentic, but this difference would be smaller in the high (vs. low) economic inequality condition (H2).ⁱ

We tested both hypotheses through two preregistered experiments in which we manipulated economic inequality in a society and measured the extent to which participants considered that society's typical male and female citizens in terms of agency and communion. In Study 1, using a fictitious society paradigm to manipulate economic inequality, we tested H1 and H2 using a Spanish sample. In Study 2, we wanted to replicate the results of Study 1 using the same paradigm with a sample from a country that is more culturally masculine, such as Mexico (Hofstede Insights, 2020; World Bank, 2020). The preregistration of all studies and data sets can be found online in the Open Science Framework (<https://osf.io/dnfbk/>).

Study 1

First, in Study 1, we aimed to test H1 and H2 using an experimental manipulation of economic inequality based on a fictitious society.

Method

Participants and Procedure

We conducted an a priori power analysis with G*Power (Faul et al., 2009). For a repeated-measures analysis of variance (ANOVA; within-between interaction), for an effect size of $f = .20$, statistical power of 0.80, and at an alpha level of 0.05, the minimum desired sample size is 72 valid observations. We tried to collect a minimum of 100 (50 per experimental condition) participants and a maximum of 200 valid observations. We were able to collect 195 responses from university students and university library users. Following the preregistration, we excluded participants who did not indicate Spanish as their native language and did not indicate being 18 years or older. After these exclusions, the final sample was composed of 170 participants (87.1%

university students and 12.9% university library users) older than 18 years (106 women, 64 men; $M_{age} = 21.24$, $SD = 5.25$).

We recruited participants from a psychology class (67.6%) and from the library of a public university (32.4%) in the southeast of Spain. The experiment was conducted online. One researcher asked participants to take part in the study via an online survey provided with a survey link and QR code. All participants gave their informed consent at the beginning of the survey and read information about their voluntary participation, as well as the anonymity and confidentiality of their answers. Participants were randomly assigned to one of the two experimental conditions of economic inequality (between-groups variable) and completed the agency–communion-related measures (within-subjects variable).

Measures

We presented the following measures in an online survey created in Qualtrics. We counterbalanced the order of presentation of the typical man and woman evaluation.

Experimental Manipulation of Economic Inequality. To manipulate economic inequality, we used the Bimboola paradigm adapted by Sánchez-Rodríguez, Willis, and Rodríguez-Bailón (2019) from the original paradigm used for manipulating social class (Jetten et al., 2015). We asked participants to imagine that they were going to live in a new (fictitious) society called Bimboola. They learned that Bimboola society consisted of three income groups, and they would be assigned to one of those income groups. Participants were randomly assigned to one of the two experimental conditions (high inequality vs. low inequality). However, regardless of which experimental condition they were assigned to, all participants learned that they were assigned to the middle-income group, which earned 7,000 Bimboolean coins (BC). In the high-

inequality condition ($n = 85$), the wealthiest group was presented as very wealthy (earning 13,500 BC per month) and the poorest group as very poor (500 BC per month). In the low-inequality condition ($n = 85$), the income differences between the three income groups of Bimboola were less pronounced (i.e., the wealthiest group earned 8,000 BC per month and the poorest group earned 6,000 BC per month). Following the procedure, and to improve its realism, we asked participants to imagine that they lived in Bimboola, and to get their life started, we invited them to pursue the essentials in life, such as a house, mode of transport, and vacation. Participants could choose only items that their income group (middle income) could afford, and the houses, cars, and vacations from which they could choose were identical in the low- and high-inequality conditions. However, the items that the wealthiest and the poorest groups in Bimboola could afford differed across the conditions. Whereas the houses, cars, and vacations open to the wealthiest group in Bimboola were only slightly more luxurious than those of the middle group in the low-inequality condition, the items that the wealthiest group could purchase in the high-inequality condition were much more luxurious and extravagant (large mansions, top-of-the-line sports cars, and expensive vacations). Likewise, whereas the items that people from the poorest group could purchase in the low-inequality condition were only slightly less luxurious than those of the middle group, the items they could afford in the high-inequality condition were of much poorer quality, including substandard houses and old and damaged motorcycles; they did not have the means to go on vacation. All items were adapted to fit the Spanish context (see Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, 2019).

Manipulation Checks. We included two manipulation checks to test whether our experimental manipulation of economic inequality was successful. Participants were

asked to answer the questions “To what extent is Bimboola economically unequal?” (1 = *Not unequal at all*, 9 = *Very unequal*) and “To what extent is Bimboola economically equal?” (1 = *Not equal at all*, 9 = *Very equal*). The latter item was reverse scored, and the two items were averaged ($r = .82, p < .001$). Next, participants also answered a manipulation check about which income group they were assigned to (1 = *Group 1* [the highest income], 2 = *Group 2* [middle income], 3 = *Group 3* [the lowest income]) and responded to the question “Considering socioeconomic status as a system of social stratification based on access to resources such as wealth, education and prestige, what would you say is your socioeconomic status in Bimboola society?” (1 = *The lowest of the society*, 9 = *The highest of the society*).

Agency and Communion of the Typical Man. We asked participants to indicate how they would describe the typical man in the described society. To measure agency and communion, we used Diekmann and Eagly’s (2000) eight agentic traits of personality (e.g., “competitive” and “daring”; $\alpha = .74$) and eight communal traits of personality (e.g., “affectionate” and “sympathetic”; $\alpha = .94$). The trait items were translated into Spanish by a native speaker and then back-translated into English by someone who was blind to the original content (to see personality traits in English and Spanish, please see Supplementary Materials). Participants had to indicate to what extent they considered each trait item presented applied to the typical man of that society on a 7-point scale (1 = *Not at all*, 7 = *Very much*).

Agency and Communion of the Typical Woman. We used the same procedure for women. Thus, we used the eight agentic traits ($\alpha = .73$) and the eight communal traits ($\alpha = .92$).

Socioeconomic Status of the Typical Man and the Typical Woman. To be sure that the participants did not think about extreme social groups when evaluating the typical man and typical woman of Bimboola, we asked them the following question about the target (woman target within parentheses): “When you answered about the typical man (woman) of Bimboola, which group did you consider him (her) to belong to?” (1 = *Group 1* [the highest income], 2 = *Group 2* [middle income], 3 = *Group 3* [the lowest income]). Most participants considered the typical man (75.9%) and woman (88.2%) to be middle class.

Sociodemographic and Socioeconomic Variables. Afterwards, participants were informed that the simulation in the Bimboola society had ended. They were asked to return to reality and answer several sociodemographic questions. We measured political orientation on a 10-point scale, where 1 indicated “left wing” and 10 indicated “right wing” ($M = 4.61$, $SD = 2.55$). Subjective SES was also measured with the MacArthur Scale of Subjective Social Status (Adler et al., 2000; $M = 5.94$, $SD = 1.32$). Participants indicated their native language, family income level (1 = *Below €500*, 7 = *Above €5,000*; $M = 3.86$, $SD = 1.96$), job status, and educational attainment (1 = *Less than a high school degree*, 8 = *Doctoral degree*; $M = 5.10$, $SD = 0.69$). Following prior research (Kraus et al., 2009), we calculated objective SES as the summary of the standardized scores for participants’ family income and educational attainment.ⁱⁱ

Results

Manipulation Check of Economic Inequality

We conducted a Student’s *t*-test (between-subjects) analysis with two levels (high inequality vs. low inequality), with the average of the manipulation checks as the dependent variable. The outcomes suggested that the experimental manipulation of

economic inequality was successful: Participants assigned to the high-inequality condition perceived to a greater extent that the society was economically unequal ($M = 7.73$, $SD = 1.41$) than those assigned to the low-inequality condition ($M = 5.08$, $SD = 1.73$), $t(168) = 10.92$, $p < .001$, $\eta_p^2 = .42$.

Attention Check of Assigned Group

All participants who responded to the attention check answered it correctly. There was only one missing value. To follow the preregistration, we did not exclude that participant, so we will present the results for all participants.

Preregistered Analyses

To test our main hypotheses, we preregistered to run two repeated-measures ANOVAs, in which we included economic inequality (high inequality vs. low inequality) as the between-participants factor, content traits (agentic vs. communal) as the within-participants variable, and perception of the (a) typical man and (b) typical woman as the dependent variable. To interpret the meaning of the interaction, we ran pairwise comparisons with Bonferroni adjustment within the repeated-measures ANOVA.ⁱⁱⁱ

Agency and Communion of the Typical Man. Results revealed a significant interaction of Economic inequality \times Content, Wilks's $\lambda = .91$, $F(1, 168) = 15.58$, $p < .001$, $\eta_p^2 = .08$. Concretely, participants assigned to the high-inequality condition evaluated the typical man as more agentic than communal, $M_D = 0.75$, 95% CI [0.45, 1.04], Wilks's $\lambda = .87$, $F(1, 168) = 25.10$, $p < .001$, $\eta_p^2 = .13$. In the low-inequality condition, the difference between agentic and communal ascriptions to the typical man was not significant, $M_D = -0.09$, 95% CI [-0.38, 0.21], Wilks's $\lambda = .99$, $F(1, 168) = 0.33$, $p = .568$, $\eta_p^2 = .01$. These results support H1 (see Table 1 for descriptive statistics).

We also observed a main effect of the content, $F(1, 168) = 9.85, p = .002, \eta_p^2 = .05$, in the sense that people generally ascribed more agentic ($M = 4.51, SD = 0.85$) than communal traits ($M = 4.18, SD = 1.11$) to the typical man.

Agency and Communion of the Typical Woman. As expected, we observed a significant interaction effect of Economic Inequality \times Content, Wilks's $\lambda = .94, F(1, 167) = 10.89, p = .001, \eta_p^2 = .06$. When we interpreted the interaction, we found that in the low-inequality condition, participants evaluated the typical woman as more communal than agentic, $M_D = 0.77, 95\% \text{ CI } [-1.00, -0.53], \text{ Wilks's } \lambda = .80, F(1, 167) = 45.53, p < .001, \eta_p^2 = .20$. However, participants assigned to the high-inequality condition evaluated the typical woman as slightly more communal than agentic, but that difference was not significant, $M_D = 0.22, 95\% \text{ CI } [-0.01, 0.45], \text{ Wilks's } \lambda = .98, F(1, 167) = 3.53, p = .062, \eta_p^2 = .02$. Overall, these findings support H2.

We also observed a main effect of the content, Wilks's $\lambda = .82, F(1, 167) = 35.40, p < .001, \eta_p^2 = .17$, in the sense that participants evaluated, in general, the woman in a more communal ($M = 4.79, SD = 0.98$) than agentic way ($M = 4.30, SD = 0.81$). For descriptive statistics, see Table 1.

Non-Preregistered Analysis: Multivariate Analysis of Covariance for Agency and Communion Dimensions

To test the robustness of the effect of economic inequality on agentic and communal dimensions and to see which dimension was driving the differences in ascriptions, we carried out a multivariate analysis of covariance (MANCOVA). This analysis enabled us to learn whether the differences occurred because inequality increases perceived agency or decreases perceived communion, or both.

We included economic inequality as the between-subjects variable and (a) agency and (b) communion of the male target and (c) agency and (d) communion of the female target as the dependent variables. We included gender, age, political orientation, subjective SES, objective SES, and the counterbalanced order of presentation of the male and female target evaluation as covariates. Even controlling for the covariates, we observed a multivariate effect of economic inequality, Wilks's $\lambda = .88$, $F(4, 155) = 5.32$, $p < .001$, $\eta_p^2 = .12$. In particular, the communion ascribed to males ($F[1, 158] = 16.01$, $p < .001$, $\eta_p^2 = .10$) and females ($F[1, 158] = 11.11$, $p = .001$, $\eta_p^2 = .07$) was influenced by economic inequality (see Figure 1). We observed that in the high economic inequality condition, men's and women's communion were significantly lower than in the low economic inequality condition. We did not observe significant differences ($p > .05$) for agency ascribed to males and females between the high- and low-inequality conditions (see Table S1 and Table S2 in the Supplementary Materials for descriptive statistics and correlations between the variables, respectively).^{iv}

Discussion

The results of Study 1 provided evidence for the effect of perceived economic inequality in a society on the different use of the Big Two when perceiving a man and a woman. More precisely, and supporting our hypotheses, we observed that when people perceived high economic inequality, the difference in agentic–communal ascriptions to a man became greater (H1), and it became smaller—and not significant—when evaluating a woman (H2). Moreover, follow-up analyses showed that the effects of inequality on perceived communion mainly drove this effect. We found that when people perceived high economic inequality, they were less likely to perceive others possessing traits such as trust, kindness, and warmth (i.e., communion). The fact that the

environment was equal or unequal hardly influenced the ascription of agency to men and women. Taken together, this could mean that the agency ascribed to men is even greater than communion under high economically unequal settings, and that the communion versus agency ascribed to women is not as great under high economic inequality settings compared to under low economically unequal conditions.

In sum, we found that economic inequality increased the relative importance of agency over communion in men's stereotypes and decreased the prevalence of communion over agency in women's stereotypes. This was mainly due to the decrease of perceived communion in both man and woman. Hence, it could be worthwhile to consider that economic inequality may foster particular agentic dynamics (e.g., competition; Sommet et al., 2019) that simultaneously imply a lack of communion (Chan et al., 2019; Wojciszke & Abele, 2019), which leads to the decrease of communion itself.

However, these results might have occurred because we did our research in Spain, a country in which gender roles are less established. In fact, Spain is a feminine-oriented culture, one in which there is less gender role differentiation (Hofstede, 2011; Hofstede Insights, 2020). Consequently, gender stereotypes could be less cognitively accessible, and inequality could influence the perception of both men and women in a similar way (i.e., through decreasing communion) because there is less gender role differentiation. To rule out the possibility that our results were due to gender role differentiation being less cognitively accessible for our participants, in Study 2, we aimed to replicate our results using a sample from a more masculine country, Mexico, according to Hofstede's cultural dimensions (Hofstede Insights, 2020).

Study 2

Culture and socioeconomic conditions are main aspects of countries worldwide. Indeed, cultural and socioeconomic environments affect people's psychology (Markus & Kitayama, 1991; Triandis, 1994; Üskül & Oishi, 2018, 2020). According to Hofstede's (1991) cultural dimensions, Mexico has a more masculine culture compared to Spain (Hofstede Insights, 2020). Consequently, in Mexican society, gender roles are more established in the population than in the Spanish culture; therefore, they are more cognitively accessible. Moreover, Mexico is also economically more unequal compared to Spain (World Bank, 2020). Therefore, in Study 2, we wanted to replicate the results of Study 1 in a different cultural context: a more masculine and more unequal society than Spain, namely, Mexico.

Method

Participants and Procedure

We conducted an a priori power analysis with G*Power (Faul et al., 2009) with the same criteria as in Study 1. Thus, to detect an effect size of $f = .20$, the minimum desirable sample size was 72 participants. We were able to collect 222 initial responses^v from students at a university in the northeast of Mexico. Following the preregistration, we excluded participants who did not indicate Spanish as their native language and did not indicate being 18 years or older. After these exclusions, a total of 215 participants older than 18 years (157 women, 58 men; $M_{age} = 21.51$, $SD = 5.23$) took part in the study.

We recruited participants from a psychology class at a Mexican university. As in Study 1, a researcher from our team asked students to participate in the study via an online survey provided with a survey link and QR code. All participants gave their

consent for participation through informed consent at the beginning of the survey, and they read information about their voluntary participation, as well as the anonymity and confidentiality of their answers.

Measures

All the following measures were presented in the online survey created in Qualtrics.^{vi} We counterbalanced the order of presentation of the typical man and woman evaluation.

Experimental Manipulation of Economic Inequality. We used the same experimental manipulation of economic inequality as in Study 1. Although we used the Bimboola paradigm (Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, 2019), we used house, car, and vacation items adapted to the Mexican context. Participants were randomly assigned to the high-inequality ($n = 111$) or low-inequality ($n = 104$) experimental condition. We used the same two manipulation checks as in Study 1 ($r = .77, p < .001$).

Agency and Communion of the Typical Man and the Typical Woman. As in Study 1, participants answered to what extent they considered each of Diekmann and Eagly's (2000) agentic and communal trait items—translated into Spanish—presented applied to the typical man ($\alpha_{agency} = .80; \alpha_{communion} = .89$) and woman ($\alpha_{agency} = .77; \alpha_{communion} = .92$) of that society on a 7-point scale (1 = *Not at all*, 7 = *Very much*).

Socioeconomic Status of the Typical Man and the Typical Woman. Similar to Study 1, after responding to the dependent variables, participants answered the following question about the target (woman target within parentheses): “When you answered about the typical man (woman) of Bimboola, which group did you consider him (her) to belong to?” (1 = *Group 1* [the highest income; 11.6%], 2 = *Group 2*

[middle income; 79.1%], 3 = *Group 3* [the lowest income; 9.3%]). Generally, participants considered the typical man (66.5%) and woman (79.1%) to be middle class.

Sociodemographic and Socioeconomic Variables. Finally, participants responded to the same sociodemographic measures as in Study 1: political orientation ($M = 6.14$, $SD = 2.04$), subjective SES ($M = 7.14$, $SD = 1.53$), native language, family income level ($M = 5.08$, $SD = 0.89$), job status, and educational attainment ($M = 5.07$, $SD = 0.40$). We also calculated objective SES (Kraus et al., 2009).

Results

Manipulation Check of Economic Inequality

We conducted a Student's *t*-test (between-subjects) analysis with two levels (high inequality vs. low inequality), with the average of the manipulation checks as the dependent variable. We observed that the experimental manipulation was successful, as participants assigned to the high-inequality condition perceived to a greater extent that the society was economically unequal ($M = 7.49$, $SD = 1.45$) than participants in the low-inequality condition ($M = 5.00$, $SD = 1.41$), $t(213) = 12.71$, $p < .001$, $\eta_p^2 = .43$.

Attention Check of Assigned Group. Almost all participants (99.5%) who answered the question about which income group they were assigned to indicated being assigned to the middle-income group, except one participant, who indicated being assigned to the high-income group. To avoid deviation from the preregistered exclusion criteria, we continued our analysis including that participant.

Preregistered Analysis

To test our main hypotheses, we preregistered and followed the same analysis strategy used in Study 1.

Agency and Communion of the Typical Man. Similar to Study 1, results revealed a significant interaction effect of Economic inequality \times Content, Wilks's $\lambda = .93$, $F(1, 213) = 16.65$, $p < .001$, $\eta_p^2 = .07$. Participants assigned to the high-inequality condition evaluated the typical man of the society as more agentic than communal, $M_D = 0.77$, 95% CI [0.55, 1.00], Wilks's $\lambda = .82$, $F(1, 213) = 46.87$, $p < .001$, $\eta_p^2 = .18$. In the low-inequality condition, the difference between agentic and communal ascriptions to the typical man was not significant, $M_D = 0.11$, 95% CI [-0.12, 0.34], Wilks's $\lambda = .99$, $F(1, 213) = 0.90$, $p = .345$, $\eta_p^2 = .01$. All these findings support H1. See Table 2 for descriptive statistics.

We also observed a main effect of the content, Wilks's $\lambda = .88$, $F(1, 213) = 29.61$, $p < .001$, $\eta_p^2 = .12$, in the sense that people ascribed more agentic ($M = 4.72$, $SD = 0.87$) than communal traits ($M = 4.27$, $SD = 0.95$) to the typical man.

Agency and Communion of the Typical Woman. Replicating Study 1, we found an interaction effect of Economic inequality \times Content, Wilks's $\lambda = .97$, $F(1, 213) = 7.46$, $p = .007$, $\eta_p^2 = .03$. Interpreting this interaction, we observed that participants assigned to the high-inequality condition evaluated the typical woman in the society as more communal than agentic, $M_D = 0.46$, 95% CI [0.24, 0.68], Wilks's $\lambda = .92$, $F(1, 213) = 17.49$, $p < .001$, $\eta_p^2 = .08$. However, this difference was even bigger in the low-inequality condition, $M_D = 0.89$, 95% CI [0.67, 1.12], Wilks's $\lambda = .78$, $F(1, 213) = 61.61$, $p < .001$, $\eta_p^2 = .22$, supporting H2.

As in Study 1, we observed a main effect of the content, Wilks's $\lambda = .74$, $F(1, 213) = 73.08$, $p < .001$, $\eta_p^2 = .25$; that is, participants generally ascribed more communal ($M = 5.04$, $SD = 0.91$) than agentic traits to the typical woman ($M = 4.37$, $SD = 0.86$).

Non-Preregistered Analysis: Multivariate Analysis of Covariance for Agency and Communion Dimensions

We ran a similar MANCOVA as in Study 1. We found a multivariate effect of economic inequality, Wilks's $\lambda = .89$, $F(4, 203) = 6.50$, $p < .001$, $\eta_p^2 = .11$, even when controlling for the covariates. Economic inequality influenced the communion ascribed to males ($F[1, 206] = 20.12$, $p < .001$, $\eta_p^2 = .09$) and females ($F[1, 206] = 6.93$, $p = .009$, $\eta_p^2 = .03$), as can be seen in Figure 2. Replicating the findings of Study 1, in the high economic inequality condition, men's and women's communion was significantly lower than in the low economic inequality condition. We did not observe significant differences ($p > .05$) for agency ascribed to males and females between the high- and low-inequality conditions. See Table S3 and Table S4 in the Supplementary Materials for descriptive statistics and correlations, respectively.

Discussion

These findings corroborate the effect of economic inequality on agentic and communal ascriptions to a man and a woman in a different cultural and socioeconomic context from that of Spain. Consistent with Study 1, we found that the typical man in the society was perceived as more agentic than communal, especially in the high versus low economic inequality condition, whereas the typical woman was perceived as more communal than agentic, but this difference was smaller under the high economic inequality condition. In other words, we observed again that when economic inequality is high, the difference in agentic–communal ascriptions to a man becomes greater (H1), and it becomes smaller in a woman's evaluation (H2). Importantly, in Study 2, we replicated the results of Study 1, showing that these effects might be driven by the effects of economic inequality on perceived communion.

General Discussion

Research on the psychosocial impact of economic inequality has increased considerably in recent years. More precisely, recent studies have evidenced the effect of perceived economic inequality on groups' stereotypes (e.g., Connor et al., 2021; Moreno-Bella et al., 2019). To address the gap regarding the possible effect of subjective economic inequality on gender stereotypes, we tested across two experiments whether perceived economic inequality would affect men's and women's agentic and communal trait attributions. Our research contributes to the literature on the consequences of economic inequality, in a field hitherto explored, such as gender stereotypes. In short, we have shown that a macrosocial factor, such as economic inequality, influences the stereotypes' content with which people perceive men and women. This is important given the enormous repercussions that gender stereotypes have (Ellemers, 2018). Moreover, our findings also contribute to the literature on gender stereotypes, showing both their dynamic and their link with sociostructural variables. Studies often investigate stereotypes in a social vacuum (Tajfel, 1972). Our results show that their content is a more malleable reality than is often thought; in this case, perceived economic inequality influenced their content.

In both experiments, using samples from two different cultures, we evidenced that perceiving a society as very economically unequal leads to accentuating the difference between agentic and communal ascriptions to men. That is, people perceive male citizens as more agentic than communal when the economic gap in the society was large versus small. According to previous findings, high social status and power entail competence (Fiske et al., 2016). Indeed, members of groups with high social status, such as men (Eagly & Steffen, 1984; Ridgeway & Bourg, 2004; Rucker et al., 2018),

are considered more competent than warm (Fiske et al., 2002, 2016; Glick et al., 2000). Going beyond that, and consistent with research on perceived economic inequality, our results showed that perceiving high economic inequality in a society amplified the difference in agency–communion attributions to high social status groups (Moreno-Bella et al., 2019).

By contrast, our studies showed that when people perceived the society was very economically unequal, the difference in agency–communion attributions to women citizens decreased. This happened because people perceived women citizens were less communal when they perceived the economic gap in the society as being large versus small. However, when they perceived that economic differences in the society were not as excessive (i.e., the low economic inequality condition), they attributed significantly more communal than agentic traits to the woman citizen. These results evidence that contextual socioeconomic features can shape traditional female stereotypes, decreasing the ambivalence of their traditional stereotype. This might be because female stereotypes are generally more dynamic and fluid compared to male stereotypes, given that has been a greater change in the women’s social roles than those of men (Diekmann & Eagly, 2000; Eagly et al., 2019; Haines et al., 2016; López-Zafra & García-Retamero, 2021; Moya & Moya-Garófano, 2021). In this sense, it is worth mentioning that we observed this finding even in a masculine culture (i.e., Mexico), where the social role differentiation between genders is considerably more salient and well established compared to a more feminine-oriented culture, such as Spain (Hofstede, 1980, 2011; Hofstede Insights, 2020).

Economic inequality, as a macroeconomic variable (i.e., Gini index), has not been shown to be related to cultural masculinity and femininity (Malinoski, 2012), that

is, to the differentiation between gender roles at the macro level. However, Durante et al. (2013, 2017) revealed that objective economic inequality (i.e., Gini index) increased the ambivalence of the stereotypes; therefore, groups were perceived with more ambivalence way within their stereotype (that is, perceiving many groups as either communal or agentic, but not both). At first glance, our results appear to contradict the referred findings because we found a casual effect of perceived economic inequality on gender stereotypes, and beyond that, we obtained a pattern supporting the ambivalence concerning the male stereotype but not concerning the female stereotype when economic inequality was perceived as high. However, Durante et al. (2013) focused on studying the ambivalence of several societal groups' stereotypes as a whole and their relationship with actual economic inequality. Unlike these authors, we particularly focused on the effect of economic inequality specifically on descriptive gender stereotypes. Additionally, to further understand these possible contradictory results, note that economic inequality of an objective or subjective nature can have different effects (Schmalor & Heine, 2021). In the abovementioned findings, Durante et al. (2013) focused on objective economic inequality measured by an indicator based on the dispersion of income across the whole income distribution (Census Bureau, 2016). Instead, in our research, we focused on examining an individual-level variable, namely, perceived (or subjective) economic inequality. The distinction between objective and subjective perceptions of economic inequality holds relevance for insight into individual and societal outcomes (Hauser & Norton, 2017). Importantly, perceived economic inequality constitutes a complex process in people's minds, and it better predicts people's behaviour compared to objective economic inequality (for a review, see Jachimowicz et al., 2020; Phillips et al., 2020).

Our results indicated that when people perceived high economic inequality, both man and woman were considered less communal relative to perceived low levels of economic inequality. Thus, economic inequality possibly underestimates the relevance of communality (i.e., being connected with others), traditionally related to women, which might affect them in some respects (e.g., academic and job opportunities). However, it may also harm all individuals who are mainly communal regardless of their gender. Additionally, the decreased communion dimension in the social perception of both men and women could have a different effect on men's and women's lives. In highly economically unequal contexts, while men's descriptive stereotype fits with the prescriptive one (i.e., high in agency and low in communion), women might be socially penalized because the descriptive stereotype of women slightly differs from the prescriptive one. In other words, under economic inequality, people do not perceive women as high in communion than traditionally expected. Apart from this, the decrease of communal content in the perception of both men and women citizens may imply a more distant and less cohesive society (Rodríguez-Bailón et al., 2020).

The present studies contribute to the study of gendered issues by showing that perceiving a society's socioeconomic structure influences the way people perceive men and women (i.e., gender stereotypes). Other studies have also attempted to establish a relationship between socioeconomic structure and gendered issues. For instance, economic inequality predicts positively women's preferences for masculinized faces (Brooks et al., 2011) and female sexualization (Blake et al., 2018). More generally, according to social role theory, gender differences in behaviour emerge primarily from physical sex differences in conjunction with influences of the economy, social structure, ecology, and cultural beliefs; that is, from women's and men's contrasting social

positions in society (Eagly & Wood, 1999). From this perspective, several sociostructural variables cause and maintain gender stereotypes. However, in our studies, we did not find evidence that economic inequality was one of them: Economic inequality had similar effects for how men and women were perceived because it decreased the perceived communion of both gender groups.

These findings hold importance in the literature on the psychosocial effects of economic inequality because they show economic inequality affects the perceptions of men and women. Likewise, these results hold relevance for gender studies given that economic inequality shapes the agentic and communal content of gender stereotypes. Additionally, these results have important implications for gender equality. Considering gender stereotypes influence behaviours towards men and women (Eagly & Heilman, 2016; Eagly & Wood, 2016; Ellemers, 2018), future studies could address this issue through examining whether gender stereotypes in economically unequal settings—where the scarcity of resources is salient—predict particular attitudes towards gender equality, such as support for women quotas, and willingness to act collectively for gender equality.

Our results align with the aforementioned evidence about decreased communion-oriented behaviours (e.g., Elgar & Aitken, 2011; Graafland & Lous, 2019; Nishi et al., 2015; Oishi et al., 2011; Paskov & Dewilde, 2012; Uslaner & Brown, 2005) and communion-oriented norms (Sánchez-Rodríguez, Willis, et al., 2019) when inequality is high (vs. low). We did not observe a significant increase of agency in the high economic inequality condition, but communion drove the increase in agency—communion differences in male stereotypes and of the smaller difference between agency and communion in female stereotypes. Based on the dual perspective model

(Abele & Wojciszke, 2014), which suggests that communion is a more relevant dimension than agency is in the observer perspective, it is reasonable to consider that communion could drive such content differences in others' evaluations.

We should also note that in our research, we attempted to shed light on whether the system justification or normative climate narratives frame the effect of economic inequality on gender stereotypes. Our findings revealed preliminary evidence in support of the normative climate hypothesis (Wilkinson & Pickett, 2017) as expected.

According to this framework, the normative climate of economically unequal societies is characterised by more aspects related to agency (e.g., competition) and a lack of aspects related to communion (e.g., social cohesion) compared to societies that are more egalitarian. Following this, we expected the same pattern for both gender stereotypes: an increase of agentic content and decrease of communal content. Our results allowed us to support this hypothesis in the sense that economic inequality similarly affected the content of both gender stereotypes through decreasing the communal content. We constructed our hypotheses on the differences of agentic and communal content of gender stereotypes based on the normative climate narrative, and we found support for them. However, further research should delve deeper in this because the system justification theory could also explain the male stereotype prediction (Jost et al., 2004).

The two studies presented in this research have certain limitations that should be acknowledged. First, the samples examined were mainly composed of educated participants, that is, university students and university library users. Further research could benefit from replicating the main results with general population samples, considering university students might have more awareness of socioeconomic-related issues and gender stereotypes compared to those in other sectors of society. Therefore,

the effect of perceived economic inequality on gender stereotypes is possibly more noticeable with general populations who have lower awareness of economic and gender inequality issues (Moya et al., 2000). Second, the method researchers use to manipulate economic inequality influences the outcomes (Jachimowicz et al., 2020). We used the Bimboola paradigm to manipulate economic inequality (Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, 2019). This paradigm has shown to work well in the field of perceived economic inequality and its consequences (e.g., Blake & Brooks, 2019; Sánchez-Rodríguez, Jetten, et al., 2019; Sánchez-Rodríguez, Willis, et al., 2019; Sprong et al., 2019). However, this paradigm has the limitation of being based on a fictitious society. Although this allows researchers to see how participants perceive the social climate in a context that is alien to them and to the norms already established in their society, we believe that it would be worthwhile to use different methods to highlight the economic inequality in real environments. Importantly, using the experimental design allowed us to control for external variables that could be confounded when examining the causal effect of economic inequality on social perception, as stated in recent studies aimed at examining the consequences of economic inequality (see Sánchez-Rodríguez & Willis, 2021; Willis et al., 2022). As such, researchers have successfully used the Bimboola paradigm to examine the consequences of economic inequality on individualism (Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, 2019), status anxiety (Melita et al., 2021; Velandía-Morales et al., 2022), social vigilance (Cheng et al., 2021), or acceptance of authoritarian leadership (Sprong et al., 2019). However, we should acknowledge our design's limitation and the consequential mismatch between internal and external validity (Campbell, 1957; but see Turner, 1981). Even though our studies have high internal validity, we should be cautious when generalizing our results

to actual societies. The artificiality of the experimental paradigm that we used may not fully reflect real societies where the social stratification and economic differences are not so evident to their citizens. Indeed, people misperceive their societies' actual economic inequality (Gimpelson & Treisman, 2018). Nonetheless, the lack of external validity when examining the consequences of economic inequality is a complicated issue to solve because it could be unethical to assign people, in a realistic way, to live in more or less economically unequal societies (Sánchez-Rodríguez & Willis, 2021). In this respect, our results may open the way for further socioecological research to examine in field studies how actual macroeconomic conditions associate to human cognition (see Uskul et al., 2008).

We also consider it important to include cultural aspects when studying the influence of gender stereotypes on attitudinal or behavioural outcomes (e.g., Hofstede, 1996) because the content of stereotypes stem in large part from societies' predominant cultural values (Cuddy et al., 2015; Steinmetz et al., 2014). In our research, we have taken into account cultural differences through conducting the research in two relatively different countries, Mexico and Spain. However, future studies should have better consideration of cultural differences between countries.

Moreover, although our research supports previous literature suggesting that economic inequality decreases communality-oriented social norms, we consider it appropriate to explore the reverse pattern to illuminate whether perceived economic inequality causes such a relationship, or conversely, is the a consequence of the normative social climate, working as a vicious circle of the normative climate of economic inequality.

Overall, across the two studies with different socioeconomic and cultural contexts, we found that when people perceived the social context to have high economic inequality (versus relatively low economic inequality), the difference in the agentic–communal content in their social evaluations of men increased, whereas it decreased in the case of women’s social evaluations through a reduction of communality in person perception. This suggests that perceived economic differences between people makes individuals less likely to perceive others as possessing communal traits. In sum, extending the evidence of the psychosocial consequences of perceived economic inequality, we contribute to this literature by showing that perceiving high economic inequality can also shape the content of traditional gender stereotypes.

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Conflicts of interest/Competing interests

The authors declare that there are no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Ethical Approval

All procedures performed in this research involving human participants followed the ethical standards of the Vicerectory of Research and Scientific Policy of the University of Granada, and it is in accordance with the 1964 Helsinki Declaration. All participants were informed in writing about the objectives of the study and the voluntariness of participation.

Availability of data and material

All data and syntax files are available at <https://osf.io/dnfbk/>

Authorship

Eva Moreno-Bella conceptualized the main idea, designed the studies, collected data of Study 1, analyzed all the data, developed the first draft of the manuscript and contributed theoretically to the different drafts of the manuscript. Guillermo B. Willis,

contributed to the conception and design of the studies, critically revised the manuscript, and contributed theoretically to the several drafts of the manuscript. Angélica Quiroga-Garza was involved in data collection of Study 2 and critically revised the manuscript. Miguel Moya contributed to the conception and design of the studies, critically revised the manuscript, and contributed theoretically to the different drafts of the manuscript. All the authors approved the final version of the manuscript to be published.

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Table 1

Descriptive Statistics of the Economic Inequality × Content Interaction on the Typical Man and Woman's Ascriptions in Study 1

	High EI				Low EI			
	AC		CC		AC		CC	
	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI
Man ascriptions	4.58 (0.83)	[4.40, 4.76]	3.83 (1.05)	[3.61, 4.06]	4.44 (0.87)	[4.26, 4.63]	4.53 (1.07)	[4.30, 4.76]
Woman ascriptions	4.29 (0.09)	[4.11, 4.46]	4.51 (0.10)	[4.30, 4.71]	4.31 (0.09)	[4.14, 4.49]	5.08 (0.10)	[4.87, 5.28]

Table 2

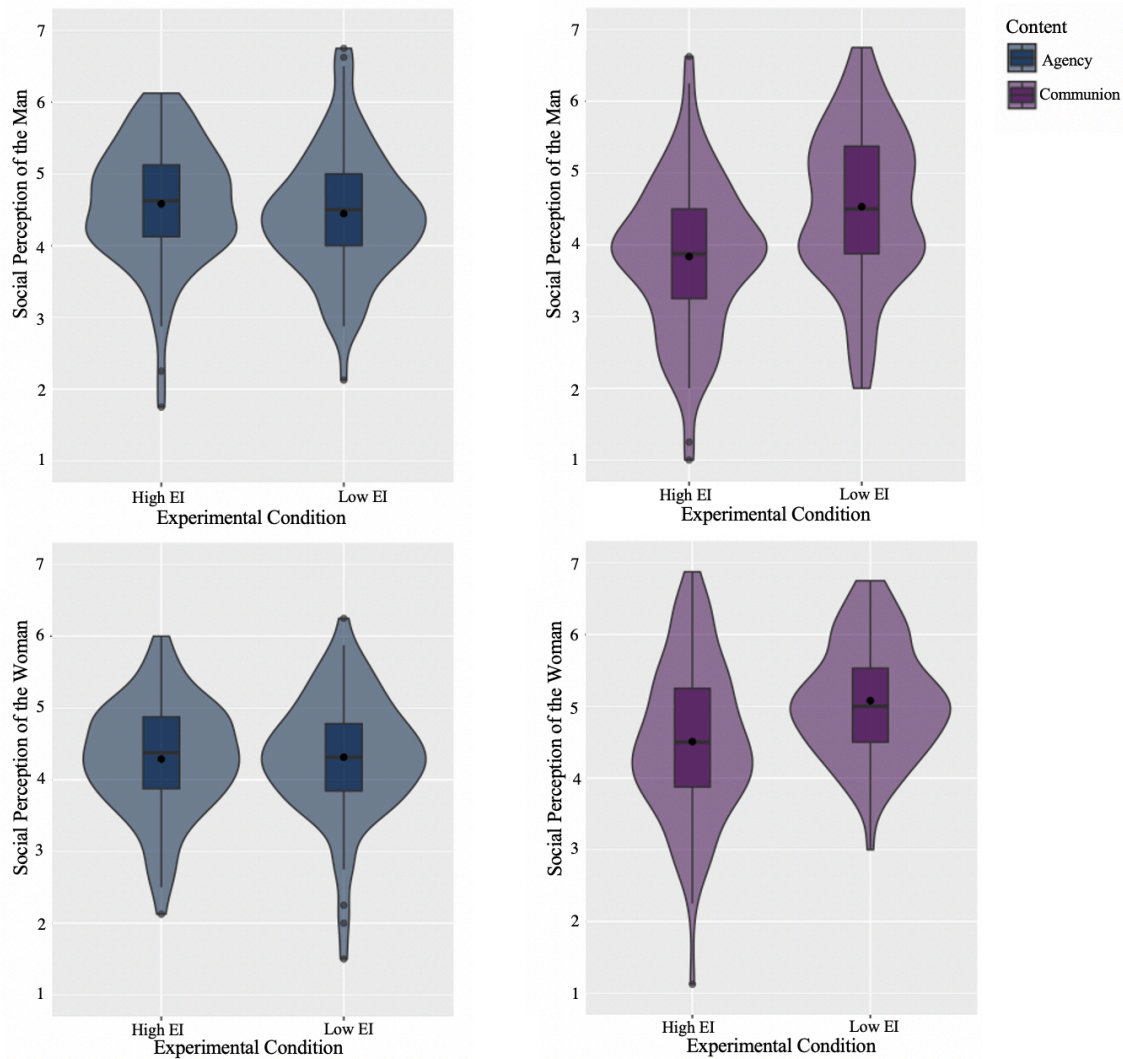
Descriptive Statistics of the Economic Inequality × Content Interaction on the Typical Man and Woman's Ascriptions in Study 2

	High EI				Low EI			
	AC		CC		AC		CC	
	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI	<i>M</i> (<i>SD</i>)	95% CI
Man ascriptions	4.75 (0.08)	[4.59, 4.92]	3.98 (0.85)	[3.81, 4.15]	4.69 (0.09)	[4.52, 4.85]	4.58 (0.09)	[4.40, 4.75]
Woman ascriptions	4.38 (0.08)	[4.22, 4.54]	4.84 (0.09)	[4.66, 5.03]	4.35 (0.08)	[4.18, 4.52]	5.24 (0.10)	[5.05, 5.43]

Note. EI = Economic inequality; AC = Agentic content; CC = Communal content.

Figure 1

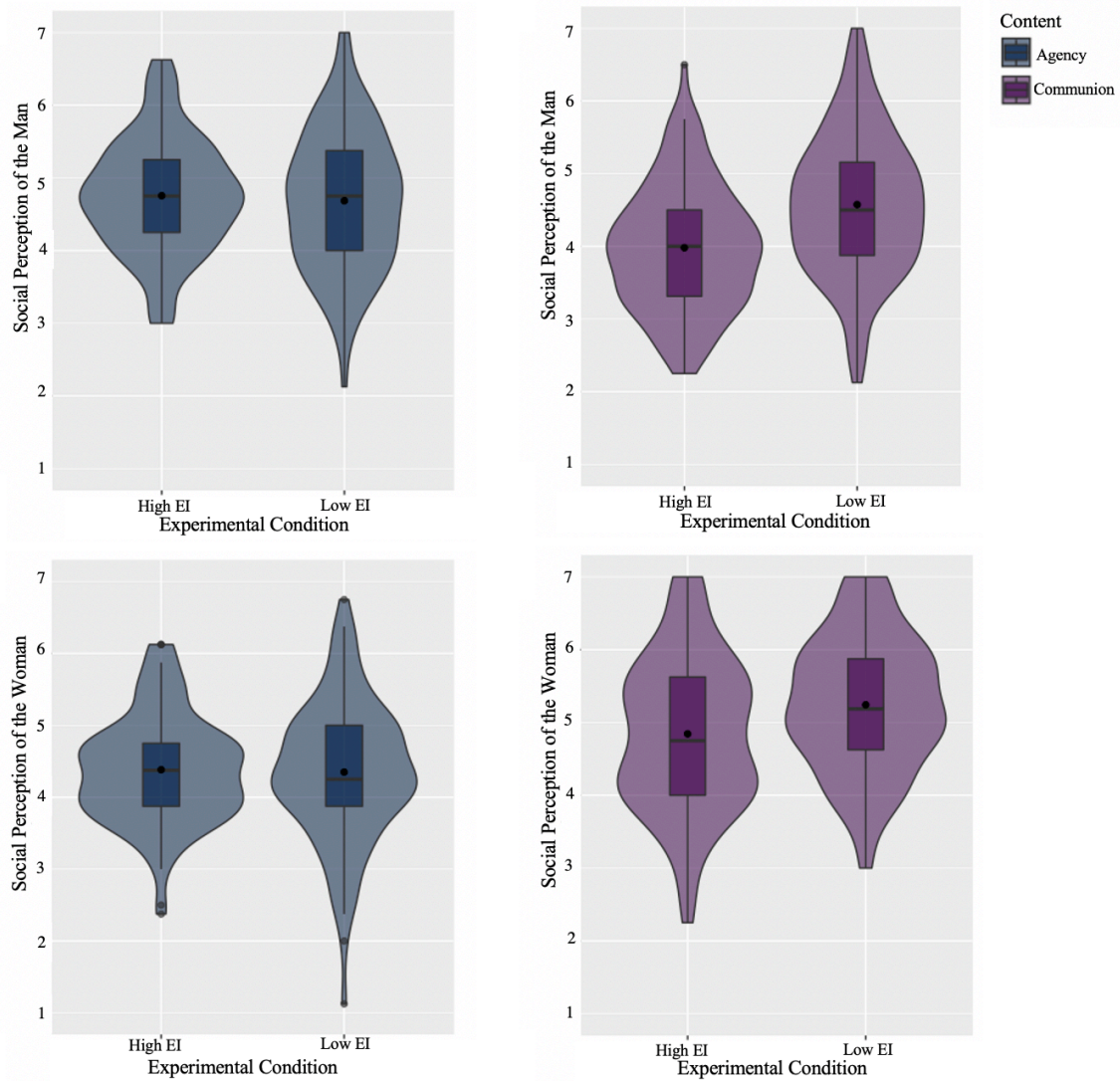
Visualization of the Data Distribution for the Social Perception of Each Target (Man vs. Woman) by Content (Agency vs. Communion) Across the Two Experimental Conditions (High Economic Inequality [$n = 85$] vs. Low Economic Inequality [$n = 85$]) in Study 1



Note. The figure shows the minimum, first quartile, mean, median, third quartile, maximum, density of the data at different values, and outliers in each experimental condition by content. EI = Economic inequality experimental condition.

Figure 2

Visualization of the Data Distribution for the Social Perception of Each Target (Man vs. Woman) by Content (Agency vs. Communion) Across the Two Experimental Conditions (High Economic Inequality [$n = 111$] vs. Low Economic Inequality [$n = 105$]) in Study 2



Note. The figure shows the minimum, first quartile, mean, median, third quartile, maximum, density of the data at different values, and outliers in each experimental condition by content. EI = Economic inequality experimental condition.

ⁱ We rewrote the hypotheses in the article to make them easier to understand. The preregistered hypotheses capture the same meaning and predict the same direction of the effect, but their writing did not promote easy reading of the article. The edits did not result in any changes to the hypotheses.

ⁱⁱ Correlations between the variables of each study are available in the Supplementary Materials.

ⁱⁱⁱ Non-preregistered repeated-measures ANCOVAs are available in the Supplementary Materials. We included gender, age, political orientation, subjective socioeconomic status (SES), objective SES, and the counterbalanced order of presentation of the male and female target evaluation as covariates. The results of the ANCOVAs suggest no changes in the results.

^{iv} To better understand gender stereotypes in high and low unequal settings, we carried out additional analyses to test the difference between woman's and man's perceived agency and communion depending on the level of economic inequality. We did not find an interaction effect between economic inequality \times target's gender for either perceived agency or communion, neither in Study 1 nor in Study 2.

^v The reason we collected more participants than the maximum number after exclusions is that we considered that the entire recruited sample would meet all the requirements to participate. There were also cases with no initial responses, which we excluded.

^{vi} Other measures were collected with an exploratory purpose. These measures and analyses are available in the Supplementary Materials.