

## **Pride and Protest: Emotional response in the aftermath of the Chilean social outburst**

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## Abstract

In the last months, Chile -like others in the world- has gone through an environment of widespread street protests claiming for structural changes and challenging the “Chilean miracle.” This study uses an interrupted public opinion poll to assess the effect of the Chilean social crisis’ first weeks that began in October 2019 on moral sentiments of the general population. Our findings suggest that emotions toward the country, official symbols, and economic development were negatively affected by the crisis. Protests signaled that the country was not as it was thought, generating a moral shock that affected shared emotions about the country. However, at the same time, the specific reciprocal moral sentiments between fellow citizens were positively affected. Henceforth, the social crisis emerges as an opportunity for strengthening collective ties either by sharing sentiments toward who is blamed by the movement or between Chileans. In the aftermath of October 18, the effect on emotions could explain the massiveness and durability of the social movement.

*Keywords:* social movements, emotions, Chile, public opinion, culture

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### **Introduction**

After the revival of emotions in the cultural analysis of protests (Goodwin, Jasper, & Polletta, 2000; Jasper, 1998, 2011, 2014), they have been isolated as causal mechanisms of willingness or actual engagement in social movements (e.g. DeCelles, Sonenshein, & King, 2019; Thomas, Zubielevitch, Sibley, & Osborne, 2020; Weber, Mummendey, & Waldzus, 2002). However, they are also crucial for the effectiveness of movements as well as in generating potential long-term transformations. The emotional response of the general population to social movements is highly relevant in the current context where climate change, the pandemic of coronavirus disease, and widespread socio-political crises arise uncertainties about future directions of our systems of values and traditional forms of culture. What is the effect that these moral shocks have on the way that we feel and think? In this study, we attempt to examine the short-term effects of one of these shocks on moral emotions (Jasper, 1998, 2011).

Emotions are an aspect of culture. Culture delineates how emotions are constituted, managed, and experienced (Thoits, 1989). Emotions are shared among individuals and socially influenced (Jasper, 2011, 2014). They are also part of the public culture, and individuals can strategically use them to make sense of their actions (Swidler, 2001). Therefore, how individuals change their emotions toward certain objects is a question about cultural change. Using an interrupted public opinion poll, we analyze the impact of the first weeks of 2019 “Chilean spring” (Somma, Bargsted, Disi Pavlic, & Medel, 2020) on country’s pride, economic development, and Chilean citizens themselves. Recent developments in cultural sociology suggest that cultural change is rather the exception than the norm (Kiley & Vaisey, 2020; Vaisey & Lizardo, 2016). Either cultural change

occurs due to cohort replacement (Vaisey & Lizardo, 2016), or changes are non-persistent (Kiley & Vaisey, 2020). Thus, we discuss whether the Chilean social movement could lay the foundations for a more stable cultural change.

The Chilean social outburst<sup>1</sup> is a case in a multicausal global wave of protests. Hong Kong, Lebanon, Catalonia, and, more recently, the United States have encountered massive social movements<sup>2</sup> Discussing whether these movements are connected goes beyond the aims of this study, but we can state that they are part of a widespread crisis of political institutions across the globe. The “Chilean spring” offers an opportunity to evaluate the changes in emotions of the general population after the first weeks of protest activities in one of these movements, which we refer to as short-term consequences of the social movement. The case of the protests in Chile is relevant because it was the first country where neo-liberal economic policies were implemented (Harvey, 2007), and this movement has signaled deficiencies of the model. Therefore, the protests in Chile do not only defy the country’s structural conditions, but rather the legitimacy of the global economic system. As Fantasia and Hirsch (2004) argue, acute social struggles provide bases for cultural transformation. The Chilean social outburst initiated what cultural sociologists (Bail, 2012; Swidler, 1986) have called “unsettled times,” where the large-scale and unprecedented crisis challenges shared beliefs about how society should work and emotions toward the social environment.

Since early October of 2019, secondary-school students started protesting fare-dodging on the metro of Santiago, capital of Chile, after an increase of the fare from about USD 1.12 to USD 1.16, equivalent to 0.28 percent of the minimum wage (Gonzalez

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<sup>1</sup>Translation given to the term “estallido social” (Somma et al., 2020) used by the media and public opinion in reference to the protests in Chile.

<sup>2</sup>For the sake of simplicity, we use the terms social movement, protests movement, and protests interchangeably. For a discussion, see (Porta & Diani, 2006).

& Morán, 2020). Protests involving students have been commonplace in Chile's political landscape and reached one of its more critical moments with the so-called "penguin revolution" in 2006 (Donoso, 2013; Guzman-Concha, 2012). However, on October 18, protests escalated to the general population<sup>3</sup>. Barricades were built, the entire metro system was shut down after attacks, and stations were set alight. On October 19, protests continued across the country with shops looted, buses burned, and clashes between protestors and special police forces. The government declared an emergency state and curfew. Several international organizations have reported human rights violations during that time (e.g. United Nations, 2019). Although the protests have been sporadic during the coronavirus pandemic, and all the spectrum of political parties has approved a referendum for a new political constitution, the case of Hong Kong (Wang, Ramzy, & May, 2020) provides signals that the Chilean movement could also be resumed after the health emergency is under control.

As a shared feature of unsettled times and turning points (Abbott, 1997; Bail, 2012), social scientists and policymakers convey that the escalation of the events in Chile on October 18 was unexpected or "they did not see it coming" (e.g. Sanhueza, 2019; Somma et al., 2020). However, its underlying causes are still a matter of debate. The low levels of political identification, distrust in political parties, unfulfilled expectations, cultural change, and market-based inequalities, among others, have been suggested (e.g. Gonzalez & Morán, 2020; Somma et al., 2020). Although citizens claim for deep structural reforms (e.g. changes in the pension system, reform of the police, a new political constitution), Chile has been long considered one of the most developed countries of Latin America. In the last three decades, Chile has undergone unprecedented changes: poverty reduction, increased GDP, and longer life expectancy (The World Bank, 2017). Hence, this article

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<sup>3</sup>For a more detailed description of the context and main facts of the social crisis in Chile, as well as explanations based on survey data fielded during the crisis see (Gonzalez & Morán, 2020).

compares moral emotions before and after the unexpected events of the first weeks of the Chilean protests movement. Coincidentally, the social crisis interrupted the fieldwork of a public opinion poll aimed to measure beliefs and attitudes toward the country (Fundación Imagen de Chile, 2019). Thus, this survey provides a unique opportunity to examine the effects of the first weeks of the “Chilean spring” as a moral shock.

Following the literature in emotions and social movements, the Chilean social outburst could be conceptualized as a moral shock (Jasper, 1998, 2011, 2014) that provided information signaling that the country was not as expected by the citizens, leading to the re-articulation of emotions toward the country and citizens themselves. Our findings indicate that the protests negatively affected pride in the country, in official symbols, in economic development, and in Chile as a place to live. Nevertheless, the valorization of characteristics of Chileans was positively affected by the social outburst.

The contribution to the literature is threefold. First, this study is one of the first in providing robust evidence of the consequences of the “Chilean spring,” which is part of a larger and dynamic ongoing wave of protests in the world. Second, in the last decades, the literature in emotions has taught us much about why people protest (Stekelenburg & Klandermans, 2013). However, there are few studies considering its cultural consequences on citizens. Third, social and political psychologists have provided evidence of the role of emotions using lab experiments. Although their internal validity, these studies lack ecological validity (Stekelenburg & Klandermans, 2013), and researchers do not really know if the students in the lab are willing to take the streets. Besides defining emotions as an outcome, we use a public opinion survey applied to the general population before and after the protests outburst. Therefore, our findings are sustained on more realistic grounds.

The article is structured as follows. First, the theoretical framework of emotions and social movements is discussed, which provides tools to understand the social outbreak as a

moral shock. Second, we describe our measurements and analytical strategy in the data and methods section. Third, the results are reported and discussed in the conclusion.

### **Protests and emotional response**

The aftermath of the night of October 18 could be understood as an unexpected moral shock of the Chilean society. The widespread protests along the country signaled that the Chilean case's apparent success was not as expected. According to Jasper (2011), these moral shocks generate vertiginous feelings, rethink moral principles, restructure worldviews, or activate underlying values. In addition, repression events following protests -as the case of the protest movement in Chile (Somma et al., 2020)- could lead to even greater mobilization and ignite public indignation toward the responsible of the repression (Aytaç, Schiumerini, & Stokes, 2018; Hess & Martin, 2006; Porta & Diani, 2006). The focus of this study, and what we consider the treatment, are the events of the first weeks of the social movement (for detail of events see Table 1S). Classical organizational theories of social movements consider this stage as "social ferment," where disorganization characterizes the movement, and goals have not been defined clearly yet (Blumer, 1995). Therefore, the effects on emotions are essential for the protests' effectiveness in succeeding stages and as a tipping point of more sustainable transformations.

Emotions are an aspect of culture (Jasper, 2014). Culture delineates how emotions are constituted, managed, and experienced (Thoits, 1989). In toolkit theory, culture is strategically used to make-sense and justify actions (Swidler, 1986; Vaisey, 2009). For instance, people use different understandings of love to interpret their circumstances, feelings, and beliefs (Swidler, 2001). Emotions also participate in the reproduction of culture, subjectivity, and power relations (Harding & Pribram, 2002), linking cognitive understandings and action.

Jasper (2006) has integrated different emotions in the literature into a typology, which helps us to define clearly the scope of this study. First, reflex emotions are quick and automatic reactions to certain events. They include anger, joy, distrust, fear, among others. Second, moods which are typically lasting longer than reflex emotions. They do not take direct objects and can be deployed across settings—for instance, nostalgia. Third, moral emotions or sentiments are more complex than the previous ones. They are more stable feelings toward others or objects and include pride and shame, but also compassion, outrage, and complex forms of fear and anger. When these moral sentiments include support for changes in the structure of the society, they are part of what has been termed “sentiment pools” (Kim & McCarthy, 2016), which are crucial for the effectiveness and success of social movements (Bugden, 2020). Moral emotions could also be considered part of the “hot cognition” (Gamson, 1992), which triggers political consciousness and participation. Social movements research indicates that the achievement of their goals and social change depends upon the support from the public and the alignment of shared sentiments (Andrews, Beyerlein, & Tucker Farnum, 2016; Snow, Rochford, Worden, & Benford, 1986). Our survey includes measurements of pride toward the country and citizens as moral emotions detailed in the variables section.

Social problems that protests signal also require someone to be held accountable (Jasper, 2014). In Chile’s case, institutions have been blamed as responsible (e.g. government, congress, market, political constitutions, among others). Thus, the indignation is targeted toward the government, the system, and their symbols. These emotions are shared by participants and supporters of the social movements. As shown by other public opinion polls, a large majority of the Chilean population supported and participated in the movement across the country<sup>4</sup>. Therefore, these emotions are widely

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<sup>4</sup>Based on a representative and probabilistic sample, surveys (Núcleo Milenio en Desarrollo Social, Chile, De, & Social, 2019) indicate that 85.5 percent of Chileans over the age of 18 declared their support toward the social movement one month after the social outbreak; 55.3 percent declared to have partici-



shared by the population and could explain the low levels of approval of the government<sup>5</sup>.

Henceforth, the new information signaling social problems provided by the movement enables us to yield the hypothesis that pride about the country, the official symbols, and the economic development will be negatively affected in the aftermath of the social crisis (hypothesis 1). They represent the status quo and those responsible for the crisis. Moreover, social movements also generate reciprocal emotions among participants and supporters of the movement. Thus, the affections toward citizens might be positively affected by the social outburst (hypothesis 2). The restructuring of shared moral sentiments toward the country and reciprocal moral sentiments among citizens could have reinforced the collective identity of the social movement (Jasper, 2011), and explain the escalation that the Chilean crisis took in the months after the night of October 18. We cannot elucidate whether the changes will be a stable cultural transformation, or whether moral sentiments will revert to the baseline. However, if the movement had short-term effects on how citizens feel and think, it could be on the basis of a long-term transformation.

## Data and Methods

We use data from the Chilean Pride Study (Fundación Imagen de Chile, 2019), a stratified and probabilistic sample of 1,503 Chileans over the age of 18 collected using a CATI (computer-assisted telephone survey). The fieldwork started on October 15 of 2019,

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pated in some form of protest; 70 percent are willing to participate in *cabildos ciudadanos* (open citizen councils) to discuss the new political constitution and the political context.

<sup>5</sup>One of the most prestigious public opinion polls (Centro de Estudios Públicos, 2019) showed that 81 percent of the Chileans consider that the governed responded wrongly or very wrongly to the social outburst, and the president reached the lowest level of approval (6 percent) since it is historically measured in the country.

one week before the unexpected events of the night of October 18 and finished on December 7. The total sample can be divided into three measurement periods for substantive theoretical comparison. Out of the total sample, 27.8 percent of respondents were surveyed before the night of October 18, starting on October 15; 30.0 percent surveyed 18 days after the crisis between November 5 and November 9; the remaining 42.2 percent was interviewed in a follow-up sample 46 days from December 3 to December 7. The fieldwork was resume on November 5 after the protests began. Thus, it provides unique conditions for evaluating the effect of the first weeks of the protest movement as an events study and monitor the evolutions of moral emotions in a follow-up sample. The survey was originally intended to examine Chileans' beliefs about their own country and identity, including questions of substantive relevance for our research problem.

**Measurements.** The study's dependent variables are four shared moral sentiments toward the country and the system and three reciprocal moral sentiments among Chilean citizens. Regarding moral sentiments toward the country:

*Pride in the country.* Respondents were asked how much proud in the country they are in a 7-categories scale, where 1 represents "nothing proud" and 7 "very proud."

*Pride in country's emblem and motto.* The original survey included items measuring how proud the respondents are in specific aspects of the country and citizens. These items are diverse, including, for instance, sky for astronomy, science and technology, and export products. One of these items can be considered as an official symbol of the country:

*"[pride] in country's emblem and motto."* After Pinochet's military dictatorship, Chilean national emblem (Figure 1) has been signified as a symbol of conservative sectors of the society and the military heritage (Joignant, 2007). In addition, the motto in the emblem could be translated as "by reason or force." Neighboring countries have long considered this phrase a representation of the Chilean expansionism of the XIX century and the iron fist of the government (Burr, 1965). These official symbols contrast with the use of the

Mapuche flag by protestors. Mapuche are the largest indigenous group in the country, with a long-standing conflict with the Chilean state (Bengoa, 2000). Thus, while Mapuche's is part of the counterculture of the movement, the emblem and motto are part of the official culture and symbolize the status quo.

[Figure 1 about here]

*Pride in the economic development.* Respondents were asked about their agreement regarding different phrases about Chile. Among them "*Chile is an economically developed and stable country.*" Categories of response range from 1 "strongly disagree" to 7 "strongly agree."

*Pride in Chile as a good place to live.* In the same set of Likert scales of the previous item, respondents indicated their degree of agreement with the phrase "*Chile is a good place to live.*"

Moral sentiments among citizens combine a general indicator and two indicators of specific characteristics of citizens.

*Pride of being Chilean.* The reciprocal moral sentiments between citizens were measured by a general question about pride in their citizenship. Respondents answered how much proud of being Chilean they are. It uses the same scale as pride in the country.

*Chileans' energy.* Respondents answered how proud they are in the energy of their own people. Following the remaining indicators, they answered in the same 7-categories scale, where 1 represents "nothing proud" and 7 "very proud."

*Chileans' effort.* Respondents were asked "*From the following statements, which one you wish people outside of the country would think about Chileans*". Respondents could choose among six categories: (1) Chileans are happy and welcoming, (2) Chileans are dedicated and hard-working, (3) Chileans care of their territory and environment, (4)

Chileans are serious and responsible, (5) Chileans have high-quality products, and (6) Chile is an economically developed country. The last category is treated as missing because it is unrelated to Chileans' features, and few people chose it (N=12). Based on a multinomial model reported in Table 2S of the supplementary material, we recoded this variable into a dummy indicator of effort where 1 represents "Chileans are dedicated and hard-working" and 0 "otherwise." Additional information is provided in the results section.

**Analytical strategy.** Our analytical strategy is threefold. We estimate an OLS regression with the respective emotion as the dependent variable and the treatment dummy (1 "treated" 0 "controlled") as the independent variable. Robust standard errors are included. This model can be formalized as follow:

$$\gamma = \beta_0 + \beta_1 T + \epsilon \quad (1)$$

where  $\beta_1$  represents the average treatment of the protests ( $T$ ) on the emotion  $\gamma$ ;  $\beta_0$  stands for the intercept and  $\epsilon$  error term. In addition, two complementary analyses were conducted as robustness checks. First, control variables were included in the model:

$$\gamma = \beta_0 + \beta_1 T + \beta_2 \delta + \epsilon \quad (2)$$

where  $\delta$  stands for a vector of control variables (gender, age, educational level, number of household members, and geographic zone of residence). Second, we used entropy balancing (Hainmueller, 2012), which is a matching technique that estimates scalar weights for the treatment group. It calculates balance covariates directly through the exact match of pre-specified means and variances of the covariates' distribution of the treatment and control group (Hainmueller, 2012; Stahl & Schober, 2020). Unlike other matching techniques, entropy balancing makes treatment orthogonal to these predefined

covariates, does not rely on a propensity score, and uses the whole sample for estimating effects. Tablea 7AS, 7BS, and 7CS, in the supplementary material, shows how differences of means, variances, and skewness between treatment and control groups are zero after entropy balancing. Three balancing procedures are conducted, one for each time-period.

## Results

The results are presented in two sections. First, we describe the time-trend of the moral sentiments along the measured period. Second, we estimate the effects of the first week of the protests on these variables.

**Time-trends.** Figure 2 shows the daily average of each shared moral emotion. After the social outburst (first vertical line), Chileans report lower levels of pride. The country's pride decreases at the level of pride in economic development, which is the moral emotion with the lowest level of the measured period. Nevertheless, although the country's pride seems to recover in the last measured period, the pride in Chile's economic development maintains a negative trend. A similar pattern shows pride in the official symbols. The pride in the emblem and motto decreases after the social crisis began, and the negative trend continues in the last period. Regarding Chile as a place to live, we cannot directly compare it with the other variables because it is measured on a different scale. However, although the trend is less pronounced, it is also negative after the crisis and during the third measurement.

[Figure 2 about here]

Figure 3 indicates a different pattern for pride in being Chilean and energy of Chileans. The overall pride in Chilean citizenship does not show a clear trend and remains at high levels. Nevertheless, the pride in the energy of Chileans increases after the outburst, and it does not return to the levels of the baseline. The peak of the pride in the

energy of Chileans is in the first measurement after the fieldwork was resumed. It could suggest that the social crisis is not only a social outburst but also as an “outburst of energy,” in the eyes of the general population.

[Figure 3 about here]

Figure 4 reports the proportion of responses of each category of the variable about features for which Chileans might be known abroad. One of the characteristics that shows a clear trajectory is “dedicated and hardworking.” The descriptive trend indicates that the valorization of this characteristic increases after the social crisis and, although not at baseline levels, decreases again in the third measurement period. Something similar is observed for Chileans as producers of high-quality goods, which could be interpreted as a market-based feature. For further analyses, we dichotomized this categorical variable considering “dedicated and hardworking” as the reference category.

[Figure 4 about here]

**Effects of the social crisis.** The main methodological challenge of this type of design (e.g. Minkus, Deutschmann, & Delhey, 2019; Slothuus, 2010) is ensuring that respondents interviewed before and after the event are comparable and the difference between treated and controlled could be attributed to the events. Table 1 shows a balancing test for the background characteristics asked in the survey using a multinomial regression model. The indicator of whether the respondent was surveyed before the crisis (“before”), in the first measurement after the crisis (“after 2”), or in the follow-up sample (“after 1”) is used as the dependent variable. Model 2 indicates that there no difference between the baseline measurement and the follow-up sample. When comparing the baseline sample with the first sample after the crisis, there are slight differences by age ( $OR = 0.986$ ,  $p < .01$ ). The same difference appears when comparing the two last measurement periods ( $OR = 0.986$ ,  $p < .001$ ). Regarding the residence zone, respondents

living in southern Chile were more likely to be surveyed after the crisis than in the baseline ( $OR = 1.870$ ,  $p < .001$ ) and the follow-up sample ( $OR = 1.768$ ,  $p < .001$ ). These differences are explained by the organization of fieldwork. The slightly significant coefficients of less-educated respondents in model 1 and model 3 suggest that they were less likely to be surveyed in the first measurement after the crisis [ $(OR = 1.821$ ,  $p < .001$ ) and  $(OR = 1.585$ ,  $p < .05$ ), respectively]. Finally, there are no significant differences in the number of household members. As explained in the analytical strategy, this result suggests the relevance of including these variables as additional covariates and weights in the entropy balance as a robustness check. Table 1S, in the supplementary material, provides a detailed account of occurred events between the interruption of the fieldwork and its resumption.

[Table 1 about here]

We estimate regressions models with dummy variables for the social crisis and the follow-up sample, using the period before the social outburst as the reference category (Table 3S in the supplementary material). These coefficients are shown in Figure 5 and are the main tests of our theoretical predictions. As stated in hypothesis 1, Figure 5 suggests that the protest movement negatively affected the country's moral sentiments. After the first weeks of the movement, pride in the country ( $B = -0.709$ ,  $p < .001$ ), pride in Chile's economic development ( $B = -0.511$ ,  $p < .001$ ), and Chile as good place to live ( $B = -0.279$ ,  $p < .001$ ) were lower than the baseline. These effects are consistent when using controls and entropy weights, suggesting the robustness of the findings against potential selection into the treatment. Only in the case of pride in official symbols, there are slight differences between the binary, controlled, and entropy balancing models. The estimated effect is negative in the three models, but only marginally significant in the latter two [ $(B = -0.319$ ,  $p < .05$ ) and  $(B = -0.308$ ,  $p < .05$ ), respectively].

The follow-up sample's effects answer the question of whether the moral emotions

returned to the baseline after more than one month that the crisis started on October 18. Although they do not refer to within-individual changes or an unexpected interruption of the poll, they provide insightful information about the trend that emotions followed after the social crisis. For all the indicators, the effect of the follow-up sample dummy is negative and statistically significant. This finding indicates that moral emotions did not return to the baseline. For the pride in official symbols, the effect is negative and highly significant, which suggests that, although there is no difference with the period after the crisis, it is negatively affected after one month of protests.

Additional models in Table 4S, in the supplementary material, enable us to discuss whether the negative effect was deepened in the follow-up compared with the period after the social crisis. The positive effect of the follow-up dummy in country's pride suggests that Chile's pride recovered in most advanced stages of the crisis. Still, it does not reach the baseline levels, as shown in the previous analysis. The non-significant effects for the remaining variables indicate that negatively-affected moral emotions were neither deepened nor recovered.

[Figure 5 about here]

Figure 6 shows the effects of indicators of reciprocal sentiments. Full models are reported in Table 5S in the supplementary material. It confirms the findings from the descriptive trends. The social crisis and follow-up samples do not have significant effects on Chilean citizens' pride, which indicates that it remains stable. In contrast, the valorization of Chileans' energy increases after the social outburst ( $B = 0.302$ ,  $p < .001$ ) and is maintained in the follow-up ( $B = 0.193$ ,  $p < .001$ ). In contrast, the effect on the valorization of Chileans' effort (dedicated and hardworking), compared to the other categories, increases after the first weeks of the social crisis but returns to the baseline after the follow-up suggested by the non-significant coefficient. Table 6S in the supplementary material shows the results with the social crisis as reference category.



[Figure 6 about here]

A recent study (Gonzalez & Morán, 2020) has found an association between participation in the Chilean protests and both educational level and age. More educated and younger people were more likely to declared have participated in protest activities. It is consistent with the idea of critical citizens (Norris, 1999). Therefore, we explore whether these groups are also differently affected by the social outburst. Figure 7 illustrates the significant interactions between educational level and measurement periods. The effects of the social outburst on moral sentiments toward the country and symbols are stronger for individuals with intermediate educational level. It could possibly capture the heterogeneity of the effect by position in the social structure. Chile is a highly unequal society with high levels of social closure (Méndez & Gayo, 2019), and, although their internal heterogeneity, an important part of the intermediate social groups, or middle class, shares the support toward neoliberal policies and the status quo (Barozet & Espinoza, 2016; Barozet & Fierro, 2011; Méndez, 2008). For instance, as shown in Figure 7, individuals with complete secondary education are the group with the highest level of national pride before the protests but equaled the highly-educated population in the aftermath of the first weeks of the crisis. The moral shock could have highlighted the vulnerability of this sector and the new middle class documented by the literature (Lopez-Calva & Ortiz-Juarez, 2014; Ravallion, 2009; Torche & F. Lopez-Calva, 2012). Nevertheless, we do not have direct measurements of social class for a more robust test of this hypothesis.

Regarding age, there is no heterogeneity of the effects (models under request). This finding is relevant considering that recent evidence (Kiley & Vaisey, 2020) has supported the hypothesis that younger individuals do more active updating of culture than older individuals. In our subset of moral sentiments, both older and younger respondents are sensitive to the social crisis's moral shock. The literature has also suggested that Metropolitan areas are the vanguard of social change (e.g. Glaeser, 2012; Evans, 2019).

However, we do not find significant differences when comparing respondents' zones of residence.

[Figure 7 about here]

## Conclusions

Chile was the first neoliberal experiment (Harvey, 2007). In the last months, the country -like others in the world- has gone through an environment of widespread street protests claiming for structural changes and challenging the "Chilean miracle" (Friedman, 1991). This study uses an interrupted public opinion poll and a complementary follow-up sample to assess the effect of the Chilean social crisis that began in October 2019 on the general population's moral emotions. Our findings suggest that pride toward the country, symbols, as a place to live and economic development were negatively affected by the crisis. Protests signaled that the system was not as thought, generating a moral shock that affected shared pride toward the country. Nevertheless, although not to the levels of the baseline, pride in Chile recovers in the follow-up. In addition, although the overall pride in Chileans did not change after the first weeks of protests, the specific reciprocal moral emotions between citizens themselves were positively affected. Henceforth, the social crisis emerges as an opportunity for strengthening collective ties either by sharing sentiments toward who is blamed by the movement or between Chileans. In the aftermath of October 18, the "unsettled times" (Bail, 2012; Swidler, 1986) have generated adjustment on emotions that could explain the massiveness of the movements and potential cultural changes.

Although previous studies have shown that social movements have a causal effect on how new cultural elements emerge and develop (e.g. Isaac, 2009), recent evidence in cultural sociology has suggested that changes in the belief system come through

generational turnover (Kiley & Vaisey, 2020; Vaisey & Lizardo, 2016), instead of an active updating to the environment. In the subset of beliefs and attitudes studied by this literature, high-salience topics and attitudes toward institutions show active updating. Moral emotions toward the system and collective identity measured by our items could be considered among those cultural elements (e.g. Boutyline & Vaisey, 2017). Nevertheless, our findings cannot confirm that the change in moral sentiments will be permanent, rather it provides strong evidence that the social crisis had a “*period effect*” on feelings and worldviews. Cultural change not only trigger the outburst (Somma et al., 2020), but narratives, frames, and worldviews of the general population are also affected by the social movement. Thus, the protests movement could offer the basis and tipping point for cultural and social change in the aftermath of a major rupture in contemporary Chilean history. At the same time, the protests continued after data gathering. Therefore, the identified effects also could explain the durability of the movement and massiveness. Further studies might examine the sustainability of these changes, and whether the new political constitution -if approved- could institutionalize moral emotions and invite people to internalize them (Goodin, 1996).

We have evaluated the effect on moral emotions, which are more long-standing affective commitments than reflex sentiments or moods (Jasper, 2006, 2011). Moreover, the overall sentiment toward citizens remain stable after the first week of protests, and only particular features of Chileans -energy and effort- are impacted by the social outburst. The general sentiment toward being Chilean is more comprehensive and is at a higher level of abstraction. A mainstream framework in values change (Flanagan, 1982; Flanagan & Lee, 2000; Rokeach, 1973) suggests that core beliefs tend to be acquired at an early age and resist change. Thus, we could argue that, in our case, the effect is on more peripheral aspects of the private culture. The moral shock, or at least during the first weeks of protests, was not sufficient to modify this deeper and more enduring emotion.

The limitations of our study are threefold. First, we have been cautious in not referring to our estimations as causal. Our design could resemble a natural experiment, and we compare balanced groups before and after the beginning of the social crisis. However, the original survey was not designed to follow individuals across time or contain a larger set of measurements for assessing other characteristics that could unbalance pre- and post-treatment samples. For instance, prosocial behavior increases the willingness to participate in surveys and shapes attitudes and beliefs (Groves, Cialdini, & Couper, 1992). Thus, we cannot examine whether individuals with higher prosocial behaviors were overrepresented in the first stage of the survey because they are an easier-to-reach population due to their willingness to participate. This potential bias is particularly relevant for the follow-up sample, where we did not have an exogenous treatment. Second, we cannot disentangle the specific treatment that generated the change on moral sentiments or whether they explain it all together. Violations of human rights, media coverage, protests events, President's addresses, among others, could have driven these changes. Therefore, we provide robust evidence of the emotional consequences of the social movement without identifying the specific "spark" of this change. The repression by the police in the aftermath is particularly relevant among these factors because it generated fear and anger (Somma et al., 2020). As Bail (2012) suggests, these feelings are emotional energy, enabling civil society to achieve resonance in the public sphere and foster cultural change. And third, the public opinion poll was not designed to measure political engagement, and the questionnaire was not modified after the social crisis. Hence, we cannot clearly identify respondents that participated in the activities of protests. Instead, our results refer to an effect on the general population.

The Chilean case illuminates the understanding of other social movements and contemporary events around the world. Regarding climate protests (Bugden, 2020), their effectiveness relies on the effect on sentiments of support for structural changes generated on the public. Likewise, Hong Kong is currently in the second wave of protests after the

government has controlled the coronavirus disease pandemic. Our study could raise the question of whether this movement has affected the moral feelings toward the Chinese government, democratic values, or collective identities. At the same time, the wave of protests in the United States after George Floyd's death could have impacted on attitudes toward racial discrimination and the police. The Chilean case illustrates that social movements could have significant short-term emotional consequences and could lay the foundations for further cultural changes. Henceforth, a constituent process of two years, the exposure to moral shocks, and months of protests followed by a health emergency could generate the conditions for the acquisition of culture in Chile as durable and embodied dispositions. Future studies might elucidate whether these effects were momentary or lead to a more profound cultural transformation.

## References

Abbott, A. (1997). On the Concept of Turning Poin. *Comparative Social Research*, 16, 85–106.

Andrews, K. T., Beyerlein, K., & Tucker Farnum, T. (2016). The Legitimacy of Protest: Explaining White Southerners' Attitudes Toward the Civil Rights Movement. *Social Forces*, 94(3), 1021–1044. doi:10.1093/SF/SOV097

Aytaç, S. E., Schiumerini, L., & Stokes, S. (2018). Why Do People Join Backlash Protests? Lessons from Turkey. *Journal of Conflict Resolution*, 62(6), 1205–1228. doi:10.1177/0022002716686828

Bail, C. A. (2012). The fringe effect: Civil society organizations and the evolution of media discourse about islam since the september 11th attacks. *American Sociological Review*, 77(6), 855–879.

Barozet, E., & Espinoza, V. (2016). Current Issues on the Political Representation of Middle Classes in Chile. *Journal of Politics in Latin America*, 8(3), 95–123.

doi:10.1177/1866802x1600800304

Barozet, E., & Fierro, J. (2011). *The Middle Class in Chile*. KAS International - Konrad-Adenauer-Stiftung. Retrieved from <http://repositorio.uchile.cl/handle/2250/121911>

Bengoa, J. (2000). *Historia del pueblo mapuche: Siglo XIX y XX*. Santiago, Chile: LOM Ediciones.

Blumer, H. (1995). Social Movements. In S. M. Lyman (Ed.), *Social movements: Critiques, concepts, case-studies* (pp. 60–83). London: Palgrave Macmillan.

doi:10.1007/978-1-349-23747-0\_1

Boutyline, A., & Vaisey, S. (2017). Belief network analysis: A relational approach to understanding the structure of attitudes. *American Journal of Sociology*, 122(5), 1371–1447.

Bugden, D. (2020). Does Climate Protest Work? Partisanship, Protest, and Sentiment Pools. *Socius: Sociological Research for a Dynamic World*, 6, 237802312092594. doi:10.1177/2378023120925949

Burr, R. (1965). *By Reason Or Force: Chile and the Balancing of Power in South America, 1830-1905*. Berkeley: University of California Press.

Centro de Estudios Públicos. (2019). *Estudio Nacional de Opinión Pública N 84*. Santiago, Chile. Retrieved from <https://www.cepchile.cl/cep/encuestas-cep/encuestas-2009-2018/estudio-nacional-de-opinion-publica-n-84-diciembre-2019>

DeCelles, K. A., Sonenshein, S., & King, B. G. (2019). Examining Anger's

Immobilizing Effect on Institutional Insiders' Action Intentions in Social Movements. *Administrative Science Quarterly*, 000183921987964. doi:10.1177/0001839219879646

Donoso, S. (2013). Dynamics of Change in Chile: Explaining the Emergence of the 2006 Pingüino Movement. *Journal of Latin American Studies*, 45(1), 1–29. doi:10.1017/s0022216x12001228

Evans, A. (2019). How Cities Erode Gender Inequality: A New Theory and Evidence from Cambodia. *Gender & Society*, 33(6), 961–984. doi:10.1177/0891243219865510

Fantasia, R., & Hirsch, E. (2004). Culture in Rebellion: The Appropriation and Transformation of the Veil in the Algerian Revolution. In H. Johnston & B. Klandermans (Eds.), *Social movements and culture* (pp. 144–159). Minneapolis: University of Minnesota Press.

Flanagan, S. (1982). Changing Values in Advanced Industrial Societies: Inglehart's Silent Revolution from the Perspective of Japanese Findings. *Comparative Political Studies*, 14(4), 403–444. doi:10.1177/0010414082014004001

Flanagan, S., & Lee, A.-R. (2000). Value Change and Democratic Reform in Japan and Korea. *Comparative Political Studies*, 33(5), 626–659. doi:10.1177/0010414000033005003

Friedman, M. (1991). Economic Freedom, Human Freedom, Political Freedom. Paper presented at the Smith Center for Private Enterprise Studies, California State University, Hayward. Retrieved from [calculemus.org/lect/07pol-gosp/frlect.pdf](http://calculemus.org/lect/07pol-gosp/frlect.pdf)

Fundación Imagen de Chile. (2019). *Estudio Orgullo Chileno*. Santiago, Chile. Retrieved from <https://marcachile.cl/web/orgullo-chileno.html>

Gamson, W. (1992). *Talking politics*. New York: Cambridge University Press.

Glaeser, E. (2012). *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier*. London: Penguin Books.

Gonzalez, R., & Morán, C. L. F. (2020). The 2019-2020 Chilean protests: A first look at their causes and participants. *International Journal of Sociology*, 50(3), 227–235. doi:10.1080/00207659.2020.1752499

Goodin, R. E. (1996). Designing constitutions: The political constitution of a mixed commonwealth. *Political Studies*, 44(3), 635–646.

Goodwin, J., Jasper, J., & Polletta, F. (2000). The Return of The Repressed: The Fall and Rise of Emotions in Social Movement Theory. *Mobilization: An International Quarterly*, 5(1), 65–83. doi:10.17813/mai.5.1.74u39102m107g748

Groves, R. M., Cialdini, R. B., & Couper, M. P. (1992). Understanding The Decision to Participate in a Survey. *Public Opinion Quarterly*, 56(4), 475. doi:10.1086/269338

Guzman-Concha, C. (2012). The Students' Rebellion in Chile: Occupy Protest or Classic Social Movement? *Social Movement Studies*, 11(3-4), 408–415. doi:10.1080/14742837.2012.710748

Hainmueller, J. (2012). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Analysis*, 20(1), 25–46. doi:10.1093/pan/mpr025

Harding, J., & Pribram, E. D. (2002). The power of feeling. *European Journal of Cultural Studies*, 5(4), 407–426. doi:10.1177/1364942002005004294

Harvey, D. (2007). *A brief history of neoliberalism*. Oxford: Oxford University Press.

Hess, D., & Martin, B. (2006). Repression, backfire, and the theory of transformative events. *Mobilization: An International Quarterly*, 11(2), 249–267.



doi:10.17813/mai.11.2.3204855020732v63

Isaac, L. (2009). Movements, Aesthetics, and Markets in Literary Change: Making the American Labor Problem Novel. *American Sociological Review*, 74(6), 938–965.

doi:10.1177/000312240907400605

Jasper, J. (1998). The emotions of protest: Affective and reactive emotions in and around social movements. *Sociological Forum*, 13(3), 397–424.

doi:10.1023/A:1022175308081

Jasper, J. (2006). Motivation and Emotion. In R. Goodin & C. Tilly (Eds.), *The oxford handbook of contextual political analysis* (pp. 157–171). Oxford: Oxford University Press.

Jasper, J. (2011). Emotions and Social Movements: Twenty Years of Theory and Research. *Annual Review of Sociology*, 37(1), 285–303.

doi:10.1146/annurev-soc-081309-150015

Jasper, J. (2014). *Protest : a cultural introduction to social movements*. Cambridge, UK: Polity Press.

Joignant, A. (2007). *Un día distinto. Memorias festivas y batallas conmemorativas en torno al 11 de septiembre en Chile (1974-2006)*. Santiago: Editorial Universitaria.

Kiley, K., & Vaisey, S. (2020). Measuring Stability and Change in Personal Culture Using Panel Data. *American Sociological Review*, 000312242092153.

doi:10.1177/0003122420921538

Kim, H. W., & McCarthy, J. D. (2016). Socially organized sentiments: Exploring the link between religious density and protest mobilization, 1960–1995. *Social Science Research*, 60, 199–211. doi:10.1016/j.ssresearch.2016.06.006

Lopez-Calva, L. F., & Ortiz-Juarez, E. (2014). A vulnerability approach to the definition of the middle class. *Journal of Economic Inequality*, 12(1), 23–47.

doi:10.1007/s10888-012-9240-5

Méndez, M. L. (2008). Middle Class Identities in a Neoliberal Age: Tensions between Contested Authenticities. *The Sociological Review*, 56(2), 220–237.

doi:10.1111/j.1467-954X.2008.00785.x

Méndez, M. L., & Gayo, M. (2019). *Upper middle class social reproduction : wealth, schooling, and residential choice in Chile*. Cham, Switzerland: Palgrave Macmillan.

Minkus, L., Deutschmann, E., & Delhey, J. (2019). A trump effect on the EU's popularity? The U.S. Presidential election as a natural experiment. *Perspectives on Politics*, 17(2), 399–416. doi:10.1017/S1537592718003262

Norris, P. (1999). *Critical citizens : global support for democratic government*. New York: Oxford University Press.

Núcleo Milenio en Desarrollo Social, Chile, De, C. de M. de la U., & Social, C. de E. de C. y C. (2019). *Termómetro Social: Octubre 2019*. Santiago, Chile. Retrieved from <https://coes.cl/nota-revisa-los-resultados-que-dejo-el-termometro-social-de-octubre/>

Porta, D. della, & Diani, M. (2006). *Social Movements: An Introduction*. Malden, MA: Blackwell Publishig.

Ravallion, M. (2009). *The Developing World's Bulging (But Vulnerable) "Middle Class"*. Washington DC: Development Research Group, World Bank; The World Bank. doi:10.1596/1813-9450-4816

Rokeach, M. (1973). *The nature of human values*. New York: Free Press.

Sanhueza, C. (2019). "No lo vimos venir": Los Expertos bajo escrutinio ["We did not

see it coming": Experts under scrutiny]. In M. Folchi (Ed.), *Chile despertó* (pp. 43–52). Santiago, Chile: Universidad de Chile.

Slothuus, R. (2010). When Can Political Parties Lead Public Opinion? Evidence from a Natural Experiment. *Political Communication*, 27(2), 158–177.  
doi:10.1080/10584601003709381

Snow, D. A., Rochford, E. B., Worden, S. K., & Benford, R. D. (1986). Frame Alignment Processes, Micromobilization, and Movement Participation. *American Sociological Review*, 51(4), 464. doi:10.2307/2095581

Somma, N. M., Bargsted, M., Disi Pavlic, R., & Medel, R. M. (2020). No water in the oasis: the Chilean Spring of 2019-2020. *Social Movement Studies*.  
doi:10.1080/14742837.2020.1727737

Stahl, J. F., & Schober, P. S. (2020). Early education and care quality: Does it matter for maternal working hours? *Social Science Research*, 86, 102378.  
doi:10.1016/j.ssresearch.2019.102378

Stekelenburg, J. van, & Klandermans, B. (2013). The social psychology of protest. *Current Sociology*, 61(5-6), 886–905. doi:10.1177/0011392113479314

Swidler, A. (1986). Culture in Action: Symbols and Strategies. *American Sociological Review*, 51(2), 273. doi:10.2307/2095521

Swidler, A. (2001). *Talk of Love: How Culture Matters*. Chicago: The University of Chicago Press.

The World Bank. (2017). *World development indicators*. Washington, DC: The World Bank.

Thoits, P. A. (1989). The Sociology of Emotions. *Annual Review of Sociology*, 15(1),

317–342. doi:10.1146/annurev.so.15.080189.001533

Thomas, E. F., Zubielevitch, E., Sibley, C. G., & Osborne, D. (2020). Testing the Social Identity Model of Collective Action Longitudinally and Across Structurally Disadvantaged and Advantaged Groups. *Personality and Social Psychology Bulletin*, 46(6), 823–838. doi:10.1177/0146167219879111

Torche, F., & F. Lopez-Calva, L. (2012). *Stability and Vulnerability of the Latin American Middle Class*. Helsinki: The United Nations University World Institute for Development Economics Research (UNU-WIDER). Retrieved from <https://www.wider.unu.edu/publication/stability-and-vulnerability-latin-american-middle-class>

United Nations. (2019). *Report of the Mission to Chile 30 October - 22 November 2019* (p. 33). Geneva, Switzerland: UN Human Rights Office of the High Commissioner. Retrieved from [https://www.ohchr.org/Documents/Countries/CL/Report%7B/\\_%7DChile%7B/\\_%7D2019%7B/\\_%7DEN.pdf](https://www.ohchr.org/Documents/Countries/CL/Report%7B/_%7DChile%7B/_%7D2019%7B/_%7DEN.pdf)

Vaisey, S. (2009). Motivation and Justification: A Dual-Process Model of Culture in Action. *American Journal of Sociology*, 114(6), 1675–1715. doi:10.1086/597179

Vaisey, S., & Lizardo, O. (2016). Cultural Fragmentation or Acquired Dispositions? A New Approach to Accounting for Patterns of Cultural Change. *Socius: Sociological Research for a Dynamic World*, 2, 1–15. doi:10.1177/2378023116669726

Wang, V., Ramzy, A., & May, T. (2020). Hong Kong Police Fire Tear Gas as Protesters Resist China's Grip. New York. Retrieved from <https://www.nytimes.com/2020/05/24/world/asia/hong-kong-protest-coronavirus-china.html>

Weber, U., Mummendey, A., & Waldzus, S. (2002). Perceived legitimacy of intergroup status differences: its prediction by relative ingroup prototypicality. *European Journal of Social Psychology*, 32(4), 449–470. doi:10.1002/ejsp.102

Table 1 Balancing tests of characteristics before and after the protest movement.

VARIABLES	(1) OR Baseline vs Social crisis	(2) OR Baseline vs Follow-up	(3) OR Social crisis 1 vs Follow-up
Female	1.012 (0.146)	0.834 (0.110)	1.214 (0.157)
Age	0.986** (0.005)	0.998 (0.005)	0.988* (0.005)
Ref. Cat.: Metropolitan Region			
North	1.203 (0.282)	0.909 (0.193)	1.324 (0.283)
Center	1.354 (0.276)	1.084 (0.201)	1.249 (0.230)
South	1.870*** (0.330)	1.058 (0.176)	1.768*** (0.277)
Ref. Cat.: Intermediate educational level			
Low educational level	1.821** (0.366)	1.149 (0.215)	1.585* (0.291)
High educational level	1.029 (0.199)	1.154 (0.198)	0.892 (0.160)
Ref. Cat.: Single-person household			
Two persons	1.437 (0.431)	1.131 (0.300)	1.271 (0.344)
Three persons	1.295 (0.378)	1.031 (0.264)	1.256 (0.335)
Four or more persons	1.148 (0.317)	0.957 (0.231)	1.200 (0.303)
Constant	1.058 (0.439)	1.603 (0.596)	0.660 (0.251)
Observations	1,421	1,421	1,421

Note: Robust standard errors. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05.

Figure 1. Chilean emblem (Gobierno de Chile, 2020).

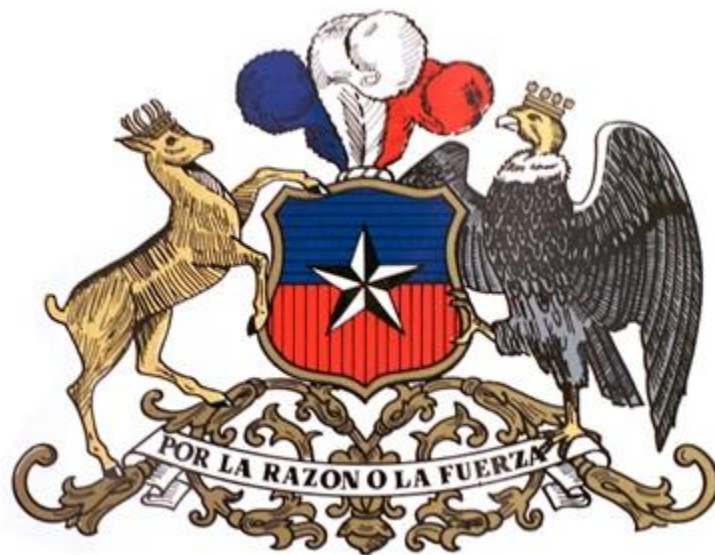
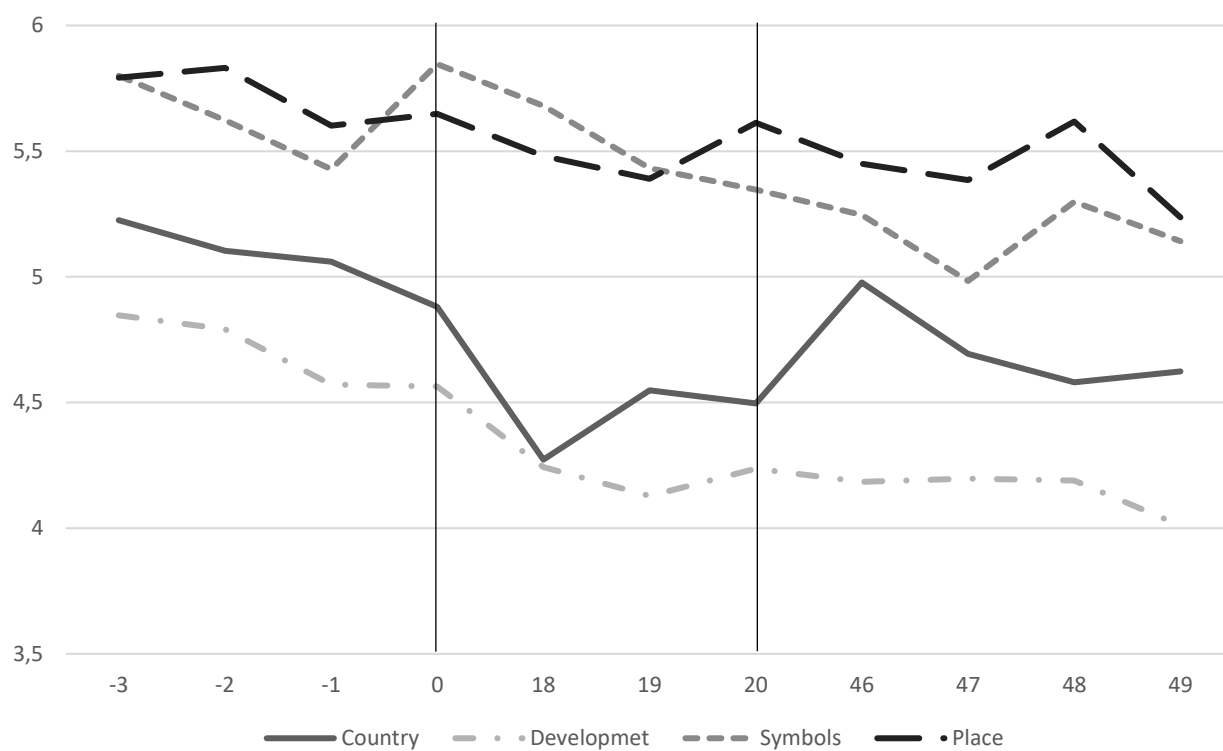
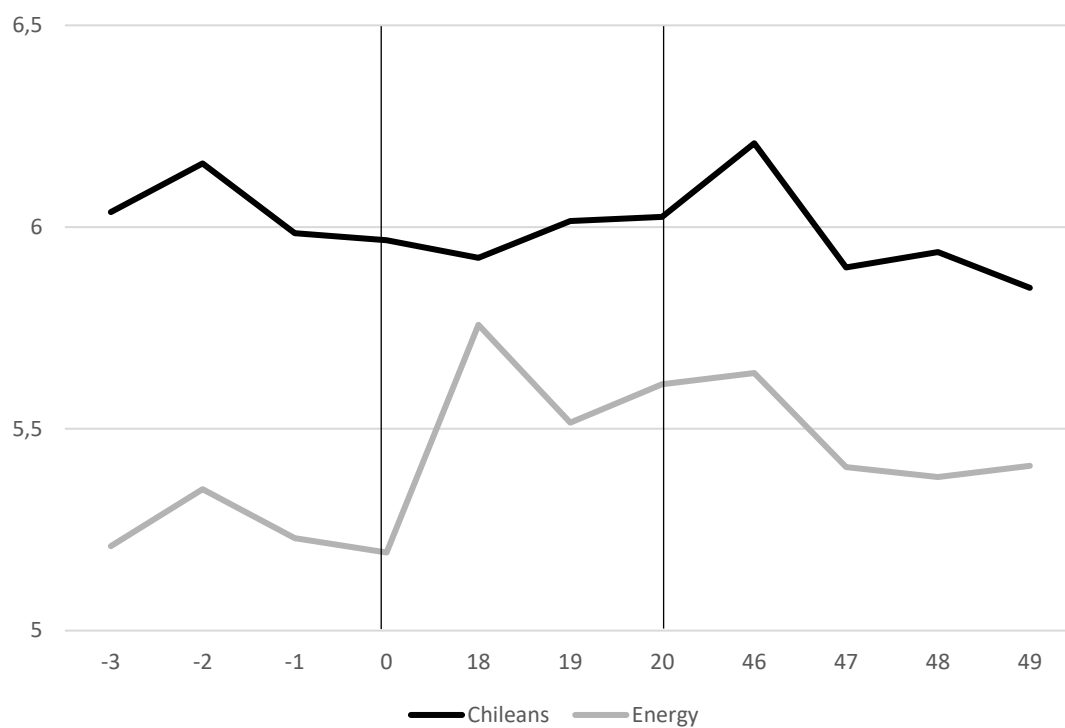


Figure 2. Time-trend of shared moral emotions (means by day).



Note: Daily sample sizes range from 77 (-2) to 243 (48). Days 23 (N=1), 24 (N=28) and 51 (N=48) have been omitted from the plot due to their small sample sizes.

Figure 3. Time-trend of reciprocal moral emotions (means by day).



Note: Daily sample sizes range from 77 (-2) to 243 (48). Days 23 (N=1), 24 (N=28) and 51 (N=48) have been omitted from the plot due to their small sample sizes.



Figure 4. Time-trend of the multinomial variable of features of Chileans (proportion by day).

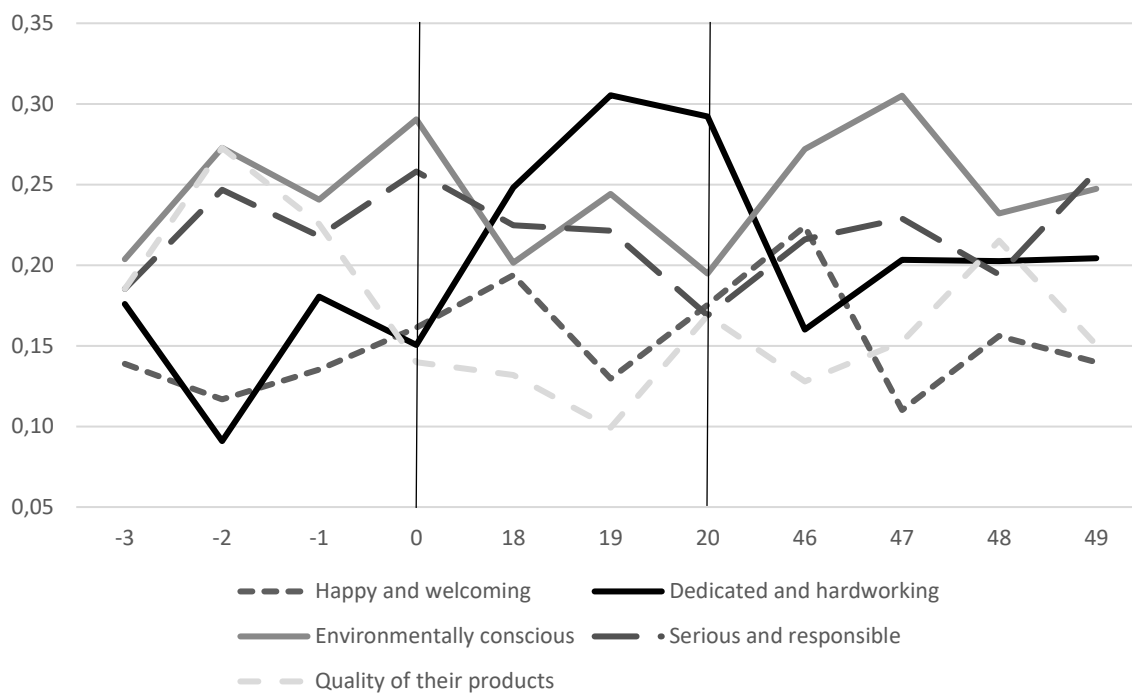


Figure 5. Effects of the social outburst on the national pride indicators.

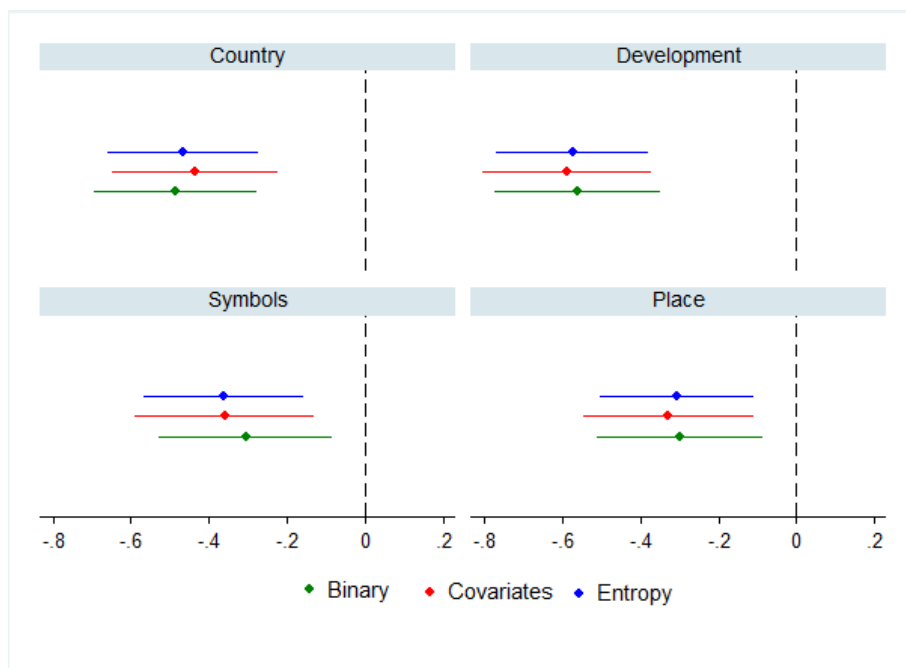
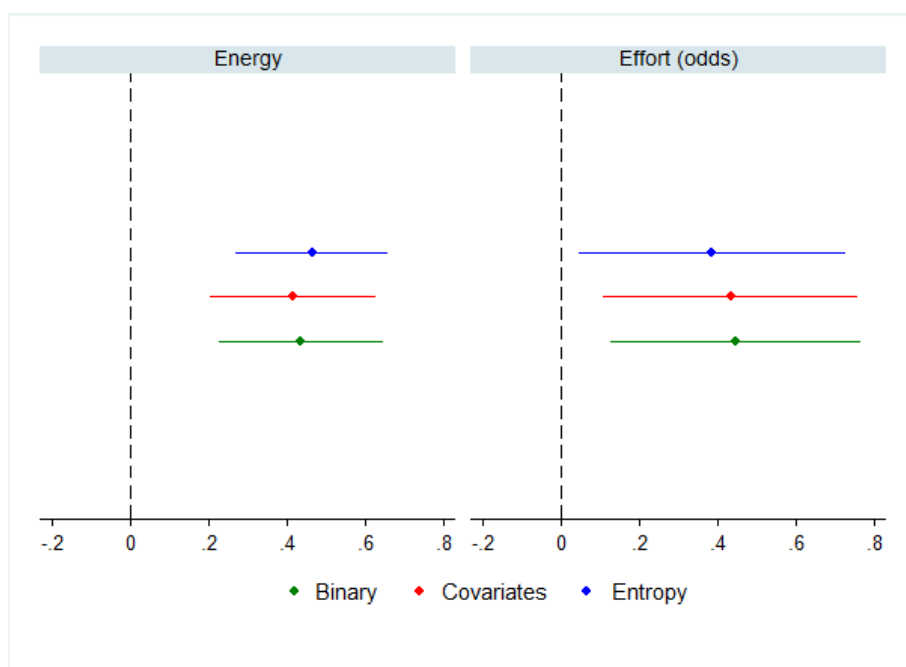
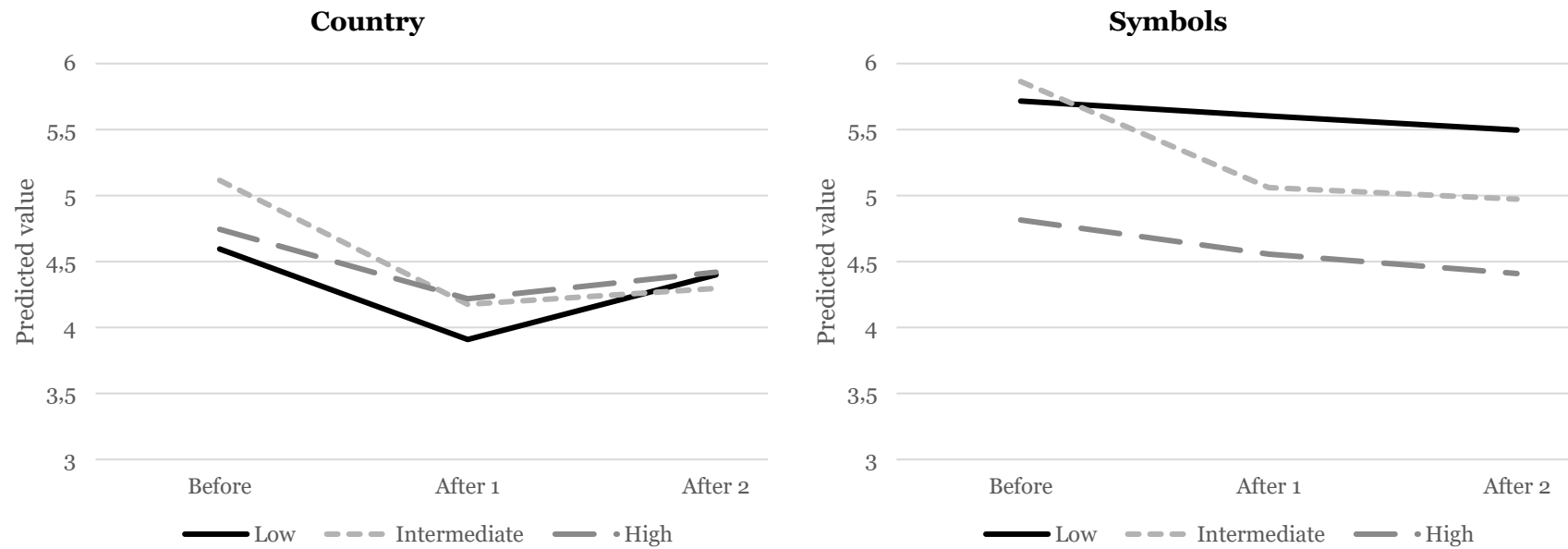


Figure 6. Effects of the social outburst on the indicators of pride toward Chileans.



NOTE: I have to update effort model using OLS, instead of logit and add the non-significant effect on the general pride toward being Chilean.

Figure 7. Heterogeneity of the effects by educational level.



Note: Interactions from OLS models with periods as 3-category variables, covariates are included. Profile defined as female, resident of the Metropolitan Region and 40 years old.

Table 1S. Events between the interruption of the fieldwork and the resumption.

Date	Event	Source

Table 2S. Multinomial model for characteristics of Chileans.

	(1)	(2)	(3)	(4)
	OR	OR	OR	OR
VARIABLES	1 vs 2	3 vs 2	4 vs 2	5 vs 2
Ref. Cat.: Baseline				
Social crisis	0.655 (0.156)	0.506** (0.108)	0.463*** (0.102)	0.386*** (0.090)
Follow-up	0.891 (0.205)	0.834 (0.170)	0.803 (0.168)	0.698 (0.151)
Constant	0.903 (0.167)	1.565** (0.254)	1.403* (0.233)	1.274 (0.216)
Observations	1,409	1,409	1,409	1,409

Note: Robust standard errors in parentheses. Categories of comparison refer to 1 "Chileans are happy and welcoming", 2 "Chileans are dedicated and hard-working", 3 "Chileans care of their territory and environment", 4 "Chileans are serious and responsible", 5 "Chileans have high-quality products". \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 3S. Full models for indicators of shared moral sentiments with baseline as reference category.

VARIABLES	(1) Country	(2) Country	(3) Country	(5) Development	(6) Development	(7) Development	(9) Symbols	(10) Symbols	(11) Symbols	(13) Place	(14) Place	(15) Place
Social crisis	-0.709*** (0.116)	-0.667*** (0.115)	-0.672*** (0.120)	-0.511*** (0.113)	-0.580*** (0.111)	-0.534*** (0.114)	-0.250 (0.134)	-0.319* (0.128)	-0.308* (0.140)	-0.279** (0.098)	-0.348*** (0.092)	-0.340*** (0.100)
Follow-up	-0.381*** (0.103)	-0.379*** (0.101)	-0.393*** (0.104)	-0.507*** (0.100)	-0.502*** (0.098)	-0.477*** (0.101)	-0.469*** (0.125)	-0.445*** (0.116)	-0.420** (0.128)	-0.229** (0.085)	-0.224** (0.080)	-0.201* (0.087)
Constant	5.097*** (0.074)	4.184*** (0.286)	5.060*** (0.081)	4.710*** (0.074)	4.185*** (0.265)	4.733*** (0.076)	5.687*** (0.092)	3.868*** (0.308)	5.745*** (0.100)	5.728*** (0.064)	4.566*** (0.206)	5.789*** (0.068)
Controls	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO
Entropy Balance	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Observations	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421
R-squared	0.024	0.065	0.020	0.019	0.073	0.015	0.009	0.152	0.005	0.007	0.144	0.006

Note: Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Coefficients for time-period dummies in entropy balancing models come from separately models and specific weights for each dummy (lowest R2 is reported).

Table 4S. Full models for indicators of shared moral sentiments with the social crisis as reference category.

VARIABLES	(1) Country	(2) Country	(3) Country	(5) Development	(6) Development	(7) Development	(9) Symbols	(10) Symbols	(11) Symbols	(13) Place	(14) Place	(15) Place
Baseline	0.709*** (0.116)	0.667*** (0.115)	0.683*** (0.116)	0.511*** (0.113)	0.580*** (0.111)	0.574*** (0.113)	0.250 (0.134)	0.319* (0.128)	0.293* (0.138)	0.279** (0.098)	0.348*** (0.092)	0.341*** (0.100)
Follow-up	0.328** (0.114)	0.289* (0.113)	0.286* (0.114)	0.005 (0.109)	0.078 (0.105)	0.053 (0.108)	-0.219 (0.130)	-0.126 (0.122)	-0.168 (0.133)	0.050 (0.092)	0.123 (0.087)	0.104 (0.094)
Constant	4.388*** (0.089)	3.517*** (0.286)	4.414*** (0.089)	4.199*** (0.086)	3.605*** (0.270)	4.136*** (0.086)	5.437*** (0.098)	3.549*** (0.312)	5.394*** (0.103)	5.449*** (0.074)	4.218*** (0.210)	5.387*** (0.076)
Controls	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO
Entropy Balance	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Observations	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421
R-squared	0.024	0.065	0.020	0.019	0.073	0.017	0.009	0.152	0.007	0.007	0.144	0.006

Note: Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Coefficients for time-period dummies in entropy balancing models come from separately models and specific weights for each dummy (lowest R2 is reported).



Table 5S. Full models for indicators of reciprocal moral sentiments with baseline as reference category.

VARIABLES	(1) Chileans	(2) Chileans	(3) Chileans	(4) Energy	(5) Energy	(6) Energy	(7) Effort	(8) Effort	(9) Effort
Social crisis	-0.117 (0.100)	-0.117 (0.098)	-0.115 (0.101)	0.302** (0.103)	0.271** (0.102)	0.235* (0.105)	0.126*** (0.029)	0.117*** (0.029)	0.121*** (0.030)
Follow-up	-0.048 (0.090)	-0.031 (0.087)	-0.043 (0.091)	0.193* (0.090)	0.201* (0.089)	0.225* (0.091)	0.037 (0.024)	0.041 (0.024)	0.041 (0.024)
Constant	6.053*** (0.067)	4.968*** (0.252)	6.051*** (0.070)	5.270*** (0.068)	5.355*** (0.253)	5.337*** (0.071)	0.158*** (0.018)	0.260*** (0.067)	0.163*** (0.021)
Observations	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421
R-squared	0.001	0.083	0.001	0.006	0.029	0.004	0.015	0.030	0.014

Note: Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05.

Table 6S. Full models for indicators of reciprocal moral sentiments with social crisis as reference category.

VARIABLES	(1) Chileans	(2) Chileans	(3) Chileans	(4) Energy	(5) Energy	(6) Energy	(7) Effort	(8) Effort	(9) Effort
Baseline	0.117 (0.100)	0.117 (0.098)	0.127 (0.102)	-0.302** (0.103)	-0.271** (0.102)	-0.310** (0.103)	-0.126*** (0.029)	-0.117*** (0.029)	-0.123*** (0.029)
Follow-up	0.069 (0.094)	0.085 (0.091)	0.080 (0.096)	-0.109 (0.096)	-0.069 (0.097)	-0.102 (0.095)	-0.089** (0.027)	-0.076** (0.027)	-0.077** (0.027)
Constant	5.936*** (0.073)	4.851*** (0.250)	5.926*** (0.076)	5.572*** (0.077)	5.626*** (0.252)	5.580*** (0.077)	0.284*** (0.022)	0.378*** (0.067)	0.281*** (0.022)
Controls									
Entropy Balance									
Observations	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421	1,421
R-squared	0.001	0.083	0.001	0.006	0.029	0.007	0.015	0.030	0.011

Note: Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Coefficients for time-period dummies in entropy balancing models come from separately models and specific weights for each dummy (lowest R2 is reported).

Table 7AS. Means and distribution measurements before and after entropy balance for dummy baseline.

	Before entropy balance						After entropy balance					
	Treat			Control			Treat			Control		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
Age	0.51	0.25	-0.02	0.49	0.25	0.02	0.51	0.25	-0.02	0.51	0.25	-0.02
North	48.16	188.00	0.21	47.68	217.30	0.04	48.16	188.00	0.21	48.16	215.50	0.04
Center	0.13	0.11	2.26	0.12	0.10	2.40	0.13	0.11	2.26	0.13	0.11	2.26
South	0.17	0.14	1.79	0.18	0.15	1.70	0.17	0.14	1.79	0.17	0.14	1.79
Low educational level	0.24	0.18	1.24	0.30	0.21	0.90	0.24	0.18	1.24	0.24	0.18	1.24
High educational level	0.31	0.21	0.84	0.36	0.23	0.57	0.31	0.21	0.84	0.31	0.21	0.84
Two persons	0.48	0.25	0.07	0.45	0.25	0.21	0.48	0.25	0.07	0.48	0.25	0.07
Three persons	0.19	0.16	1.56	0.21	0.16	1.45	0.19	0.16	1.56	0.19	0.16	1.56
Four or more persons	0.24	0.18	1.23	0.25	0.19	1.15	0.24	0.18	1.23	0.24	0.18	1.23
	0.47	0.25	0.12	0.46	0.25	0.16	0.47	0.25	0.12	0.47	0.25	0.12

Note: Metropolitan region, intermediate educational level and single-person household omitted due to avoid collinearity. 1 represents to respondents surveyed in the baseline and 0 otherwise.

Table 7BS. Means and distribution measurements before and after entropy balance for dummy social crisis.

Variable	Before entropy balance						After entropy balance					
	Treat			Control			Treat			Control		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
Female	0.53	0.25	-0.11	0.49	0.25	0.06	0.53	0.25	-0.11	0.53	0.25	-0.11
Age	46.98	226.00	0.02	48.17	201.70	0.12	46.98	226.00	0.02	46.98	203.10	0.11
North	0.12	0.10	2.37	0.12	0.10	2.36	0.12	0.10	2.37	0.12	0.10	2.37
Center	0.18	0.15	1.71	0.17	0.14	1.73	0.18	0.15	1.71	0.18	0.14	1.71
South	0.36	0.23	0.59	0.25	0.19	1.18	0.36	0.23	0.59	0.36	0.23	0.59
Low educational level	0.43	0.25	0.27	0.31	0.21	0.82	0.43	0.25	0.27	0.43	0.25	0.27
High educational level	0.39	0.24	0.47	0.49	0.25	0.05	0.39	0.24	0.47	0.39	0.24	0.47
Two persons	0.21	0.17	1.42	0.20	0.16	1.51	0.21	0.17	1.42	0.21	0.17	1.42
Three persons	0.25	0.19	1.13	0.25	0.19	1.18	0.25	0.19	1.13	0.25	0.19	1.13
Four or more persons	0.47	0.25	0.13	0.46	0.25	0.16	0.47	0.25	0.13	0.47	0.25	0.13

Note: Metropolitan region, intermediate educational level and single-person household omitted due to avoid collinearity. 1 represents to respondents surveyed in the first measurement after the social crisis sample and 0 otherwise.

Table 7CS. Means and distribution measurements before and after entropy balance for dummy follow-up.

Variable	Before entropy balance						After entropy balance					
	Treat			Control			Treat			Control		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
Female	0.47	0.25	0.11	0.52	0.25	-0.07	0.47	0.25	0.11	0.47	0.25	0.11
Age	48.18	211.00	0.07	47.55	207.90	0.08	48.18	211.00	0.07	48.17	207.70	0.07
North	0.11	0.10	2.42	0.12	0.11	2.32	0.11	0.10	2.42	0.11	0.10	2.42
Center	0.18	0.15	1.69	0.17	0.14	1.75	0.18	0.15	1.69	0.18	0.15	1.69
South	0.25	0.19	1.15	0.30	0.21	0.88	0.25	0.19	1.15	0.25	0.19	1.14
Low educational level	0.31	0.22	0.80	0.37	0.23	0.53	0.31	0.22	0.80	0.31	0.22	0.80
High educational level	0.49	0.25	0.03	0.43	0.25	0.27	0.49	0.25	0.03	0.49	0.25	0.04
Two persons	0.20	0.16	1.48	0.20	0.16	1.48	0.20	0.16	1.48	0.20	0.16	1.48
Three persons	0.25	0.19	1.16	0.25	0.19	1.18	0.25	0.19	1.16	0.25	0.19	1.16
Four or more persons	0.46	0.25	0.18	0.47	0.25	0.13	0.46	0.25	0.18	0.46	0.25	0.18

Note: Metropolitan region, intermediate educational level and single-person household omitted due to avoid collinearity. 1 represents to respondents surveyed in the follow-up sample and 0 otherwise.

