

## “You should (not) do that”: An Evaluative Model of Normative Appeals (EMNA)

Luis Oceja, Marisol Villegas, Maite Beramendi & Sergio Salgado

**To cite this article:** Luis Oceja, Marisol Villegas, Maite Beramendi & Sergio Salgado (2015): “You should (not) do that”: An Evaluative Model of Normative Appeals (EMNA), *The Journal of Social Psychology*, DOI: [10.1080/00224545.2015.1111855](https://doi.org/10.1080/00224545.2015.1111855)

**To link to this article:** <http://dx.doi.org/10.1080/00224545.2015.1111855>



Accepted author version posted online: 29 Oct 2015.  
Published online: 29 Oct 2015.



Submit your article to this journal [↗](#)



Article views: 86



View related articles [↗](#)



View Crossmark data [↗](#)

## “You should (not) do that”: An Evaluative Model of Normative Appeals (EMNA)

Luis Oceja<sup>a</sup>, Marisol Villegas<sup>b</sup>, Maite Beramendi<sup>c</sup>, and Sergio Salgado<sup>d</sup>

<sup>a</sup>Universidad Autónoma de Madrid; <sup>b</sup>Universidad Central de Venezuela; <sup>c</sup>Universidad de Buenos Aires; <sup>d</sup>Universidad de La Frontera

### ABSTRACT

Normative appeals refer to those messages that indicate that one should (or should not) engage in a certain action in a given situation. According to the psychosocial research, the decision to fulfill a normative appeal depends on both the extent to which it has captured our attention and the evaluation of what we may gain or lose by doing so. However, according to the Evaluative Model of Normative Appeals (EMNA), between these two processes we carry out an evaluation (normative appraisal) that strongly influences the decision that is ultimately made. Specifically, this normative appraisal, which is done in accordance with the dimensions of formality and protection, transforms the appeal into a particular normative representation (i.e., custom, coercive law, prescription, or legitimate law) that, in turn, influences the willingness toward compliance or violation. The results of three studies support these basic premises of EMNA.

### ARTICLE HISTORY

Received 22 September 2014

Accepted 20 October 2015

### KEYWORDS

Compliance; formality; normative appeal; normative appraisal; protection

In the early 20th century in Madrid and Buenos Aires, elegant enameled signs were posted stating that one *should not spit on the floor*. One hundred years later in Beijing and Shanghai, updated versions of this same message can be seen. We are regularly exposed to messages expressing laws or regulations from the fields of health, consumption, and coexistence (Cialdini et al., 2006; Oceja & Jiménez, 2001). These messages, which suggest that the individual should (or should not) perform a certain action in a given situation, are referred to by a variety of different names, including appeals, orders, requirements, mandates, or provisions. We will use the term *normative appeals* to refer to these types of messages. The purpose of the present research is to address what determines our willingness to comply with (or violate) them.

### *Psychological processes associated with compliance*

The Focus Theory of Normative Conduct emphasizes the importance of attentional processes in compliance (Cialdini, Kallgren, & Reno, 1991; Cialdini, Reno, & Kallgren, 1990; Kallgren, Reno, & Cialdini, 2000). This theory has two basic premises. First, there are two types of norms: those that refer to what the individual thinks their reference group expects him/her to comply with (i.e., “what one ought to do” or *injunctive norms*) and those that refer to what the individual observes the majority of people complying with (i.e., “what is done” or *descriptive norms*). Second, these norms only guide action when they are focal; that is, when they have drawn our attention.

The Deterrence Theory emphasizes the importance of rational-choice processes in compliance (Andenaes, 1974; Cornish & Clarke, 1986; Gibbs, 1975). This theory proposes that, when faced with

the decision of complying with a norm, an expected utility calculation process is activated, which estimates the costs and benefits that would be derived from compliance or violation.

The attention and choice processes can explain a large part of the influence of norms, but they fail to provide definite answers to two important questions. First, what occurs when a person observes and knows what the majority of people do, or what their reference group would think, but he or she does not personally agree with the norm? Second, is the cost-benefit analysis independent of whether the initial preference was to comply versus to violate the norm? And, if not, where would this initial preference come from? Research has demonstrated that, in order to answer these questions, it is necessary to analyze a process that mediates attention and choice: the evaluation of the legitimacy.

Max Weber (1922/1992) argued that a command will be evaluated as legitimate depending on the degree of agreement that exists between the command and the values of the person perceiving it. In this sense, the Theory of Normative Activation (Schwartz, 1977, 1994) states that the probability of a person performing a certain behavior depends on the degree of agreement between personal values activated at the time and the values expressed by the command. Moreover, the Relational Model of Authority (Tyler & Lind, 1992; Tyler, 1997) suggests that allocating the right to issue orders or laws to an authority figure depends on the extent to which this authority's procedures and decisions when distributing resources are evaluated as following the principle of fairness.

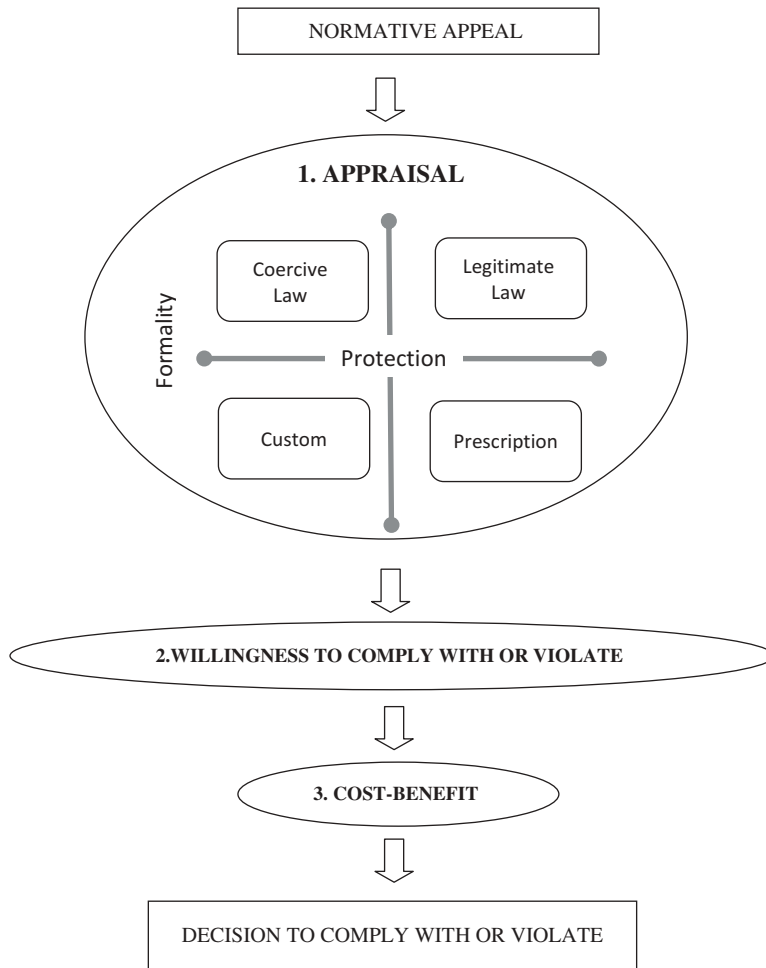
These two models emphasize the importance of the evaluation process in explaining normative compliance. However, neither of these models can provide answers to important questions. For example, the Theory of Normative Activation does not explain which personal values are activated in a specific individual when evaluating a concrete norm. It is, therefore, very hard to predict how people will evaluate that norm in that particular situation. In a similar vein, the Relational Model of Authority does not disentangle the authority figure and the rules that the authority figure attempts to impose. For example, people can negatively evaluate a rule that emanates from a positively evaluated authority figure. The model exposed in this work is aimed to address these issues.

### **Evaluative model of normative appeals**

In the present paper, we test the basic premises of the Evaluative Model of Normative Appeals (EMNA). The EMNA describes the factors that influence our willingness to complying with *salient normative appeals*. These appeals can be presented in an iconic form (e.g., a sign displaying the gesture requesting silence) or linguistic form (e.g., a phrase that expresses that you should be quiet). The essential features of a normative appeal are that (1) they grab our attention (i.e., they are salient), and (2) the content indicates that one should or should not do a certain action in a particular situation (i.e., they are normative). Therefore, EMNA does not attempt to explain the attitude provoked by a specific action (e.g., be quiet), or the influence of messages that are implicitly processed (e.g., unconscious perception that at that moment, in that location no one is speaking).

The basic premise of EMNA is that our willingness toward compliance with a normative appeal depends on, first, whether it grabbed our attention and, second, how we represented it through an evaluation process. This evaluation process, which we call *normative appraisal*, is organized according to two dimensions: protection and formality. Protection refers to the degree to which one feels that the normative appeal allows for and facilities carrying out the primary action. Formality refers to the degree to which one perceives that the appeal is posed by an institution that has status and responsibility to ensure compliance.

We propose three hypotheses with respect to this *normative appraisal*, (see Figure 1). First, a specific normative appeal (e.g., Respect Pedestrian Crossing) consistently produces a *normative representation*. This normative representation can be classified as one of the following: *custom* (low formality and low protection), *prescription* (low formality and high protection), *coercive law* (high formality and low protection), or *legitimate law* (high formality and high protection). Second, we propose that willingness to comply is directly and positively related to both protection and formality dimensions, though to a greater extent with the former. This is because protection is linked



**Figure 1.** Three processes from the presentation of the normative appeal to the decision to comply with or violate it.

to the self-regulatory system (Higgins, 2012) as it refers to the perceived coherence of the action proposed by the appeal and the individual's goals. Consequently, the willingness to comply follows a continuum that goes from custom, to coercive law, to prescription, to legitimate law.

Third, this willingness moderates the influence of the cost-benefit analysis associated with violating the appeal. Specifically, a normative appeal perceived as either *legitimate law* or *prescription* will provoke a high likelihood of compliance, even when the benefits for violating it are high. On the other hand, an appeal perceived as a *coercive law* or *custom* will have a low incidence of compliance unless the costs for violating it are high.

### **The present research**

Our primary aim was to test the three hypotheses. In Study 1, we asked the participants to evaluate 28 normative appeals according to the formality and protection dimensions, and test whether that evaluation was consistent—across gender, age and country—and coherent with the four normative representations (i.e., legitimate law, prescription, coercive law, or custom). In Study 2, we employed new samples from each of the four countries to test whether compliance with the 28 normative appeals is organized accordingly with the continuum proposed by EMNA. In Study 3, based on the

results of Study 1, we first selected four normative appeals: two that are usually perceived as legitimate laws, and therefore provoke a high willingness towards compliance, and two that are usually perceived as coercive laws, thereby provoking a low willingness toward compliance. We then test whether the normative representation overcomes the influence of the cost-benefit analysis.

## Study 1: The perception of normative appeals

In the first study, we selected a set of 28 normative appeals and asked participants from four different countries (Argentina, Spain, United States, and Venezuela) to indicate the degree of formality and protection they perceived in each one of the appeals. We hypothesize that these 28 appeals would be consistently perceived in accordance with the four basic categories proposed by EMNA: customs, coercive laws, prescriptions, and legitimate laws.

### Method

#### Participants

We were not aiming to conduct a cross-cultural research but to test the premises of EMNA with a sample as large and diverse as possible in terms of gender, age, and cultural origin. To this end, we recruited a total sample of 442 participants (61.2% women;  $M_{age} = 26.74$ ,  $SD = 7.87$ ) from four different countries: 112 people from Argentina (58.9% women;  $M_{age} = 23.56$ ,  $SD = 6.11$ ), 103 people from Spain (82.9% women;  $M_{age} = 18.99$ ,  $SD = 3.61$ ), 60 people from the United States (38.3% women;  $M_{age} = 33.38$ ,  $SD = 10.05$ ), and 167 people from Venezuela (64.7% women;  $M_{age} = 31.04$ ,  $SD = 11.56$ ).

#### Procedure

We followed the standard procedure used in appraisal studies (Scherer, 2001). We first selected the stimuli and afterward asked the participants to evaluate these stimuli in terms of the two dimensions proposed by the model. In regards to the stimuli, we selected the 28 normative appeals by using those developed by Cialdini et al. (1990, p. 1023), Tyler (1990), and a survey carried out on a national level in Spain by the Center for Sociological Investigation (Estudio n° 2079, 1994).

The dimensions of each appeal were evaluated using two independent questionnaires, one for protection and another one for formality, in which the participants indicated to either “what degree do the following appeals protect you” or to “what degree do you consider that the following appeals are established by a formal institution.” Specifically, from the total of 442 participants, 147 completed only the protection dimension, 123 completed only the formality dimension, and 172 completed first the protection and then the formality dimension. Therefore, a total of 319 and 295 completed the protection and formality dimensions, respectively. The questionnaires were presented in Spanish (Spain, Venezuela and Argentina) and, after conducting a back-translation procedure, in English (United States). We carried out the first round of data collection in Spain using a 4-point scale (1 = not at all, 4 = totally) for both dimensions; afterward, in the United States and Venezuela, we used a 9-point scale for the protection dimension (1 = not at all, 9 = totally) and a 4-point scale for formality. Finally, we used the 9-point scale for both dimensions in Argentina. The issue of having progressively gone from a 4-point scale to a 9-point scale was addressed by standardizing the scores.

### Results

#### Analysis of the normative categories

In order to test whether the 28 appeals were consistently perceived in accordance with the four basic categories proposed by EMNA (i.e., customs, coercive laws, prescriptions, and legitimate laws), we

carried out an analysis procedure consisting of three phases. First, each of the 28 scores provided by a participant for each dimension (i.e., protection or formality) was within-subject standardized. These z-scores reflect the relative participant's evaluation of one appeal in relation with the other 27, and their use is recommended (Bush, Hess, & Wolford, 1993) to control for the influence of the scale's range (4 or 9 points) and the participant's response style (e.g. tendency to choose moderate or extreme scores). Second, we obtained the average of each of the 28 appeals for each dimension (see Table 1). Third, we introduced the scores of the 28 normative appeals in the protection and formality dimensions and tested whether the appeals were grouped in four clusters that correspond to the four categories proposed by EMNA (i.e., customs, coercive laws, prescriptions, and legitimate laws).

We first conducted a hierarchical cluster analysis over the total sample using Ward's method and the squared Euclidean distance. This is the most efficient and stringent way of testing whether the 28 appeals were perceived in accordance with the four basic categories (Pardo & Ruiz, 2002). In line with our hypothesis, the results supported that the optimum number of clusters was four. Specifically, the first efficient solution included 6 clusters; with an agglomeration coefficient change of 0.788, the 5 clusters solution presented an agglomeration coefficients change of 0.872; and the 4-cluster solution one of 2.690. Therefore, the higher change after the first efficient solution started with the 4-clusters solution.

Subsequently, we tested the consistency of this solution by conducting the same hierarchical cluster analysis within each subsample. As expected, the results revealed high consistency: most of the appeals (75%, 21 out of 28) were grouped into the same cluster in the four countries, and the remaining 7 were grouped together in at least two countries (see Table 1). The average of the Kappa indices corresponding to the six contrasts derived from comparing the four subsamples in pairs was .81 (ranging between .762 and .903,  $ps < 0.001$  in all cases). Supported by the hierarchical analyses

**Table 1.** Means and standard deviations of the dimensions of protection and formality (within-subject z scores) for the 28 normative appeals (Study 1).

	Protection		Formality	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Pedestrian crosswalk <sup>4</sup>	0.90	0.54	0.71	0.62
Driving drunk <sup>4</sup>	0.81	0.58	0.96	0.54
Blocking an ambulance <sup>4</sup>	0.78	0.71	0.75	0.63
Speed limit <sup>4</sup>	0.65	0.80	0.81	0.64
Dealing drugs <sup>4</sup>	0.61	0.70	0.90	0.65
Smoking in the subway <sup>4</sup>	0.59	0.80	0.87	0.61
Damaging public property <sup>4</sup>	0.56	0.65	0.70	0.59
Parking in a restricted area <sup>3</sup>	0.27	0.74	0.79	0.60
Donating blood <sup>4</sup>	0.47	0.86	-0.54	0.81
Leaving the water turned on <sup>4</sup>	0.47	0.68	-0.50	0.84
Recycling materials <sup>4</sup>	0.42	0.83	-0.33	0.84
Littering <sup>3</sup>	0.41	0.70	0.11	0.78
Non-environmental sprays <sup>4</sup>	0.39	0.68	-0.11	0.77
Turning off the lights <sup>3</sup>	-0.17	1.03	-0.75	0.71
Cutting in line <sup>2</sup>	-0.13	0.90	-0.49	0.74
Blocking in a museum <sup>2</sup>	-0.23	0.88	-0.53	0.79
Double parking <sup>2</sup>	0.09	0.75	0.50	0.69
Skipping work <sup>3</sup>	-0.13	0.78	-0.05	0.83
Alcohol in public spaces <sup>4</sup>	-0.17	0.76	0.26	0.77
Pirating copies of CDs <sup>4</sup>	-0.54	0.76	0.42	0.83
Downloading music <sup>4</sup>	-0.79	0.89	0.41	0.83
Photocopying books <sup>4</sup>	-0.76	0.86	0.15	0.95
Looking around while talking <sup>4</sup>	-0.54	0.82	-0.79	0.69
Yelling to greet <sup>4</sup>	-0.57	0.78	-0.82	0.64
Ask for change to tip <sup>4</sup>	-0.70	0.88	-0.89	0.65
Kissing in public spaces <sup>4</sup>	-0.79	0.82	-0.74	0.73
Cell phone in elevator <sup>4</sup>	-0.89	0.79	-0.87	0.67
Eating at the bus stop <sup>4</sup>	-1.00	0.71	-0.98	0.61

Note. The superscript in each normative appeal indicates the number of samples in which it was grouped in the same cluster.

and the consistency between samples, we conducted a 4-means cluster analysis over the total sample that converged in two iterations. The corresponding means for each cluster in the protection and formality dimensions showed that this solution was consistent with the four basic categories proposed by EMNA. Specifically, eight appeals were grouped in a cluster that represents the legitimate laws ( $M_P = 0.65$ ,  $M_F = 0.81$ ), eight in the prescriptions cluster ( $M_P = 0.20$ ,  $M_F = -0.39$ ), six in the coercive laws cluster ( $M_P = -0.38$ ,  $M_F = 0.29$ ), and six in the customs cluster ( $M_P = -0.75$ ,  $M_F = -0.85$ ). The graphical representation of this solution is depicted in Figure 2.

### The influence of age, gender, and nationality

Regarding the relationship of age with the perception of protection and formality for each of the 28 appeals, only 8 and 12 of the 112 correlations (28 appeals  $\times$  4 countries) were significant for the protection and formality dimensions, respectively. None of the appeals yielded a significant correlation in more than two countries. Therefore, the results did not suggest a systematic influence of age on the perception of protection and formality.

Although we intentionally deviated from the cultural view and focused on the basic features of the normative appraisal, we tested whether nationality and gender had a significant influence in the perception of protection and formality. Regarding protection, the MANOVA (gender  $\times$  nationality) revealed a significant influence of nationality in 25 appeals [ $3.02 < F_s(3, 318) < 28.52$ ,  $ps < .03$ ], whereas gender and its interaction with nationality showed significant influence in only 1 appeal each [ $F_s(1, 318) = 7.84$  and  $3.44$ , respectively,  $ps < .02$ ]. Regarding formality, the MANOVA revealed a significant influence of nationality in 16 appeals [ $3.48 < F_s(3, 294) < 13.72$ ,  $ps < .02$ ], gender did not show any significant influence [ $F_s(1, 294) < 2.80$ ,  $ps > .09$ ], and its interaction with nationality only in 2 appeals, [ $F_s(3, 294) = 2.69$  and  $3.68$ ,  $ps < .02$ ].

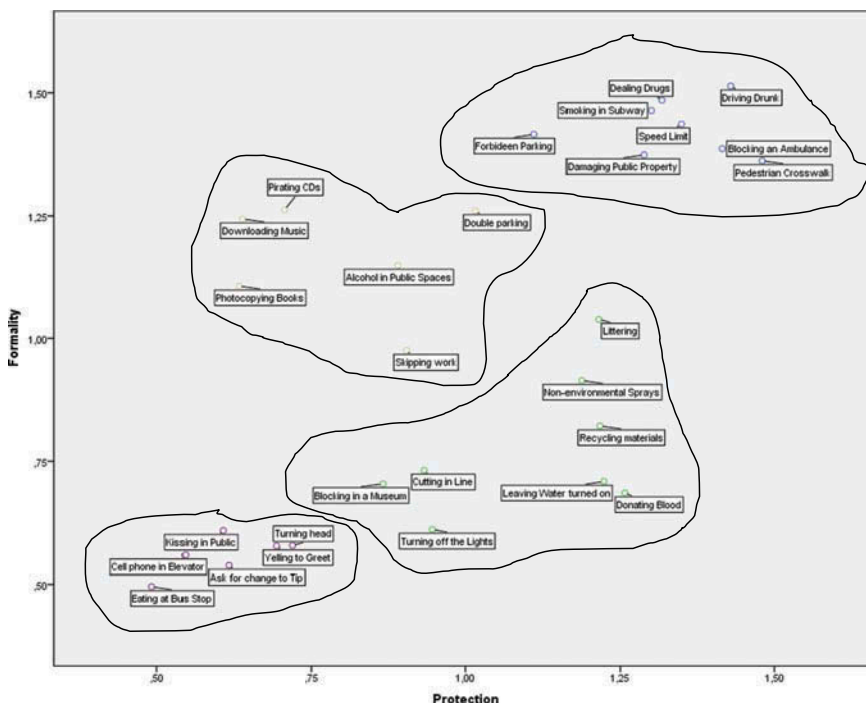


Figure 2. Clusters from the general analysis that includes the four countries (Study 1).



Therefore, it made sense to test whether a specific nationality showed a systematic influence; that is, whether participants of one nationality reported consistently the highest or lowest perceptions of either protection or formality for a substantial set of appeals. The post-hoc contrasts (Bonferroni method) did not support such systematic influence; no subsample obtained the highest or the lowest perception in more than 3 appeals, neither for protection nor formality. All of these data and analyses are available on Open Science Framework (OSF) website (Oceja & Salgado, 2015; [osf.io/2wjgn](https://osf.io/2wjgn)).

## Discussion

The results of Study 1 suggest that different normative appeals are consistently perceived as different types of norms. Specifically, EMNA highlights the fact that appeals suggesting that one should not, for example, kiss in public, buy pirated products, litter, or drive drunk, are perceived as a custom, a coercive law, a prescription, and a legitimate law, respectively.

It is noteworthy that the procedure did not ask participants or a group of experts to classify the 28 appeals in a closed set of four normative categories. The depiction of the perception process resulted from combining together and analyzing the participants' evaluations of each of the appeals in one of the corresponding dimension. We used this procedure in order to avoid demand characteristics, since it reduces the possibilities of obtaining consistent results. Therefore, the results showed that overall the 28 appeals were perceived in a similar way (see [Figure 2](#)) regardless of the age, gender, and nationality.

However, what happens after a particular normative appeal is perceived to be a particular kind of norm? We hypothesize that individuals' willingness to comply follows a continuum that goes from custom, to coercive law, to prescription, to legitimate law. The aim of Study 2 was to test this hypothesis.

## Study 2: Willingness towards compliance (or violation) of a normative appeal

We used in this study the 28 normative appeals from Study 1 and asked the participants to indicate to what degree they agreed with each one of these appeals. That is, whether they should perform the behavior suggested by the appeal. We felt that directly asking about their willingness to comply with these normative appeals would evoke greater social desirability in the responses, therefore the willingness to comply was operationalized with questions concerning their degree of agreement. In short, we assumed that those participants who showed greater agreement with a normative appeal would be more willing to comply with it, while those who were less willing to comply would be more comfortable with expressing it through their disagreement with the appeal. Therefore, we hypothesize that willingness to comply would follow the continuum proposed by EMNA: customs (low in protection and formality), coercive laws (low-protection & high-formality), prescriptions (high-protection & low-formality), and legitimate laws (high in protection and formality). Furthermore, we hypothesize that this continuum would not be subject to age, gender, and nationality.

## Method

### Participants and procedure

A total of 318 people (60.2% women;  $M_{age} = 28.11$ ,  $SD = 11.63$ ) participated in this study: 89 from Argentina (60.7% women;  $M_{age} = 23.61$ ,  $SD = 4.56$ ), 69 from Spain (75.7% women;  $M_{age} = 19.10$ ,  $SD = 4.30$ ), 60 from the United States (38.3% women;  $M_{age} = 33.38$ ,  $SD = 10.05$ ), and 100 from Venezuela (62% women;  $M_{age} = 35.27$ ,  $SD = 14.09$ ). The participants completed a questionnaire (back-translated for the North American subsample) in which they indicated to what degree they agreed with each of the 28 appeals. As Study 1 and 2 were run in tandem, the scale used in Spain remained being a 4-point scale, whereas the one used in the other three countries was changed to a



9-point scale. We again controlled the influence of the degrees of the scales (i.e., 4 or 9 points) and response style (e.g. tendency to respond with extreme or moderate scores) by the within-subject standardization (z-scores).

## Results

### Test of the continuum

Presenting the analysis of the influence of gender and nationality on a continuum formed by each of the 28 appeals could be confusing, since it would consist of 3024 planned contrasts: 378 in each of the 4 samples and 2 genders. Yet, we aim to analyze this influence over a relatively extensive continuum. For these two reasons, we utilized the scores obtained in Study 1 to create a continuum formed by the four normative categories: customs, coercive laws, prescriptions, and legitimate laws.

Therefore, we first created the four levels of the *normative category* by averaging the corresponding appeals (see Table 2), and then tested the proposed continuum through conducting mixed ANOVA, with gender and nationality as possible moderators. Unless otherwise noted, the sphericity assumption ( $p < .001$ ) was rejected and the degrees of freedom correction proposed by Greenhouse-Geisser was applied. The ANOVA revealed a clear effect of the *normative category* factor [ $F(2.77, 845.20) = 938.17, p < .001, \eta^2 = .755$ ], which produced a linear distribution [ $F(1, 305) = 2412.69, p < .001, \eta^2 = .888$ ]. The results clearly supported the existence of the proposed continuum: customs provoked the lowest willingness to comply ( $M = -0.80, SD = 0.40$ ), followed by the coercive laws ( $M = -0.41, SD = 0.32$ ), the prescriptions ( $M = 0.32, SD = 0.29$ ), and the legitimate laws that provoked the highest ( $M = 0.58, SD = 0.27$ ). Each mean was significantly different from the other three ( $ps < .001$ , Bonferroni test).

Finally, the mixed ANOVA revealed a moderating effect of nationality [ $F(8.31, 845) = 21.55, p < .001, \eta^2 = .175$ ] but not of gender,  $F < 1.30, \eta^2 > .01$ . As can be seen in Table 2, among the appeals perceived as *legitimate laws*, Venezuelans reported the lowest agreement; among the *prescriptions* and *coercive laws*, North Americans reported the lowest and the highest agreement, respectively. In any case, a systematic influence of nationality that would alter the predicted continuum was not found.

## Discussion

The results of Study 2 suggest that agreement with the normative appeals were consistent with the type of perception presumably produced by the normative appraisal. Two aspects must be emphasized. First, the participants of Study 2 did not previously complete the questionnaires about the dimensions of protection and formality used in Study 1, therefore the results cannot be explained by accessibility (i.e., provoked by the activation of certain concepts) or by consistency (i.e., an attempt to maintain what they had stated in previous answers). Second, the results showed high consistency: men and women from Argentina, Spain, the United States, and Venezuela reported a level of agreement ranging from the appeals that were perceived as customs to those that were perceived as legitimate laws, passing through the intermediate categories of coercive laws and prescriptions.

As hypothesized, the results suggested that an appeal that is perceived (appraised) as a legitimate law would provoke greater willingness to comply than an appeal perceived as a coercive law.

**Table 2.** Means of the degree of agreement (within-subject z scores) for the normative categories across the four samples (Study 2).

	Argentina	Spain	United States	Venezuela	Total
Legitimate laws	0.64 <sub>a</sub>	0.69 <sub>a</sub>	0.60 <sub>a</sub>	0.44 <sub>b</sub>	0.58
Prescriptions	0.45 <sub>a</sub>	0.42 <sub>a</sub>	0.10 <sub>c</sub>	0.28 <sub>b</sub>	0.33
Coercive laws	-0.44 <sub>b</sub>	-0.53 <sub>b</sub> <sub>c</sub>	-0.27 <sub>a</sub>	-0.40 <sub>ab</sub>	-0.41
Customs	-1.01 <sub>b</sub>	-0.94 <sub>b</sub>	-0.67 <sub>a</sub>	-0.57 <sub>a</sub>	-0.80

However, between the willingness to comply with an appeal appraised as a specific type of norm and the actual decision to carry out the action of compliance or violation, a choice process occurs that involves the analysis of the possible costs and benefits that would be involved in converting this willingness into action. We address the effects caused by the combination of these two processes of appraisal and choice in Study 3.

### **Study 3: The decision to comply with (or violate) a law**

In line with Deterrence Theory, the decision to violate a law depends on the possible benefits or costs that this violation would involve (Cornish & Clarke, 1986; MacCoun, 1993). EMNA shares in this assumption while introducing two considerations. First, as shown by the results of Study 1, the evaluation (i.e., normative appraisal) of a normative appeal that has captured a person's attention will lead to perceive it as a custom, prescription, or law. Second, as shown by the results of Study 2, the perception produced by the appraisal (i.e., the normative representation) will strongly determine the willingness to comply with this normative appeal.

Based on the above premises, we tested whether the decision to violate a law depends not only on the cost-benefit analysis, but also on the previous level of willingness caused by the product of the normative appraisal (i.e., the normative representation). Specifically, we hypothesize that the decision to violate an appeal perceived as a legitimate law will always be less than in the case of an appeal perceived as a coercive law, even if the violation of the legitimate law implied a high benefit, and the violation of the coercive law implied a high cost.

To test this hypothesis, we introduced two manipulations by writing four scenarios that describe the possibility of violating a particular normative appeal. With respect to the first manipulation (i.e., normative category), based on the results of Study 1, we selected two appeals that had been perceived as legitimate laws, and two that had been perceived as coercive laws. Regarding the second manipulation (i.e., benefit-cost), in the case of the legitimate laws, its violation implied either a high or a low benefit, whereas the violation of the coercive laws implied either high or a low cost. We focused on the appeals perceived as laws because the concept of violation involving a law is clearer. It is noteworthy that it was necessary to introduce a benefit for violating a legitimate law, given that the person would be willing to comply it; whereas in the case of violating a coercive law, it was necessary to include a cost, given that the person would be willing to violate it.

### **Method**

#### **Participants**

Once more, under the practical consideration of increasing the sample size and diversity as much as possible, a total of 578 university students participated in this study: 225 Spanish (60% women) and 353 Argentinean (79.60% women) with a mean age of 20.90 ( $SD = 2.59$ ) and 20.63 ( $SD = 2.69$ ), respectively. The students individually responded to the instrument described below.

#### **Procedure**

The design of the instrument had two phases. First, based on the results from Study 1, we selected four normative appeals that represented two legitimate and two coercive laws, and that could also be applied to the general population. Furthermore, we chose appeals that did not present significant differences in the dimensions of protection and formality between the Argentinean and Spanish samples. Specifically, don't deal drugs, and don't paint graffiti in public property (legitimate laws); and don't consume alcohol in public spaces, and don't download music illegally from the internet (coercive laws).

Next, for each of the four appeals, we developed two different versions of four situations that involved the possibility of violating the appeal and receiving, as a consequence, a benefit (in the case of the legitimate laws) or a cost (in the case of the coercive laws). The two versions were identical except

for one aspect: the cost-benefit was high or low. Namely, in the situation concerning the possibility of carrying a quantity of drugs that another person needed to sell in order to pay for school, this person was either a good friend (high benefit) or an acquaintance (low benefit). In the situation involving the possibility of helping a group of people that were going to paint the front of a university building as a sign of protest, this group consisted of good friends (high benefit) or acquaintances (low benefit). In the situation concerning drinking alcohol in a public space with friends, the two possibilities included doing so knowing that they could be arrested (high cost) or receive a small fine (low cost). In the situation involving downloading music from the internet for a party, the perceived probability of receiving a monetary fine was either high or low (high or low cost, respectively). Participants were asked to read and imagine that they found themselves in the situation and to indicate on a 9-point scale the probability that they would act in a certain manner (1 = not at all, 9 = totally)<sup>1</sup>.

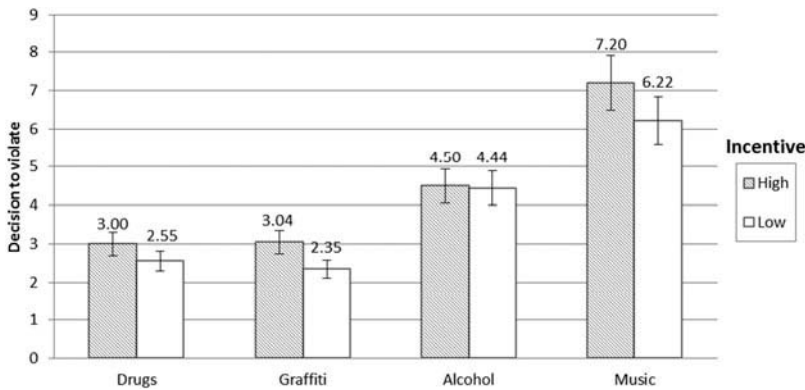
Using random assignment, 287 (113 Spanish and 174 Argentinean, 71.4% women) and 291 (112 Spanish and 179 Argentinean, 72.5% women) participants responded to either the high or the low cost-benefit versions, respectively. For each version, two counterbalanced models were created by inverting the order of presentation of the four situations. At the end of the instrument, participants responded to ten phrases from the Spanish version (Ferrando & Chico, 2000) of the Social Desirability Scale of Marlowe-Crowne (Crowne & Marlowe, 1960) that measures the tendency to present a socially positive image.

This procedure controls for three possible effects: the tendency for the participant to respond in the same direction (two of the situations involved violation and the other two did not), the tendency to provide socially desirable responses (by evaluating this at the end of the questionnaire), and the mindset that could be created by the approach to the first situations (by counterbalancing two orders of presentation). All of the material described above is available on the OSF Web site (Oceja & Salgado, 2015; [osf.io/2wjgn](https://osf.io/2wjgn)).

## Results and discussion

### Decision to violate a law

We first analyzed if the variables of social desirability, age, country, gender, and cost-benefit analysis influenced the decision to violate the four appeals perceived as laws. In the Spanish sample, social desirability did not present significant correlations [ $-.10 < r_{s(222)} < .05$ ,  $ps > .10$ ], however the Argentinean participants who reported a higher level of social desirability tended to report less of a decision to deal drugs, drink alcohol in public spaces, or download music from the internet;  $r_s(350) = -.12$ ,  $-.13$  and  $-.18$ , respectively,  $ps < .03$ . Age did not yield significant correlations in either of the two samples;  $-.10 < r_s < .07$ ,  $ps > .10$ . We tested the influence of the three between-subject variables (i.e., country, gender and cost-benefit) via MANOVA with social desirability introduced as a covariate—an ANOVA revealed that none of the three factors had a main or interaction effect over this covariate,  $F_s(1, 569) < 2.82$ ,  $ps > .09$ . This analysis revealed that the three variables demonstrated main effects [ $F_s(4, 562) > 10.20$ ,  $\eta^2 = .27$ ,  $.07$  and  $.08$ ; for the country, gender and cost-benefit, respectively,  $ps < .001$ ] without an interaction between them;  $F_s(4, 562) < 1.93$ ,  $ps > .10$ . With respect to the country, for all four laws, the Spanish participants reported a higher rate of the decision to violate than the Argentinean participants. In the 9-point scale:  $M_{\text{drugs}} = 3.72$  vs. 2.17;  $M_{\text{graffiti}} = 3.25$  vs. 2.35,  $M_{\text{alcohol}} = 6.60$  vs. 3.12 y  $M_{\text{music}} = 7.68$  vs. 6.09;  $F_s(1, 565) > 13.28$ , range of  $\eta^2 = .02$  to  $.25$ ,  $ps < .01$ . Regarding the gender, men reported a higher rate of deciding to violate than women:  $M_{\text{drugs}} = 3.73$  vs. 2.41;  $M_{\text{graffiti}} = 3.54$  vs. 2.37,  $M_{\text{alcohol}} = 5.69$  vs. 4.01 y  $M_{\text{music}} = 7.38$  vs. 6.46;  $F_s(1, 565) > 6.10$ , range of  $\eta^2 = .01$  to  $.03$ ,  $ps < .03$ . Finally, with respect to the high vs. low cost-benefit, as can be seen in Figure 3, the decision to violate the legitimate laws was higher when the benefit was higher (i.e., help a friend), and the decision to violate the coercive laws was lower when the cost was higher (i.e., higher probability of receiving a fine). Therefore, the influence of the cost-benefits was significant in all of the situations,  $F_s(1, 565) > 8.50$ , range of  $\eta^2 = .01$  to  $.03$ ,  $ps < .01$ , except for the law that prohibited the consumption of alcohol in public spaces,  $F < 1$ .



**Figure 3.** Decision to violate the laws referred to dealing with drugs, painting graffiti in public property, drinking alcohol in public spaces, and illegal downloading of music in the conditions of high-incentive and low-incentive toward violation (Study 3). *Note.* High- and low-incentive refer to the high and low benefit (for “drugs” and “graffiti”) or cost (in “alcohol” and “music”) received for violating those laws. Error bars indicate 95% confidence around the means.

We then tested whether the decision to violate a legitimate law was always less than that of violating a coercive law, regardless of the possible benefits or costs obtained by violating it. The results supported this hypothesis. The mixed ANOVA of the normative appeal (within-subjects), country and gender (between-subjects), and social desirability (covariate) revealed a main effect of the normative appeal [ $F(3,567) = 65.49$ ,  $\eta^2 = .26$ ,  $p < .001$ ], qualified by an interaction with country [ $F(3,567) = 24.54$ ,  $\eta^2 = .11$ ,  $p < .001$ ]. According to the Bonferroni test, the estimated means showed that the decision to violate was less in the case of the legitimate laws (i.e., deal drugs and paint graffiti) without differences between them:  $M_s = 3.13$  vs.  $2.98$ ,  $SE_s = 0.11$  and  $0.11$ , 95% CI  $[-0.216, 0.533]$ ; followed by the two coercive laws (i.e., consume alcohol in a public space and download music from the internet) that did show differences between them:  $M_s = 5.06$  vs.  $6.99$ ,  $SE_s = 0.12$  and  $0.11$ , 95% CI  $[-2.31, -1.55]$ . Indeed, as it is shown in Figure 3, in line with our hypothesis, the decision to violate a legitimate law in order to obtain a relatively high benefit (e.g., deal drugs or paint graffiti in order to help friends) was always less than violating a coercive law regardless of whether the cost was low or high,  $t_s > 6.18$ ,  $p_s < .001$ . The interaction with the country was due to the fact that this result was clearer in the Spanish sample ( $t_s > 7.83$ ,  $p_s < .001$ ) than in the Argentinean sample ( $t_s > 1.94$ ,  $p_s \leq .05$ ). This result was also found just as much among men ( $t_s > 2.98$ ,  $p_s < .01$ ) as in women ( $t_s > 5.59$ ,  $p_s < .001$ ).

Consistent with the Theory of Deterrence, analysis of the possible costs and benefits influences the decision of whether or not to violate a law. However, in accordance with EMNA, the results showed that the reach of this influence is determined by the result of the normative appraisal that precedes this cost-benefits analysis. In other words, the decision to violate an appeal that is perceived as a legitimate law tends to be less than the decision to violate an appeal perceived as a coercive law, even though violating the first would imply relatively high benefits and violating the second would imply relatively low costs.

## General discussion

According to the previous research, the decision to comply with a normative appeal depends on the degree to which it has grabbed our attention and on the analysis of what we might gain or lose by complying (or violating). However, according to the Evaluative Model of Normative Appeals (EMNA), between these two moments, an evaluation process (normative appraisal) occurs that strongly influences the decision. Specifically, through this normative appraisal, which is made according to the dimensions of formality and protection, the appeal comes to be perceived as a certain type of norm, which, in turn, leads to a willingness to either comply with or violate it. This

willingness, which precedes the analysis of the costs and benefits of complying (or violating) the norm in this situation, influences the final decision to carry out this action. The results of three studies supported these basic premises of EMNA.

The participants in Study 1 read 28 normative appeals, and for each one they indicated either the degree to which they perceived that the appeal came from a formal institution, or the degree to which they perceived that it would protect them. The results showed a high level of consistency between men and women of different ages and from different countries. The 28 appeals could be grouped in four stable and coherent sets with the approach provided by EMNA, with each set responding to one of the four normative categories proposed by the model: custom, coercive law, prescription, and legitimate law. In Study 2, the participants indicated their level of agreement with each of the 28 appeals, without previously stating the level of perceived formality and protection. In line with our hypothesis, participants from Argentina, Spain, United States, and Venezuela showed a level of agreement that supported the continuum proposed by EMNA. The lowest and greatest levels of agreement corresponded to the appeals that are usually perceived as customs and legitimate laws, respectively, with intermediate levels of agreement passing through the coercive laws and prescriptions. Finally, participants in Study 3 showed that the decision to violate a normative appeal depended not only on the costs or benefits that would result from the violation, but even more on the form in which the appeal is usually perceived: as a legitimate or a coercive law. The decision to violate an appeal usually perceived as a legitimate law was always less than that to violate an appeal usually perceived as a coercive law, even when the former implied a high benefit and the latter a low cost.

### ***Theoretical and practical implications***

The present paper has two theoretical implications. First, EMNA agrees with the Focus Theory of Normative Behavior in highlighting the importance of two processes: the salience of the norm and the perception of it (Oceja & Fernández-Dols, 2006). However, in terms of perception, EMNA's proposal of a two-dimensional normative appraisal considerably broadens the distinction between descriptive and prescriptive norms. Not only does it distinguish four types of normative categories, but it also points to a psychological space that provides an opportunity to anticipate the possible effects of distinct appeals in terms of their position in this space. For example, it is possible that an individual may not be willing to comply with a particular normative appeal, even though he/she observes that most people do it or approve of doing it; and it is also possible that this same person is willing to comply with a normative appeal even though he/she does not know how many people do it or approve of doing it. According to EMNA, these possibilities would occur if the individual had perceived the appeal as a coercive law in the first situation, or as a legitimate law or prescription in the second situation.

Second, a thorough review of the contributions and limitations of the Deterrence Theory has already been carried out by MacCoun (1993), in which the importance of including other processes besides the rational cost-benefit choice are pointed out. Likewise, our results suggest that the decision to violate an appeal is strongly influenced by how this appeal is previously perceived in terms of protection and formality.

Regarding the practical implications, our results suggest three considerations to the authorities that are responsible for designing and administering normative appeals in complex environments. First, there are certain normative appeals that individuals are virtually certain to comply with, in such a way that those responsible for their administration hardly need to dedicate resources to them. This is the case in those appeals that are clearly perceived as formal and protective (i.e., *legitimate laws*). Second, there are certain appeals that are not perceived as formal, but are however perceived as very protective (i.e., *prescription*), and therefore provoke a similar willingness to comply. One recommendation could be that the authorities refrain from making these appeals official, as this could produce a paradoxical effect of reactance (Brehm, 1966) and a reduction in the level of motivation (Lepper & Greene, 1978).

Third, all social systems contain a set of appeals that are perceived as formal, but not protective at all. The results showed that these *coercive laws* provoke a low willingness to comply, in certain cases the same level as that provoked by a mere *custom*. Research on the Perverse Norm Model (Fernández-Dols, 1992, 1993) has shown that when the authorities continue to pretend that these appeals will be complied with, defending their legal validity, they provoke effects such as demoralization and corruption within the entire system (Oceja & Fernández-Dols, 2006). In short, the development of theoretical concepts and evaluation tools that allow for deepening and advancing the understanding of, and ability to anticipate, these cases could be of great use in the appropriate management of norms.

### **Limitations and future directions**

Future research should continue to explore the immediate consequences of appraising a normative appeal as a particular normative category. EMNA assumes that the nature of these consequences is diverse and complex. For example, in Study 2 the willingness to comply was measured by the degree of explicit agreement provoked by a specific appeal. In addition to expanding research to explore this component with more indirect measures (for a review see Fazio & Olson, 2003), future research could also address the emotional aspect of the willingness toward complying with or violating a norm that is provoked by the normative appraisal. Furthermore, though EMNA does not attempt to explain what attitude is provoked by a specific action (e.g., be quiet) but how a salient normative appeal is perceived (e.g., a sign at the entrance of a library stating that one must be quiet), future research should analyze the relationship between the normative appraisal proposed by EMNA and the processes stated by theories of Reasoned Action (Fishbein & Ajzen, 1975) and Planned Behavior (Ajzen & Fishbein, 1980). Finally, the results of Study 3 must be expanded upon in the future with research that both incorporates field studies and substitutes the measurements of the willingness to comply and the decision to comply with observations in natural settings (Oceja & Berenguer, 2009). This limitation can be extended to the majority of studies on normative compliance, as well as other studies outside of this field (Cialdini, 2009).

### **Conclusion**

EMNA does not intend to completely respond to the ambitious and interesting question of why people fulfill norms. First, it does not analyze the macro social factors that encourage or hinder normative conformity (e.g., Elster, 1989; Foucault, 1975; Gibbs, 1975; Homans, 1958; Posner, 2000; Sumner, 1927). Second, it also does not analyze the influence of those norms that fail to grab an individual's attention. Instead, from a psychosocial perspective, EMNA's analysis is focused on the psychological processes provoked by the presentation of a normative appeal via an external source. With respect to this situation, the theoretical models currently offered by social psychology leave some questions unanswered. For example, why do people with very different sets of values unanimously comply with, or violate, a certain normative message? Why do people not respect laws that are promulgated and administered by authorities that are generally considered to be just and legitimate? Why does a person's decision to comply with or violate certain laws seem to be immune to the policy of fines applied by the authorities? The main aim of proposing and testing the premises of the Evaluative Model of Normative Appeals consists in offering more thorough answers to these less ambitious, but equally interesting, questions.





## Note

1. In addition to those four situations that involved violating a law (legitimate or coercive), the questionnaire inserted four more situations that corresponded to normative appeals usually perceived as prescriptions (i.e., donate blood, stop buying products that are bad for the environment) and customs (i.e., greet someone in the street by yelling, and answer your mobile phone in a public place). We did not include the analysis of referred to these situations because, first, we focused on the decision of illegal violation, and, second, its description will dilute the narrative and increase the length. In any case, the additional analyses presented on OFS Web site (Oceja & Salgado, 2015; osf.io/2wjgn) show that the pattern of results is virtually identical to that described in the present work and, moreover, robustly consistent with the premises derived from EMNA.

## Acknowledgments

We are grateful to Pilar Carrera and Eric Stocks for their helpful comments on an earlier draft, to Vanesa Duro for data collection in Study 3, and to David Weston, Susana Sariego, and the Linguistic Consulting Office at UAM for their assistance with the preparation of the English version.

## Funding

This research has received financial support from a Spanish Education Ministry grant (PSI2014-53321-P) and the Programa CONICYT, FONDECYT Iniciación 11130710 (Chile).

## Notes on contributors

*Luis Oceja* is affiliated with the Department of Social Psychology, Universidad Autónoma de Madrid. *Marisol Villegas* is affiliated with the Centro de Estudios del Desarrollo, Universidad Central de Venezuela. *Maite Beramendi* is affiliated with the Universidad de Buenos Aires-CONICET. *Sergio Salgado* is affiliated with the Departamento de Administración y Economía, Universidad de La Frontera.

## References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Andenaes, J. (1974). *Punishment and deterrence*. Ann Arbor, MI: University of Michigan Press.
- Brehm, J. W. (1966). *A theory of psychological reactance*. Oxford, UK: Academic Press.
- Bush, L. K., Hess, U., & Wolford, G. (1993). Transformations for within-subject designs: A Monte Carlo investigation. *Psychological Bulletin*, *113*, 566–579. doi:10.1037/0033-2909.113.3.566
- Centro de Investigaciones Sociológicas (Study 2079). (1994). *Percepción del fraude social*. [http://www.cis.es/cis/opencm/EN/1\\_encuestas/estudios/busqueda.jsp](http://www.cis.es/cis/opencm/EN/1_encuestas/estudios/busqueda.jsp)
- Cialdini, R. B. (2009). We have to break up. *Perspectives on Psychological Science*, *4*, 5–6. doi:10.1111/ppsc.2009.4.issue-1
- Cialdini, R. B., Demaine, L., Sagarin, B. J., Barrett, D. W., Rhoads, K., & Winter, P. L. (2006). Managing social norms for persuasive impact. *Social Influence*, *1*, 3–15. doi:10.1080/15534510500181459
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in Experimental Social Psychology*, *24*, 201–234.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, *58*, 1015–1026. doi:10.1037/0022-3514.58.6.1015
- Cornish, D. B., & Clarke, R. V. (1986). *The reasoning criminal: Rational choice perspectives on offending*. New York, NY: Springer-Verlag.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349–354. doi:10.1037/h0047358
- Elster, J. (1989). *The cement of society. A study of social order*. Cambridge, MA: Cambridge University Press.
- Fazio, R., & Olson, M. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology*, *54*, 297–327. doi:10.1146/annurev.psych.54.101601.145225
- Fernández-Dols, J. M. (1992). Procesos escabrosos en Psicología Social. El concepto de norma perversa. *Revista de Psicología Social*, *7*, 243–256. doi:10.1080/02134748.1992.10821664
- Fernández-Dols, J. M. (1993). Norma perversa: Hipótesis teóricas. *Psicothema*, *5*, 91–101.



- Ferrando, P. J., & Chico, E. (2000). Adaptación y análisis psicométrico de la Escala de Deseabilidad Social de Marlowe y Crowne. *Psicothema*, *12*, 383–389.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Foucault, M. (1975). *Discipline and punish: The birth of the prison*. New York, NY: Vintage Books.
- Gibbs, J. P. (1975). *Crime, punishment and deterrence*. New York, NY: Elsevier.
- Higgins, E. T. (2012). *Beyond pleasure and pain: How motivation works*. New York, NY: Oxford University Press.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63*, 597–606. doi:10.1086/ajs.1958.63.issue-6
- Kallgren, C. A., Reno, R. R., & Cialdini, R. B. (2000). A focus theory of normative conduct: When norms do and do not affect behavior. *Personality and Social Psychology Bulletin*, *26*, 1002–1012. doi:10.1177/01461672002610009
- Lepper, M. R., & Greene, D. (1978). *The hidden costs of reward: New perspectives on the psychology of human motivation*. Hillsdale, NY: Lawrence Erlbaum.
- MacCoun, R. J. (1993). Drugs and the law: A psychological analysis of drug prohibition. *Psychological Bulletin*, *113*, 497–512. doi:10.1037/0033-2909.113.3.497
- Oceja, L., & Salgado, S. (2015, September 7). “You should (not) do that”: An Evaluative Model of Normative Appeals (EMNA). Retrieved from [osf.io/2wjgn](http://osf.io/2wjgn)
- Oceja, L. V., & Berenguer, J. (2009). Putting text in context: The conflict between pro-ecological messages and anti-ecological descriptive norms. *The Spanish Journal of Psychology*, *12*, 657–666. doi:10.1017/S113874160000202X
- Oceja, L. V., & Fernández-Dols, J. M. (2006). La conducencia de la norma jurídica. In E. Garrido, J. Masip, & C. Herrero (Eds.), *Psicología Jurídica*. Madrid, Spain: Pearson Educación.
- Oceja, L. V., & Jiménez, I. (2001). Hacia una clasificación psicosocial de las normas. *Estudios de Psicología*, *22*, 227–242. doi:10.1174/021093901609514
- Pardo, A., & Ruiz, M. (2002). *SPSS 11. Guía para el Análisis de Datos*. Madrid, Spain: McGrawHill.
- Posner, E. R. (2000). *Law and social norms*. Cambridge, MA: Harvard University Press.
- Scherer, K. R. (2001). Appraisal considered as a process of multi-level sequential checking. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 92–120). New York, NY: Oxford University Press.
- Schwartz, S. H. (1977). Normative influence on altruism. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol. 10, pp. 221–279). New York, NY: Academic Press.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, *50*, 19–45. doi:10.1111/josi.1994.50.issue-4
- Sumner, W. G. (1927). *Folkways*. Boston, MA: Ginn (Original work published in 1906).
- Tyler, T. R. (1990). *Why people obey the law*. New Haven, CT: Yale University.
- Tyler, T. R. (1997). The psychology of legitimacy: A relational perspective on voluntary deference to authorities. *Personality and Social Psychology Review*, *1*, 323–345. doi:10.1207/pspr.1997.1.issue-4
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (vol. 25, pp. 115–191). San Diego, CA: Academic Press.
- Weber, M. (1992). *Economy and society*. Berkeley, CA: University of California Press (Original work published in 1922).