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The path of most resistance

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5

Nobody expects the Spanish resistance: Resisting implicit stereotypes when they legitimise disadvantage



Note: This chapter is based on van Breen, J.A., de Lemus, S., Spears, R., & Kuppens, T. (2017). Nobody expects the Spanish resistance: Resisting implicit stereotypes when they legitimise disadvantage.

Abstract

In spite of their subtle nature, implicit stereotypes have profound effects on those who are their targets. In this study, we use Spanish-German intergroup relations to examine implicit social identity threat as a factor that can trigger *resistance* to implicit stereotypes. We argue that implicit social identity threat occurs when implicit stereotypes legitimise in-group disadvantage, and that resistance arises to cope with this experience. Spanish participants were exposed to implicit in-group stereotypes that legitimised in-group disadvantage related to the economic crisis. Results showed that, indeed, implicit stereotypes that legitimise disadvantage triggered resistance, in the form of implicit in-group bias: participants associated positive words more readily with the in-group than the outgroup (Study 5.1), and associated negative words *less* readily with the in-group than the out-group (Study 5.2). These results indicate that people assess the implications of the stereotypes to which they are exposed, even when these are presented at the implicit level. As such, these findings highlight the role of implicit social identity threat in resistance to implicit stereotypes.

Stereotypes of social groups play an important role in maintaining the intergroup status quo, as they can be used to legitimise intergroup differences. A recent example of this process can be seen in the context of the economic crisis in Europe, whereby stereotypes of those from countries like Spain and Greece as lazy and incompetent are used to explain their economic circumstances (e.g. see Bloom, 2015; Brooks, 2011; Friedman, 2011). Often, these arguments are not explicitly made (for instance due to social desirability concerns, or political correctness), but conveyed in more subtle or even implicit ways. Because such implicit stereotyping occurs outside of conscious awareness it is difficult to recognize and difficult to confront directly (Kray et al., 2001; Major et al., 2003). In this chapter, we are interested in the factors that nevertheless allow people to *resist* implicit stereotypes. Specifically, we suggest that resistance is most pronounced when implicit stereotypes threaten social identity.

In spite of their subtle nature, implicit stereotypes have a profound impact on those who are their target. For instance, Agerström and Rooth (2011) showed that implicit biases towards overweight people predict hiring discrimination. Compared to explicit stereotypes, implicit stereotypes generally increase stereotype-conformity (Kray et al., 2001), such as more stereotypical self-descriptions (Barreto et al., 2009), and can also lead to lower self-esteem (Major et al., 2003), anxiety (Barreto et al., 2010), and cognitive depletion (McConnell & Leibold, 2001). There is also evidence that implicit stereotypes affect behaviour: Black participants show poorer performance after having interacted with White partners who hold implicit anti-Black biases (Holoien & Shelton, 2012). Such findings suggest that the subtlety of implicit stereotypes belies the great effect they have on those who are exposed to them. In the current study, we are interested in how people respond to implicit stereotypes, and whether they are able to resist them. Specifically, we argue that resistance arises in response to implicit stereotypes that threaten social identity.

Identity threat. Amongst members of disadvantaged groups, exposure to implicit stereotypes can lead to *social identity threat*, that is, the realization that a social group to which one belongs is devalued (Steele et al., 2002; Tajfel & Turner, 1979). There are two main reasons why implicit stereotypes would be threatening to social identity. Firstly, stereotypes ascribe (often negative) traits to individuals based on their membership in certain social groups, and as a result stereotypes could be threatening to identity. However, they can

also provide a sense of uniqueness, or differentiation from out-groups (Oakes, Haslam, & Turner, 1994), even when they are negative (Mlicki & Ellemers, 1996). That is, stereotypes in themselves do not necessarily threaten identity, even when they are negative.

A second reason why stereotypes can be threatening to identity is because of the role they play in maintaining a disadvantageous status quo. Stereotypes can legitimise inequality because they invoke traits, which are inferred to be causal factors in producing a group's outcomes. Perceiving stereotypes as causal factors in explaining group disadvantage provides legitimacy because it suggests that status differences between groups result from "real" and essentialized differences in the traits these groups possess (Jost & Kay, 2005; Rudman & Glick, 2008; Tajfel, 1981). That is, when people are confronted with inter-group inequalities, they use stereotypical inferences to explain or rationalize the differences in status or power between groups (e.g. Eagly & Steffen, 1984; Hoffman & Hurst, 1990; Jost & Banaji, 1994; Ridgeway, 2001). Indeed, stereotypes that suggest that a group is responsible for their own disadvantage have been shown to be a very powerful way of legitimising disadvantage (Henry, Reyna, & Weiner, 2004; Reyna, Henry, Korfmacher, & Tucker, 2006; Weiner, 1995). This suggests that this "legitimising function" of stereotypes is more threatening to group identity than the negative content/valence of the stereotype alone (see also Spears, Greenwood, de Lemus, & Sweetman, 2010). Importantly, legitimising information need not be explicit to have its effects. Merely presenting traits and outcomes conjointly will lead people to infer that the traits are causal in creating the outcomes (Kressel & Uleman, 2015).

Thus, it is clear from previous research that people are sensitive to the legitimising implications of stereotypes, even when such information is presented at the implicit level.

Here, we examine responses to implicit stereotypes that legitimise disadvantage, in comparison to implicit stereotypes without legitimising implications. We are interested in whether the different identity implications of legitimising and non-legitimising implicit stereotypes affect the occurrence of resistance.

Resistance. As the work discussed above illustrates, implicit stereotypes seem to elicit stereotype-conformity, assimilation and acceptance. Explicit stereotypes, however, are more commonly resisted. Here we define "resistance" as a motivational process that leads to a reaction counteracting a

threat to social identity, with the function of reaffirming or restoring threatened social identity. As such, resistance is evident from responses *opposite* to those induced by the manipulation. For instance, when women are exposed to *negative* gender stereotypes, they may counteract this by activating *positive* in-group associations (de Lemus et al., 2017, see also Chapter 3). That is, the motivational basis of resistance is evident from its functionality in addressing and redressing specific components of the threat. Resistance does not imply automatic contrast to just any stimulus, but is targeted to counteract those stimuli that are threatening to social identity.

Resistance can take the form of expressions of anger (Barreto et al., 2010), support for collective action (van Zomeren et al., 2012), or improved performance in counter-stereotypical domains (Kray et al., 2001). Particularly relevant to the case of implicit stereotypes, however, is the fact that resistance can also occur through implicit strategies, as has been shown to occur for other motivational processes (Bargh et al., 2001; Glaser & Kihlstrom, 2005; Moskowitz & Li, 2011). Implicit resistance can take the form of activation of counter-stereotypical in-group associations. For instance, women who are exposed to stereotypical gender roles or sexist interactions implicitly associate their in-group with counter-stereotypical attributes (de Lemus et al., 2013; Ramos et al., 2015). Likewise, participants show implicit in-group bias, that is, they associate the in-group more readily with positive attributes after exposure to stereotypical role divisions (de Lemus et al., 2017). Thus, implicit resistance can take the form of implicit in-group bias, as well as the activation of counter-stereotypical traits.

In sum, in this chapter we examine responses to implicit stereotypes that legitimise in-group disadvantage. In Chapters 3 and 4, we have shown that some individuals are able to resist stereotypes even when they are presented at the implicit level. Specifically, women who are strongly identified with feminists, but not with women, resist implicit stereotypes through implicit in-group bias, out-group derogation, and persistence in counter-stereotypical performance domains. In the studies that make up this chapter, we aim to replicate these findings in the context of national identity. In addition, we *manipulate* the interpretation of stereotypes, to examine how the threat posed by implicit stereotypes affects resistance. We expect that resistance will occur specifically when implicit stereotypes are threatening to identity, that is, when stereotypes legitimise intergroup inequality.

The current studies. To test our predictions we chose an inter-group con-

text characterised by well-known national stereotypes, clear in-group disadvantage, and a possible link between these two, whereby in-group disadvantage could be legitimised through stereotypes. Specifically, we use the context of national identity in Spain. Generally speaking, national stereotypes in Europe follow the well-known North-South divide on competence vs. warmth (Fiske et al., 2002; Pennebaker, Rimé, & Blankenship, 1996; Voci, 2006), which sees people from the Northern European countries as hard-working but cold-hearted, and those from Southern Europe as friendly but lazy (Linssen & Hagendoorn, 1994; Pennebaker et al., 1996; Willis & Rodríguez-Bailón, 2008). Further, the economic crisis, starting in 2008, has had a particularly strong effect on some Southern European countries, such as Spain. Germany, as the most dominant power amongst the Northern European countries, is perceived to have played a particularly important role in enforcing far-reaching austerity in Spain. Thus, the Spanish-German intergroup context is characterized by well-known national stereotypes, and also considerable disadvantage for Spain, as a result of the economic crisis. Previous research shows that salient national identity in the context of the economic crisis leads to explicit resistance (e.g., collective actions) amongst Spanish but not German participants (Fritsche et al., 2017).

Crucially for the current study, rhetoric in politics and the media has attempted to legitimise this disadvantage with reference to stereotypes by suggesting, for instance, that the current economic situation is due to poor work ethic in Southern Europe (Bloom, 2015; Brooks, 2011; Friedman, 2011). Regardless of whether there is any validity to such simplistic explanations for macro-level phenomena, in the current study we are interested in how Spanish people respond when they are exposed to these ideas implicitly. By manipulating whether implicit stereotypes legitimise disadvantage or not, we are able to examine how different implications of stereotypes affect resistance.

Study 5.1

We examine the idea that resistance will occur when implicit in-group stereotypes pose a threat to social identity, that is, when they are used to legitimise in-group disadvantage. Resistance can take a number of different forms, and as such this study includes several different measures of resistance. Resistance can take the form of implicit in-group bias on an evaluative decision task. That is, participants can activate in-group-favouring asso-

ciations that *counteract* those they are exposed to during the manipulation. Likewise, resistance to implicit stereotypes can take the form of persistence in counter-stereotypical performance domains (Nussbaum & Steele, 2007; Chapter 3). Previous studies have shown that explicit measures tend not to be affected by implicit manipulations such as the one used here (see Chapter 3), leading us to expect few effects of the manipulation on the explicit measures. Nevertheless, they are included for comparison purposes. We expect resistance to arise when implicit in-group stereotypes legitimise in-group disadvantage. Conversely, we expect that when there is no link between implicit in-group stereotypes and disadvantage, participants will show no evidence for resistance.

Method

Participants. Undergraduates from the University of Granada (N=163) completed the study. Those who did not have the Spanish nationality (N=17) were excluded from the sample. We further excluded those who failed to comply with instructions or who had high error rates (>20%) during the manipulation phase (N=14). This left a total of 132 participants (24 males; 18.25%). The average age was 20.56 years old, ranging from 18 to 45 years old.

We expected effects of a small size, and with this sample we are able to detect such small effect sizes ($d=0.1$) at a power of $1-\beta=0.80$ (Faul, Erdfelder, Lang, & Buchner, 2007). The stopping rule used during data collection was to continue collecting data until the sample was large enough to detect effects of the expected size.

Design. Participants were exposed to 4 different types of implicit associations (a 4 x1 design). Identification with the national in-group was included as a covariate.

Implicit manipulation. The implicit associations to which participants were exposed were manipulated by the repeated pairing of subliminal in-group and out-group primes (“Spanish” and “German”) with negative or positive target words. In the *stereotype condition*, participants were exposed to negative in-group stereotypes and positive out-group stereotypes, such as “Spanish-lazy”, and “German-efficient”. The *disadvantage condition* implicitly associated the in-group with targets relating to the economic disadvantage, such as “Spanish-debt”, while implicitly associating the out-group prime “German” with economic advantage such as “credit” and “growth”. The *legitimising condition*, reflecting the legitimising function of stereotypes, combined

both of these associations: “Spanish” was associated with *both* economic disadvantage *and* low competence (i.e. “Spanish-lazy”; “Spanish-debt”); “German” was associated with both economic advantage and high competence (“German-efficient”; “German-wealth”). This condition legitimises the disadvantage the in-group faces by suggesting that the in-group is responsible for their own outcomes through their stereotypical traits (Henry et al., 2004; Reyna et al., 2006). The fourth condition was a control condition, in which Spanish and German primes were switched, such that “German” was associated with low competence and economic disadvantage, and “Spanish” was associated with high competence and economic advantage. Importantly, this control condition was as complex as the legitimising condition in terms of the number of targets seen and classifications made, allowing us to rule out the fact that any differences between conditions are due to the complexity of the legitimising condition. Note that in a 2x2 design (e.g. presence vs absence of in-group stereotypes and in-group disadvantage) the control condition would be a neutral condition in which both in-group stereotypes and in-group disadvantage were absent. However, here the control condition presents the in-group positively. Therefore, we used a 4x1 design.

The target stimuli were selected based on a pre-test, which is described in the supplementary materials. We selected 10 low competence traits (e.g. lazy, inefficient) rated as stereotypical for the in-group (Spanish), and 10 high competence traits (e.g. productive, ambitious) that rated as stereotypical for the out-group (Germans), 10 nouns reflecting economic crisis (e.g. debt, poverty), and 10 nouns reflecting economic advantage (e.g. credit, wealth). The targets in the different categories were of similar length and frequency in Spanish (confirmed using the database at <http://www.bcbl.eu/databases/espal/index.php>), as longer or less frequent words can slow responses (Hudson & Bergman, 1985; Sainz, 2016).

The manipulation consisted of 120 trials, in which the subliminal group prime (“Spanish” or “German”) was presented for 42 ms, with a supraliminal forward and backward mask (a random letter string) presented for 100 ms. Following the masked prime, the target appeared; participants’ task was to classify the target as being related to high or low competence, or as related to the crisis or not. The target remained on the screen until a response was given.

Dependent measures. Following the threat manipulation, the dependent measures and covariates were administered in the order shown below.

The dependent measures include implicit, indirect, and explicit measures.

Implicit measure: Implicit in-group bias. We include an evaluative decision task to examine the effect of implicit threat on implicit associations with the in- and out-group (de Lemus et al., 2017; Fazio et al., 1995). Participants respond to positive or negative target stimuli (supraliminal), preceded by a subliminal in-group or out-group prime. The task, consisting of 120 trials, uses the same subliminal prime (“Spanish” or “German”) as in the threat manipulation. The supraliminal targets were positive or negative words without stereotypical connotations, taken from the standard IAT measure (such as ‘love’ or ‘peace’) translated to Spanish (following Rodríguez-Bailón, Ruiz, & Moya, 2009). Participants were asked to classify targets as positive or negative. The facilitation of Spanish-positive pairs compared to German-positive pairs in reaction times (RTs) indicates implicit in-group bias (de Lemus et al., 2016; Fazio et al., 1995).

A pre-test with 26 participants established that, in the absence of a manipulation, there is no evidence for in-group, or indeed out-group, bias ($F < 1.376$, $p = 0.241$). Therefore, we can be confident that any bias in the experimental conditions is due to the manipulation.

Indirect measure: Math task. We measured persistence and performance in a competence domain through a math task (see Chapter 3). The task consisted of 8 math problems in increasing order of difficulty. Participants were asked to choose the correct answer from 4 options. Participants could choose “skip this question” if they did not know the answer. The final item was unsolvable, that is, the correct answer was not amongst the options. Participants might resist implicit stereotype exposure by spending more time on the unsolvable item. Additionally, resistance might be evident from improved performance on the solvable items.

Explicit measures.

Hiring task. The hiring task asked participants to read the CVs of two candidates supposedly applying for the same job. One candidate for the position was Spanish (in-group), the other German (out-group). As an explicit measure of in-group bias, participants rated the candidates in terms of competence, warmth and suitability for the job vacancy on a 7-point Likert scale. They were also asked to choose which of the two candidates they would hire if they were to make the decision (forced-choice). Resistance to implicit threat exposure would be evident from an in-group bias in favour of the Spanish candidate. Pre-testing of the CVs showed that, in the absence of personal in-

formation about the candidates, the two CVs did not differ on any of the three indicators.

Mood. A mood scale was created from a combination of the dejection/agitation scale (Higgins, 2001), and the PANAS (Tellegen, Watson, & Clark, 1988), resulting in a 10-item scale asking about positive (N=4; $\alpha=0.74$) and negative (N=6; $\alpha=0.79$) mood. Participants indicated their response on 9-point scale.

Collective Action. Participants' willingness to engage in collective action was measured with an 8-item scale referring to both normative (e.g. protesting) and non-normative collective (e.g. arson). Participants rated the perceived appropriateness of each of action on a Likert scale from 1 (not at all appropriate) to 9 (very appropriate). The Cronbach's alpha reliability of this scale was $\alpha=0.61$. We considered this insufficient, and therefore the results for this measure are presented in the supplementary materials.

Covariate: In-group identification. Finally, participants completed the Multidimensional Identification measure (Leach et al., 2008; $\alpha=0.94$) using a 9-point Likert scale, as an indicator of their identification with their national in-group.

Procedure. The study was run in the weeks preceding the regional elections (Testing days: 24/02 – 13/03; Election day (Andalucía): 22/03 2015). Upon arrival to the lab, participants read the study information and provided informed consent. Participants were randomly assigned to one of the four implicit threat conditions and completed the manipulation followed by the other measures, in the order described above. Finally, after a funnelled debriefing, participants were thanked, and given the opportunity to ask questions.

Preliminary analyses. None of the participants spontaneously reported awareness of the subliminal primes, but when explicitly asked to guess, 7 participants correctly identified at least one of the primes. We examined whether this varied based on threat condition, but this was not the case (all p -values above $p=0.69$). Additionally, prime awareness did not affect reaction times ($F<1$, $p=0.63$). Thus, these participants were retained in the sample. A predetermined cut-off was used for the reaction time data (RTs). RTs above 1500 ms and below 300 ms were excluded from analyses (Ratcliff, 1993). However, because significant kurtosis remained (Kurtosis = 4.44, K-S test statistic= 0.14, $p<0.001$), a more stringent criterion was preferred: data points more than 3 standard deviations from the mean were excluded. Preliminary analysis confirmed the existence of a random Subject factor (Wald's $Z=7.13$, $p<0.001$), reflecting a multilevel structure where trials are nested within participants.

Therefore, the models described below include a random Subject factor.

Analytical strategy. As a first step, we fit a model using omnibus tests for the interactions. In decomposing any interactions found, the simple effect of central interest is how the threat manipulation may create different effects of the in-group primes *relative to the out-group primes*. Theoretically speaking, we consider this the most relevant comparison, as several of our measures concern in-group bias, that is, the comparison of the in-group *to an out-group*. To compare the four experimental conditions, we created dummy variables comparing each of the conditions to each of the others, and contrasts comparing the each condition to the other three.

Results

The measure of central interest in this study is the measure of implicit in-group bias. Therefore, we briefly discuss the explicit and indirect measures (which produced few relevant effects), before moving on to the implicit measure. For a more detailed discussion of the results on the explicit measures, please refer to the supplementary materials.

Indirect and explicit measures. Our hypotheses regarding the math task (measuring performance and persistence) were not supported: there was no effect of threat condition on either performance or persistence ($F_s < 1.77$, $p_s > 0.16$). Likewise, the hiring task and the mood measure showed no evidence for resistance. In the hiring task, threat condition did not affect ratings of warmth, competence or suitability of the in- and out-group candidates ($F_s < 1.95$, $p_s > 0.12$). Finally, threat condition did not affect either positive or negative mood ($F_s < 1$, $p_s > 0.54$).

Implicit inter-group bias. We are interested in in-group bias in the context of inter-group relations, that is, we are interested in how the inter-group context affects attitudes towards the in-group relative to the out-group. Therefore, the simple effect of interest is the comparison between in-group primes and out-group primes.

Hypothesis test. Omnibus analysis showed a main effect of target valence ($F(1, 13005) = 13.03$, $p < 0.001$): positive targets elicited faster responses than negative targets. The hypothesized 3-way interaction between threat condition, target valence and the group prime also reached significance ($F(3, 13005) = 2.92$, $p = 0.033$, see Figure 5a). There was no further interaction with identification ($F < 1$).

Breakdown of the interaction showed that when the target is positive,

the subliminal group prime interacts with the contrast reflecting the difference between the legitimising condition and the other three conditions ($F(1,13024)=11.32, p=0.001$). That is, people respond differently to the primes when they have been exposed to the legitimising condition compared to the other three conditions. Further breakdown showed that, in the legitimising condition, in-group primes facilitated responses to positive targets, relative to out-group primes ($M_{\text{diff}}=12.07$ ms, $F(1,13023)=5.83, p=0.016, d=0.1$). That is, the legitimising condition elicits implicit in-group bias. In the disadvantage condition responses to positive targets were marginally affected by the subliminal group prime: there was a tendency for participants to associate positive targets with the out-group more than the in-group, that is, evidence for *out-group bias* on positive targets ($M_{\text{diff}}=8.45$ ms, $F(1,13004)=3.33, p=0.068, d=0.16$). In the control and stereotype conditions responses to positive targets were not significantly affected by the type of prime that preceded them ($F<1, p>0.50$).

Responses to negative targets showed a different pattern. There was a significant interaction between exposure condition and the prime type ($F(3,13009)=2.76, p=0.041$). Further breakdown showed that, in the control condition, responses to negative targets were affected by the category of the prime, such that negative targets were responded to faster when preceded by an out-group prime than an in-group prime ($M_{\text{diff}}=-12.21$ ms, $F(1,13005)=7.51, p=0.006, d=0.24$). Other simple effects did not reach significance (see Table 5a).

In sum, there were three significant simple effects. The simple effects in the disadvantage and control conditions show that participants learn the associations they are exposed to in the manipulation phase. In the control condition, participants see negative out-group associations, and subsequently out-group primes facilitate responses to negative targets. In the disadvantage condition, participants see positive out-group associations, and subsequently out-group primes facilitate responses to positive targets. However, the responses to the legitimising condition constitute a *reversal* of the manipulation: participants were exposed to negative in-group associations, but in-group primes subsequently facilitate *positive* targets. There were few effects on the explicit measures.

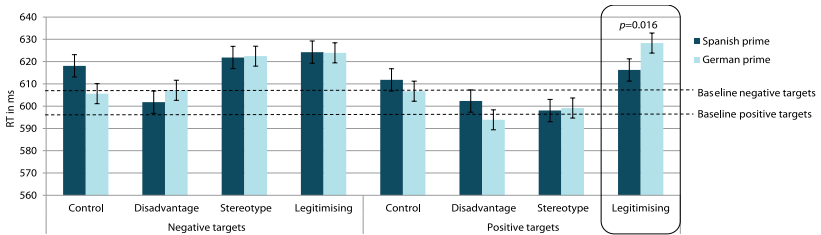
Nobody expects the Spanish resistance

Table 5a. Simple effects in the evaluative decision task

Target valence	Threat condition	RT (per prime)					95% CI	
		Spanish	German	M_{diff}	Std. Error	p -value	Lower	Upper
Negative	Control*	618.12	605.91	12.21	4.46	.006	3.74	21.21
	Stereotype	622.56	623.05	-.49	4.27	.856	-8.97	7.77
	Disadvantage	601.54	607.03	-5.50	4.61	.232	-14.37	3.69
	Legitimising	625.04	624.12	.92	5.08	.909	-9.64	10.27
Positive	Control	611.80	606.73	5.08	4.41	.249	-3.56	13.71
	Stereotype	598.05	599.18	-1.13	4.21	.789	-9.37	7.12
	Disadvantage*	602.32	593.88	8.45	4.63	.068	-.63	17.52
	Legitimising*	616.25	628.32	-12.08	5.00	.016	-21.87	-2.28

Note: Simple effects marked with an asterisk are described in the text.

Figure 5a. Reaction times in the evaluative decision task for Study 5.1.



NB: Error bars represent 1 standard error. Baseline reaction times are derived from a pilot study.

Discussion

The central question of this study is: when do implicit stereotypes trigger resistance? We argue that implicit social identity threat occurs when implicit stereotypes *legitimise* in-group disadvantage, and that resistance arises to cope with this experience. In line with this reasoning, we observed resistance (in the form of implicit in-group bias) following exposure to the legitimising condition. Resistance was evident from a reversal of the associations the participants saw during the manipulation: after seeing *negative* implicit associations with the in-group (e.g., Spanish-debt, Spanish-lazy), in-group primes facilitated the categorization of *positive* targets, that is, participants showed implicit in-group bias. These effects did not appear in the other conditions. Taken together, findings from this study indicate that resistance occurs in response to the legitimising function of stereotypes. Importantly, participants are able to differentiate the different functions of stereotypes even when information is presented at the implicit level.

We argue that when in-group stereotypes and in-group disadvantage are presented together, they are perceived to be linked, such that stereotypes suggest the in-group is responsible for the disadvantage they face. Those who have negative traits get negative outcomes, and those who have positive traits get positive outcomes (see also Reyna et al., 2006). This reasoning suggests that participants perceive a (causal) link between implicit in-group stereotypes and in-group disadvantage. However, in this study we did not test directly whether participants in fact perceive such a link. It could be that participants simply interpret the legitimising condition as a “double threat”. Such an explanation could not be excluded in this study. Study 5.2 examines this issue.

Study 5.2

Study 5.1 showed that resistance occurred when participants were exposed to both implicit stereotypes and negative outcomes for the in-group (i.e., in the legitimising condition). Above we have argued that this effect in the legitimising condition is due to implicit identity threat arising from a perceived link between stereotypes and in-group disadvantage. However, Study 5.1 did not directly address whether participants did indeed perceive such link. Reyna et al. (2009) have argued that stereotypes that imply that a group is responsible for their negative outcomes are one of the most powerful tools for legitimising disadvantage. If this is the case, then the legitimising condition should affect responses to concepts related to legitimacy, responsibility and blame.

To examine this idea, Study 5.2 includes implicit and explicit measures of perceived legitimacy and responsibility. We expect to find that the legitimising condition affects implicit processing of these concepts. This will be examined using a lexical decision task (LDT). The legitimising condition can affect the processing of the concept of responsibility in at least two different ways. Firstly, when a concept is activated, this could lead to faster responses to that concept (Kawakami et al., 2000; McNamara & Healy, 1988). On the other hand, in the legitimising condition the concept of responsibility acquires a threat component because it could imply that the in-group is responsible for its own disadvantage. Such threat is known to slow down reaction times (Algom, Chajut, & Lev, 2004; Spears, Gordijn, Dijksterhuis, & Stapel, 2004; Wentura, Rothermund, & Bak, 2000). If this is the case, we might expect *slower* responses to responsibility (compared to neutral) targets in the legitimising condition.

In sum, we expect that the legitimising condition will lead to differences in the processing of responsibility targets compared to neutral targets, differences that are not predicted for the other conditions. Such findings would constitute evidence that the legitimising condition is perceived as linking stereotypes and disadvantage through the suggestion that the in-group is responsible for the disadvantage they face. Examining processing of the concept of responsibility will allow us to say *what it is* that makes the legitimising condition threatening (namely, the implied responsibility). For the explicit measure of responsibility we expect no effect of the manipulation, as we consider the manipulation to be too subtle. Additionally, we expect to replicate the resistance finding from Study 5.1, which showed that the legitimising condition leads to implicit in-group bias.

Method

Participants. Undergraduates from the University of Granada (N=160) participated in this study. Those who did not have the Spanish nationality (N=9) were excluded from the sample. Three participants who had high error rates (>20%) during the manipulation phase were also excluded. This left a total of 148 participants (34 males; 24.1%) in the final sample. The average age was 21.42 years old, ranging from 18 to 39 years old.

We expected effects of a small size, and with this sample we are able to detect such small effect sizes ($d \approx 0.1$) at a power of $1 - \beta = 0.80$ (Faul, Erdfelder, Lang, & Buchner, 2007). The stopping rule used during data collection was to continue collecting data until the sample was large enough to detect effects of the expected size.

Design. Study 5.2 used the same design as Study 5.1, assigning participants to one of four different threat conditions: exposure to in-group stereotypes, exposure to in-group disadvantage, exposure to both stereotypes and disadvantage, and a counter-stereotype control condition. Identification with the national in-group (Leach et al., 2008, $\alpha = 0.948$) was included as a covariate.

Dependent measures. Like Study 5.1, this study included the evaluative decision task, as well as measures of positive mood ($\alpha = 0.76$), negative mood ($\alpha = 0.77$), and collective action ($\alpha = 0.64$). The hiring task was dropped from this study. Measures that are new, or adapted based on Study 5.1, are described in detail below.

Responsibility processing. To examine whether the legitimising condition triggers responsibility associations we included a LDT, containing 96 trials, in which participants must decide whether a target stimulus is an existing word or not. The target categories were non-words (48 trials), neutral targets (24 trials) and responsibility targets (24 trials). Neutral targets included words such as “regrettable” and “irregular”, while responsibility targets included words such as “guilty”, “responsible”, and “accused”. The non-words were created by scrambling the letters of the word targets. All words were selected, based on pre-testing, to be of similar valence (slightly negative), and comparable length and frequency. If the legitimising condition affects processing of responsibility, it should affect responses to responsibility targets relative to neutral targets.

Explicit responsibility and legitimacy. We also included an explicit measure examining to what extent participants’ perceived the in-group to be responsible for their own disadvantage, and how legitimate they found the circumstances. Those who were exposed to the legitimising condition may resist

the implication of in-group responsibility by denying legitimacy and responsibility. The scale consisted of items such as “For me it is clear that Spain is not responsible for the economic crisis” (in-group responsibility; 6 items; $\alpha=0.76$), and “I think the effect of the economic crisis on Spain are unfair” (legitimacy, 3 items; $\alpha=0.62$). Participants rated their agreement with each item on a scale of 1 to 9; higher scores reflect *low* perceptions of legitimacy and responsibility.

Math task. We adapted the instructions for the math task, to create more overlap between the associations that are primed implicitly during the manipulation, and the framing of the math task (Payne et al., 2008). More specifically, in Study 5.1 the math task was described simply as a measure of competence, while in Study 5.2 the math task was described as a measure of *financial* competence, creating greater fit with the crisis context.

Collective action. As the alpha reliability of this measure was insufficient in Study 5.1, we adapted the phrasing of some of the items. However, the alpha reliability of the measure remained low ($\alpha=0.64$), and therefore, as for Study 5.1, results are discussed in the supplementary materials.

Procedure. This study was run in the weeks preceding the national elections (Testing days: 23/11 – 03/12; Election day: 20/12 2015). Upon arrival to the lab, participants read the study information and provided informed consent. Participants were randomly assigned to one of the four threat conditions and completed the manipulation followed by the dependent measures: the evaluative decision task and the lexical decision task were completed first in a counterbalanced order, followed by the math task and the mood measure. Participants then indicated their nationality, and identification with their national group, before completing the measures that explicitly referred to their national identity: the collective action measure and a short questionnaire about legitimacy and responsibility. Finally, participants completed a funnelled debriefing. None of the participants guessed the nature of the experiment. At the end of the study, participants were given the opportunity to ask questions and were thanked for their participation.

Preliminary analyses. None of the participants spontaneously reported awareness of the subliminal primes, but 3 participants correctly identified one of the primes. As in Study 5.1, these participants were retained in the sample. For the RTs we used the same cut-off criterion as in Study 5.1 (i.e., 3 standard-deviations above or below the mean). This meant that 6.01% of data points were excluded. As before, there was a random Subject factor (Wald's $Z=8.41, p<0.001$), which is included in the models described below.

Results

Indirect and explicit measures. As in Study 5.1, the indirect and explicit measures produced few relevant effects. Therefore, they are discussed only briefly here, and more extensively in the supplementary materials. Persistence and performance on the math task were not affected by threat condition ($F_s < 1.15$, $p_s > 0.33$). Likewise, positive and negative mood were not affected by threat condition ($F_s < 1.24$, $p_s > 0.29$). Finally, perceptions of *explicit* legitimacy and in-group responsibility showed no effects of threat condition ($F_s < 1$).

Implicit inter-group bias.

Hypothesis test. The omnibus analysis showed a main effect of target valence ($F(1, 18314) = 62.27$, $p < 0.001$): positive targets elicited faster responses than negative targets. There was evidence for the predicted 3-way interaction between threat condition, group prime and target valence ($F(3, 18314) = 2.86$, $p = 0.036$).

Breakdown of the 3-way interaction showed that, unlike in Study 5.1, responses to positive targets were not affected by the interaction between threat conditions and group prime ($F < 1$).

When looking at negative targets, the group prime interacts with exposure condition ($F(3, 18314) = 3.13$, $p = 0.024$). Further breakdown, using dummy variables, showed that the primes affected responses to negative targets in a different way in the legitimising condition compared to the other three conditions ($F(1, 18314) = 8.39$, $p = 0.004$). Specifically, in the legitimising condition, in-group primes (relative to out-group primes) delayed responses to negative targets ($M_{\text{diff}} = 31.86$ ms, $F(1, 18305) = 10.92$, $p = 0.001$, $d = 0.27$). That is, there was evidence for in-group bias (on negative targets) in the legitimising condition. This effect is presented in Figure 5b. No other simple effects reached significance ($F_s < 2.39$, $p_s > 0.121$, see Table 5b).

Responsibility processing.

Processing of the concept of responsibility was measured with a LDT containing responsibility targets, neutral fillers, and non-words.

Hypothesis test. There was a main effect of target category ($F(1, 6862) = 7.46$, $p = 0.006$), such that participants responded more slowly to responsibility targets than to neutral targets. Additionally, there was a marginal omnibus interaction between threat condition and target category ($F(3, 6862) = 2.20$, $p = 0.086$). When focusing specifically on the contrast between the legitimising condition and the other three conditions, this interaction reached signif-

icance ($F(1,6862)=5.127, p=0.024$). Specifically, in the legitimising condition, responses to responsibility targets were significantly *slower* than responses to neutral targets ($M_{\text{diff}}=28.82$ ms, $F(1,6862)=11.19, p=0.001, d=0.28$, other p -values above $p=0.14$). Thus, although the omnibus interaction was only marginally significant, the contrast between the legitimising condition and the other three conditions showed that participants in the legitimising condition are slower to respond to the responsibility targets than to the neutral targets. This finding is in line with the hypothesis that the legitimising condition creates a threatening, implicit link between stereotypes and disadvantage.

Exploratory analyses.

Results presented above have shown that the legitimising condition leads to implicit in-group bias, and to slower categorization of responsibility targets. We now explore how these two responses relate to one another. As expected, there was evidence that the relation between the two responses depended on threat condition ($F(3,17692)=3.97, p=0.009$): in the legitimising condition, the degree of in-group bias and the delay of responsibility targets were significantly negatively related ($\beta= -0.59, F(1,17692)= 15.06, p=0.001, d=0.31$), and this negative relationship was stronger than in the other conditions ($F(1,17692)= 16.40, p=0.001, d=0.33$). Thus, the legitimising condition gives rise to two responses that are inversely related: once one response has taken place, the other is less likely to occur.

So what determines which response option is preferred? There was some evidence that the strongest effects were present on whichever measure participants were presented with first. Although these order effects did not reach statistical significance ($F_s < 1.97, p_s > 0.11$), trends showed that those who were presented with the in-group bias measure first showed a greater degree of in-group bias (and a smaller delay in responsibility categorization) than those who saw the responsibility measure first, and vice versa (see Figure 5c).

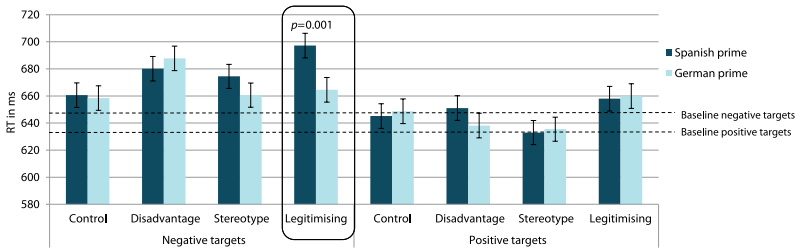


Table 5b. Simple effects in the evaluative decision task.

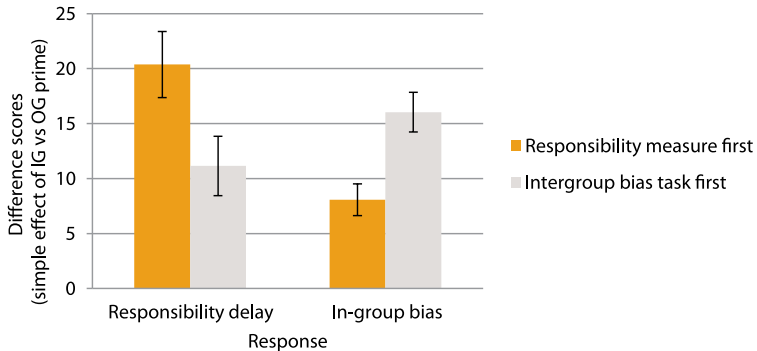
Target valence	Threat condition	RT (per prime)			Std. Error	p-value	95% CI	
		Spanish	German	M_{diff}			Lower	Upper
Negative	Control	661.01	658.81	2.198	9.64	0.820	-16.70	21.10
	Stereotype	674.98	660.45	14.52	9.40	0.122	-3.90	32.95
	Disadvantage	681.09	688.80	-7.71	9.64	0.424	-26.61	11.19
	Legitimising*	696.48	664.63	31.86	9.64	0.001	12.96	50.76
Positive	Control	645.57	649.10	-3.53	9.64	0.714	-22.43	15.37
	Stereotype	633.23	635.25	-2.01	9.40	0.830	-20.43	16.41
	Disadvantage	651.97	639.08	12.89	9.64	0.181	-6.01	31.79
	Legitimising	657.81	660.38	-2.56	9.64	0.790	-21.47	16.33

Note: Simple effects with an asterisk are described in the text.

Figure 5b. Reaction times in the Evaluative decision task in Study 5.2.



NB: Error bars represent 1 standard error. Baseline reaction times are derived from the pilot study.

Figure 5c: The effect of presentation order on the implicit measures.

Discussion

Here we replicated the finding, from Study 5.1, that resistance occurs when stereotypes legitimise in-group disadvantage. However, the resistance response took a slightly different form than in Study 5.1. In the first study, exposure to the legitimising condition was resisted by *more readily* associating *positive* targets with the in-group than the out-group. In this study, exposure to the legitimising condition was resisted by *less readily* associating *negative* targets with the in-group than the out-group. In spite of this difference, as in Study 5.1, this response constitutes a reversal of the associations participants saw during the manipulation: after seeing negative targets consistently associated with the in-group rather than the out-group, participants showed the opposite response: negative targets were *less* likely to be associated with the in-group compared to the out-group, that is, participants showed implicit in-group bias. In the other conditions, this resistance did not occur. Thus, resistance occurs in response to the legitimising function of stereotypes.

In these studies, disadvantage was legitimised through stereotypes that suggest that the group is responsible for their own social position, due to their stereotypical characteristics (Henry et al., 2004; Reyna et al., 2006). Indeed, results confirmed that participants perceived this implied responsibility: the legitimising condition influenced the processing of responsibility stimuli. After exposure to the legitimising condition, participants responded more slowly to responsibility targets compared to neutral targets. In the legitimising condition, the concept of responsibility acquires a threat component, which then

appears to interfere with the lexical categorization of the word, in line with research showing that threatening targets require more detailed processing than neutral targets (Algom et al., 2004; Wentura et al., 2000). This finding supports our hypothesis that the legitimising condition affects the processing of the concept of responsibility. More broadly, this finding provides evidence that participants interpret the joint presentation of implicit in-group stereotypes and in-group disadvantage as having responsibility implications (Reyna et al., 2006).

An interesting remaining question is whether the delayed responses to responsibility targets should be seen as a form of resistance. We have defined resistance as a motivated response that *counteracts* the threat induced by the manipulation. Indeed, we might argue that, if the legitimising condition suggests that the in-group is responsible for the disadvantage they face, then participants may become motivated to “deny” this, which might be reflected in inhibited (i.e. slower) responses to responsibility targets. Previous studies have supported the notion that slower word categorization can function as a form of resistance. Spears et al. (2004) showed that when an intergroup context is primed, people were slower to categorize words that reflect out-group attributes, as a way of distancing themselves from these traits. In our study too, we might interpret the delayed responses to responsibility targets as a motivated resistance response aimed at counteracting the threat. Although the responsibility measure was not designed to assess this issue directly, there is some exploratory evidence that this finding might indeed represent a resistance effect. If the delay in responsibility categorization was “just” an effect of threat, we would have expected a positive relationship between delay in responsibility categorization and in-group bias: the more acute the threat, the greater the need for resistance. Instead, the fact that the two measures were inversely related, suggests that these two responses serve the same purpose: once one response has taken place, the other is no longer needed (Heine, Proulx, & Vohs, 2006; see also Tesser, 2000 for a similar effect in the context of self-regulation). Though exploratory, these findings suggest that the delay in responsibility categorization, like implicit in-group bias, could be a product of the motivation to resist.

In sum, Study 5.2 replicated the finding from Study 5.1 that, when implicit stereotypes are used to legitimise in-group disadvantage this produced implicit resistance, although the resistance effect took a slightly different form than in Study 5.1. Moreover, findings regarding the processing of responsibil-

ity stimuli supported our hypothesis that the legitimising condition legitimises disadvantage through the suggestion that the in-group is responsible for the disadvantage they face.

General Discussion

Results from two studies show evidence for implicit resistance to implicit identity threat in the context of national identity in Spain, and as such provide a conceptual replication of findings of Chapters 3 and 4. More specifically, the studies that make up this chapter show that when implicit stereotypes legitimise in-group disadvantage, this threatens social identity, and participants address this through implicit in-group bias. Separate exposure to implicit stereotypes or implicit in-group disadvantage did not produce such effects.

Many studies have shown that repeated exposure to certain associations leads to subsequent facilitation in responding to those associations (Kawakami et al., 2000; McNamara & Healy, 1988). However, in the studies described here, exposure to the legitimising condition leads participants to show a *reversal* of the associations they were exposed to. The legitimising condition presented participants with associations that reflected negatively on the in-group compared to the out-group. In Study 5.1, participants reversed this by responding faster to in-group positive pairs than to out-group positive pairs. In Study 2, exposure to the legitimising condition led participants to respond more *slowly* to in-group negative pairs than out-group negative pairs. Thus, in both studies exposure to the legitimising condition leads participants to respond in ways that *contravene* the associations they have been exposed to in the manipulation, indicating resistance. There was no evidence for resistance on explicit measures.

The legitimising function of stereotypes. These studies illustrate that resistance to implicit stereotypes is triggered by the role they play in legitimising in-group disadvantage. The fact that resistance is specific to the legitimising condition illustrates several points. Firstly, these findings suggest that resistance is aimed at counteracting implicit social identity threat. When stereotypes are used in a descriptive way only, people are likely to have a certain level of tolerance for stereotypes, even if negative, because they say something about “who we are” (Gómez, Seyle, Huici, & Swann, 2009; Mlicki & Ellemers, 1996; Swann, 2011). Indeed, here we observed that exposure to implicit stereotypes alone does not produce resistance. Likewise, the disadvantage condition does not produce resistance. This condition implicitly

exposes participants to in-group disadvantage (and out-group advantage) without suggesting any cause or reason for this situation. As such, this condition perhaps threatens the outcomes of the group more than their identity. The legitimising condition is arguably most threatening to group identity. In this condition, rather than being confronted with stereotypes alone, participants are exposed to implicit stereotypes that legitimise a larger social system in which the in-group is disadvantaged. It is in this condition that resistance arises as a means of counteracting that threat. Thus, it seems that it is implicit social identity threat, rather than negative in-group associations per se, that triggers resistance.

Secondly, with regards to *implicit* stereotypes, the fact that resistance is specific to the legitimising condition shows that participants are able to assess the implications of the associations they are exposed to, even when these associations are presented *at the implicit level*. Put differently, people not only pick up on, but *interpret* implicit associations in the light of knowledge about the broader social context of which they are a part. This finding supports the idea that resistance to implicit stereotypes reflects a motivated mechanism aimed at protecting the in-group.

In the current research, the legitimising function of stereotypes was part of the manipulation, but it is likely that in natural settings not all individuals are equally aware of the role played by stereotypes in maintaining the status quo. For instance, activists who aim to change social inequality, and other highly politicized groups, may be more aware of the legitimising function of stereotypes than the general public (e.g. see Chapter 2). As a result, such politicized groups may be more able to resist implicit identity threat.

These findings of this chapter also provide insight into situations in which resistance does *not* occur. For instance, considering the fact that implied legitimacy of *in-group disadvantage* is an important factor in the occurrence of resistance, this indicates that advantaged or high-status groups may be less likely to show resistance to implicit stereotypes. For disadvantaged groups, disadvantage is a part of the status quo to a greater extent than for advantaged groups, therefore, disadvantaged groups might have more strategies at their disposal to resist implicit stereotypes than do advantaged groups. Differences between advantaged and disadvantaged groups in their responses to implicit stereotypes are a fruitful topic for future research.

Implicit resistance. The resistance that was observed in these studies occurred at the same level as the threat: exposure to *implicit* stereotypes elic-

its *implicit* resistance. There are several possible explanations for why resistance occurred on implicit rather than explicit measures. Firstly, the effects of the manipulation may have worn off by the time the indirect and explicit measures were completed, as they were administered towards the end of the studies. This can be compounded by a sense of goal completion after resisting on the first measure, leading to goal inhibition (Rothermund, 2003). Alternatively, it could be that implicit stereotypes are simply too subtle to elicit explicit resistance. The fact that implicit stereotypes cannot be consciously evaluated or attributed to any source (Major et al., 2003) might make explicit resistance strategies such as anger, protesting and explicit in-group bias less viable. That is, in dealing with an implicit threat, implicit strategies are perhaps more accessible. Together, these factors may explain why resistance to implicit social identity threat is more likely to occur on implicit compared to explicit measures.

The studies reported here further illustrate that implicit resistance can take different forms. In the first study, participants resisted the legitimising condition by more readily activating ingroup-positive associations, while in the second study, participants resisted by *less* readily activating ingroup-*negative* associations. One possible explanation for this difference is that Study 5.2 was more threatening overall because it was run just before *national* elections. As a result, national identity and the Spanish-German intergroup context may have been more salient when Study 5.2 was run compared to Study 5.1, which was run before *regional* elections. Therefore, it is possible that the difference between national and regional elections affected how threatening participants perceived the manipulation to be, and the resistance responses they subsequently showed. Nevertheless, we argue that these two responses serve the same purpose: to affirm or maintain positive social identity (Hepper, Gramzow, & Sedikides, 2010; Weber, 1994). That is, across studies, the associations participants make reflect a motivated mechanism that counter-acts the implicit threat arising from the legitimising condition, and as such both responses can be considered resistance responses.

Conclusion. The studies that make up this chapter replicate the findings of Chapters 3 and 4 in the context of national identity in Spain. Additionally, these studies demonstrate that implicit resistance, in the form of implicit in-group bias, is triggered when implicit stereotypes threaten social identity by legitimising in-group disadvantage. In line with this reasoning, neither in-group stereotypes alone, nor in-group disadvantage alone, was sufficient

to produce implicit resistance. Only when implicit stereotypes legitimise in-group disadvantage, did resistance arise. We believe these findings allow us to better understand resilience amongst members of disadvantaged groups by showing that stereotypes can be resisted, even when they occur implicitly.

Nobody expects the Spanish resistance

5

