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Moral self-licensing or behavioural consistency? Moral credentials, intergroup attitudes, and

regulatory focus interactively affect support for affirmative action

Fanny Lalot¹

&

Juan M. Falomir-Pichastor²

¹ School of Psychology, University of Kent, Canterbury, UK

² Faculty of Psychology and Educational Sciences, University of Geneva, Geneva,

Switzerland

Authors' note

Correspondence regarding this paper should be addressed to Fanny Lalot (f.lalot@kent.ac.uk,

phone: +44 (0)1227 824110), School of Psychology, Keynes College, University of Kent,

University road, Canterbury CT2 7NP, UK.

All materials can be obtained upon request from the first author.

Abstract

People generally tend to stay consistent in their attitudes and actions but can feel licensed to act less-than-virtuously when an initial moral action provides an excuse to do so (i.e., moral self-licensing). A handful of studies have tested how relevant initial attitudes moderate the self-licensing effect but yielded mixed findings: initial attitudes either decrease, increase, or do not influence licensing dynamics. To account for these inconsistent findings, we propose that the effect of attitudes could itself interact with other factors, notably motivational orientation. We conducted two studies taking into account initial attitudes, absence/presence of moral credentials, and participants' chronic regulatory focus. Drawing from selfcompletion theory, we expected self-licensing to occur specifically amongst preventionfocused participants holding positive intergroup attitudes. Results supported this prediction. Prevention-focused participants with positive intergroup attitudes supported affirmative action policies to a lesser extent when they had acquired moral credentials, as compared to when they had not (i.e. self-licensing), t(329) = -3.79, p < .001, d = -.42, 95% CI [-.64, -.20]. Additionally, promotion-focused participants holding positive intergroup attitudes supported affirmative action policies to a greater extent when they had acquired moral credentials (i.e., behavioural consistency), t(329) = 2.44, p = .015, d = .27, 95% CI [.05, .49].

Keywords: consistency; intergroup attitudes; moral credentials; regulatory focus; self-licensing.

Introduction

Past research suggests that people are motivated to suppress prejudiced tendencies, but that they can release prejudice when they have acquired moral credentials from past nondiscriminatory behaviour (i.e., a self-licensing effect; see e.g., Effron, Cameron, & Monin, 2009; Monin & Miller, 2001). Self-licensing effects have been identified in a variety of domains (see Blanken, van de Ven, & Zeelenberg, 2015). However, they somehow contradict past research showing that people tend to act consistently with their past deeds (e.g., Festinger, 1957; Kiesler, 1971). These conflicting findings suggest the existence of moderators determining when people will more likely remain coherent in their opinions and actions and when they will self-license (Mullen & Monin, 2016). In the present research, we explore further the licensing/consistency effect by investigating the combined moderating role of two factors: initial intergroup attitudes and chronic motivational orientation (i.e., regulatory focus).

The moderating role of attitudes

There is preliminary evidence that initial attitudes can moderate the self-licensing effect but the exact nature of the effect is not clear yet. Indeed, some studies did not find initial attitudes to play any role in the licensing effect (e.g., Effron, Miller, & Monin, 2012; Monin & Miller, 2001), whereas other studies yielded seemingly opposite results.

On the one hand, and fitting with the idea that credentials release the expression of true but socially undesirable attitudes, some work suggests that self-licensing is most likely observed amongst individuals holding negative or unfavourable attitudes regarding the (moral) behaviour under scrutiny, who should be more inhibited in the absence of credentials. For example, as compared to those holding equalitarian opinions, White participants who held prejudiced opinions favoured their ingroup at the expense of a Black outgroup to a greater extent, in a resource allocation task, after having been given the opportunity to support Obama for president (Effron et al., 2009; Study 3). Similar results arose for proenvironmental behaviour: participants who initially reported low levels of concern about the environment expressed weaker environmental-friendly intentions after imagining buying environmental-friendly shoes than conventional shoes (i.e., self-licensing), whereas participants who reported high levels of concern expressed strong intentions, regardless of the type of shoes they imagined purchasing (Meijers, 2014).

On the other hand, there is evidence that self-licensing occurs amongst people with initial positive or favourable attitudes regarding the (moral) behaviour under scrutiny. In their seminal study, Dutton and Lennox (1974) preselected participants to retain only White individuals with strong egalitarian attitudes. They first threatened these participants with a bogus autonomic feedback suggesting they were prejudiced, before providing them with the opportunity to donate money to a White vs. Black beggar vs. no such opportunity. The following day, they solicited participants again and asked them to donate time to a charity. Those egalitarian participants who had been given opportunity to donate money to the Black beggar (hence, supposedly, lifting the threat over their identity as an unprejudiced person) donated less time than participants in the other conditions (i.e., they self-licensed).

Other research yielded similar results. For instance, Democrat participants (who generally hold stronger pro-environmental attitudes) were found to self-license after having had the opportunity to recycle a plastic bottle, whereas Republican participants did not (Truelove, Yeung, Carrico, Gillis, & Raimi, 2016). In a similar vein, outside the moral domain, students strongly committed to their studies were less motivated to study for a core course after reflecting on their hard work done on a previously completed (vs. unaccomplished) coursework, whereas uncommitted students showed the opposite dynamics (Koo & Fishbach, 2008).

Hence, initial attitudes seem to play a complex role in licensing dynamics, influencing it either positively, negatively, or not. These mixed findings suggest that the impact of initial attitudes might depend on other moderating factors. To the best of our knowledge, to date only two studies have investigated moderators of the effect of initial attitudes on selflicensing, namely the normative context (egalitarian vs. discriminatory; Falomir-Pichastor, Mugny, Frederic, Berent, & Lalot, 2018) and the nature of the initial behaviour (freely chosen vs. mandatory; Clot, Grolleau, & Ibanez, 2016). Indeed, self-licensing was only observed amongst more prejudiced participants when an egalitarian norm was made salient (Falomir-Pichastor et al., 2018). In the same vein, uncommitted (less environmental-friendly) participants self-licensed after performing a freely chosen environmental-friendly behaviour, while committed (more environmental-friendly) participants self-licensed after performing a mandatory environmental-friendly behaviour (Clot et al., 2016).

Therefore, further research is needed in order to better understand the different ways in which initial attitudes may influence self-licensing dynamics. The present research aims to address this gap by focusing on a self-completion perspective of self-licensing and investigating the moderating role of individuals' regulatory focus (Higgins, 1997).

Self-completion and self-licensing

Longoni, Gollwitzer, and Oettingen (2014) proposed to rely on self-completion theory (Gollwitzer, Wicklund, & Hilton, 1982) to account for self-licensing effects. They suggested that moral credentials can be interpreted as a signal of fulfilment of the related self-defining goal, which in turn results in disengaging from this goal. Whether past behaviour is considered sufficient to fulfil the goal would hence determine if the person would self-license or maintain a coherent course of action.

According to this perspective, moral credentials would inform about goal fulfilment only when past behaviour targets a relevant, self-defining goal. Therefore, one could reasonably advance that moral credentials will result in a self-licensing effect only (or mainly) when initial attitudes are positive regarding the (moral) behaviour under scrutiny. Put differently, there must be an existing identity-related goal in order for (in)completeness effects to occur (Gollwitzer et al., 1982; Longoni et al., 2014; Marquardt, Gantman, Gollwitzer, & Oettingen, 2016). This understanding is consistent with past research that identified self-licensing effects amongst egalitarian persons (Dutton & Lennox, 1974). Accordingly, whether self-licensing effects are observed – in particular amongst relatively egalitarian individuals – depends on the extent to which these individuals consider their past behaviour as reflecting completeness of their egalitarian identity goal. In order to investigate this process, the present research focused on the moderating role of regulatory focus.

The moderating role of motivational orientation

Regulatory focus theory distinguishes between two independent motivational orientations: prevention and promotion (Higgins, 1997). Prevention focus is related to the accomplishment of obligations and duties, implies attention on the presence/absence of negative outcomes and preference for vigilant strategies, and results in quiescence/agitation-related emotions (Higgins, Shah, & Friedman, 1997; Shah & Higgins, 2001). Promotion focus, on the other hand, is related to the accomplishment of hopes and ideals, implies attention on the presence/absence of positive outcomes and preference for eagerness strategies, and results in dejection/cheerfulness-related emotions.

Of particular interest for our present purpose, regulatory focus also orients individuals towards the realisation of different goals – i.e., prevention focus orients towards minimal goals, whereas promotion focus orients towards maximal goals (Brendl & Higgins, 1996; Lalot, Quiamzade, & Falomir-Pichastor, 2018). Minimal and maximal goals differ in their nature (mandatory vs. ideal, respectively) and their magnitude (the former being lower than the latter). As such, one would expect that people interpret past behaviour differently depending on the salient goal serving as a reference point: prevention-oriented individuals, focusing on a minimal goal, should more easily infer goal-completeness from their past behaviour. Contrariwise, promotion-oriented individuals whose focus is on the maximal goal should rather infer incompleteness, because of the higher magnitude and ideal nature of the goal. In consequence, regulatory focus should moderate the consistency/licensing effect, self-licensing (vs. consistency) appearing specifically in prevention (vs. promotion) focus. Indeed, there is preliminary evidence that past positive behaviour leads to lower effort and behavioural intention in a prevention focus as compared to past negative behaviour.

In one set of studies (Baas, De Dreu, & Nijstad, 2011), participants were asked to recall a past event where they had experienced a promotion success (gain), prevention success (non-loss), promotion failure (non-gain) or prevention failure (loss). They then performed a creativity task. Performance dropped in one specific condition, that is, after recalling a prevention success. The authors explained this effect by a specific deactivation of the motivational system when a goal is reached in the prevention focus: as the person experiences feelings of relaxation and relief, they are "deactivated" and feel no need to invest cognitive resources in any further task. In contrast, promotion success implies activating feelings of joy and cheerfulness and translates in higher motivation to perform a second task. The authors replicated these results while asking participants to write an essay insisting on fear (prevention failure), anger (promotion failure), happiness (promotion success) or relief (prevention success) – the drop in performance occurring in this latter condition only (see also Van Dijk & Kluger, 2011). In another set of studies more directly related to self-licensing (Lalot, Falomir-Pichastor, & Quiamzade, 2019), participants received a bogus feedback labelling their daily-life habits as rather environmental-friendly (i.e., moral credentials) or not environmental-friendly (absence of credentials). They then reported their pro-environmental intentions. Participants' chronic regulatory orientation was measured beforehand. Results

showed that prevention-oriented participants expressed weaker intentions when their past behaviour had been labelled as environmental-friendly than when it had not (i.e., selflicensing), whereas promotion-oriented participants' intentions did not depend on the level of past behaviour. In other research, past positive behaviour can even boost a consistent course of action in a promotion focus because it signals progress towards a yet unfulfilled maximal goal (e.g., Idson & Higgins, 2000). In sum, there is evidence that reaction to moral credentials is moderated by regulatory focus, and we believe that this relationship itself depends on participants' initial attitudes.

Overview and Hypotheses

The present research aims to provide an understanding of the effect of initial attitudes on self-licensing based on a self-completion approach. Specifically, we investigate whether initial attitudes and regulatory focus jointly moderate the link between moral credentials and future intentions (i.e., consistency vs. self-licensing). In the studies reported here, we measured initial intergroup attitudes and chronic regulatory focus (promotion / prevention), then provided our participants with moral credentials as an egalitarian person (vs. not), and finally measured their support for affirmative action policies.

We reasoned that individuals with positive intergroup attitudes would be more likely to scrutinise their (non-)egalitarian behaviour and interpret it as symbol of (un)fulfilment of their egalitarian identity goal. As a consequence, they would react to the presence of moral credentials by strengthening (consistency effect) or weakening (licensing effect) personal commitment, as a function of their regulatory focus. A prevention focus would lead to selflicensing because the minimal standard has been achieved, whereas a promotion focus would trigger consistency because a maximal standard still needs to be reached. Individuals with negative intergroup attitudes, in contrast, would care less about, and not react to, the absence or presence of moral credentials. Accordingly, our specific hypotheses are the following. First, we expect an overall positive effect of initial intergroup attitudes on support for affirmative action (H1). Second, we expect a three-way moral credentials × regulatory focus × initial attitudes interaction (see Figure 1). Specifically, we expect moral credentials to decrease support for affirmative action only amongst participants holding positive intergroup attitudes and oriented towards prevention (i.e., self-licensing; H2). Finally, we expect moral credentials to increase support for affirmative action amongst participants holding positive intergroup attitudes and oriented towards towards promotion (i.e., consistency; H3).

To enhance reliability of the results, we conducted two parallel versions of the same study in two different national contexts: Switzerland and France. The experimental design was in all points comparable, except for the minority group under scrutiny. To fit national geopolitical particularities, the French sample was questioned about Maghrebis (defined as "persons of Maghrebi origin (Algeria, Morocco, Tunisia) living in France, with or without the French nationality") and the Swiss sample about immigrants in general. Initial attitudes and support for affirmative action were measured with respect to these groups, and the moral credentials manipulation was adapted accordingly.ⁱ

Despite our best efforts, recruitment of laypeople participants on a voluntary basis in public places proved difficult and we could only access 125 Swiss and 222 French participants. As a consequence, the samples taken separately could suffer from insufficient power to detect the expected three-way interaction effect. We therefore decided to merge the samples and conduct the statistical analyses on the overall sample, while including country as a control variable. This granted better statistical power and allowed for a more reliable estimation of the effect sizes. For transparency purposes, separate-sample results are reported in Appendix A. Similar results were obtained in the two samples separately.

Method

Participants and procedure. The study took the form of a paper-and-pencil questionnaire. Participants were laypeople approached in public spaces as well as students from a French high school. Condition to participate was to be a French (or Swiss) national or binational. A total of 346 people (57% female, $M_{age} = 19.1$, SD = 4.68) completed the survey; demographics are reported in Table 1. The study adopted a 2 (moral credentials: low vs. high) × continuous (intergroup attitudes) × continuous (regulatory focus) design; participants were randomly allocated to one moral credentials condition (in the Swiss sample: low credentials: N = 61, and high credentials: N = 63; in the French sample: low credentials: N = 113, and high credentials: N = 109). A sensitivity power analysis estimated the sample size was sufficient to detect a small-size 3-way interaction effect (Cohen's d = .30) at 80% power.

We started by measuring initial attitudes towards social minorities. Participants then read a one-page-long text describing the principle of "equality and non-discrimination" as a fundamental aspect of a functional modern society (e.g., "Equality between groups and most notably non-discrimination of minority groups proves a fundamental value for a society to function adequately"). We subsequently asked participants to imagine they had just done, first, something incongruent with these values (i.e., they discriminated against somebody), and second, something congruent with these values (i.e., they had not discriminated), and to report to what extent they would experience certain emotions as a result, in both cases (Falomir-Pichastor, Mugny, Quiamzade, & Gabarrot, 2008). The emotions proposed corresponded to either a promotion or a prevention focus (see Higgins et al., 1997; Shah & Higgins, 2001). Emotions are indeed a core component of regulatory focus and of its precursor, self-discrepancy theory (Higgins, 1987). The degree to which participants endorse a type of emotions or the other hence constitutes a reliable measure of chronic regulatory focus (see also Baas et al., 2011, Study 4). After the regulatory focus measure, participants were presented with a recruitment task that constituted the moral credentials manipulation.

Participants selected one of four candidates applying for a job. The best candidate was either an immigrant (so that selecting him provided the participant with moral credentials) or a national (i.e., no credentials; Monin & Miller, 2001). We finally measured support for affirmative action as the dependent variable. Upon completion of the questionnaire, participants were thoroughly debriefed; they all confirmed their consent to the use of their data.

Independent variables

Initial intergroup attitudes. The initial attitudes measure included the three following items (bracketed text represents the two versions of the questionnaire): "Living standards of [Maghrebis / immigrants] currently living in [France / Switzerland] should be improved," "[France / Switzerland] should implement measures ensuring equal rights of [French / Swiss] nationals and immigrants," and "[France / Switzerland] should adopt a more favourable politic regarding [Maghrebis / immigrants]" (7-point scale, 1 = strongly disagree, 7 = strongly agree). Answers were aggregated in a single score, a more positive score reflecting more favourable attitudes towards social minorities. Descriptive statistics are reported in Table 1 (separate samples) and Table 2 (overall sample).

Regulatory focus measure (emotions). Emotions were assessed on bipolar axes with a negative emotion on one side and its positive counterpart on the other side (7 point-scale, 1 = absolutely [the negative emotion], 4 = neither [the negative] nor [the positive emotion], 7 = absolutely [the positive emotion]). Three axes were promotion-related (disappointed-joyful, discouraged-satisfied, and sad-happy) and three were prevention-related (tense-relaxed, uneasy-quiet, and nervous-calm). Non-surprisingly, participants reported more positive emotions when they imagined themselves *not* discriminating (M = 5.61, SD = 1.26) than discriminating (M = 2.74, SD = 1.27), F(1, 344) = 567.2, p < .001, $\eta^2_p = .62$. We hence reverse-coded the emotions reported when imagining discriminating to obtain an index of the

strength of "congruent emotions" (see Falomir-Pichastor et al., 2008). We were then able to compute separate scores of promotion emotions and prevention emotions. To avoid complicating the analytical design, we computed a difference score reflecting a stronger orientation for one of the foci (promotion minus prevention; min = -3.00, max = 1.83, M = -0.28, SD = .62; for a similar approach, see e.g., Browman, Destin, & Molden, 2017; Cesario, Grant, & Higgins, 2004). It should be noted that analyses on separate scores yielded similar results (reported in Online Supplementary Material for information purposes).

Moral credentials manipulation. To manipulate moral credentials, we used a recruitment decision task (Falomir-Pichastor et al., 2018; Study 1) that was adapted from the literature (Monin & Miller, 2001). Participants indicated which of four applicants they would choose for a financial analyst position in a French (or Swiss) company. For each candidate (all male), we provided his name, nationality, and a brief curriculum. One candidate was clearly better than the three others (he held a Bachelor degree in Economics, a Master degree in Economics and Finance and had worked for two years as an analyst in a prestigious bank). In the credentials condition, this candidate was a Maghrebi (or Serbian) immigrant. In the non-credentials condition, he was a French (or Swiss) national. Participants chose one candidate and reported his name, surname, and nationality at the bottom of the page. Some participants did not select the most qualified candidate; however, excluding these participants did not influence the results and we hence retained them in the analyses.

Dependent measure: support for affirmative action. We developed 10 items to measure support for affirmative action that participants rated on 7-point scale (1 = strongly disagree, 7 = strongly agree). All items are reported in Table 3. We aggregated the items in an index of support for affirmative action ($\alpha = .87$, M = 2.33, SD = 1.04). The distribution was not normal but moderately skewed to the left (Skewness = .66, SE = .13); as a consequence, we relied on robust regression analyses.

Results

Using R and the package *robustbase* (Maechler et al., 2018), we ran a robust regression model (MM-estimator) including country (-1 = French, 1 = Swiss), moral credentials (-1 = low credentials, 1 = high credentials), intergroup attitudes (standardised), regulatory focus difference score (standardised), and all their interactions, with support for affirmative action as the dependent variable.ⁱⁱ The analysis revealed a main effect of initial attitudes, so that more positive intergroup attitudes predicted stronger support for affirmative action, b = .31, t(329) = 5.49, p < .001, Cohen's d = .60, 95% CI [.38, .83]. A two-way credentials × regulatory focus interaction was also significant, b = .15, t(329) = 2.15, p = .032, d = .24, 95% CI [.02, .45]. More interestingly, the expected credentials × attitudes × regulatory focus interaction was significant, b = .27, t(329) = 4.18, p < .001, d = .46, 95% CI [.24, .68]. No other effect reached significance, $t_s < 1.59$, $p_s > .11$. Importantly, the 4-way interaction (country × credentials × attitudes × regulatory focus interaction) was not significant, b = .05, t(329) = 0.74, p = .46, d = .08, 95% CI [-.14, .30], suggesting that the effect was not different in the French and the Swiss samples. We hence decomposed the observed 3-way interaction (see Figure 2).

Amongst relatively more prevention-oriented participants (regulatory focus difference score -1 *SD*), the attitudes by credentials interaction was significant, b = -.25, t(329) = -3.24, p = .001, d = -.36, 95% CI [-.58, -.14]. The positive effect of initial attitudes remained in the nocredentials control condition, b = .48, t(329) = 5.25, p < .001, d = .58, 95% CI [.36, .80], but disappeared in the credentials condition, b = -.03, t(329) = -0.20, p = .84, d = -.02, 95% CI [-.24, .20]. In accordance with our second hypothesis, participants with relatively stronger initial attitudes (+1 *SD*) expressed weaker support for affirmative action in the credentials than in the control condition, b = -.47, t(329) = -3.79, p < .001, d = -.42, 95% CI [-.64, -.20]. In contrast, support was not a function of the credentials manipulation amongst participants with relatively weaker initial attitudes (-1 *SD*), b = .04, t(329) = 0.35, p = .73, d = .04, 95% CI [-.18, .26]. Moreover, a direct comparison of promotion vs. prevention focus in the credentials condition amongst participants with stronger initial attitudes yielded a significant simple effect, b = .42, t(329) = 4.48, p < .001, d = .49, 95% CI [.27, .71], confirming that moral credentials triggered self-licensing in a prevention focus only.

Amongst relatively more promotion-oriented participants (regulatory focus difference score +1 *SD*), the attitudes by credentials interaction was also significant, b = .22, t(329) = 2.29, p = .023, d = .25, 95% CI [.04, .47]. Initial attitudes had a positive effect in the nocredentials control condition, b = .19, t(329) = 2.00, p = .047, d = .22, 95% CI [.003, .44], which got reinforced in the credentials condition, b = .62, t(329) = 3.75, p < .001, d = .41, 95% CI [.19, .63]. Participants with relatively stronger initial attitudes expressed a stronger support for affirmative action in the credentials than in the control condition, b = .27, t(329) = 2.44, p = .015, d = .27, 95% CI [.05, .49] (H3). In contrast, support was not a function of the credentials manipulation amongst participants with relatively weaker initial attitudes, b = .17, t(329) = -1.18, p = .24, d = -.13, 95% CI [-.35, .09].

General Discussion

We reported the aggregated results of two studies investigating the conditions under which the acquisition of moral credentials as a nonprejudiced person translates into behavioural consistency or self-licensing. Results show that the link between moral credentials and further support for affirmative action is moderated by initial intergroup attitudes and motivational orientation. Moral credentials triggered licensing or consistency only amongst participants with more positive intergroup attitudes, whereas participants with less positive attitudes did not react to the credentials manipulation. Consistent with our expectations, a promotion focus led to consistency whereas a prevention focus led to selflicensing. Initial intergroup attitudes, overall, significantly predicted support for affirmative action. Hence, our results seem to indicate that people lean by default towards behavioural consistency and demonstrate self-licensing in particular cases only – which reconciles a long tradition of research on consistency (e.g., Festinger, 1957; Heider, 1946; Kiesler, 1971) with the relatively more recent work on self-licensing.

Limitation and future directions

The present study was duplicated in two different national contexts and targeted different minority groups, which increases its reliability. It remains, however, a single test of the interactive effect of moral credentials, attitudes and motivational orientation, and future research will need to make sure it replicates in other contexts. First, as self-licensing has been identified in several domains, the effect could be tested with respect to, e.g., proenvironmental behaviour or interpersonal prosocial action. Second, our conceptualisation of regulatory focus was centred on its emotional component, but focus can also be grasped through predominant needs, preferred action strategies, or more salient outcomes (Higgins, 1997). Future research should try and replicate the present results while relying on different measurements of regulatory focus and also while inducing it contextually (e.g., Cesario et al., 2004). This last possibility would be particularly relevant in an applied perspective as it would allow to determine how information about one's past behaviour should be framed in order to increase consistency (or, if that is the purpose, self-licensing). Finally, the present study did not investigate the mechanism underlying the attitudes by regulatory focus interaction effect. We suggested that self-licensing (vs. consistency) could be due to a feeling of goalcompleteness but future research is needed to elucidate this matter.

Moral self-licensing versus consistency

Overall, these results are consistent with a self-completion understanding of selflicensing dynamics (Dutton & Lennox, 1974; Longoni et al., 2014; Truelove et al., 2016). They are also consistent with past findings showing that regulatory focus moderates the effect of past behaviour (Baas et al., 2011; Lalot et al., 2019). Furthermore, they extend these past findings by taking into account initial attitudes, which had so far yielded mixed evidence. Specifically, they suggest that the direction of the attitudes effect depends on motivational orientation. As such, they reinforce the notion that attitudes should be considered in interaction with other factors (Clot et al., 2016; Falomir-Pichastor et al., 2018).

These results also relate to other previously identified moderators of consistency and licensing dynamics, namely, construal level and progress/commitment perspective. Authors found consistency (vs. licensing) to occur when past moral behaviours were construed at an abstract (vs. concrete) level (Conway & Peetz, 2012), and when these behaviours were perceived as proof of commitment (vs. progress) towards the goal (e.g., Susewind & Hoelz, 2014). Interestingly, regulatory focus, construal level, and progress/commitment seem interconnected. Temporally distant and abstract (vs. near and concrete) actions are perceived as cues of commitment (vs. progress; Fischbach, Dhar, & Zhang, 2006), and promotion (vs. prevention) focus triggers more abstract (vs. concrete) thinking (e.g., Lee, Keller, & Sternthal, 2010). Hence, these parallel lines of research all hint in the same direction but it is not clear yet how these factors articulate. One could mediate the other (progress/commitment perspective, or prevention/promotion focus, could induce a more concrete/abstract thinking, or the other way around) or they could all operate through a common yet unidentified mechanism. Future work is needed to elucidate this issue.

Finally, it should be noted that some studies identified self-licensing effects in the absence of any moderator (e.g., Monin & Miller, 2001). It is unclear yet whether such studies incidentally induced moderating conditions (e.g., implicit focus on progress, concrete construal level, promotion framing, temporally close behaviour), or whether these identified moderators are actually not completely necessary for self-licensing to occur. Now that more

moderators are being identified (e.g., Mullen & Monin, 2016), it would be beneficial to scrutinise past research and organise it as a function of the presence/absence of these moderators, testing for example their impact on the reported effect size, to try and answer this important remaining question.

Moral credentials and moral credits

In the present studies, all participants held relatively favourable intergroup attitudes, hence we could only distinguish strongly egalitarian and moderately egalitarian (or unconcerned) participants. An open question remains as to determine how individuals with truly negative attitudes would react to the (non-)acquisition of moral credentials. Research on self-licensing has almost entirely focused on socially desirable domains (e.g., egalitarian attitudes, pro-environmental behaviour), hence the denomination of *moral* credentials. However, one could envision that a person holding an "immoral" identity-goal who interpret their past behaviour as goal-congruent (i.e., "immoral" credentials) would similarly reduce their efforts towards the goal. Self-completion theory would support such a prediction (see Marquardt et al., 2016). Moreover, it fits earlier distinctions between moral credits and moral credentials (Mullen & Monin, 2016). According to the moral credentials model, the initial moral behaviour is utilised to change the meaning of a second ambiguous behaviour. According to the moral credits model, moral behaviour translates into a currency that is stocked in a metaphorical bank account and used later on to purchase a right to deviate. Put differently, *credentials* only have value with respect to a normative social system that promotes some behaviours (see also Falomir-Pichastor et al., 2018). In contrast, credits depend more on the person's internal system of values and goals, and personal perception of desirable versus undesirable behaviour. It should then be possible, even in an egalitarian society, to acquire "discrimination credits." To the best of our knowledge, this intriguing possibility has never been tested yet. Future research is needed that investigate in more details the different ways in which the effect of initial attitudes can be moderated by individual and contextual factors.

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Tables

Table 1

Demographics and descriptive statistics for the two national samples.

Sample	e N	%	Age	RF score	Initial attitude	Support for affirmative action	
		female	M (SD)	M (SD)	M (SD)	M (SD)	
French	222	55%	16.8 (1.30)	-0.30 (.67)	4.35 (1.31)	2.34 (1.10)	
Swiss	124	61%	23.3 (5.58)	-0.24 (.51)	4.77 (1.71)	2.32 (.94)	
	Test for	difference	s: F(1, 343) =	0.59 ^{ns}	6.04 *	0.03 ^{ns}	

Note. RF score = Regulatory Focus difference score

* p = .014

Table 2

Descriptive statistics and correlations between the variables measured in the study (all

variables were assessed on 7-point scales).

		Descriptive statistics		Pearson's correlation			ons
		α	M (SD)	2	3	4	5
1	Promotion score	.89	5.30 (1.18)	.86***	.30***	.52***	.20***
2	Prevention score	.86	5.57 (1.15)		23***	.48***	.18***
3	Regulatory focus difference score	-	-0.28 (0.62)			.09 ^{ns}	.05 ^{ns}
4	Initial intergroup attitude	.85	4.50 (1.48)				.27***
5	Support for affirmative action	.87	2.34 (1.04)				

p > .05*** p < .001

Table 3

Items forming the support for affirmative action scale.

1. Affirmative action policies should be implemented to enable intergroup equality.

2. [Maghrebis / Immigrants] should always be given priority over [French / Swiss] nationals when applying for a job

3. If resumes are comparable, [Maghrebis / immigrants] should be given priority over [French / Swiss] nationals when applying for a job.

4. It would be beneficial to have quota policies guaranteeing a minimal percentage of [Maghrebis / immigrants] working in companies.

5. [Maghrebis / Immigrants] should benefit from a higher minimal wage than [French / Swiss] nationals.

6. [Maghrebis / Immigrants] should be given priority over [French / Swiss] nationals when applying for subsidised housing.

7. Social benefits (insurance, old-age and invalidity pension) should be increased for [Maghrebis / immigrants] more than for [French / Swiss] nationals.

8. It would be beneficial to have quota policies guaranteeing a minimal percentage of [Maghrebis / immigrants] in higher education programs.

9. [Maghrebis / Immigrants] should benefit from more generous education grants than [French / Swiss] nationals.

10. It would be beneficial to have quota policies guaranteeing a minimal percentage of [Maghrebis / immigrants] involved in politics.

Note. Words in square brackets correspond to the two versions of the questionnaire, for the French and Swiss samples, respectively.



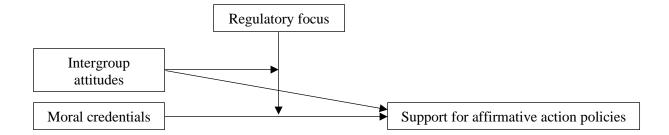


Figure 1. Conceptual model of the hypothesised three-way interaction effect between moral

credentials, regulatory focus, and intergroup attitudes, on support for affirmative action policies.

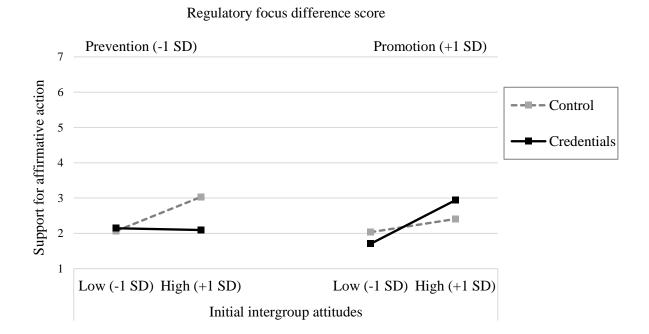


Figure 2. Support for affirmative action as a function of initial intergroup attitudes, regulatory focus score, and moral credentials condition.

Appendix

Appendix A – Separate analyses on the Swiss and the French samples

We report here the results of the robust regression analyses conducted separately on the French and the Swiss subsamples. The analyses included moral credentials (-1 = lowcredentials, 1 = high credentials), intergroup attitudes (standardised), regulatory focus difference score (standardised), and all their interactions, with support for affirmative action as the dependent variable.

Swiss sample $(n = 124)$	Estimate	Standard error	<i>t</i> -test	<i>p</i> -value
Intercept	2.26	.080	28.31	< .001
Credentials	-0.12	.080	-1.47	.145
Attitude	0.35	.078	4.48	< .001
Regulatory focus	-0.01	.127	-0.11	.91
Credentials × attitude	-0.07	.076	-0.92	.36
Credentials \times focus	0.19	.125	1.51	.134
Attitude × focus	0.16	.094	1.65	.101
$Credentials \times attitude \times focus$	0.31	.094	3.26	.001
$Credentials \times attitude \times focus$	0.31	.094	3.26	.001
Credentials \times attitude \times focus French sample ($n = 222$)	0.31 Estimate	.094 Standard error	3.26 <i>t</i> -test	.001 <i>p</i> -value
French sample ($n = 222$)	Estimate	Standard error	<i>t</i> -test	<i>p</i> -value
French sample (<i>n</i> = 222) Intercept	Estimate 2.32	Standard error .082	<i>t</i> -test 28.37	<i>p</i> -value < .001

0.05

0.12

0.04

0.22

.086

.073

.085

.085

0.63

1.69

0.51

2.60

.53

.093

.61

.010

Credentials × attitude

Credentials \times attitude \times focus

Credentials × focus

Attitude × focus

Supplementary Material

SM1 – Manipulation of social support for egalitarian values and related results

In the present study, we initially also manipulated numerical support for egalitarian values. Just before participants read the text describing the principle of "equality and non-discrimination" as a fundamental aspect of a functional modern society, they were informed of the results of an alleged recent opinion survey. Depending on the condition (minority vs. majority support), it was said that "18% [82%] of the individuals declared supporting the content of the text without hesitation. Thus, only a minority [a large majority] of the inhabitants supports unconditionally social equality."

The reason to include this manipulation was that previous work had found numerical support for the values at stake to moderate the self-licensing effect, a majority support leading to self-licensing and a minority support to consistency (Lalot, Falomir-Pichastor, & Quiamzade, 2018). Moreover, a fit effect had been identified between regulatory focus and numerical support: individual's strength of prevention orientation was a better predictor of attitudes when support was a majority, whereas strength of promotion orientation was a better predictor when support was a minority (Falomir-Pichastor, Mugny, Gabarrot, & Quiamzade, 2011; Falomir-Pichastor, Mugny, Quiamzade, & Gabarrot, 2008). Hence, because of the relations between numerical support and regulatory focus, on the one hand, and numerical support and moral credentials, on the other hand, it seemed relevant to include this variable in the study. However, since regulatory focus, numerical support, and moral credentials were never studied all together, we did not have a specific hypothesis regarding the impact of numerical support but considered it in a more exploratory way.

Anyhow, the numerical support manipulation was found to have no effect on the dependent variable, nor did it influence the other variables' effects: a 2 (numerical support:

majority vs. minority) × 2 (moral credentials: low vs. high) × continuous (attitude towards immigrants, standardised) × continuous (regulatory focus difference score, standardised) full-factorial ANOVA revealed a main effect of initial attitude, F(1, 329) = 22.9, p < .001, $\eta^2_p = .065$, a marginal credentials × regulatory focus interaction, F(1, 329) = 3.77, p = .053, $\eta^2_p = .011$, a marginal attitude × regulatory focus interaction, F(1, 329) = 2.96, p = .086, $\eta^2_p = .009$, and, most importantly, the expected credentials × attitude × regulatory focus interaction, F(1, 329) = 2.96, p = .086, $\eta^2_p = .009$, and, most importantly, the expected credentials × attitude × regulatory focus interaction, F(1, 329) = 15.2, p < .001, $\eta^2_p = .044$. No other effect, and none of the terms including numerical support, was significant, $F_s < 1.35$, $p_s > .25$.

Additional references

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SM2 – Analyses on separate scores of promotion / prevention focus

We report here the analysis considering separate scores of promotion and prevention focus instead of a difference score. We first checked for an effect of the national sample but it played strictly no role. Hence, for simplification purposes, we report the results of the analyses not including this variable. We ran a robust regression model (MM-estimator) including moral credentials (-1 = low credentials, 1 = high credentials), intergroup attitudes (standardised), promotion focus score (standardised), prevention focus score (standardised), and all their interactions on the measure of support for affirmative action. The analysis revealed a main effect of initial attitude, so that more positive intergroup attitudes predicted a stronger support for affirmative action, b = .30, 95% CI [.15, .45], t(329) = 3.96, p < .001, η^2_p = .044. The expected credentials × attitude × prevention interaction was significant, b = -.48, 95% CI [-.80, -.15], t(329) = -2.89, p = .004, $\eta^2_p = .024$, and so was the credentials × attitude × promotion interaction, b = .47, 95% CI [.22, .72], t(329) = 3.65, p < .001, $\eta^2_p = .037$.

We then decomposed the interactions with regard to our hypotheses, starting with the prevention focus (see Figure B.1). Amongst prevention-oriented participants (prevention score +1 *SD*), initial intergroup attitudes positively predicted support for affirmative action in the low credentials (control) condition, b = .65, 95% CI [.30, 1.00], t(329) = 3.67, p < .001, but this link disappeared in the high credentials condition, b = -.29, 95% CI [-.87, .30], t(329) = -0.97, p = .33. When intergroup attitudes were more positive (+1 *SD*), support was significantly lower in the credentials than in the control condition, b = -.81, 95% CI [-1.19, -.42], t(329) = -4.14, p < .001. When attitudes were less positive (-1 *SD*), the two credentials conditions did not significantly differ from each other, b = .05, 95% CI [-.44, .55], t(329) = 0.21, p = .83.

We then turned to the second interaction, involving the promotion focus (see Figure B.2). Amongst promotion-oriented participants (promotion score +1 *SD*), initial attitudes were

positively related to support for affirmative action in the credentials condition, b = .92, 95% CI [.38, 1.45], t(329) = 3.37, p < .001, and this link disappeared in the low credentials (control) condition, b = -.03, 95% CI [-.37, .30], t(329) = -0.20, p = .84. When initial attitudes were more positive (+1 *SD*), support was stronger in the credentials than in the control condition, b = .47, 95% CI [.08, .86], t(329) = 2.38, p = .018. When initial attitudes were less positive (-1 *SD*), support was stronger in the control condition, b = -.48, 95% CI [-.94, -.02], t(329) = -2.04, p = .042. Hence, in the present study globally similar results emerge when considering a stronger tendency towards one focus (+1 *SD*) or a weaker tendency towards the other focus (-1 *SD*).

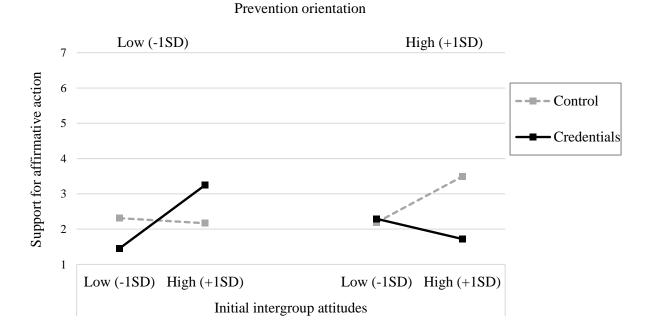


Figure B.1. Support for affirmative action as a function of credentials, initial intergroup attitudes, and prevention focus, controlling for promotion focus.

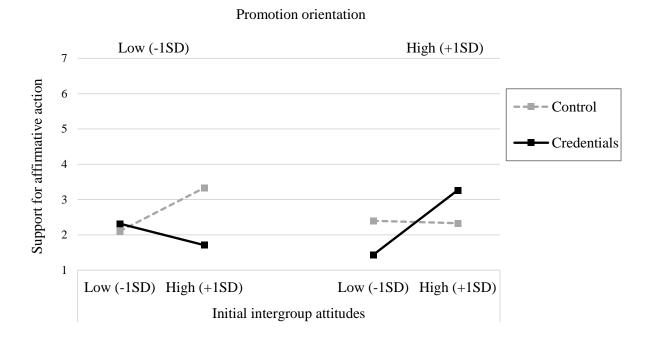


Figure B.2. Support for affirmative action as a function of credentials, initial intergroup attitude, and promotion focus, controlling for prevention focus.

Notes

ⁱ In addition to the manipulations presented here, we initially also manipulated numerical support for the egalitarian values, i.e., whether a majority/minority of inhabitants supported egalitarian values. This manipulation, however, yielded no significant effects, nor did it impact the effect of the other variables. For information and transparency purposes, details of this manipulation and related results are reported in Online Supplementary Material. ⁱⁱ It should be noted that a "classical" least squares linear regression model yielded similar results.