Infrahumanization and Socio-Structural Variables: The Role of Legitimacy, Ingroup Identification, and System Justification Beliefs

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Infrahumanization and socio-structural variables: The role of legitimacy, ingroup identification, and system justification beliefs

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Abstract

As there is a robust tendency to support system-legitimizing beliefs by appealing to stereotypes or ideologies, we examined the role played by the perception of the status quo in relation to the infrahumanization bias. We compared this bias in high vs. low status group members and tested the mediating role of system justification beliefs and ingroup identification. The results of a moderated mediated regression model ($N = 238$) showed that the perception of legitimacy of one's own status had differential effects on the infrahumanization bias: The perception of legitimacy was positively associated with the endorsement of system justification beliefs and negatively associated with ingroup identification among low status group members, whereas the perception of legitimacy was positively associated with ingroup identification among high status group members. In both groups, ingroup identification was positively correlated with the tendency to infrahumanize the outgroup, while the endorsement of system justification beliefs was linked to the infrahumanization among low status group members only. The findings highlight that the Social Identity Theory and the System Justification Theory can be fruitfully combined to explain infrahumanization tendencies.

Keywords: infrahumanization; system justification; ingroup identification; legitimacy; status quo

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The last decades have seen a surge of interest in humanness as a defining dimension of the interdependence between the self /individual and the group /collective level. In particular, an ever-increasing amount of research in interpersonal and intergroup relations showed that people scale their fellow human beings on the basis of their humanness (Haslam et al. 2008) and, specifically, that ingroup members are viewed as more human than others (Leyens et al. 2007). Furthermore, the perception of the outgroup as being less human than the ingroup is related to reduced pro-social behaviors toward outgroup members (Vaes et al. 2002), increased avoidance of the outgroup (Vaes et al. 2003), and discrimination (Pereira et al. 2009). In attempting to understand this important phenomenon, the infrahumanization theory, introduced by Leyens and colleagues (see Leyens et al. 2003, 2007 for reviews) has focused mainly on the attribution of uniquely human, secondary emotions to the ingroup and to different outgroups.

The model of infrahumanization is based on the notion that people ascribe different degrees of human emotions to ingroup and outgroup members, as a tendency to attribute more humanity to the ingroup than to the outgroup. According to the authors (Leyens et al. 2000; Demoulin et al. 2004) the distinction between primary and secondary emotions is crucial (e.g., Ekman, 1992) in order to refer respectively to emotions shared by humans with animals (e.g., fear, joy) and those that are uniquely human (e.g., regret, hope). Moreover, people can discriminate between primary emotions, which are usually perceived as universal, caused by external factors and related to low cognition and morality, and secondary emotions, that involve complex cognitive processes. A wide range of infrahumanization research showed that people attribute more secondary emotions to the ingroup than to the outgroup (Leyens et al. 2007, 2001; Paladino et al. 2002).

The infrahumanization bias is very pervasive and some studies showed that it does not depend on the status-relationship between groups. For example, Leyens and colleagues (2001) found that

Canarians (low status group) tended to attribute fewer secondary emotions to Spanish people (high status group) to the same extent as Spanish people did. Similarly, Pérez et al. (2011) examined the infrahumanization of outgroup members in different countries in relation to similarity, intergroup friendship, knowledge of the outgroup, and status. Among these factors, status was the only one that was not related to outgroup infra-humanization (for similar results see also Demoulin et al. 2005; Paladino et al. 2002; Paladino and Vaes 2009). Altogether these results show that infrahumanization is not a prerogative of high status groups, Leyens (2009) then concluded that intergroup status differences are conditions nor necessary neither sufficient for infrahumanization to occur.

The above mentioned studies mainly focused on status differences in the context of national, ethnic or regional groups. This approach has been questioned because these status differences may "vary in the extent to which they are consensually acknowledged and shared, and seen as a legitimate outcome of intergroup comparisons" (Vaes et al. 2012, p. 91). In other words, in these contexts, people do not recognize and legitimate status differences to the same extent. Indeed, some studies reported that – when there is consensus over status differences, such as in work groups – the members of low status groups were not biased in the attribution of uniquely human emotions, or they were biased in favour of the higher status group members (e.g., Iatridis 2013). In this study, we suggest that it is the *perception of the legitimacy* of one's own group position in the society – more than the status itself – that matters. Perceiving one's own position as il/legitimate might activate both group and social motives that can be reflected in the tendency to infrahumanize the outgroup.

Perceived Legitimacy and Ingroup Identification

Central to the discussions of intergroup relations is the argument that intergroup attitudes and behaviors are influenced by group members' views about whether their status is legitimate or not (Tajfel 1974). According to the social identity theory (SIT, Tajfel and Turner 1979), under some conditions, group members will behave in accordance with the prevailing status hierarchy. More specifically, when status differences are perceived as legitimate, members of low status groups will

show outgroup favoritism whereas members of high status groups will show ingroup favoritism (Turner 1980), a consensual form of discrimination (Rubin and Hewstone 2004). In other words, the perception of legitimacy of each group's status indicates intergroup consensus over status differences, which decreases social competition and increases consensual discrimination (Tajfel and Turner, 1979).

Within the SIT, a key factor explaining ingroup and outgroup favoritism as a reaction to the perception of the legitimacy of one's own status position is ingroup identification, i.e., the degree to which the ingroup is included in the self (Tajfel 1981). A meta-analysis found that reactions to high status group membership are consistently shaped by the assessments of the legitimacy or illegitimacy of that status (Bettencourt et al. 2001). High status group members identify more with their ingroup when group status is legitimate, but not when it is illegitimate. On the other hand, it has been suggested that disidentification is the preferred choice among low status group members in general (e.g., Ellemers et al. 1988; Lewin 1941; Tajfel 1978) and, more specifically, among low status members who perceive their position as legitimate (cf. Ellemers et al. 1993). The reduction of ingroup identification is a strategy to keep distance from an undesirable group membership, whereas the perception of illegitimacy leaves room to cognitive alternatives that might well go along with a high ingroup identification. In sum, members of low status groups exhibit outgroup favouritism to the extent that they shun identification with their own group (Tajfel and Turner 1986).

The fact that the perceived legitimacy of status differences influences the level of ingroup identification has direct consequences for the manifestation of ingroup favoritism. Indeed, empirical evidence consistently supports the idea that ingroup identification is a key factor for intergroup dynamics: The stronger the identification with the ingroup, the stronger the ingroup favoritism and the outgroup derogation (e.g., Levin and Sidanius 1999; Castano et al. 2002). Studies focused on the dehumanization of the outgroup, both in terms of infrahumanization and denial of human

characteristics, reached the same conclusion. For example, Demoulin et al. (2009) reported a positive association between ingroup identification and infrahumanization of the outgroup.

Perceived Legitimacy and System Justification Beliefs

The support of the legitimacy of the social setting has been documented in a variety of contexts and populations through many forms (Brandt 2013; Jost and Banaji 1994; Newheiser et al. 2014; Sengupta et al. 2014). People subscribe to beliefs and ideologies that make such inequalities inevitable or rationalize the inequalities through stereotypes. Whatever the form, the tendency to uphold the current societal arrangements fulfills a palliative function to alleviate the unpleasant feelings that may arise from the awareness of their own position or the structures of one's society. This tendency has been theorized in the system justification theory (SJT, Jost and Banaji 1994), according to which, there are psychological factors that motivate individuals to accept, even support, the existing social system, although that system entails substantial costs and relatively few benefits for them individually and for the community as a whole (Jost et al. 2004). It helps people cope with and adapt to realities, including unwelcome realities, satisfying a wide range of needs (from the epistemic to the relational ones) (cf. Jost et al. 2010). But it is also potentially costly at the societal level, insofar as it undermines the motivation to push for progress and social change (Wakslak et al. 2007). Research on the system justification process has pointed out how the social system is constituted by a structured network of social relations (Thorisdottir et al. 2009) where the perception of legitimacy of status differences is crucial as it engenders a psychological attachment among people and the institutions or system (families, organizations, and so on). Therefore, those who are members of groups that are low in social or material standing, should exhibit ingroup derogation and outgroup favoritism to the extent that they perceive the overarching social system to be legitimate. Perceived legitimacy is hypothesized to relate positively to ingroup favoritism among high status groups, insofar as they gain confidence and esteem from the sense that their advantage is legitimized; their sense of superiority is increased by the perception that the system is legitimate

(Jost 2001; Jost et al. 2004). In sum, the predictions about the influence of legitimacy on ingroup favoritism and outgroup derogation derived from the SJT strictly resemble those derived from the SIT.

The key factor in explaining the relationship between legitimacy and consensual discrimination within the SJT is the endorsement of system justification beliefs, i.e., ideologies and belief systems that serve as justifications for maintaining existing political, social, and economic established system (Jost and Banaji 1994). Even if perceiving one's own position in the society as legitimate might foster endorsement of system justification beliefs among both high and low status group members, SJT specifically suggests that the acceptance of system justifying ideologies should be more appealing for members of low status groups (Jost 2011) as it fulfills a palliative function (Jost and Hunyady 2005).

The endorsement of system justification beliefs leads to increased ingroup favoritism among members of high status groups and increased outgroup favoritism among members of low status groups (Jost et al. 2004). More than two decades of research inspired by the SJT confirmed this idea by showing that the acceptance of system justifying ideologies is associated with consensual discrimination in a variety of advantaged and disadvantaged groups (e.g., whites vs. blacks, Northerners vs. Southerners, heterosexuals vs. homosexuals, men vs. women, Jost and Burgess 2000, Jost et al. 2001), in the United States (e.g., Jost et al. 2004), in Europe (e.g., Mosso et al. 2013), and in developing countries (e.g., Henry and Saul 2006).

The Current Study

We focused on the role played by the *perception of legitimacy* of socio-economic status differences in enhancing/reducing the infrahumanization bias by comparing high vs. low status group members and by testing the mediating role of ingroup identification and system justification beliefs.

First of all, we examined the infrahumanization bias among Italians (high status group) and immigrants from Colombia (low status group) by comparing primary and secondary emotions attributed to the ingroup vs. the outgroup: We expected to observe a tendency to attribute uniquely human emotions more to the ingroup than to the outgroup, independently from the participants' group status.

Second, we investigated the effect exerted by the perception of legitimacy on the infrahumanization bias as mediated by system justification beliefs and ingroup identification. More specifically, relying on the SIT (Tajfel and Turner 1979), we anticipated that the perception of legitimacy would reduce ingroup identification among low status group members (H1a) and increase it among high status group members (H1b). The level of group identification should prompt the infrahumanization bias (H2). In addition, based on the SJT (Jost and Banaji 1994), we expected the perception of legitimacy to have a positive impact on the endorsement of system justification beliefs (H3a); this relationship should be significant especially among low status groups members (H3b). The endorsement of system justification should reduce the tendency to infrahumanize among low status group members (H4a) and to increase it among high status group members (H4b). Figure 1 shows a summary of the hypotheses.

Method

Participants and Procedure

Two-hundred and thirty-eight participants (59.7% women; $M_{age} = 26.11$, $SD = 4.63$) responded to a web questionnaire. Adopting a snowball procedure, we contacted two target groups, Italians ($N = 131$) and Colombian immigrants ($N = 107$), in order to obtain data from a high and a low status group. Questionnaire versions administered to the respondents were slightly different depending on the target: While in the questionnaire for Colombians the targeted outgroup was the Italians and the ingroup was immigrants from Colombia, in the version for Italians the targeted outgroup was immigrants from Latin America. We reasoned

that Colombians might have been a too specific target for Italians. A pre-test performed to explore

Italians' judgments about immigrants indicated that there are no significant differences in

perceptions of social distance between Colombians and other groups of immigrants from Latin

America[1]. All participants signed an informed consent to participate in the study, and the whole

procedure was carried out following the APA norms.

Measures

    Socio-economic status. To check whether respondents' perception of their own group

position in the society corresponded to our assumption, we asked them if they thought their

ingroup's socio-economic status was lower (1) or higher (7) compared to the outgroup's socio-

economic status (i.e., Colombians indicated whether they had a lower/higher status than Italians,

and Italians whether they had a lower/higher status than immigrants from Latin America on a 7-

point scale). T-test comparison revealed that, as expected, Italian respondents perceived their own

group to have a higher status ($M = 4.92$) than Colombians did ($M = 3.58$), $t(236) = -9.25$, $p < .001$.

Thus, we considered Italian respondents as part of the high status group (1) and immigrants from

Colombia as low status group members (-1).

    Perception of status legitimacy. Participants have been asked to think about Italians and

immigrants from Latin America and to indicate whether socio-economic status differences between

the two groups were legitimate, fair, and justifiable (7-point scale). Based on $\alpha = .83$, we computed

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[1] In the pre-test, we used a composite measure of social distance, namely whether the respondents thought it was

acceptable, on a scale from 1 to 9, to have members of different immigrant groups as neighbor, colleagues, or spouse.

The immigrant groups considered were the largest groups of immigrants from Latin America in the city were the study

was carried out (Colombians, Peruvians, and Ecuadoreans). We also included social distance measures for other large

immigrant groups (Moroccans, Romanians, and Albanians). Results of this pretest showed no significant differences in

perceptions of social distance between Colombians and Peruvians, $t(20) = -0.058$, $p = .954$, and between Colombians and

Ecuadoreans, $t(20) = 0.666$, $p = .513$, and significant differences between Colombians and Moroccans, Romanians, and

Albanians (lowest t-test, $t(20) = 3.684$, $p = .001$).

a mean index of status legitimacy, with higher scores indicating higher perception of legitimacy of the socio-economic status differences.

Group identification. Participants indicated whether they agreed (7) or disagreed (1) with four statements: "It is important for me to be an Italian/a Colombian"; "I feel strong ties with Italians/Colombians", I identify myself with Italians/Colombians, Italians/Colombians share similar ideas. Based on $\alpha = .78$, we computed a mean index of ingroup identification. The items were adapted from Barreto and Ellemers' (2000) identification scale, and they were previously used in Italian research (e.g., Pacilli et al. 2016; Russo 2017).

System Justification. System justification was assessed using eight items translated from Kay and Jost (2003) and widely used in Italian research (e.g., Mosso et al. 2013). Participants indicated their agreement on a Likert scale ranging from 1 (disagree completely) to 7 (agree completely). Based on $\alpha = .84$, we computed a mean index of system justification.

Infrahumanization. Following the procedure adopted by Leyens et al. (2001), participants have been presented a list of 12 emotions among which they had to check all the emotions they see as typical of their own group and, subsequently, those seen as typical of outgroup members. Among the emotions presented, three were primary positive emotions (*desiderio*, desire; *eccitazione*, excitement; *piacere*, pleasure), three primary negative emotions (*paura*, fear; *spavento*, fright; *agitazione*, agitation), three secondary positive emotions (*ammirazione*, admiration; *orgoglio*, pride; *passione*, passion), and three secondary negative emotions (*rimorso*, remorse; *rancore*, resentment; *rammarico*, regret). Emotions were pre-tested for valence and degree of humanity. Pre-test results confirmed that, on average, secondary emotions were perceived as more uniquely human ($M = 4.95$) than primary emotions ($M = 2.24$) on a scale ranging from 1 (*not uniquely human*) to 7 (*uniquely human*), $t(28) = -7.48$, $p < .001$. Similarly, positive emotions were perceived, on average, as more positive ($M = 5.14$) than negative emotions ($M = 3.33$) on a scale ranging from 1

(*extremely negative*) to 7 (*extremely positive*), $t(28) = 9.10$, $p < .001$.

Control variables. In the following analyses, we controlled for age, gender (1 = female), political self-placement on a left-right 10-point axis ($M = 4.73$, $SD = 2.08$), previous contact with the outgroup, and evaluations of ingroup and outgroup. Contact with the outgroup was measured by one item asking participants to report the number of outgroup members they knew, with a response scale ranging from 1 (*none*) to 4 (*more than 10*) ($M = 2.90$, $SD = 1.14$). We also asked respondents to indicate – on 7-points semantic differentials – whether they thought their ingroup was friendly/hostile and competent/incompetent (markers for warmth and competence). The same questions were posed about the outgroup. We computed differential scores by subtracting outgroup evaluations from ingroup evaluations, with resulting scores indicating a net preference for the ingroup in terms of warmth and competence. Bivariate correlations for Italians and Colombians are reported in Table 1.

Results

Preliminary Analyses

We conducted a 2 (Target: Ingroup vs. Outgroup) X 2 (Humanity: Primary vs. Secondary emotions) X 2 (Valence: Positive vs. Negative emotions) X 2 (Status: High vs. Low) mixed ANOVA with the last factor varying between participants. Among the effects detected, the crucial interaction for the infrahumanization bias Humanity X Target was significant, $F(1, 236) = 13.50$, $p < .001$, $\eta_p^2 = .05$. This interaction was further qualified by the Valence of emotions ($F(1, 236) = 12.62$, $p < .001$, $\eta_p^2 = .05$. The status of the respondents qualified neither the two-way interaction between Target and Humanity, $F(1, 236) = 0.00$, $p = .96$, $\eta_p^2 = .00$, nor the three way interaction between Target, Humanity, and Valence, $F(1, 236) = 0.44$, $p = .51$, $\eta_p^2 = .00$.

In light of the significant three-way interaction detected, we run two 2 (Target: Ingroup vs. Outgroup) X 2 (Humanity: Primary vs. Secondary emotions) ANOVAs by considering positive and negative emotions separately. We did not include the status in this analysis because, as mentioned,

the crucial Humanity X Target interaction was not qualified by higher-order interactions with the status factor. As concerns negative emotions, only the main effect of humanity was significant, $F(1, 237) = 47.90$, $p < .001$, $\eta_p^2 = .17$, with primary emotions selected more often ($M = 0.89$) than secondary emotions ($M = 0.54$). The main effect of target was not significant $F(1, 237) = 3.36$, $p = .07$, $\eta_p^2 = .01$, nor it was the two-way interaction Target X Humanity $F(1, 237) = 0.06$, $p = .80$, $\eta_p^2 = .00$. When analysing positive emotions we found significant main effects for Target $F(1, 237) = 24.97$, $p < .001$, $\eta_p^2 = .10$, and for Humanity $F(1, 237) = 46.91$, $p < .001$, $\eta_p^2 = .17$, as well as a significant interaction effect between these two factors $F(1, 237) = 23.66$, $p < .001$, $\eta_p^2 = .09$. While the ingroup-outgroup difference in emotions attribution was not significant for primary positive emotions, $t(237) = 0.43$, $p = .66$, $d = .03$, we found a significant difference in the attribution of secondary emotions, $t(237) = 6.82$, $p < .001$, $d = .52$, with the ingroup attributed more secondary positive emotions ($M = 1.64$) than the outgroup ($M = 1.16$). Following Brown and colleagues (2007) and in order to simplify the following analyses, we computed an index of infrahumanization by subtracting secondary positive emotions attributed to outgroup members from secondary positive emotions attributes to ingroup members.

Before testing our predictions, we also checked whether the hypothesized conditional relationship between the perception of legitimacy and system justification was supported by the data. To do so, we compared fit indexes for two models (MPlus 8). In the first one, the perception of legitimacy predicted system justification which in turn predicted the infrahumanization bias. In the second one, system justification predicted the perception of legitimacy, which in turn predicted the infrahumanization bias. Given the focus on status differences, in both models we also included the status and its interaction with the perceptions of legitimacy and system justification. The fit indexes indicated that the first model ($\chi^2(3) = 8.30$, $p = .04$, CFI = .95, SRMR = .04, RMSEA = .08) fitted the data better than the second one ($\chi^2(3) = 15.40$, $p = .001$, CFI = .78, SRMR = .06, RMSEA = .13). In

other words, fit statistics privileged the hypothesized direction of relationship between the perception of legitimacy and system justification over the alternative possibility, namely that the perception of legitimacy precedes system justification.

Hypotheses Test

In order to verify the hypotheses advanced, we tested a two-stages moderated mediation model (model 58, PROCESS, Hayes 2013) aimed at predicting infrahumanization as a function of the perception of legitimacy, system justification, and ingroup identification (mean centered). We also included age, gender, political orientation, contact with the outgroup, and net ingroup warmth and competence as control variables. Participants' status has been included as moderating variable.

As concerns the first part of the model (cf. upper portion of Table 2), we found that the perception of legitimacy had a significant positive impact on system justification but a non-significant effect on group identification. As expected, both the effects of legitimacy were moderated by the status. As concerns ingroup identification, in line with the hypotheses (H1a and H1b), the simple slope analysis showed that the perception of legitimacy had a positive effect on ingroup identification for members of high status group (simple slope = .15, $t(234) = 1.99$, $p = .047$) but a negative effect for members of low status group (simple slope = -.30, $t(234) = -3.10$, $p = .002$). In relation to system justification beliefs (H3a and H3b), the simple slope analysis showed that the perception of legitimacy had a positive impact on system justification for members of the low status group, simple slope = .24, $t(234) = 3.24$, $p = .001$, but not for members of high status group, simple slope = -.01, $t(234) = -.12$, $p = .901$.

In the second part of the model we estimated the impact of our mediating variables on the infrahumanization as well as the moderating effect of status. None of the control variables had a significant effect on the infrahumanization. Ingroup identification had a direct positive effect on infrahumanization (H2), and such effect was not moderated by status. The effect of system justification on infrahumanization was moderated by the status. Simple slope analysis indicated that

the endorsement of system justification reduced – in line with H4a – the tendency to infrahumanize among members of low status (simple slope = -.24, $t(225)$ = -2.28, p = .023) but – contrary to H4b – did not increase significantly infrahumanization among members of high status group (simple slope = .12, $t(225)$ = 0.91, p = .365). Figure 2 summarizes the moderated effects of status on the relationships between the perception of legitimacy, system justification, and infrahumanization. Overall, for low status group members, the perception of legitimacy had a significant indirect negative effect on infrahumanization through the mediation of system justification (indirect effect = -.06, 95% CI -.164; -.003). For high status group members, the perception of legitimacy had a positive indirect effect on infrahumanization through ingroup identification (indirect effect =.02, 95% CI .000; .074).

Discussion

In this study, we addressed the role played by the perception of legitimacy of status differences in shaping the infrahumanization bias. We found that such perception is associated to infrahumanization indirectly and negatively among low status group members, and indirectly and positively among high status group members. Specifically, the link between legitimacy and infrahumanization among low status group members was mediated by the endorsement of system justification beliefs and by the disidentification from the ingroup (i.e., low ingroup identification). Among high status group members, the association between legitimacy and infrahumanization was mediated by ingroup identification only.

The findings from this study highlight that both the SJT and SIT frameworks are fruitful in explaining the effects of the perception of legitimacy on one's own status position on the manifestation of the infrahumanization bias. Specifically, while ingroup identification explains the link between legitimacy and infrahumanization both for high status and low status group members, the endorsement of system justification beliefs seems to be an important factor for low status group member only. One might argue that we failed to observe an effect of system justification on

infrahumanization in the high status group because of the high correlation between system justification and ingroup identification in this subsample (cf. Table 1). Admittedly, high correlations between predictors can inflate the standard errors and produce null results (Alin, 2010). However, the inspection of collinearity diagnostics and standard errors, and a replication of the model including system justification as sole mediator, led us to discard this possibility. We suggest instead that this finding is in agreement with the tenet of SJT holding that system justification ideologies are especially appealing for disadvantaged groups because they serve the palliative function of enabling people to feel better about social inequality (Jost et al. 2008); and this is more important to low status groups as they experience a conflict between group justification and system justification motives (Jost and Hunyady 2005). In sum, the two theoretical approaches should be considered complementary rather than mutually exclusive.

The importance of SIT and SJT in explaining ingroup and outgroup favoritism is here proved using a subtle form of prejudice towards immigrants. This is noteworthy as traditional measures for prejudice are susceptible of social desirability, especially in modern times when the discrimination towards immigrants is morally condemned. Beyond its theoretical relevance, the strategy of capturing forms of dehumanization through the attribution of primary and secondary emotions has also the advantage of minimizing social desirability concerns (Gaertner and Insko 2001). As such, the emotional attribution procedure produces a powerful and unobtrusive indicator for intergroup discrimination (Demoulin et al. 2005). From this point of view, the results reported here are in line with the most recent studies of implicit attitudes showing that members of low status groups tend to exhibit favoritism toward the outgroup and members of high status groups favoritism toward their own group especially on implicit measures that minimize self-presentational issues (Jost et al. 2002; Jost et al. 2004).

We also need to acknowledge some limitations of the study. First, we found the infrahumanization effect for positive emotions only. Most of the studies on the topic found a

significant difference between primary and secondary positive and negative emotions (e.g., Leyens et al. 2000). Therefore, it could be argued that the findings reported in this study reflect an effect of ingroup favoritism rather than infrahumanization. However, Brown et al. (2007) reported an infrahumanization effect for positive emotions only, and concluded that the index created by subtracting positive secondary emotions attributed to the outgroup from those attributed to the ingroup proved to be useful and reliable as it was positively correlated with a negative stereotype measure and negatively correlated with the desire for closeness. In addition, if this effect were driven by ingroup favoritism we should have observed also a target effect for primary positive emotions (more primary positive emotions attributed to the ingroup), but this was not the case. Finally, in our analyses, we controlled for warmth and competence evaluations of the ingroup and the outgroup. Controlling for potential ingroup favoritism allowed us to provide robust evidence that the findings reported here are unique for infrahumanization. In other words, ingroup identification and system justification affect the tendency to infrahumanize the outgroup, above and beyond the perception of competence and warmth of its members.

Second, we used correlational data. Even though the predictions tested were theoretically grounded, it is not possible to infer any casual effect from our results. A replication of this study using an experimental design to manipulate the perception of legitimacy of one's own position in the society would certainly add to these findings, insofar as it was found here that such perception shapes infrahumanization through differential mechanisms for low and high status groups.

Finally, we limited our focus to the analysis of the perception of legitimacy of status differences. Since the first studies within the SIT framework, it has been noted that the perceptions of stability and of permeability of boundaries are also important to explain intergroup attitudes and behaviors (e.g., Turner and Brown 1978). Even though we did not address it directly, it is likely that our findings are driven also by respondents' perceptions of stability and impermeability of group boundaries. On the one hand, membership in the targeted social groups, natives vs. immigrants from

Colombia, is defined by ascribed criteria, and therefore individuals are likely to perceive group boundaries as impermeable (Pehrson and Green 2010). On the other hand, socioeconomic status differences between natives and immigrants are not likely to change in the short run (see, for example, Caner and Pedersen 2018). In sum, the pattern of associations observed in this study is most likely reflecting a situation in which the intergroup structure is perceived as legitimate as well as stable and impermeable. This combination does not leave room for cognitive alternatives to the current social equilibrium, and leads to consensual discrimination, here addressed in the form of humanity denial.

According to the SIT, the enhancement of one's own social identity can be achieved through individual mobility (i.e., gaining membership in a higher status group) when group boundaries are permeable (Ellemers et al. 1990), and through social change (i.e., upgrading the ingroup status position) when the group status is unstable (Tajfel and Turner 1979). In such conditions, as low status group members do have cognitive alternatives, we might expect loose relationships between the perceptions of legitimacy and infrahumanization. On the other hand, we might expect even stronger links between legitimacy perceptions and infrahumanization among high status group members when their privileged position is unstable. For example, Hogg and Mullin (1999) suggest that unstable social systems induce feelings of uncertainty among high status group members and, as a consequence, they should be motivated to secure their position through ingroup favoritism. Future studies interacting the perception of legitimacy with the perceived stability and permeability of group boundaries might help to test these ideas and to get a full understanding of how socio-structural characteristics influence the infrahumanization bias.

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Table 1. Correlations among the study variables. Coefficients for the low status group (*n* = 107) are above the main diagonal, for the high status group below the main diagonal (*n* = 131).

	1	2	3	4	5	6	7	8	9	10
1. Sex	-	.138	-.008	.003	.238*	.119	-.190	.024	-.086	.090
2. Age	.040	-	.082	.117	.140	.002	-.118	-.108	-.239*	-.129
3. Political orientation	-.098	-.055	-	-.012	.206*	.074	.105	.210*	-.001	.060
4. Contacts with outgroup	-.021	-.163	-.030	-	.022	.165	-.146	-.010	-.041	.055
5. Net ingroup competence	-.096	.114	.151	-.232**	-	.132	-.095	-.068	-.313**	.114
6. Net ingroup warmth	.015	-.047	-120	-.117	.244**	-	-.231*	.320**	-.340***	.262**
7. Legitimacy	-.235**	-.087	.207*	-.047	.152	.126	-	-.302**	.266**	-.089
8. Identification	-.174*	-.034	.259**	-.096	.215*	.123	.167	-	.053	.130
9. SJ	-.291**	-.038	.170	-.030	.230**	.067	-.013	.409***	-	-.205*
10. Infrahumanization	-.056	-.096	-.016	.043	.042	.121	.192*	.239**	.159	-

Note. * *p* < .05, ** *p* < .01, *** *p* < .001

Table 2. Unstandardized coefficients for the moderated-mediated regression model predicting infrahumanization.

	SJ			Identification		
	B	*SE*	*p*	*B*	*SE*	*p*
Status	-.61	.06	<.001	-.80	.08	<.001
Legitimacy	.12	.05	.01	-.07	.06	.22
Legitimacy X status	-.12	.05	.01	.22	.06	<.001
R^2		.40			.33	

	Infrahumanization		
	B	*SE*	*p*
Gender	.13	.15	.37
Age	-.03	.02	.07
Political orientation	-.03	.04	.39
Contacts with outgroup	.08	.09	.37
Net ingroup competence	.02	.05	.75
Net ingroup warmth	.08	.04	.08
Status	-.06	.15	.70
Legitimacy	.09	.06	.13
SJ	-.06	.09	.49
Identification	.14	.06	.03
SJ X status	.18	.09	.04
Identification X status	.01	.06	.89
R^2		.16	

Figure captions

Fig 1 Summary of the hypotheses

Fig 2 Moderating effect of status on the relationships between the perception of legitimacy, system justification, and infrahumanization. HS = high status group, LS = low status group. * $p <$ .05, ** $p <$ .01.
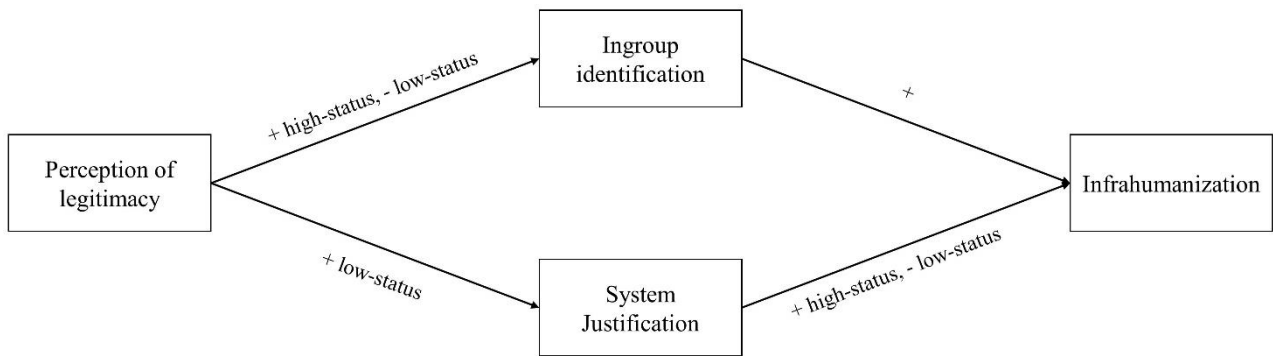
Fig 1

Fig 2