Self-Affirmation and Prejudice Against Religious Groups: The Role of Ideological Malleability

^*Yara Alnajjar
ORCID: 0000-0002-8984-4423
OSF: osf.io/u86bq
University of Paris Nanterre
yara.alnajjar@parisnanterre.fr / yaraalnajjar1993@hotmail.com

*Constantina Badea
ORCID: 0000-0001-7459-4698
OSF: osf.io/um4jq
University of Paris Nanterre
constantina.badea@parisnanterre.fr / constantina.badea@gmail.com

*Béatrice Sternberg ORCID: 0000-0003-1048-4419 OSF: osf.io/47uk3 University of Paris Nanterre beatrice.s@parisnanterre.fr / beatrice.sternberg@hotmail.fr

*Contributed equally ^Corresponding author

Word: abstract - [166], manuscript - [8416]

Author bios:

Yara Alnajjar and Béatrice Sternberg were PhD students and Constantina Badea was a Professor of Social Psychology at the University of Paris Nanterre during 2023.

Declaration of Conflict of Interest:

The authors declare no potential conflicts of interests with respect to the authorship and/or publication of this article.

Financial disclosure/funding:

This research was funded by the National Agency of Research, France (AFFIRMATIF ANR-21-CE28-0018-01).

Corresponding author

Yara Alnajjar, Department of Psychology, University of Paris Nanterre 200 Av. de la République, 92000 Nanterre, France yara.alnajjar@parisnanterre.fr

Rights:

CC-By

Acknowledgements (with ORCID):

We thank Gilad Feldman (ORCID: 0000-0003-2812-6599) for his helpful feedback and support in writing this manuscript.

Additional information: This manuscript has been written on the basis of the template developed by Gilad Feldman (available at: https://mgto.org/RRmanuscripttemplate)

2

3

Contributor Roles Taxonomy

Role	Yara Alnajjar	Constantina Badea	Béatrice Sternberg
Conceptualization	X	X	X
Pre-registration	X		
Data curation			X
Formal analysis			X
Funding acquisition		X	
Investigation	X		
Pre-registration peer			
review / verification	X	X	
Data analysis peer review	•		
/ verification			X
Methodology	X	X	X
Project administration	X		
Resources		X	
Software	X		X
Supervision		X	
Validation			
Visualization	X		X
Writing-original draft	X	X	X
Writing-review and			
editing	X		X

4

Abstract

[IMPORTANT: Abstract, method, and results were written in past tense, to simulate what these sections will look like after data collection, but no pre-registration or data collection took place yet.]

Self-affirmation has shown mixed findings when used as a prejudice reduction technique, sometimes diminishing prejudice while sometimes increasing it or having no significant effect. In a Registered Report experiment with a French representative sample (N = XXX), we tested whether ideological malleability (participants' representation of secularism) influences the effectiveness of the self-affirmation procedure in reducing prejudice against religious groups. After reporting their representation of secularism, participants were either asked to self-affirm on a threat-related value (secularism), or to self-affirm on a threat-unrelated value (humor), or were assigned to a control condition. Finally, affective and behavioral prejudice against religious groups (Muslims and Christians) were measured.

In accordance with/contrary to previous research, secularism representation did/did not have a significant impact on prejudice, $\eta^2 = XXX$, and prejudice did/did not depend on the targeted religious group, $\eta^2 = XXX$. We found/failed to find empirical evidence showing that the effect of self-affirmation on prejudice depends on ideological malleability, $\eta^2 = XXX$. All materials, data, and code are available on: OSF.

Keywords: self-affirmation, ideological malleability, prejudice, religious groups

PCIRR-Study Design Table

Question	Hypothesis	Supported/No t supported Effect size + CIs	Sampling plan	Analysis plan (see results section)	Rationale	Interpretation given different outcomes	Theory impact
Does self-affirmation on a threat-unrelated value decrease prejudice against religious groups?	Main effect of self-affirmation Participants who self-affirm on a threat-unrelated value will show lower prejudice towards religious groups compared to those in the other two conditions (H1)		W	Mixed ANOVA 2 (secularism representation: historical vs. new) by 3 (self-affirmation: threat-related value vs. threat-unrelated value vs. control) by 2 (religious group: Muslims, Christians) will be run to test the main effect of self-affirmation. Specific test: Main effect of self-affirmation	Based on the bottom limit of the 80% CI on the effect obtained by Lehmiller et al. (2010), we consider $f = .14$ as the SESOI (Smallest Effect Size Of Interest). Power to test the SESOI ($f = .14$) with 600 participants is 88%, thus corresponding to current standards.	We will conclude that the effect of self-affirmation on prejudice reduction depends on the type of the affirmed value and how related it is to the perceived threat, if H1 is confirmed.	Self-affirmation is more effective in reducing prejudice when the affirmed value is unrelated to the threatened domain, thus attention should be paid to the values used in the manipulation and their relation to the threatened domain.
Does prejudice towards religious groups vary according to individuals' representation of secularism?	Main effect of secularism representation: Participants who have a "historical" representation of secularism will exhibit less prejudice towards religious groups than those who have a "new" representation of secularism (H2)	[To be recruit a representative sample of 600 French participants	The same mixed ANOVA will be run to examine the main effect of the secularism representation. Specific test: t-test for independent samples comparing prejudice among participants with new vs. historical representations of secularism.	Given the lack of previous data concerning this effect, the SESOI was determined on the basis of Cohen's (1988) benchmark values. We consider $d = .25$, corresponding to a small effect, as the SESOI. Power to test the smallest effect size of interest (SESOI), for independent samples t-test, $d = .25$ with 600 participants is 85%, thus corresponding to current standards.	We will conclude that prejudice towards religious groups depends on individuals' representation of secularism if H2 is confirmed.	Individuals' representation of malleable ideologies should be taken into consideration when studying their prejudice against groups concerned by these ideologies (religious groups in the case of secularism ideologies)	

Does prejudice towards religious groups vary according to the religious group considered?	Main effect of the type of religious group: There will be more prejudice towards Muslims than towards Christians (H3)	The above mixed ANOVA analysis will be conducted to test the main effect of the type of religious group evaluated. Specific test: paired-sample t-test comparing the levels of prejudice against Muslims vs. Christians	Based on the bottom limit of the 80% CI on the effect obtained in an unpublished study (Nugier et al., 2023), we consider $d = .13$ as the SESOI. Power to test the smallest effect size of interest (SESOI), for paired sample t-test, $d = .13$ with 600 participants is 89%, thus corresponding to current standards.	We will conclude that prejudice towards religious groups differs according to the type of religious group if H3 is confirmed.	Certain subgroups are subject to higher levels of prejudice than others in a specific context (Muslims in France are subject to higher prejudice compared to Christians)
Does the effect of the representation of secularism on prejudice depend on the type of religious group?	Interaction effect between secularism representation and type of religious group: Participants who have a "new" representation of secularism will exhibit more prejudice towards religious groups than those who have a "historical" representation of secularism, and this difference will be higher concerning prejudice towards Muslims as compared to Christians (H4)	Mixed ANOVA 2 (secularism representation: historical vs. new) by 3 (self-affirmation: threat-related value, threat-unrelated value vs. control) by 2 (religious group: Muslims, Christians) Specific test: interaction between secularism and type of religious group	Given the lack of previous data concerning this effect, the SESOI was determined on the basis of Cohen's (1988) benchmark values. We consider $f = .10$, corresponding to a small effect, as the SESOI. Power to test the smallest effect size of interest (SESOI), $f = .10$ with 600 participants is 99%, thus corresponding to current standards.	We will conclude that there is a differential effect of the representation of secularism on prejudice, depending on the type of religious group if H4 is confirmed.	Malleable ideologies influence prejudice against certain target groups, but not all groups concerned (In the case of secularism, Muslims are particularly affected, but not all religious groups)
Does the effect of self-affirmation on prejudice towards religious groups differ depending on participants' representation of secularism?	Interaction effect between self-affirmation and secularism representation: self-affirmation on secularism (the threat-related value) will decrease affective and behavioral prejudice towards religious groups, among participants who have a "historical" representation of secularism, compared to control. The reverse pattern is expected (self-affirmation on secularism	Mixed ANOVA 2 (secularism representation: historical vs. new) by 3 (self-affirmation: threat-related value vs. threat-unrelated value vs. control) by 2 (religious group: Muslims, Christians).	Given the lack of previous data concerning this effect, the SESOI was determined on the basis of Cohen's (1988) benchmark values. We consider $f = .10$, corresponding to a small effect, as the SESOI. We conducted an a-priori	We will conclude that the effect of self-affirmation on prejudice depends on ideological malleability if H5 is confirmed.	Ideological malleability moderates the effect of self-affirmation on prejudice reduction. When applying self-affirmation, ideological malleability of the affirmed value should be taken into consideration to understand the

increasing prejudice against religing groups) among participants who lass the "new" representation of secularist expected self-affirmation on hum threat-unrelated value) to decreast affective and behavioral prejudice compared to control, regardless of chosen secularism representation	ave a m. We or (the e	Specific test: interaction between secularism representation and self-affirmation	power analysis to estimate the required sample size for a mixed ANOVA, alpha = .05, and power = .95. The resulting sample size was $N = 504$. We aim for $N = 600$ to account for potential exclusions (Perugini et al., 2018).	technique's effect on prejudice reduction.
			This sample of 600 participants was used to compute the power to detect each SESOI above.	

Self-Affirmation and Prejudice Against Religious Groups: The Role of Ideological Malleability

[IMPORTANT: Section is written in the past tense to simulate what the manuscript will look like after data collection, no pre-registration or data collection took place yet.]

Self-affirmation has been tested as a tool for reducing prejudice against minority groups (e.g., Badea et al., 2018; Lehmiller et al., 2010; Lesick & Zell, 2021; Persson & Hostler, 2021). The basic tenet of self-affirmation theory (Cohen & Sherman, 2014; Steele, 1988) is that individuals try to maintain self-integrity, a global positive image of the self. Minority groups can be perceived as a threat to social identity, to who "we are" as the majority group in a society (e.g., Stephan et al., 2005). To the extent that the social identity is connected to the individual's self, when social identity is threatened, individuals can respond defensively by exhibiting prejudice and discrimination (Sherman et al., 2017).

Self-affirmation can reduce the perception of threat (Critcher & Dunning, 2015) and decrease negative attitudes towards minority groups (Fein & Spencer, 1997).

However, although self-affirmation has shown success in attenuating negative attitudes in past studies (Badea et al., 2018; Čehajić-Clancy et al., 2011; Lehmiller et al., 2010), more recent research has failed to find any impact (Lesick & Zell, 2021) or has even found a deleterious effect, accentuating negative intergroup attitudes (Badea et al., 2020). For example, a study conducted in Serbia found that self-affirmation was successful in increasing recognition of the genocide committed by Serbs against Bosnian Muslims (Čehajić-Clancy et al., 2011). Other research showed that self-affirmation reduced support for discriminatory measures undertaken by the French government against North African immigrants in the aftermath of terrorist attacks in November 2015 (Badea et al., 2018). In contrast, a recent study showed that self-affirmation failed to increase European Americans' perception of

racism (Lesick & Zell, 2021). Moreover, in a study conducted in France, participants in the self-affirmation condition, who indicated their religion to be Christian, perceived more threat from Muslim immigrants and expressed higher prejudice against them (Badea et al., 2020). Therefore, it seems important to understand when self-affirmation can be effective in reducing prejudice, by investigating the potential moderators of its effects (Badea & Sherman, 2019).

One possible reason for the mixed findings with self-affirmation procedures is that this technique increases the salience of personal beliefs related to minority groups, such as individuals' representation of sociopolitical ideologies governing intergroup relations.

Indeed, numerous studies show that adherence to specific intergroup ideologies (e.g., colorblindness) can have a differentiated impact on prejudice (e.g., Levin et al., 2012).

Moreover, the same ideology can be used in a flexible way (i.e., ideological malleability), sometimes to reduce prejudice against minority groups, sometimes to maintain and justify it. The aim of this research is to test the ideological malleability, i.e., participants' representation of a given ideology, as a potential moderator of the effectiveness of the self-affirmation procedure in reducing prejudice against religious groups. We first define "ideological malleability" and its impact on intergroup attitudes by focusing on "secularism". We then argue that ideological malleability can influence the efficacy of self-affirmation in reducing prejudice. Finally, we introduce the present research and the case of affective and behavioral prejudice towards religious groups in France.

Ideological Malleability and Intergroup Attitudes

"A given ideology can mean different things to different people (...) individuals exploit the malleability of sociopolitical ideologies by actively endorsing them in forms that promote their intergroup goals" (Knowles et al., 2009, p. 857). Ideological malleability

implies a motivational component. If individuals are motivated to protect the status quo, they may interpret an available ideology in a way that reinforces intergroup hierarchy, even if that ideology at its core is constructed to challenge social inequality (Knowles et al., 2009). This can be accomplished through two complementary ways: (a) the change in the intensity of adherence to the ideology and (b) the modification of the ideology's content. Individuals can show a greater adherence to the ideology in certain specific domains. However, this is possible because they modify the content of the ideology, its cognitive representation, to make it more consistent with the maintenance of social hierarchy.

Taking the example of the colorblindness ideology, Knowles and collaborators (Knowles et al., 2009) have shown how this principle that individuals should not be judged by the color of their skin, can be variably used to reduce versus to maintain the status quo of racial inequality in the United States. Specifically, Knowles and colleagues (2009) identified two meanings of the colorblindness ideology: a distributive-justice versus a procedural-justice dictates. Distributive justice refers to the equal treatment of people in resource allocation, regardless of the color of their skin. People with an egalitarian view of intergroup relations agree more with this principle of distributive justice than people with an anti-egalitarian, hierarchical view of social groups. However, to achieve equal treatment of Black people and White people, Martin Luther King's dream, it might sometimes be necessary to consider people's skin color through positive actions that help to equalize opportunities and reduce social hierarchy. Anti-egalitarian people can, in these circumstances, claim to be attached to the application of the colorblindness principle in procedures such as employment or university admission. Thus, individuals motivated by the protection of racial hierarchy interpret the ideology of colorblindness as a procedural justice dictate. Studies by Knowles and colleagues (2009) showed that, when faced with an intergroup threat,

anti-egalitarian participants' support for the ideology of colorblindness increased compared to a non-threat condition. However, this is explained by the fact that anti-egalitarian participants shifted their representation of colorblindness from an ideology of distributive justice to one of procedural justice.

Drawing on this work, other researchers have shown that secularism (i.e., "laicité") is a malleable ideology that can be adopted by individuals with contrasting attitudes towards immigrants in France, as is the case with colorblindness in the United States (Roebroeck & Guimond, 2018). More specifically, Roebroeck and Guimond (2018) showed that anti-egalitarian participants endorsed more the secularism ideology, when an outgroup was presented as a symbolic threat compared to the condition where the same outgroup was presented as a realistic threat or to the control condition. Egalitarian participants did not endorse secularism differently as a function of the condition.

Participants with a hierarchical view of intergroup relations may have a different representation of secularism than those less attached to social dominance (Roebroeck & Guimond, 2016). Indeed, in French society, two representations of secularism coexist: the "new" secularism according to which citizens are not allowed to practice their religion in public institutions, and the "historical" secularism, conforming to which citizens are free to practice their religion, without any restriction in public spaces. Unlike "historical" secularism, which is based on the 1905 law guaranteeing the neutrality of the State regarding religious practice, the "new" secularism stems from more recent laws enacted in 2004 and 2010, the first one prohibiting the wearing of religious symbols in public schools and the second banning face coverage in institutions and in the public space. More recently, as of September 2023, it is prohibited by law to wear an Abaya (a long loose dress worn by Muslim women) in public schools. Studies have shown that French people who adhere to the

"new" representation of secularism show a higher level of prejudice against immigrants than those who have a "historical" representation of this ideology (Roebroeck & Guimond, 2016). In addition, experimental evidence showed that the "new" representation of secularism played a role in increasing prejudice and discrimination (Anier et al. 2019; Nugier et al. 2016).

In this research, we examine whether ideological malleability influences the effectiveness of the self-affirmation procedure in reducing prejudice towards religious groups. We take the example of affective and behavioral prejudice towards Muslims in France, and of the secularism ideology. We argue that self-affirmation on the value of secularism will increase its importance for participants, and their own support for it. Thus, based on evidence showing the differential associations between each secularism representation and prejudice against Muslims (Roebroeck & Guimond, 2016), the effect of the self-affirmation manipulation should differ depending on the specific representation of secularism affirmed. Consequently, we argue that self-affirmation decreases prejudice towards Muslims among participants with a "historical" representation of secularism and increases prejudice among participants with a "new" representation of secularism.

Impact of Ideological Malleability on the Self-Affirmation Procedure

Previous research has shown that the effect of self-affirmation on intergroup attitudes can be moderated by values that are central to the individual (e.g., individualism). For example, in the study conducted in the aftermath of terrorist attacks in France, participants who scored higher on individualism were more responsive to the self-affirmation procedure and diminished their support for the government's discriminative policy against immigrants, compared to those who scored low on this value (Badea et al., 2018). Indeed, the basic principle of self-affirmation is that the procedure taps into the values that are important to the

individual (Cohen & Sherman, 2014). Ideologies governing intergroup relations and their representation in participants' minds are part of these values that can be used in self-affirmation procedures designed to reduce prejudice. We argue that if the ideology's representation is compatible with the principle of social equality, self-affirmation can reduce prejudice against minority groups, by increasing the importance of the ideology and support for it. Conversely, if the ideology's representation enhances social hierarchy, self-affirmation can increase prejudice.

One difficulty in testing the effect of secularism representation on the self-affirmation outcome is linked to methodological aspects of the self-affirmation manipulation. Indeed, in the classical self-affirmation procedure, participants are presented with a list of values (e.g., love, loyalty) that they must rank from the most to the least important to them personally. In most cases, the list of values has no direct connection with a specific ideology (that can be the main interest of a study). Thus, it is not sure that a given representation of an ideology is cognitively salient when individuals undertake a classical self-affirmation task. In this research, we propose to affirm participants on secularism and to examine the effect of self-affirmation on prejudice towards a minority religious group (e.g., Muslims).

Previous research suggests that manipulating the content of the list of values used in the self-affirmation procedure can have an impact on attitudes towards immigrants. For example, affirming values congruent with one's political orientation increased positive attitudes towards Syrian refugees (Badea et al., 2017). In a different study, Lehmiller and collaborators (Lehmiller et al., 2010) showed that participants who were affirmed by valuing relationships with family and friends were significantly more prejudiced against sexual minorities than participants who were affirmed by valuing other self-relevant aspects. These findings demonstrate that the type of value affirmed is an important consideration to take in

the design of self-affirmation procedures. Specifically, in Lehmiller and al.'s (2010) study, familial-based affirmations undermined the reduction of prejudice towards minority sexual groups because they reminded individuals of values that are seen as conflicting with expressing tolerant attitudes towards these groups.

In our case, the efficacy of affirming participants on the secularism value would depend on participants' representation of this ideology. The representation of "historical" secularism in terms of freedom of religious practice is more compatible with positive attitudes towards minority religious groups. On the other hand, the representation of "new" secularism is more restrictive regarding religious practices and may, on the contrary, increase participants' prejudice towards religious groups. Since new secularism places limits on religious practices and the display of religious affiliation, affirming this value could seem conflicting with expressing tolerant attitudes towards people that are concerned, religious groups. Being reminded with this value should lead to the perception of people that display their religious affiliation as incompatible with French values, thus perceiving these individuals as a threat to French society, and expressing prejudice against them, especially when they are members of a minority religious group. Muslims in particular can be targeted under this norm, as wearing visible religious symbols (e.g., headscarf) is common.

The Present Research

In this study, we begin by identifying French participants' representation of secularism ("historical" vs. "new"). They are then randomly assigned to either a self-affirmation experimental condition or to a control condition. In one of the two self-affirmation conditions, participants explain why secularism is an important value for them and give examples from their daily lives where this principle has guided their behavior. However, secularism can be considered as a threat-related value. The attachment to the

principle of secularism is linked to different attitudes towards religious groups (e.g., Roebroeck & Guimond, 2016). These minority groups may represent a threat to national identity and therefore to individuals who may identify strongly with their country (e.g., Badea et al., 2020). It is important to also include a self-affirmation task on a threat-unrelated value (see also, Lehmiller et al., 2010). Thus, in the other self-affirmation condition, participants are asked to self-affirm a value that is unrelated to the threat domain (humor). Finally, in the control condition, participants are asked to write about an important value for someone else. All participants complete a measure of prejudice against Muslims.

Nevertheless, members of the majority society may express this view either because they are prejudiced against this community in particular, or because they are committed to the principle of "new" secularism that prohibits religious practices for all religious groups. Indeed, in a recent survey, Dangubić et al. (2020) examined attitudes towards religious practices in many European countries. The authors simultaneously examined attitudes towards Muslims and Christians. They distinguished between participants who rejected Muslim but not Christian religious practices, and those who rejected practices regardless of the religious group. The authors argue that much of the previous research on anti-Muslim prejudice has only considered Muslim practices, which can lead to the misidentification of individuals as being prejudiced against Muslims. In our study, we also assess participants' attitudes towards the majority religious group (Christians), in order to examine specifically the impact of self-affirmation on attitudes towards Muslims.

We measure the affective dimension of prejudice towards religious groups using a feeling thermometer and the behavioral component of prejudice using distributive matrices (Anier et al., 2018; Rubin et al., 2014). The feeling thermometer measure allows us to add several other groups, as a distraction to the target groups. Moreover, we propose to consider

relative negative feelings, comparing the target group (Muslims or Christians) to the mainstream ingroup (French people), instead of the simple feeling towards each group. This allows us to use a measure less sensitive to social desirability concerns (see Hugenberg & Bodenhausen, 2003). For the behavioral component of prejudice, we ask participants to imagine that they are responsible for allocating subsidies at Paris City Hall, and that they have to decide how to divide a sum of money between a Muslim/Christian association vs. a French association, which does not mention any religion. Participants must indicate their intention to distribute the money between the two associations. Again, the relative behavioral prejudice against each religious group compared to the French association, will be calculated. We did not include the cognitive measure of prejudice (i.e. stereotyping) because it seems difficult to compare stereotypes about Christians (e.g., lower scientific competence, Rios et al., 2015) with stereotypes about Muslims (e.g. terrorist, Saleem & Anderson, 2013), see also Erentzen et al. (2022). In contrast, examining affective and behavioral prejudice allows the use of the same measures for both groups.

According to previous work, we hypothesize a main effect of secularism representation, a main effect of the type of religious group and a main effect of self-affirmation such that (1) participants who have a "historical" representation of secularism will exhibit less prejudice towards religious groups than those who have a "new" representation of secularism, (2) there will be more prejudice towards Muslims than towards Christians, and (3) participants who self-affirm on the threat-unrelated value will show lower prejudice towards religious groups compared to those in the other two conditions. Following this reasoning, we also expect an interaction effect between secularism representation and the type of religious group in that participants who have a "new" representation of secularism

will exhibit more prejudice (as compared to "historical" representation), and that this difference will be higher regarding prejudice towards Muslims as compared to Christians.

We also test the key hypothesis concerning the interaction between secularism representation and self-affirmation on prejudice. Specifically, we predict that participants who self-affirm on a threat-unrelated value will express lower prejudice compared to control, regardless of their secularism representation, as self-affirmation will buffer the psychological threat causing the expression of prejudice. On the other hand, we expected different results when self-affirming on secularism, as the affirmed threat-related value will moderate the buffering effect of self-affirmation. In this case, the content of the affirmed value is fundamental to the effect (unlike the affirmation of a threat-unrelated value, where the content of the value is irrelevant), and can increase the perceived threat when the value is intolerant or decrease it when it is tolerant. Therefore, we expected participants with a "historical" representation of secularism to exhibit lower prejudice in the condition of self-affirmation on the secularism value as compared to control. Conversely, we expected participants with a "new" representation of secularism to exhibit higher prejudice in the condition of self-affirmation on secularism compared to control. We examine whether these effects are stronger for Muslims than for Christians.

Pre-registration and Open-science

We provided all materials, data, and code on: https://osf.io/63rnq/. This project received Peer Community in Registered Report Stage 1 in-principle acceptance (ENTER LINK AFTER IPA) after which we created a frozen pre-registration version of the entire Stage 1 packet (ENTER LINK AFTER IPA) and proceeded to data collection. All measures, manipulations, exclusions conducted for this investigation are reported, and data collection was completed before analyses.

Method

[IMPORTANT: Method and results were written in past tense, to simulate what these sections will look like after data collection, but no pre-registration or data collection took place yet.].

Power Analysis

We calculated the required sample size using G*Power 3.1. We set the SESOI to f= .10 for an ANOVA repeated measures within-between interactions. We concluded that the minimum required sample size for 6 experimental groups, 2 repeated measures, a power of 0.95 and alpha of 0.05 is 504 participants (G*Power screenshot is presented in the Supplementary). To minimize the risk of overestimating the true population effect size (Perugini et al., 2018), as well as to account for potential exclusion of participants, we planned to recruit 600 participants.

Participants

Based on these aforementioned calculations, we recruited a total of 600 native French speakers, born, raised and based in France, regardless of their religious identification, through a survey institution (Bilendi) to have a representative sample of the French population and to ensure high quality data collection. Participants who composed the final sample were aged between XX and XX years old (M_{age} = XX.XX, SD = XX.XX, Mdn = XX.XX). The sample included XXX females, XXX males and XXX who did not disclose their gender. The average compensation for participation in this study was X ϵ .

Design and Procedure

We summarize the experimental design in Table 1. The design is as follows: 2 (secularism representation: historical and new; between-subjects) by 3 (self-affirmation:

threat-related value, threat-unrelated value and control; between-subjects) by 2 (religious group: Muslims and Christians; within-subjects). Display of the within-subjects factor (type of religious group) was counterbalanced. All translated materials are presented in the Supplementary.

[For review: The Qualtrics survey .QSF file and an exported DOCX file are provided on the OSF folder. The translated Qualtrics survey can be found in the Supplementary. A preview link of the Qualtrics survey is provided on:

https://parisouestpsy.eu.qualtrics.com/jfe/form/SV_07BJ9ppKM7hWCGy]

Table 1

Experimental Design

IV1: Secularism representation (2 between) IV2: Self-affirmation (3	IV1: "Historical" rep Participants reporting l representation of secul	having a "historical"	IV1: "New" representation Participants reporting having a "new" representation of secularism		
between) IV3: Type of religious group (2 within)	Completing the prejudice measures	IV3: Christians Completing the prejudice measures against Christians	IV3: Muslims Completing the prejudice measures against Muslims	IV3: Christians Completing the prejudice measures against Christians	
IV2: Self-affirmation on threat-related value condition Writing about the importance of the chosen representation of secularism to oneself	 Manipulation checks: Secularism representation: one continuous measure of secularism representation Self-affirmation: one item measuring participants' perceived importance of the used value in each procedure (secularism or humor or physical endurance) 				
IV2: Self-affirmation on threat-unrelated value condition Writing about the importance of the value of "humor" to oneself	Dependent variables: • Affective prejudice towards religious groups: Using a feeling thermometer, we measure relative negative feelings by comparing reported feelings towards the target group (Muslims or Christians) and towards the ingroup (French people). • Behavioral prejudice towards religious groups: Using distributive matrices, we measure relative de-favoritism by comparing sums of money of the transfer group (Muslims or Christians) and to the ingroup (French people).				
IV2: <u>Control condition</u> Writing about the importance of the value of "physical endurance" to another person					

The online survey was built using Qualtrics. Participants indicated their consent, with four questions confirming their eligibility, understanding, and agreement with study terms, which they must answer with a "yes" in order to proceed to the study. Participants then

provided their demographic information. Next, after indicating their personal representation of secularism, they were randomly assigned to one of the three experimental conditions (self-affirmation on secularism, self-affirmation on humor or control condition). Finally, they completed the measurements of prejudice against Muslims and Christians. At the end of the experiment, they answered a few funneling questions.

Predictors

Secularism Representation

Participants were first told that secularism is an important value in France and that two visions of it coexist. Vision 1 (corresponding to "historical" secularism) stated: "Individuals are free to practice their religion in private and in public. Citizens have the right to show their religious affiliation in the public sphere. The State must remain completely neutral regarding these religious practices". Vision 2 (corresponding to "new" secularism) stated: "Individuals are free to practice their religion in private, but not in public. Citizens do not have the right to show their religious affiliation in the public sphere. The State must regulate these religious practices". These visions of secularism were constructed on the basis of items used by Roebroeck and Guimond (2016) and De la Sablonnière et al. (2020). Participants were then asked to indicate which of the two visions best reflected their personal convictions.

As a manipulation check, participants then reported on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), how much they agreed with the following statement "Religious practices and symbols should not be allowed in public institutions", representing the main difference between the two visions. Participants with a "new" secularism vision

were expected to score higher on this question than participants with a "historical" secularism vision.

Self-Affirmation Manipulation

Following, participants were randomly assigned into one of the three conditions: self-affirmation on the threat-related value (i.e., secularism), self-affirmation on the threat-unrelated value (i.e., humor) or control condition. Typically, in self-affirmation activities, participants are asked to rank a list of values in order of importance for them personally, and to answer questions about the importance of the top ranked value (e.g., Badea et al., 2018). In this study, we have adapted the procedure to ask them to self-affirm on the threat-related value (secularism), or a threat-unrelated value (humor, see also, Lehmiller et al., 2010, for a similar procedure). Participants in both self-affirmation conditions were asked to affirm themselves on the corresponding value (their representation of the secularism value or the humor value) by answering two questions. The first asked them to explain why this value (i.e., secularism or humor) would be important for them personally, and the second required giving examples of how this value guides their behavior in daily life (for example, in their interactions with others). In the control condition, participants explained why physical endurance would be an important value for another person and gave examples on how this value could guide this person's behavior. In order to keep constant the salience of participants' secularism representation across all conditions, all participants were reminded of their choice of secularism representation before they start the self-affirmation or the control activity.

Immediately after the manipulation, participants were required to indicate the importance of the affirmed value in each condition (secularism, humor and physical

endurance accordingly) to them personally on a 7-point scale from 1 "not at all important" to 7 "very important".

Dependent Measures

Affective Prejudice

Affective prejudice against the two targeted religious groups (Muslims and Christians) was measured using a feeling thermometer. Participants were asked to indicate their feelings towards 10 groups including Muslims, Christians, and French people on a scale from 0 "Very negative feelings" to 100 "Very positive feelings". Then, a relative affective prejudice score was computed (see also Hugenberg & Bodenhausen, 2003) by calculating the difference between feelings towards the ingroup (French people) and the target group (Muslims or Christians). A higher score indicated higher relative affective prejudice (see supplementary for more details on the score calculation). The presentation order of the ten evaluated groups was randomized.

Behavioral Prejudice

Two distributive matrices were used to measure behavioral prejudice against each target group. Participants were asked to imagine that they are responsible for allocating subsidies at Paris City Hall, and that they have to indicate their intention to divide a sum of money between two high impact associations that need support. Four fictitious student associations were used. One matrix included a Muslim vs. a French association, while the other one included a Christian vs. another French association. Then, in the same way as for affective prejudice, a score of relative behavioral prejudice was calculated. The difference between the amount of money attributed to the French association and the Muslim association corresponded to the relative behavioral prejudice towards Muslims, while the difference between the other French association and the Christian association reflected

relative behavioral prejudice towards Christians. A higher score indicated higher relative behavioral prejudice (see supplementary for more details on the score calculation). These matrices allowed us to measure the relative de-favoritism of Muslims and that of Christians in comparison with French people. Relative prejudice was used to minimize the sensitivity of our measures to social desirability bias.

Religiosity

Participants were asked to indicate on a 7-point scale "To what extent would you say you practice a religion?" from 1 "*Not at all*" to 7 "Absolutely".

Attention Check

One attention check item was included in the feeling thermometer to detect careless responding: "Please put the cursor on ten".

Data Analysis Strategy

Firstly, we expected a significant main effect of both the secularism representation and the type of religious group on prejudice, as well as an interaction between the two variables. It was hypothesized that (1) affective and behavioral prejudice will be higher among participants who have a "new" representation of secularism (vs. "historical") and that (2) there will be more affective and behavioral prejudice towards Muslims than towards Christians. We expected secularism representation to interact with the type of religious group in that participants who have a "new" representation of secularism will exhibit more affective and behavioral prejudice (as compared to "historical" representation), and that this difference will be higher regarding prejudice towards Muslims as compared to Christians. Secondly, we expected a main effect of self-affirmation, such as participants who self-affirm on the threat-unrelated value will show lower prejudice towards religious groups compared to those in the other two conditions. Central to this work, we aimed to test the interaction hypothesis

between self-affirmation and secularism representation on prejudice towards religious groups. We hypothesized that self-affirmation on secularism (the threat-related value) will decrease affective and behavioral prejudice towards religious groups, among participants who have a "historical" representation of secularism compared to control. The reverse pattern is expected (self-affirmation on secularism increasing prejudice against religious groups) among participants who have a "new" representation of secularism. We expected self-affirmation on humor (the threat-unrelated value) to decrease affective and behavioral prejudice against religious groups compared to control, regardless of the chosen secularism representation. Finally, we examine whether the interaction between self-affirmation and secularism representation is more strongly observed when considering prejudice towards Muslims rather than prejudice towards Christians.

To test these hypotheses, we ran a three-way mixed ANOVA: 2 (secularism representation: historical vs. new) x 3 (self-affirmation: threat-related value vs. threat-unrelated value vs. control) x 2 (religious group: Christians vs. Muslims). For all analysis, significance threshold α will be set at .05.

Outliers and exclusions

Among participants who completed the study to the end, we excluded from the analysis participants who failed the attention check item (i.e., selecting another response than 10 to this question) and participants who reported less than 4 out of 5 on the question asking them to what extent they completed the study seriously. We did not classify outliers. The final sample consisted of XXX participants.

Results

[IMPORTANT: Method and results were written in past tense, to simulate what these sections will look like after data collection, but no pre-registration or data collection took place yet. These will be updated following the data collection.]

Manipulation Checks

Firstly, we checked if our identification of participants' representation of secularism successfully distinguished different beliefs about secularism. We conducted an independent t-test and **did/did not** find a significant difference between participants endorsing a "new" vision of secularism (M = X.XX, SD = X.XX) and those endorsing a "historical" vision of secularism (M = X.XX, SD = X.XX) in their opposition to public religious display, t(XXX) = X.XX, t(XXX) = X.XX, t(XXX) = X.XX. This indicates that participants who chose "new" secularism did/did not significantly display distinctive beliefs concerning secularism from those who chose "historical" secularism.

Secondly, to verify that the affirmed values were considered important to participants, we ran an ANOVA 3 (Value: Secularism vs. Humor vs. Physical endurance) between-subjects with the importance of the value as the dependent variable. Results $\operatorname{did/did}$ not indicate a significant difference in value-importance between conditions, F(X, XXX) = X.XX, p = X.XX. The secularism value (M = X.XX, SD = X.XX) was/was not significantly perceived as more important than the physical endurance value (M = X.XX, SD = X.XX), p = X.XX, p = X.XX. The humor value (p = X.XX) was/was not significantly more important to participants than the physical endurance value, p = X.XX, p = X.XX. Finally, the difference between the importance of the secularism value and that of the humor value was/was not significant, p = X.XX, p = X.XX, p = X.XX. Overall, these results suggest that participants p = X.XX did/did not rate the affirmed values (secularism and humor) as more important than the control value (physical endurance).

Descriptive Statistics

Descriptive statistics are presented in Table 2.

Table 2Descriptive Statistics for all Conditions

	IV1: "Historical" representation	IV1: "New" representation	Overall (Self-affirmation)
IV2: Threat-related value	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX
IV2: Threat-unrelated value	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX
IV2: Control	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX
Overall (Secularism representation)	Muslims _{AP} : $X.XX$ ($X.XX$) Muslims _{BP} : $X.XX$ ($X.XX$) Christians _{AP} : $X.XX$ ($X.XX$) Christians _{BP} : $X.XX$ ($X.XX$) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX	Muslims _{AP} : X.XX (X.XX) Muslims _{BP} : X.XX (X.XX) Christians _{AP} : X.XX (X.XX) Christians _{BP} : X.XX (X.XX) n = XXX

Note. AP = Affective prejudice; BP = Behavioral prejudice

Test of the Hypotheses

In order to test each hypothesis, we ran a 2 (secularism representation: historical vs. new) by 3 (self-affirmation: threat-related value vs. threat-unrelated value vs. control) by 2 (religious group: Muslims vs. Christians) mixed ANOVA for each of the prejudice measures (affective measure and behavioral measure).

Secularism Representation and Prejudice

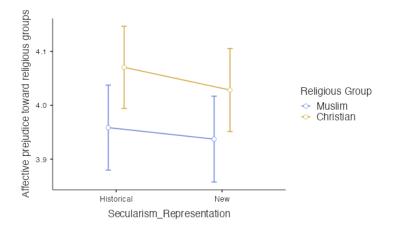
We expected a significant main effect of both the secularism representation and the type of religious group on prejudice, as well as an interaction between secularism representation and type of religious group.

Affective Prejudice. We found **no/a** significant main effect of secularism representation, F(X, XXX) = X.XX, p = .XXX, $q^2 = XXX$, **nor/and** a main effect of religious groups, F(X, XXX) = X.XX, p = .XXX, $q^2 = XXX$. Participants **did/did not** significantly report more prejudice towards religious groups when they displayed a "new" vision (M = X.XX, SD = X.XX) of secularism as compared to a "historical" vision (M = X.XX, SD = X.XX). Affective prejudice scores **were/were not** significantly higher towards Muslims (M = X.XX, SD = X.XX) than towards Christians (M = X.XX, SD = X.XX).

Finally, we **did/did not** find support for the two-way interaction between secularism representation and religious group, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = .XXX$, see Figure 1. [Pairwise comparisons will only be tested if the two-way interaction is significant]. Pairwise comparisons indicated that participants displaying a "new" representation of secularism **did/did not** significantly exhibit more affective prejudice against Muslims (M = X.XX, SD = X.XX) than towards Christians (M = X.XX, SD = X.XX), t(XXX) = X.XX, p = .XXX, d = .XX. Participants displaying a "historical" representation of secularism **did/did not** significantly exhibit less affective prejudice against Muslims (M = X.XX, SD = X.XX) than against Christians (M = X.XX, SD = X.XX), t(XXX) = X.XX, t(XXX) = X.XX

Figure 1 [To be updated in Stage 2]

Affective Prejudice Towards Religious Groups as a Function of Secularism Representation and Type of Religious Group

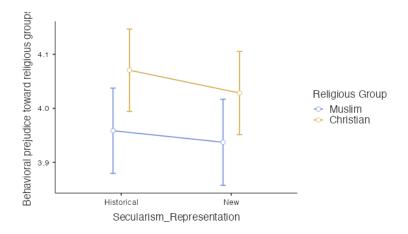


Behavioral Prejudice. As for/different from affective prejudice, there was/was no significant main effect of secularism representation, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$, nor/and a main effect of religious groups, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$, on behavioral prejudice. Participants having a "new" representation of secularism (M = X.XX, SD = X.XX) did/did not significantly exhibit more behavioral prejudice against religious groups than those reporting a "historical" vision (M = X.XX, SD = X.XX). Behavioral prejudice scores were/were not significantly higher towards Muslims (M = X.XX, SD = X.XX) as compared to Christians (M = X.XX, SD = X.XX), d = .XXX.

The two-way interaction between secularism representation and religious group **was/was not** significant, F(X, XXX) = X.XX, p = .XXX, $q^2 = .XXX$, see Figure 2. [*Pairwise comparisons will only be tested if the two-way interaction is significant*]. Participants with a "new" representation (M = X.XX, SD = X.XX) **did/did not** exhibit significantly more prejudice towards Muslims than towards Christians (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Among participants with a "historical" representation of secularism, behavioral prejudice against Muslims (M = X.XX, SD = X.XX) **was/was not** significantly higher than that towards Christians (M = X.XX, SD = X.XX), p = .XXX, d = .XXX.

Figure 2 [To be updated in Stage 2]

Behavioral Prejudice Towards Religious Groups as a Function of Secularism Representation and Type of Religious Group



Self-Affirmation and Secularism Representation

To begin, we tested whether participants who self-affirmed on the threat-unrelated value showed lower prejudice towards religious groups compared to those in the other two conditions. Then, we tested the key interaction hypothesis between self-affirmation and secularism representation on prejudice towards religious groups. We expected self-affirmation on humor (the threat-unrelated value) to decrease affective and behavioral prejudice against religious groups compared to control, regardless of the chosen secularism representation, since the process of self-affirmation should protect from any perceived threat leading to the expression of prejudice. On the other hand, we expected self-affirming on the threat-related value to be affected by the content of the value. In other terms, affirming one's representation of secularism should moderate the protecting effect of the mere self-affirmation process. We hypothesized that self-affirmation on secularism (the threat-related value) will decrease affective and behavioral prejudice towards religious

groups, among participants who have a "historical" representation of secularism compared to control. The reverse pattern is expected (self-affirmation on secularism increasing prejudice against religious groups) among participants who have a "new" representation of secularism.

We also examine the interaction between the three factors (self-affirmation, secularism representation and religious group). We expect self-affirmation and secularism representation to interact with the type of religious group such as the key interaction effect between self-affirmation and secularism representation will be particularly observed concerning prejudice towards Muslims as compared to prejudice towards Christians.

For each prejudice score (affective and behavioral), we begin by presenting the results concerning the main effect of self-affirmation on prejudice. We then test the interaction between self-affirmation and secularism representation on prejudice (general score). Finally, we test whether this interaction depends on the religious group (Christians and Muslims), reporting the results concerning the three-way interaction between self-affirmation, secularism representation and religious groups.

Affective Prejudice. We found no/a significant main effect of self-affirmation on affective prejudice, F(X, XXX) = X.XX, p = .XXX, $q^2 = XXX$. Participants did/did not significantly report more prejudice towards religious groups in the threat-unrelated condition (M = X.XX, SD = X.XX) as compared to the threat-related condition (M = X.XX, SD = X.XX), and the control condition (M = X.XX, SD = X.XX), respectively, t(XXX) = X.XX, p = .XXX, t = .XXX, and t(XXX) = X.XX, t = .XXX, t = .XXX. The difference between the threat-related condition and the control condition was/was not significant, t(XXX) = X.XX, t = .XXX, t = .XXX, t = .XXX.

We then tested the interaction hypothesis regarding self-affirmation and secularism representation on affective prejudice towards religious groups. The interaction between

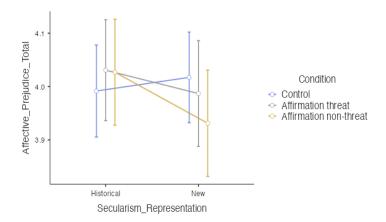
self-affirmation and secularism representation **was/was not** significant, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$, see Figure 3. [Pairwise comparisons will only be tested if the two-way interaction is significant].

Pairwise comparisons indicated that participants with a "historical" representation of secularism **did/did not** display significantly less affective prejudice towards religious groups when they self-affirmed on secularism (M = X.XX, SD = X.XX) as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Self-affirming on humor (M = X.XX, SD = X.XX) **was/was not** significantly associated with less prejudice towards religious groups as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ in their level of affective prejudice towards religious groups from those who self-affirmed on humor, p = .XXX, d = .XXX.

Among participants with a "new" representation of secularism, self-affirming on secularism (M = X.XX, SD = X.XX) was/was not significantly related to more affective prejudice towards religious groups as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. There was no/a significant difference between self-affirmation on humor and the control condition, such as participants with a "new" representation did/did not express less prejudice when they self-affirmed on humor (M = X.XX, SD = X.XX) vs. control (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Participants who self-affirmed on secularism did/did not significantly differ in their level of affective prejudice towards religious groups from those who self-affirmed on humor, p = .XXX, d = .XXX.

Figure 3 [To be updated in Stage 2]

Affective Prejudice Towards Religious Groups as a Function of Secularism Representation and Self-Affirmation



In order to test whether the interaction between self-affirmation and secularism representation on prejudice is moderated by the religious group (Muslims or Christians), we examined the three-way interaction between these variables. The three-way interaction **was/was not** significant, F(X, XXX) = X.XX, p = .XXX, p = .XXX. [Pairwise comparisons will only be tested if the three-way interaction is significant].

Concerning prejudice towards Muslims, participants with a "historical" representation of secularism **did/did not** significantly display less affective prejudice towards Muslims in the self-affirmation on secularism condition (M = X.XX, SD = X.XX) than in the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. The difference between the self-affirmation on humor condition (M = X.XX, SD = X.XX) and the control condition **was/was not** significant, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX. Among participants with a "new" representation of secularism, participants in the self-affirmation on secularism condition (M = X.XX, SD = X.XX) **were/were not** significantly more likely to express prejudice towards Muslims as compared to those in the

control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Self-affirmation on humor **was/was not** significantly related to less affective prejudice towards Muslims (M = X.XX), SD = X.XX) as compared to the control condition, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX.

Regarding affective prejudice towards Christians, individuals displaying a "historical" representation of secularism did/did not significantly exhibit less affective prejudice towards Christians when self-affirming on secularism (M = X.XX, SD = X.XX) as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. The affective prejudice score in the self-affirmation on humor condition was/was not significantly lower (M = X.XX, SD = X.XX) as compared to the control condition, p = .XXX, d = .XXX. A/No significant difference was found between participants who self-affirmed on secularism and those who self-affirmed on humor, p = .XXX, d = .XXX. Among participants with a "new" representation of secularism, those in the self-affirmation on secularism condition (M = X.XX, SD = X.XX) did/did not significantly express more affective prejudice towards Christians as compared to those in the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. The difference between the self-affirmation on humor (M = X.XX, SD = X.XX) and the control condition was/was not significant, p = .XXX, d = .XXX. A/No significant difference was found in affective prejudice against Christians between participants who self-affirmed on secularism and those who self-affirmed on humor, p = .XXX, d = .XXX.

Behavioral Prejudice. We ran the same analysis on behavioral prejudice. We found **no/a** significant main effect of self-affirmation on behavioral prejudice, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$. Participants **did/did not** significantly report more prejudice towards religious groups in the threat-unrelated condition (M = X.XX, SD = X.XX) as compared to

the threat-related condition (M = X.XX, SD = X.XX), and the control condition (M = X.XX, SD = X.XX), respectively, t(XXX) = X.XX, p = .XXX, d = .XX, and t(XXX) = X.XX, p = .XXX, d = .XX. The difference between the threat-related condition and the control condition **was/was not** significant, t(XXX) = X.XX, p = .XXX, d = .XX.

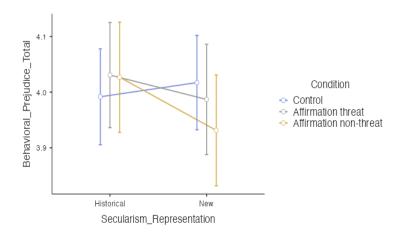
Results **did/did not** indicate a significant two-way interaction between self-affirmation and secularism representation, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$, see Figure 4. [Pairwise comparisons will only be tested if the two-way interaction is significant].

Pairwise comparisons indicated that, participants with a "historical" representation of secularism **did/did not** significantly express less behavioral prejudice towards religious groups in the self-affirmation on secularism condition (M = X.XX, SD = X.XX) as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. The difference between self-affirmation on humor (M = X.XX, SD = X.XX) and the control condition **was/was not** significant, p = .XXX, d = .XXX. **A/No** significant difference was found between participants who self-affirmed on secularism and those who self-affirmed on humor, p = .XXX, d = .XXX.

Among those with a "new" representation of secularism, self-affirming on secularism (M = X.XX, SD = X.XX) was/was not significantly associated with more behavioral prejudice towards religious groups as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Participants in the self-affirmation on humor (M = X.XX, SD = X.XX) did/did not significantly differ from those in the control condition in their behavioral prejudice scores, p = .XXX, d = .XXX. A/No significant difference was found between participants who self-affirmed on secularism and those who self-affirmed on humor, p = .XXX, d = .XXX.

Figure 4 [To be updated in Stage 2]

Behavioral Prejudice Towards Religious Groups as a Function of Secularism Representation and Self-Affirmation



The three-way interaction between self-affirmation, secularism representation and religious group **was/was not** significant, F(X, XXX) = X.XX, p = .XXX, $\eta^2 = XXX$. [Pairwise comparisons will only be tested if the three-way interaction is significant].

Concerning behavioral prejudice towards Muslims, among participants with a "historical" representation, there **was/was not** a significant difference between those who self-affirmed on secularism (M = X.XX, SD = X.XX) and those in the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Self-affirmation on humor (M = X.XX, SD = X.XX) **did/did not** significantly differ from the control condition, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX. Among participants with a "new" representation of secularism, results indicated that behavioral prejudice scores towards Muslims **did/did not** significantly increase in the self-affirmation on secularism condition (M)

= X.XX, SD = X.XX) as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. The difference between self-affirmation on humor (M = X.XX, SD = X.XX) and control **was/was not** significant, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX.

Regarding behavioral prejudice specifically against Christians, participants having a "historical" representation of secularism **were/were not** significantly less likely to display behavioral prejudice towards Christians when self-affirming on secularism (M = X.XX, SD = X.XX) as compared to the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Participants in the self-affirmation on humor (M = X.XX, SD = X.XX) **did/did not** express less behavioral prejudice against Christians than those in the control condition, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX.

On the other hand, participants with a "new" representation of secularism, self-affirming on secularism, **did/did not** significantly express more behavioral prejudice towards Christians (M = X.XX, SD = X.XX) as compared to those in the control condition (M = X.XX, SD = X.XX), p = .XXX, d = .XXX. Behavioral prejudice towards Christians **was/was not** significantly lower in the self-affirmation on humor (M = X.XX, SD = X.XX) vs. in the control condition, p = .XXX, d = .XXX. Participants who self-affirmed on secularism **did/did not** significantly differ from those who self-affirmed on humor, p = .XXX, d = .XXX.

Analysis Including Participants' Religiosity

As religion may be related to prejudice towards religious groups, it could be argued that the differences in participants' religiosity have accounted for our findings. We thus examined whether participants' religiosity has an impact on the effects of self-affirmation and

of secularism representation on prejudice. To test this possibility, we ran a multiple-regression analysis on prejudice towards religious groups, including participants' religiosity (i.e., the extent to which they report practicing a religion; centered), two orthogonal contrasts corresponding to self-affirmation conditions (C1: self-affirmation on secularism = 2, self-affirmation on humor = -1, control = -1; C2: self-affirmation on secularism = 0, self-affirmation on humor = -1, control = 1), secularism representation ("New" secularism = -0,5; "Historical" secularism = 0.5), the interactions between religiosity and self-affirmation's contrasts, and the interaction between religiosity and secularism representation.

There was $\mathbf{a/no}$ significant interaction between C1 and religiosity, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$, thus indicating that participants in the self-affirmation on secularism $\mathbf{did/did}$ not significantly express lower prejudice that participants in the other two conditions, when their religiosity score was higher, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$. This effect $\mathbf{was/was}$ not significant among participants whose religiosity score was lower, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$.

There was \mathbf{a}/\mathbf{no} significant interaction between C2 and religiosity, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$, thus indicating that participants in the self-affirmation on humor $\mathbf{did}/\mathbf{did}$ \mathbf{not} significantly express lower prejudice that participants in the control condition, when their religiosity score was higher, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$. This effect $\mathbf{was}/\mathbf{was}$ \mathbf{not} significant among participants whose religiosity score was lower, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$.

There was a/no significant interaction between religiosity and secularism representation, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$. Participants having a "new" representation of secularism did/did not report significantly more prejudice towards religious groups than those having a "historical" representation, when their religiosity score was lower, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, p = .XXX, $\eta_p^2 = .XXX$. This effect **was/was not** found among participants whose religiosity score was higher, b = X.XX, 95% CI [X.XX, X.XX], t(XXX) = X.XX, t(XXX) = X.XX

Discussion

[Please note that the discussion is only to be completed in Stage 2 following data collection]

Findings

Implications, limitations, and directions for future research

References

- Anier, N., Badea, C., Berthon, M., & Guimond, S. (2018). Perceived acculturation preferences of minority groups and intergroup discrimination: When culture-specific intergroup norms matter. *Journal of Applied Social Psychology*, 48(9), 506-518. https://doi.org/10.1111/jasp.12530
- Anier, N., Roebroeck, E., Kleinlogel, E. P., Badea, C., Nugier, A., Berthon, M., & Guimond, S. (2019). The effect of the normative context on intergroup discrimination: implications for the scientific value of exact and conceptual replications. *International Journal of Intercultural Relations*, 73, 43–58.
 https://doi.org/10.1016/j.ijintrel.2019.07.006
- Badea, C., Bender, M., & Korda, H. (2020). Threat to national identity continuity: When affirmation procedures increase the acceptance of Muslim immigrants. *International Journal of Intercultural Relations*, 78, 65–72. https://doi.org/10.1016/j.ijintrel.2019.11.004
- Badea, C., Binning, K., Verlhiac, J. F., & Sherman, D. K. (2018). In the aftermath of terrorism: Effects of self versus group affirmation on support for discriminatory policies. *Journal of Experimental Social Psychology*, 76, 421–428. https://doi.org/10.1016/j.jesp.2017.11.004
- Badea, C., & Sherman, D. K. (2019). Self-Affirmation and Prejudice Reduction: When and Why? *Current Directions in Psychological Science*, 28(1), 40–46. https://doi.org/10.1177/0963721418807705
- Badea, C., Tavani, J. L., Rubin, M., & Meyer, T. (2017). Self-affirmation, political value congruence, and support for refugees. *Journal of Applied Social Psychology*, 47(7), 355–365. https://doi.org/10.1111/jasp.12441

- Čehajić-Clancy, S., Effron, D. A., Halperin, E., Liberman, V., & Ross, L. D. (2011).

 Affirmation, acknowledgment of in-group responsibility, group-based guilt, and support for reparative measures. *Journal of Personality and Social Psychology*, 101(2), 256–270. https://doi.org/10.1037/a0023936
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences, 2nd ed. Hillsdale, NJ: Erlbaum.
- Cohen, G. L., & Sherman, D. K. (2014). The Psychology of Change: Self-Affirmation and Social Psychological Intervention. *Annual Review of Psychology*, 65(1), 333–371. https://doi.org/10.1146/annurev-psych-010213-115137
- Critcher, C. R., & Dunning, D. (2015). Self-Affirmations provide a broader perspective on Self-Threat. *Personality and Social Psychology Bulletin*, 41(1), 3–18. https://doi.org/10.1177/0146167214554956
- Dangubić, M., Verkuyten, M., & Stark, T. (2020). Rejecting Muslim or Christian religious practices in five West European countries: a case of discriminatory rejection? *Ethnic and Racial Studies*, 43(16), 306–326. https://doi.org/10.1080/01419870.2020.1792525
- Erentzen, C., Bergstrom, V. N. Z., Zeng, N., & Chasteen, A. L. (2022). The gendered nature of Muslim and Christian stereotypes in the United States. *Group Processes & Intergroup Relations*, 26(8), 1726–1749.
 - https://doi.org/10.1177/13684302221138036
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31–44. https://doi.org/10.1037/0022-3514.73.1.31

- Hugenberg, K., & Bodenhausen, G. V. (2003). Facing prejudice: Implicit prejudice and the perception of facial threat. *Psychological Science*, *14*(6), 640–643. https://doi.org/10.1046/j.0956-7976.2003.psci_1478.x
- Knowles, E. D., Lowery, B. S., Hogan, C. M., & Chow, R. M. (2009). On the malleability of ideology: Motivated construals of color blindness. *Journal of Personality and Social Psychology*, 96(4), 857–869. https://doi.org/10.1037/a0013595
- Lehmiller, J. J., Law, A. T., & Tormala, T. T. (2010). The effect of self-affirmation on sexual prejudice. *Journal of Experimental Social Psychology*, 46(2), 276–285. https://doi.org/10.1016/j.jesp.2009.11.009
- Lesick, T. L., & Zell, E. (2021). Is Affirmation the Cure? Self-Affirmation and European-Americans' Perception of Systemic Racism. *Basic and Applied Social Psychology*, 43(1), 1–13. https://doi.org/10.1080/01973533.2020.1811092
- Levin, S., Matthews, M., Guimond, S., Sidanius, J., Pratto, F., Kteily, N., Pitpitan, E. V., & Dover, T. L. (2012). Assimilation, multiculturalism, and colorblindness: Mediated and moderated relationships between social dominance orientation and prejudice. *Journal of Experimental Social Psychology*, 48(1), 207–212.
 - https://doi.org/10.1016/j.jesp.2011.06.019
- Nugier, A., Alnajjar, Y., Sherman, D., & Badea, C. (2023). Secularism and anti-immigrant prejudice: How self- and group-affirmation impact conformity to social norms. Unpublished manuscript. University of Clermont-Ferrand.
- Nugier, A., Oppin, M., Cohu, M., Kamiejski, R., Roebroeck, E., & Guimond, S. (2016).

 «Nouvelle Laïcité» en France et Pression Normative Envers les Minorités

 Musulmanes [Secularism in France and Normative Pressure Against Muslim

- Minorities]. *International Review of Social Psychology*, 29(1), 15. https://doi.org/10.5334/irsp.11
- Persson, S., & Hostler, T. J. (2021). When Men Who Dislike Feminists Feel Proud: Can Self-Affirmation and Perspective-Taking Increase Men's Empathy Toward Feminists?

 *Psychology** of Women Quarterly, 45(3), 372–386.

 https://doi.org/10.1177/03616843211017472
- Perugini, M., Gallucci, M., & Costantini, G. (2018). A Practical Primer To Power Analysis for Simple Experimental Designs. *International Review of Social Psychology*, *31*(1). https://doi.org/10.5334/irsp.181
- Rios, K., Cheng, Z. H., Totton, R. R., & Shariff, A. F. (2015). Negative stereotypes cause Christians to underperform in and disidentify with science. *Social Psychological and Personality Science*, 6(8), 959-967. https://doi.org/10.1177/1948550615598378
- Roebroeck, E., & Guimond, S. (2018). Intergroup threat, social dominance, and the malleability of ideology: The importance of conceptual replication. *European Journal of Social Psychology*, 48(2), 134-149. https://doi.org/10.1002/ejsp.2311
- Roebroeck, L., & Guimond, S. (2016). Pour une psychologie sociale de la laïcité:

 Identification et mesure de deux conceptions distinctes de la laïcité. *L'Année Psychologique*, 1–22.
- Rubin, M., Badea, C., & Jetten, J. (2014). Low status groups show in-group favoritism to compensate for their low status and compete for higher status. *Group Processes* & *Intergroup Relations*, 17(5), 563-576.

https://doi.org/10.1177/1368430213514122

Sablonnière, R., Nugier, A., Kadhim, N., Kleinlogel, E. P., Pelletier-Dumas, M., & Guimond, S. (2020). The impact of national integration policies on prejudice and psychological

well-being: The fundamental role of the clarity and coherence of integration policies. *European Journal of Social Psychology, 50*(3), 614–633. https://doi.org/10.1002/ejsp.2647

- Saleem, M., & Anderson, C. A. (2013). Arabs as terrorists: Effects of stereotypes within violent contexts on attitudes, perceptions, and affect. *Psychology of Violence*, *3*(1), 84. https://doi.org/10.1037/a0030038
- Sherman, D. K., Brookfield, J., & Ortosky, L. (2017). Intergroup conflict and barriers to common ground: A self-affirmation perspective. *Social and Personality Psychology Compass*, *11*(12). https://doi.org/10.1111/spc3.12364
- Steele, C. M. (1988). The Psychology of Self-Affirmation: Sustaining the Integrity of the Self. *Advances in Experimental Social Psychology*, 261–302. https://doi.org/10.1016/s0065-2601(08)60229-4
- Stephan, W. G., Renfro, C. L., Esses, V. M., Stephan, C. W., & Martin, T. A. (2005). The effects of feeling threatened on attitudes toward immigrants. *International Journal of Intercultural Relations*, 29(1), 1–19.

https://doi.org/10.1016/j.ijintrel.2005.04.011

Self-Affirmation and Negative Attitudes Towards Minority Groups: The Role of Ideological Malleability

Registered Report [Stage 1]

Supplementary

	26
Open Science Disclosure	31
Data and Code	31
Data Collection	31
Conditions Reporting	31
Variables Reporting	31
Power Analysis	31
Materials and Scales	32
Original Version (French)	32
Translated Materials and Scales	38
Exclusion Criteria	44
Handling Outliers	45
Comparisons and Deviations	45
Pre-exclusions versus post-exclusions	45
Pre-registration plan versus Final Report	46
Additional Analyses and Results	47
Additional Tables and Figures	47

Open Science Disclosure

Data and Code

Data and code are available at: [link included in Stage 2]

Data Collection

Data collection was completed before analyzing the data.

Conditions Reporting

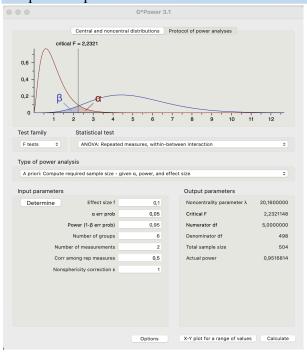
All collected conditions are reported.

Variables Reporting

All variables collected for this study are reported and included in the provided data.

Power Analysis

First, we defined the smallest effect size of interest for the analysis that tests our main hypothesis, that is the interaction effect between self-affirmation and secularism representation. Due to the absence of empirical data concerning our interaction effect, we were unable to identify clear criteria to set our SESOI. We thus decided to set this effect according to Cohen's criteria, corresponding to a small effect size of f = .10. Then we conducted an a-priori power analysis using G*Power 3.1. to estimate the required sample size for a mixed ANOVA with 6 groups, alpha = .05, and power = .95. The required sample to detect an effect size of f = .10 was N = 504. We decided to expand our sample to N = 600 to minimize the risk of overestimating the true population effect size and to account for potential exclusions (Perugini et al., 2018). Afterward, we specified a SESOI for each test in the PCIRR-study design table (page 5). Finally, the sample of 600 participants was used to compute the power to detect each SESOI in the table.



Materials and Scales

We first present the material in its original form (in French) as the research was conducted in French. We also provide a translation in English below. Qualtrics exported files that included all the original materials and stimuli are available at: https://osf.io/63rng/.

Original Version (French)

CONSENTEMENT

Cette étude est menée par plusieurs chercheurs du département de psychologie à l'Université Paris Nanterre.

Objectif de l'étude

Cette étude a pour objectif d'examiner les relations entre les différents groupes qui vivent ensemble dans notre société.

Déroulement de l'étude

Dans cette étude, il vous sera demandé de répondre à un ensemble de questions. Afin d'obtenir une diversité de réponses, nous vous demandons de répondre selon votre propre opinion. La durée de cette étude a été indiquée sur la tâche que vous avez acceptée. Vous aurez un débriefing à la fin du questionnaire.

Risques potentiels

Cette étude ne présente pas de risques connus et a été validée par le Comité d'Éthique de la Recherche de l'université de Nanterre (Numéro éthique : 2022-06-03).

Bénéfices potentiels

Cette étude vise à apporter de nouvelles connaissances dans le domaine de la psychologie sociale. Nous espérons également qu'il s'agira d'une expérience enrichissante pour vous, en vous permettant éventuellement d'en apprendre davantage sur vous-même, vos croyances, vos préférences, votre personnalité, etc.

Compensation

La compensation est offerte via la plateforme en ligne. Le niveau de rémunération a été indiqué sur la tâche que vous avez acceptée.

Participation et retrait

Votre participation est volontaire. Cela signifie que vous pouvez choisir d'arrêter à tout moment sans conséquences négatives. Si à tout moment, vous souhaitez interrompre votre participation, veuillez simplement indiquer huit zéros comme code d'achèvement, et vous recevrez une compensation quand même.

Confidentialité

Vos réponses au questionnaire sont anonymes et strictement confidentielles. Aucun identifiant personnel n'est conservé. Les informations obtenues ne seront utilisées que comme agrégats à des fins de recherche. Une version anonymisée des données, sans informations confidentielles, sera partagée publiquement pour permettre la reproduction et la reproductibilité de nos recherches.

Notice d'information

L'Université Paris Nanterre traite les données recueillies pour le programme de recherche AFFIRMATIF, financé par l'Agence Nationale de la Recherche. Les informations recueillies dans

le questionnaire sont enregistrées dans un fichier informatisé. L'Université Paris Nanterre (200 avenue de la République, 92001 Nanterre), représentée par son président, M. Philippe Gervais-Lambony, est responsable de son traitement. La base légale du traitement est l'exécution d'une mission de service public d'enseignement supérieur prévue à l'article L. 123-3 du code de l'éducation. Les données collectées seront communiquées aux seuls destinataires suivants : enseignant.e.s et chercheur.e.s. impliqués dans le programme AFFIRMATIF. Elles sont conservées en France pendant cinq ans. Vous êtes libre de vous retirer ou de cesser votre participation à ce projet à tout moment. Ce retrait n'aura aucune conséquence. Consultez le site cnil.fr pour plus d'informations sur vos droits. Pour exercer ces droits ou pour toute question sur le traitement de vos données dans ce dispositif, vous pouvez contacter, notre délégué à la protection : dpo@liste.parisnanterre.fr Si vous estimez, après nous avoir contactés, que vos droits « Informatique et Libertés » ne sont pas respectés, vous pouvez adresser une réclamation à la CNIL.

Formulaire de consentement

Ce formulaire est destiné à recueillir votre consentement pour la collecte des données vous concernant, dans le cadre du projet AFFIRMATIF piloté par Constantina Badea, professeure de psychologie sociale à l'Université Paris Nanterre. En signant le formulaire de consentement, vous certifiez :

- Que vous avez 18 ans ou plus et que vous avez lu et compris les renseignements communiqués.
- Qu'on vous a informé que vous étiez libre de retirer votre consentement ou d'arrêter de participer à cette recherche en tout temps, sans préjudice.
- J'ai lu et compris les renseignements fournis dans la notice d'informations et j'accepte de plein gré de participer à cette recherche. Je m'engage également à ne pas divulguer les détails de l'étude à d'autres parties.
- J'accepte que mes réponses aux questions posées soient exploitées par l'équipe du projet.

Lorsque vous êtes prêt.e à commencer, veuillez cliquer sur la flèche pour passer à l'étude.

CHECKS

Cette enquête s'intéresse à votre opinion personnelle. Il vous sera demandé d'indiquer vos pensées et vos sentiments. Vous répondrez tout simplement à des questions pour lesquelles il n'y a pas de bonnes ou de mauvaises réponses. Veuillez répondre le plus spontanément et le plus sincèrement possible.

- D'abord, il vous sera demandé de répondre à des questions socio-démographiques.
- La deuxième partie s'intéresse à la notion de laïcité.
- La troisième partie concerne les valeurs personnelles.
- La dernière partie s'intéresse à vos opinions concernant différents groupes.

Êtes-vous dans un environnement vous permettant de répondre attentivement aux questions qui suivent ?

- Oui
- ■Non

□ Pas sûr.e, probablement pas
AVERTISSEMENT : l'étude comprend des contrôles d'attention et de compréhension.
Avez-vous compris le déroulement de l'étude et êtes-vous d'accord pour participer à une enquête avec des contrôles d'attention et de compréhension ?
Oui Non Pas sûr.e, probablement pas
Cette enquête s'adresse uniquement aux francophones né.e.s et élevé.e.s en France. Êtes-vous de langue maternelle française, né.e, élevé.e et vivant actuellement en France ? Oui Non
□Pas sûr.e, probablement pas
Veuillez préciser quelques informations vous concernant :
Genre: Femme/Homme/Autre/Je ne souhaite pas répondre
Age:
Dans quelle mesure estimez-vous pratiquer une religion ? (de 1 = Pas du tout à 7 = Tout à fait)
Parmis ces religions ou confessions, quelle est celle dont vous vous sentez le plus proche ? Agnostique Athée Bouddhiste Chrétienne Hindouiste Juive Musulmane Autre: Je ne souhaite pas répondre
En ce qui concerne la politique en général, vous considérez-vous comme étant plutôt de gauche, du centre ou de droite ? 1 = Très à gauche 2 3 4 5 6 7 = Très à droite Je ne souhaite pas répondre

REPRÉSENTATION_LAICITE

Nous allons maintenant commencer la première partie de cette étude.

La laïcité est une valeur centrale en France. Nous allons vous présenter deux visions de la laïcité. Parmi ces deux visions, quelle est celle qui correspond le plus à vos convictions personnelles ? Autrement dit, si vous deviez choisir l'une des deux, laquelle choisireriez-vous ?

- Les individus sont libres de pratiquer leur religion en privé et en public. Les citoyens ont le droit de montrer leur appartenance religieuse dans la sphère publique. L'État doit rester totalement neutre vis-à-vis de ces pratiques religieuses.
- Les individus sont libres de pratiquer leur religion en privé, mais pas en public. Les citoyens n'ont pas le droit de montrer leur appartenance religieuse dans la sphère publique. L'État doit réguler ces pratiques religieuses.

Dans quelle mesure êtes-vous d'accord avec l'affirmation suivante. Veuillez indiquer votre opinion personnelle sur une échelle de 1 à 7 (1 = pas du tout d'accord, 7 = tout à fait d'accord)

- Les pratiques et les symboles religieux ne devraient pas être autorisés dans les institutions publiques.

SELF AFFIRMATION

Les participants sont aléatoirement assignés à l'une des trois conditions suivantes (Affirmation de soi sur la valeur liée à la menace vs. Affirmation de soi sur la valeur non liée à la menace vs. contrôle)

Condition 1: Affirmation de soi sur la valeur liée à la menace

Vous avez choisi la vision suivante de la laïcité comme étant la plus proche de vos convictions personnelles : [La vision qui correspond au choix des participants est affichée ci-dessous]

Veuillez expliquer pourquoi cette vision de la laïcité serait une valeur importante pour vous personnellement.

Donnez un exemple où cette valeur a guidé votre comportement (par exemple, dans votre vie quotidienne, dans vos interactions avec autrui...).

Avant de passer à la partie suivante du questionnaire, nous aimerions savoir quelle est l'importance de la laïcité pour vous personnellement.

Veuillez indiquer l'importance de la laïcité pour vous sur une échelle de 1 à 7 (1 = pas du tout importante, 7 = très importante).

Condition 2: Affirmation de soi sur la valeur non liée à la menace

Vous avez choisi la vision suivante de la laïcité comme étant la plus proche de vos convictions personnelles : [La vision qui correspond au choix des participants est affichée ci-dessous]

Nous aimerions maintenant nous concentrer sur un autre aspect lié aux relations sociales dans notre société, à savoir l'humour.

Veuillez expliquer pourquoi l'humour serait une valeur importante pour vous personnellement.

Donnez un exemple où cette valeur a guidé votre comportement (par exemple, dans votre vie quotidienne, dans vos interactions avec autrui...).

Avant de passer à la partie suivante du questionnaire, nous aimerions savoir quelle est l'importance de l'humour pour vous personnellement.

Veuillez indiquer l'importance de <u>l'humour</u> pour vous sur une échelle de 1 à 7 (1 = pas du tout important, 7 = très importante).

Condition 3: Contrôle

Vous avez choisi la vision suivante de la laïcité comme étant la plus proche de vos convictions personnelles : [La vision qui correspond au choix des participants est affichée ci-dessous]

Nous aimerions maintenant nous concentrer sur un autre aspect de la vie, cette fois-ci corporel, à savoir l'endurance physique.

Veuillez expliquer pourquoi l'endurance physique serait une valeur importante pour une autre personne (PAS pour vous personnellement)

Donnez un exemple où cette valeur pourrait guider le comportement de cette personne (par exemple, dans sa vie quotidienne, dans ses interactions avec autrui...).

Avant de passer à la partie suivante du questionnaire, nous aimerions savoir quelle est l'importance de l'endurance physique pour vous personnellement.

Veuillez indiquer l'importance de l'endurance physique pour vous sur une échelle de 1 à 7 (1 = pas du tout importante, 7 = très importante).

MESURE PREJUGE AFFECTIF

Vous allez maintenant compléter la deuxième partie de cette étude.

Nous aimerions connaître vos sentiments à l'égard de plusieurs groupes dans notre société. Merci d'évaluer chaque groupe en positionnant le curseur selon vos propres sentiments envers ces groupes de 0 (sentiments très négatifs) à 100 (sentiments très positifs).

[l'ordre de présentation des groupes est aléatoire]

- Les Musulmans
- Les Chrétiens
- Les Français
- Les Supporters de football
- Les politiciens
- Les végans
- Les dentistes
- Les Hindous
- Les athées
- Les psychologues
- Veuillez placer le curseur sur dix

MESURE PREJUGE COMPORTEMENTAL

Maintenant, nous vous demandons d'imaginer le scénario suivant et de décider comment vous choisireriez d'agir si vous aviez le dernier mot :

Imaginez que vous êtes responsable de l'allocation des subventions à la Mairie de Paris. Pour votre prochaine mission, vous devrez décider comment répartir 500 000 euros entre deux associations d'étudiants à fort impact, présentes dans différentes universités françaises, et qui ont besoin de soutien. Nous allons vous présenter 2 tableaux de répartitions possibles avec 4 associations différentes.

[L'ordre de présentation des matrices est c	contrebalancé]
---	----------------

Veuillez indiquer comment vous auriez l'intention de répartir la somme de 500 K euros entre les deux associations suivantes. Cliquez sur le choix correspondant à la répartition qui vous convient le plus.

Attention : lorsque vous sélectionnez un choix, cela implique que vous êtes d'accord avec la somme accordée AUX DEUX associations, car chaque choix possible implique deux sommes.

Somme à allouer : 500 K euros									
Distributions possibles des ressources									
Choix Choix Choix Choix Choix 1 2 3 4 5					Choix 5	Choix 6	Choix 7		
Étudiants de France	50 K	100 K	200 K	250 K	300 K	400 K	450 K		
L'association des étudiants	450 K	400 K	300 K	250 K	200 K	100 K	50 K		

1		
musulmans I		

Quel est votre choix?

- Choix 1
- Choix 2
- Choix 3
- Choix 4
- Choix 5
- Choix 6
- Choix 7

Veuillez indiquer comment vous auriez l'intention de répartir la somme de 500 K euros entre les deux associations suivantes. Cliquez sur le choix correspondant à la répartition qui vous convient le plus.

Attention : lorsque vous sélectionnez un choix, cela implique que vous êtes d'accord avec la somme accordée AUX DEUX associations, car chaque choix possible implique deux sommes.

Somme à allouer : 500 K euros									
	Distributions possibles des ressources								
Choix Choix Choix Choix Choix Choix Choix 1 2 3 4 5 6 7							Choix 7		
Les étudiants français unis	50 K	100 K	200 K	250 K	300 K	400 K	450 K		
L'association des étudiants chrétiens	450 K	400 K	300 K	250 K	200 K	100 K	50 K		

Quel est votre choix?

- Choix 1
- Choix 2
- Choix 3
- Choix 4
- Choix 5
- Choix 6
- Choix 7

FUNNELING ET DEBRIEFING

Il vous reste quelques questions rapides sur cette page.

Dans quelle mesure avez-vous complété ce questionnaire sérieusement ? (de 1 = Pas du tout to 5 = Tout à fait)

Selon vous, quel était l'objectif de l'étude ? (une phrase)

Aidez-nous à nous améliorer pour les prochaines études! Avez-vous relevé des erreurs? Quelque chose qui manque ou qui ne va pas? Quelque chose auquel nous devrions prêter attention? (brièvement)

Nous vous remercions d'avoir participé à notre recherche. Cette recherche est menée dans le cadre d'un projet de recherche « AFFIRMATIF » financé par l'Agence Nationale de la recherche.

Encore une fois, nous vous assurons que les données recueillies sont strictement confidentielles. Elles seront traitées uniquement dans le cadre de recherches universitaires.

L'objectif de la recherche est d'identifier le rôle joué par les croyances populaires concernant la laïcité française dans l'expression des préjugés et des comportements discriminatoires à l'encontre des minorités religieuses. Nous testons aussi l'effet d'une technique basée sur l'auto-affirmation visant à la diminution des préjugés. Les techniques d'auto-affirmation aident les individus à réfléchir aux valeurs qu'ils considèrent importantes dans leur vie. Des études montrent que cette activité simple peut aider à se sentir mieux envers soi-même et à avoir une estime de soi plus élevée, ce qui amène à manifester moins d'attitudes négatives à l'égard d'autrui.

Nous tenons par ailleurs à vous assurer que les données recueillies au cours de cette expérimentation ne serviront en aucun cas à tenir des propos stigmatisants ou discriminants.

Si vous souhaitez de plus amples informations sur les résultats de cette étude, vous pouvez vous adresser à : affirmatif.parisnanterre@hotmail.com

Vous pouvez également consulter le site du gouvernement dédié à la laïcité afin d'avoir une définition officielle de la laïcité: https://www.gouvernement.fr/laicitegouvfr

Nous vous demandons de ne pas partager les détails de cette étude avec d'autres personnes, car celles-ci pourraient être des participants potentiels et connaître le but de l'étude à l'avance peut influencer les résultats.

CONSENT

This study is conducted by researchers in the psychology department at the University of Paris Nanterre.

Purpose of the study

The aim of this study is to examine the relationships between different groups living together in our society.

Procedure

In this study, you will be asked to answer a series of questions. In order to obtain a diversity of answers, we ask you to respond according to your own opinion. The duration of this study has been indicated on the task you have accepted. You will be debriefed at the end of the questionnaire.

Potential risks

This study presents no known risks and has been validated by the Research Ethics Committee of Paris Nanterre University (Ethical Number: 2022-06-03).

Potential benefits

This study aims to contribute new knowledge to the field of social psychology. We also hope that it will be an enriching experience for you, enabling you to learn more about yourself, your beliefs, your preferences, your personality and so on.

Compensation

Compensation is offered via the online platform. The level of compensation has been indicated on the task you have accepted.

Participation and withdrawal

Your participation is voluntary. This means you can choose to stop at any time without any negative consequences. If at any time you wish to discontinue your participation, simply enter eight zeros as the completion code, and you will receive compensation anyway.

Confidentiality

Your answers to the questionnaire are anonymous and strictly confidential. No personal identifiers are stored. The information obtained will only be used as aggregates for research purposes. An anonymized version of the data, with no confidential information, will be shared publicly to enable reproduction and reproducibility of our research.

Information note

The University of Paris Nanterre processes the data collected for the AFFIRMATIF research program, funded by the National Agency of Research. The information collected using the questionnaire are saved in a computerized file. The University of Paris Nanterre (200 avenue de la République, 92001 Nanterre), represented by its President, Mr. Philippe Gervais-Lambony, is responsible for data processing. The legal basis for the processing is the performance of a public service mission in higher education, as provided for in article L. 123-3 of the French Education Code. The data collected will be communicated only to the following recipients: teachers and researchers involved in the AFFIRMATIF program. It will be kept in France for five years. You are free to withdraw or cease your participation in this project at any time. Such withdrawal will have no consequences. Visit cnil.fr for more information on your rights. To exercise these rights, or if you have any questions about the processing of your data under this scheme, please contact our Data Protection Officer; dpo@liste.parisnanterre.fr. If, after contacting us, you feel that your

"Informatique et Libertés" rights have not been respected, you may submit a complaint to the CNIL.

Consent form

This form is intended to obtain your consent for the collection of data concerning you, as part of the AFFIRMATIF project led by Constantina Badea, Professor of Social Psychology at the University of Paris Nanterre. By signing the consent form, you certify:

- That you are 18 years of age or older and that you have read and understood the information provided.
- That you have been informed that you are free to withdraw your consent or stop participating in this research at any time, without prejudice.
- ☐ I have read and understood the information provided in the information note, and I willingly agree to participate in this research. I also agree not to divulge any details of the study to any other party.
- ☐ I agree that my answers to the questions asked may be used by the project team.

When you're ready to start, click on the arrow to proceed to the study.

CHECKS

This survey is about your personal opinion. You will be asked to indicate your thoughts and feelings. You will simply be answering questions for which there are no right or wrong answers. Please answer as spontaneously and sincerely as possible.

- First, you will be asked to answer some sociodemographic questions.
- The second part deals with the notion of secularism.
- The third part concerns personal values.
- The final part looks at your opinions on different groups.

Are you in a position to answer the following questions carefully?

- Yes
- □No
- Not sure, probably not

WARNING: the study includes attention and comprehension checks.

Have you understood how the study works and do you agree to take part in a survey with attention and comprehension checks?

- □ Yes
- □No
- Not sure, probably not

This survey is only intended for native French speakers born and raised in France. Are you a native French speaker, born, raised and currently living in France?

■ Yes

No Not sure, probably not
Please give us some information about yourself: Gender: Woman/Man/Other/ I don't want to answer
Age:
To what extent would you say you practice a religion? (from 1 = Not at all to 7 = Absolutely)
Which of these religions or beliefs do you feel closest to? Agnostic Atheist Buddhist Christian Hinduist Jewish Muslim Other: I don't want to answer
When it comes to politics in general, do you consider yourself more left-wing, center-wing or right-wing? • 1 = Very left-wing • 2 • 3 • 4 • 5 • 6 • 7 = Very-right wing • I don't want to answer

SECULARISM_REPRESENTATION

We will now begin the first part of this study.

Secularism is a central value in France. We will present two visions of secularism. Which of these two visions best corresponds to your personal convictions? In other words, if you had to choose one of the two, which one would you choose?

- Individuals are free to practice their religion in private and in public. Citizens have the right to show their religious affiliation in the public sphere. The State must remain totally neutral with regard to these religious practices.
- ☐ Individuals are free to practice their religion in private, but not in public. Citizens do not have the right to show their religious affiliation in the public sphere. The State must regulate these religious practices.

To what extent do you agree with the following statement. Please indicate your personal opinion on a scale of 1 to 7 (1 = strongly disagree, 7 = strongly agree).

- Religious practices and symbols should not be allowed in public institutions.

SELF AFFIRMATION

Participants are randomly assigned to one of the three following conditions (self-affirmation on threat-related value vs. self-affirmation on threat-unrelated value vs. control)

Condition 1: Self-affirmation on threat-related value

You have chosen the following vision of secularism as being closest to your personal convictions: [The vision that corresponds to the participant's choice is displayed below]

Please explain why this vision of secularism would be an important value for you personally.

Give an example where this value has guided your behavior (for instance, in your daily life, in your interactions with others...).

Before we move to the next part of the survey, we would like to know how important secularism is to you personally.

Please indicate the importance of secularism to you on a scale from 1 to 7 (1 = not at all important, 7 = very important).

Condition 2: Self-affirmation on threat-unrelated value

You have chosen the following vision of secularism as being closest to your personal convictions: [The vision that corresponds to the participant's choice is displayed below]

Now we would like to focus on another aspect of life, this time social, that is humor.

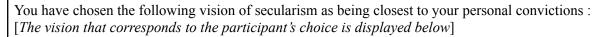
Please explain why humor would be an important value for you personally

Give an example where this value has guided your behavior (for instance, in your daily life, in your interactions with others...).

Before we move to the next part of the survey, we would like to know how important humor is to you personally.

Please indicate the importance of humor to you on a scale from 1 to 7 (1 = not at all important, 7 = very important).

Condition 3: Control



Now we would like to focus on another aspect of life, this time corporal, that is physical endurance.

Please explain why physical endurance would be an important value for another person (NOT for you personally)

Give an example where this value could guide the behavior of this person (for instance, in their daily life, in their interactions with others...).

Before we move to the next part of the survey, we would like to know how important physical endurance is to you personally.

Please indicate the importance of physical endurance to you on a scale from 1 to 7 (1 = not at all important, 7 = very important).

AFFECTIVE PREJUDICE MEASURE

You will now complete the second part of this study.

We'd like to know how you feel about several groups in our society. Please rate each group by positioning the slider according to your own feelings towards these groups, from 0 (very negative feelings) to 100 (very positive feelings).

[The presentation order of groups is randomized]

- Muslims
- Christians
- French people
- Football Supporters
- **Politicians**
- Vegans
- **Dentists**
- Hindus
- Atheists
- **Psychologists**
- Please, put the cursor on ten

BEHAVIORAL PREJUDICE MEASURE

Now we ask you to imagine the following scenario and to decide how you would choose to act if you had the final word:

Imagine you are in charge of grant allocation at Paris City Hall. For your next assignment, you will have to decide how to divide 500,000 euros between two high-impact student associations at different French universities that need support. We are going to show you 2 possible distribution tables with 4 different associations.

[The order in which the matrices are presented is counterbalanced.]

Please indicate how you intend to distribute the sum of 500 K euros between the following two associations. Click on the choice corresponding to the distribution that suits you best.

Please note: when you select a choice, this implies that you agree with the amount granted TO BOTH associations, because each possible choice involves two amounts.

Amount to allocate: 500 K euros								
	Possible distributions							
Choice Choice Choice Choice 5					Choice 6	Choice 7		
Students of France	50 K	100 K	200 K	250 K	300 K	400 K	450 K	
The Muslim students' association	450 K	400 K	300 K	250 K	200 K	100 K	50 K	

What is your choice?

- Choice 1
- Choice 2
- Choice 3
- Choice 4
- Choice 5
- Choice 6
- Choice 7

Please indicate how you intend to distribute the sum of 500 K euros between the following two associations. Click on the choice corresponding to the distribution that suits you best.

Please note: when you select a choice, this implies that you agree with the amount granted TO BOTH associations, because each possible choice involves two amounts.

Amount to allocate : 500 K euros							
Possible distributions							
	Choice 1	Choice 2	Choice 3	Choice 4	Choice 5	Choice 6	Choice 7
French students	50 K	100 K	200 K	250 K	300 K	400 K	450 K

6	Λ
U	v

united							
The Christian students' association	450 K	400 K	300 K	250 K	200 K	100 K	50 K

What is your choice?

- Choice 1
- Choice 2
- Choice 3
- Choice 4
- Choice 5
- Choice 6
- Choice 7

FUNNELING AND DEBRIEFING

There are a few quick questions left on this page and some sociodemographic questions on the next page.

How seriously have you answered this questionnaire? (from 1 = Not at all to 5 = Absolutely)

In your opinion, what was the aim of the study? (one sentence)

Help us improve for future studies!

Have you noticed any errors? Anything missing or wrong? Anything we should pay attention to (briefly)?

Thank you for taking part in our research. This research is being carried out as part of an "AFFIRMATIF" research project funded by the French National Research Agency.

Once again, we assure you that the data collected is strictly confidential. It will only be used for university research purposes.

The aim of the research is to identify the role played by popular beliefs about French secularism in the expression of prejudice and discriminatory behavior against religious minorities. We are also testing the effect of a self-affirmation technique aimed at reducing prejudice. Self-affirmation techniques help individuals reflect on values they consider significant in their life. Studies show

that this simple activity can help people feel better about themselves and have a higher self-esteem, which makes them exhibit fewer negative attitudes towards others.

We would also like to assure you that the data collected during this experiment will in no way be used to make stigmatizing or discriminatory statements.

For further information on the results of this study, please contact: affirmatif.parisnanterre@hotmail.com

You can also consult the government website dedicated to secularism for an official definition of secularism: https://www.gouvernement.fr/laicitegouvfr

We ask you not to share details of this study with others, as they may be potential participants, and knowing the purpose of the study in advance may influence the results.

Affective Prejudice Score Calculation

- Affective prejudice against Muslims = feeling towards French feeling towards Muslims. Higher score means higher relative prejudice towards Muslims
- Affective prejudice against Christians = feeling towards French feeling towards Christians. Higher score means higher relative prejudice towards Christians

Behavioral Prejudice Score Calculation

- Behavioral prejudice against Muslims = money attributed to the French association (Students of France) money attributed to the Muslim association (the Muslim students' association). Higher score means higher de-favouritism towards Muslims
- Behavioral prejudice against Christians = money attributed to the French association (French students united) money attributed to the Christian association (the Christian students' association). Higher score means higher de-favouritism towards Christians

Exclusion Criteria

We will run our analyses on the full sample of all participants who completed the study successfully and answered all questions. Those who dropped out will not be included. We will report exclusions in detail with results for the full sample, and results following exclusions (in either the manuscript or the supplementary).

Participants will be immediately redirected to the end of the study, and will thus not be included in the final sample on the basis of the following criteria: (1) not consenting to take part in the study, (2) indicating that they are not in an environment that allows them to answer the questionnaire seriously (either answering, "no" or "not sure, probably not"), and (3) indicating that they are not French and born in France.

The exclusion criteria applied to participants who completed the study to the end were as follows:

- Participants who self-report not answering the survey seriously (self-report < 4, on a 1-5 scale).
- Participants who failed the attention check items (i.e., indicating another response than 10 to the question asking them to select the response 10).

Handling Outliers

We will conduct analyses on the full sample following exclusions.

Comparisons and Deviations

Pre-exclusions versus post-exclusions

[To complete after data collection if required]

Pre-registration plan versus Final Report

[To complete in Stage 2 if necessary]

Components in your preregistration (e.g., stopping rule, analyses, hypotheses, exclusion rules)	Location of 1) preregistered decision/plan and 2) rational for decision/plan [Location / link]	Were there deviations? What type? [no / minor / major]*	If yes - describe details of deviation(s) [brief description / location /	Rationale for deviation [brief description / location / link]	How might the results be different if you had/had not deviated [brief description / location / link]	Date/tim e of decision for deviation + stage	Any additional notes
Study design							
Measured variables							
Exclusion criteria							
IV							
DV							
Data analysis							

^{*}Categories for deviations: Minor - Change probably did not affect results or interpretations; Major - Change likely affected results or interpretations.

Self-Affirmation and Prejudice Against Religious Groups: The Role of Ideological Malleability - Registered Report [Stage 1]

64

Additional Analyses and Results

[To complete in Stage 2 if necessary]

Additional Tables and Figures

[To complete in Stage 2 if necessary]