Further evidence that system justification amongst the disadvantaged is positively related to superordinate group identification

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ABSTRACT

Members of disadvantaged groups sometimes support societal systems that enable the very inequalities that disadvantaged them. Is it possible to explain this puzzling *system-justifying* orientation in terms of rational group-interested motives, without recourse to a separate system motive? The social identity model of system attitudes (SIMSA) claims that it is. SIMSA proposes that the system justification shown by a disadvantaged group (e.g., African American women) can sometimes support identity needs that are tied to a more inclusive (superordinate) in-group (e.g., Americans). There is already some supportive evidence for this proposition, but it is not yet clear whether: (1) such trends are visible in a wider range of disadvantaged contexts, and (2) this explanation *also* applies to those who are strongly invested in their subgroup (e.g., feminists). In two waves of a large nationally representative survey from 21 to 23 European states ($N_{total} = 84,572$) and two controlled experiments ($N_{total} = 290$ women), we found that: (a) system justification was *positively* associated with superordinate ingroup identification across multiple cases of disadvantage (Studies 1–3), (b) system justification increased when this inclusive identity was made more salient (Studies 2 & 3), and (c) system justification was visible even amongst feminists when they activated their superordinate (Italian) identity (Study 3).

1. Introduction

Why do members of disadvantaged groups support economic, social, and political realities that undercut their group's interests? Jost and Banaji (1994) dubbed this puzzling tendency *system justification,* and they assumed that such ostensibly irrational attitudes have an underlying motive that is independent from self/group-interests. Indeed, Jost (2019, p. 281) recently explained that, "to suggest that system justification on the part of the disadvantaged serves rational self-interest is, at best, incomplete and, at worst, completely misleading."

However, there are at least two problems with the assumption of a separate (irrational) system justification motive that operates independently from group interests amongst the disadvantaged:

a. There is no clear evidence for the operation/existence of a system justification motive that cannot also be explained in terms of self/ group interests (for a discussion, see Owuamalam et al., 2019a-b).
b. Several studies that have examined the existence of the system motive in large-scale nationally representative surveys have produced mixed evidence (e.g., Brandt, 2013; Buchel et al., 2020; Caricati, 2017; Henry & Saul, 2006; Jost et al., 2003; see also Owuamalam et al., 2022), and the results from controlled laboratory studies have yielded more definitive unsupportive evidence (e.g., Owuamalam & Spears, 2020; Owuamalam et al., 2017).

To be clear, there is no doubt that the phenomenon of system justification exists. What is in doubt is the necessity of a system justification motive to explain this phenomenon, especially given that a social identity model of system attitudes (SIMSA; Owuamalam et al., 2018, 2019a, 2019b) provides an alternative and more parsimonious

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explanation in terms of the well-established need for a positive social identity. In the current paper, we focus on one of SIMSA's social identity-based explanations for system justification: the *superordinate ingroup bias* account.

1.1. SIMSA's superordinate ingroup bias explanation

According to the social identity perspective, people categorize themselves at different levels of abstraction, and the identity that is salient in a given context will normally be the one that determines attitudes and behavior (Turner, 1999; Tajfel & Turner, 1979). So, for example, being the only woman at a company party with numerous men from that organization is likely to increase the salience of the woman's gender identity (rather than her identity as member of the said organization), which should then cause her to adopt behaviors and attitudes that support her identity as a woman. Grounded in this basic self-categorization principle (Turner, 1999; see also Tajfel & Turner, 1979), SIMSA's *superordinate ingroup bias* explanation assumes that system justification may occur amongst members of disadvantaged groups because in some situations, the salience of, or identification with, an inclusive "superordinate" ingroup (e.g., one's nationality) overshadows the salience of, or identification with, the disadvantaged subgroup (e.g., women). Consequently, members of a disadvantaged group may express a positive bias (or favoritism) towards their superordinate ingroup, including support for systems that operate within the inclusive ingroup (e.g., the gender system in one's society). This superordinate ingroup bias explanation implies a positive association between superordinate social identification and system justification, and it can help to explain some instances of system-justifying attitudes amongst the disadvantaged without recourse to an independent system motive.

Support for SIMSA's superordinate ingroup bias proposition comes from an experimental study by Jaśko and Kossowska (2013, Study 1), which showed that residents of Krakow (a city in Poland) who believed that their city received less than average funding (i.e., implying disadvantage) justified the financial system more when their superordinate national identity (rather than their subordinate city identity) was made salient (see also Vargas-Salfate et al., 2018; Vargas-Salfate & Ayela, 2020).

One objection to Jaśko and Kossowska's (2013) work is that it considered groups based on residency and religion, with the implication being that this effect might be limited to these groups and their identities. In the present research, we aimed to further test the generalizability of the proposed effects to a wider range of disadvantaged groups.

A further objection to relying on Jaśko and Kossowska's (2013) evidence (and others like it) is that the extent to which superordinate identity-driven system justification is apparent amongst strongly identifying members of the disadvantaged subgroup is not always clear. Although Jaśko and Kossowska (2013, Study 2) separately examined the role of superordinate and subgroup identification on system-justifying orientations of the disadvantaged, they did not establish whether a superordinate identity-driven system justification was present amongst people who identified strongly with their subgroup. This point is important because strong subgroup identifiers have a stronger motive to resist a system that currently disadvantages the subgroup, as decades of research on collective action has shown (e.g., Van Zomeren et al., 2008). Hence, a strong test of SIMSA's superordinate identity-driven system justification would be to show that system justification occurs even amongst people who are strongly invested in the subgroup that is affected by the inequity within the system.

1.2. The present research and summary of predictions

In Study 1, we examined SIMSA's prediction of a positive association between superordinate ingroup identification and system justification using a nationally representative sample of multiple chronically disadvantaged groups across several European nations. Our aim was to test

SIMSA's prediction that the *strength* of superordinate ingroup identification was positively related to system-justifying attitudes amongst the disadvantaged.

In Study 2, we narrowed our test to the specific context of women as a historically disadvantaged group (Eagly, 1987; Eagly & Wood, 1982; Ridgeway & Diekema, 1992; van Breen et al., 2017; Wagner & Berger, 1997). Here, we experimentally manipulated the *salience* of women's superordinate identity (nationality), and then compared the extent to which they justified their national system. Our goal was to test whether we could generate a conceptual replication of previous trends (e.g., Jaśko & Kossowska, 2013) but with a different disadvantaged group by comparing the system justifying attitudes of women when their superordinate identity was made either salient or nonsalient.

Finally, to address the critical issue of whether strong subgroup identifiers also system-justify as a result of superordinate ingroup bias, Study 3 largely replicated the approach that we used in Study 2, in addition to measuring women's feminist identification as a potential moderator. Based on SIMSA, we predicted that system justification would be a positive function of the salience of women's superordinate identity (i.e., nationality), and that this effect would *also* be visible amongst those women for whom a commitment to their gender group's feminist cause is strong.

2. Study 1

2.1. Method

2.1.1. Data

We analyzed datasets from Waves 7 (ESS7, $N = 40,185$) and 8 (ESS8, $N = 44,387$) of the European Social Survey, which collected data from 21 European countries between 2014 and 2015 and 23 European countries between 2016 and 2017. These two datasets monitored the change in public attitudes and values over time (i.e., longitudinally), and they were largely identical in the questions that were posed to participants. Hence, we were able to (a) analyze exactly the same indices of system justification and (b) select subsamples of participants using the same criteria across the datasets. We considered only those participants who were citizens of the survey country, and we selected two subsamples from each dataset to represent members of disadvantaged groups: (a) those who classified themselves within the first decile threshold of the actual household income range in each of the surveyed countries (e.g., ESS8 in Italy $< €9000$) and (b) those who identified themselves as belonging to a discriminated social group in the surveyed country. That is, participants self-identified as belonging to a discriminated social group by answering two questions. Firstly, they were asked if they identified themselves as a member of a group that is discriminated against in their country. Then, those who answered positively were asked to indicate the ground on which their group was discriminated against. Participants could choose between nine categories of discrimination (e.g., color or race, nationality; see Table 1 for additional details concerning the specific groups comprising the Discriminated subsamples). Note that this approach allowed us to capture the subjective aspects of participants' assessments of their own social status.

Table 1
Grounds of discrimination (multiple choice answer).

Based on…	ESS7	ESS8
Color or race	16.3 %	12.4 %
Nationality	19.5 %	18.7 %
Religion	21.1 %	24.4 %
Language	11.3 %	13.3 %
Ethnic group	11.7 %	13.5 %
Age	16.7 %	14.0 %
Gender	13.4 %	16.9 %
Sexuality	7.5 %	5.7 %
Disability	8.7 %	8.5 %

Table 2

Gender (N, %), mean age (SD), and mean years of full-time education (SD) of participants across subsamples.

	ESS7 (2014/2015) country = 21		ESS8 (2016/2017) country = 23	
	Low income (n = 2470)	Discriminated (n = 2544)	Low income (n = 3054)	Discriminated (n = 2823)
Gender (male)	879 (35.6 %)	1200 (47.2 %)	1113 (36.4 %)	1273 (45.1 %)
Age	55.62 (21.12)	45.21 (17.56)	57.20 (19.82)	44.77 (17.06)
Education	10.79 (3.95)	13.51 (3.95)	10.88 (3.82)	13.97 (4.06)

Table 2 provides the demographic details of the four samples (i.e., two types of disadvantaged groups in two waves) after removing the participants that overlapped in the low-income and discriminated categories in the two datasets (overlapping participants: n_{ESS7} = 336 and n_{ESS8} = 413; see Table 3 for country-specific demographic details).

2.1.2. Measures

2.1.2.1. National identification. This was measured with a single item asking participants how close they felt towards their country (ESS7: recoded, 1 = *not close at all*, 4 = *very close*) or how emotionally attached they were to their country (ESS8: 0 = *not at all attached*, 10 = *very attached*).

2.1.2.2. System justification. This was measured in two ways: (a) *Satisfaction with the national system and its institutions:* This index was computed by averaging a set of five items that measured participants' satisfaction with "the present state of the economy in the country," "the way the government is doing its job," "the way the democracy works in the country," "the state of education," and "the health services in the country" (0 = *extremely dissatisfied* to 10 = *extremely satisfied*). The scale items showed high reliability across the four subsamples (ESS7: Cronbach's $\alpha_{low\text{-}income}$ = 0.81, $\alpha_{discriminated}$ = 0.82; ESS8: $\alpha_{low\text{-}income}$ = 0.80, $\alpha_{discriminated}$ = 0.79). (b). *Trust in the national system and its institutions:* This index measured how much participants trusted "the country's parliament," "the legal system," "the police," "the politicians," "the political parties" (0 = *no trust at all* to 10 = *complete trust*). The index showed high reliability across the four samples (ESS7: Cronbach's $\alpha_{low\text{-}income}$ = 0.88, $\alpha_{discriminated}$ = 0.87; ESS8: $\alpha_{low\text{-}income}$ = 0.87, $\alpha_{discriminated}$ = 0.87).

2.2. Results

2.2.1. Analytical approach

A mixed modelling approach that considered the possible effect of country-level on system justification was used. At Level 1, the two indices of system justification were regressed on the national identification and, at Level 2, country was set as a clustering variable with only the random-intercept effect tested, given that no relevant Level 2 predictor was found in the datasets. We added participants' self-reported political orientation (0 = *left*, 10 = *right*) as a control variable.[1] Both national (superordinate) ingroup identification and political orientation were centered within countries. Analysis was performed with the package *lmerTest* (Kuznetsova et al., 2017) in the R-Studio software (vers. 1.1.456; RStudio Team, 2016), using a maximum likelihood estimation. We ran eight different models, testing the effect of the

predictors separately for the two indices of system justification in four subsamples (i.e., 2 waves by 2 disadvantaged groups). For each analysis, only cases with no missing values on the composite scores were considered.

2.2.2. Main analyses

Table 4 summarizes the results of the linear mixed-models. Consistent with SIMSA's superordinate ingroup bias explanation, national identification was positively associated with national system justification amongst low-income and discriminated social groups.[2] This evidence replicates the patterns that have been extensively reported elsewhere in the literature (Jaśko & Kossowska, 2013; Vargas-Salfate et al., 2018; Vargas-Salfate & Ayela, 2020), with the novelty here being its extension to a wider range of chronically disadvantaged groups across several countries than are considered within a single study. It is also interesting to note that the positive association between superordinate identification and system justification was present in the context of objective disadvantage (i.e., based on income) in light of recent caveats that the system motive might be especially visible here (see Li et al., 2020).

3. Study 2

Study 2 aimed to demonstrate that increased salience and strength of a superordinate identity (e.g., one's nationality) can increase justification of a system that is linked to this identity amongst members of a subgroup that is disadvantaged by the system. The study focused on Italy as the superordinate (national) identity and Italian women as the disadvantaged subgroup within this system. Women have a relatively low social status in Italian society compared to men (Caricati, 2007). This gender inequality is evident in the 2018 Global Gender Gap Report (World Economic Forum, 2018). The Report benchmarked 149 countries on their gender parity with regards to (a) economic participation and opportunity, (b) educational attainment, (c) health and survival, and (d) political empowerment. Italy was ranked 70th out of 149 countries overall on these dimensions, and 17th out of 20 European countries. Globally, Italy was ranked 118th out of 149 countries in terms of women's relative economic participation and opportunity and 116th in terms of women's relative health and survival. Hence, women experience a large gender gap relative to men in Italian society (see also Triventi, 2013).

Study 2 experimentally manipulated the salience of women's superordinate (Italian) identity in order to determine its effect on the justification of the Italian national system. Based on SIMSA, we predicted that heightening the salience of the superordinate identity would increase Italian women's system justification because it would cause them to be more attentive to the identity needs that are tied to their superordinate national identity rather than to identity needs that are tied to their gender subgroup. Consequently, Italian women should justify their national system as an expression of ingroup favoring bias (i.e. SIMSA Route # 2, Fig. 1, in Owuamalam et al., 2019a).

3.1. Method[3]

3.1.1. Participants

We used a convenience sampling approach to recruit 129 participants online via a weblink that was distributed to students at a university in Italy. One participant was excluded because they were a non-native Italian. This exclusion ensured that questions about the

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[1] This variable was thought to be relevant for inclusion given the close connection often found between political orientation and system-justifying attitudes. Please note that excluding this variable from the analysis did not change the results in any significant way.

[2] Monte Carlo simulations accessing power (post-hoc) show sufficient levels (i.e., exceeding 80 %) to detect the theorized effects (see Appendix A, Table A1).

[3] All the studies reported here and elsewhere in the paper where conducted pre COVID-19 pandemic.

Table 3

Country-level demographic statistics of Study 1 samples: Gender (N, %), mean age (SD), and mean years of full-time education (SD).

	ESS7						ESS8					
	Low-income			Discriminated			Low-income			Discriminated		
	Gender (male)	Age	Education	Gender (male)	Age	Education	Gender (male)	Age	Education	Gender (male)	Age	Education
Austria	34 (34.0)	57.17 (22.25)	11.30 (4.11)	21 (46.7)	43.82 (13.32)	14.00 (3.93)	32 (31.4)	56.37 (18.17)	11.02 (3.43)	37 (48.1)	43.07 (14.32)	13.34 (3.43)
Belgium	20 (46.5)	53.21 (22.23)	11.65 (3.26)	41 (51.9)	43.09 (19.00)	13.97 (4.00)	20 (51.3)	49.92 (22.09)	11.97 (4.84)	75 (51.4)	43.23 (16.81)	13.88 (3.58)
Switzerland	28 (44.4)	58.06 (18.18)	9.69 (2.54)	17 (37.8)	40.42 (16.82)	12.53 (4.28)	23 (45.1)	57.25 (22.43)	11.02 (3.51)	24 (52.2)	44.09 (14.52)	11.98 (4.15)
Czechia	23 (18.4)	59.87 (11.63)	11.63 (2.32)	71 (57.3)	50.19 (16.74)	12.64 (2.38)	44 (30.8)	60.89 (15.28)	10.41 (2.42)	44 (55.7)	47.33 (16.87)	11.71 (3.29)
Germany	65 (45.5)	49.38 (20.75)	13.71 (3.51)	53 (53.5)	47.15 (15.00)	14.45 (3.62)	77 (50.3)	50.90 (19.61)	12.68 (3.34)	56 (47.5)	42.04 (15.74)	14.95 (3.26)
Denmark	46 (47.4)	51.20 (26.14)	10.32 (4.56)	26 (47.3)	43.76 (14.74)	12.75 (4.67)	–	–	–	–	–	–
Estonia	–	–	–	41 (44.1)	43.74 (18.08)	13.76 (3.23)	49 (33.8)	61.67 (17.88)	10.74 (3.08)	38 (48.1)	44.77 (17.91)	13.86 (3.43)
Spain	60 (43.8)	57.02 (20.91)	7.97 (4.61)	56 (53.3)	42.31 (15.66)	16.38 (5.36)	60 (37.3)	59.55 (18.56)	8.83 (4.39)	56 (39.2)	45.27 (16.18)	15.80 (6.12)
Finland	58 (45.3)	50.02 (25.03)	11.23 (3.82)	68 (50.0)	46.05 (19.53)	13.41 (4.13)	69 (51.1)	48.33 (23.81)	12.21 (4.16)	62 (39.7)	48.08 (17.69)	15.02 (4.27)
France	60 (36.8)	49.20 (21.76)	11.27 (3.95)	83 (44.9)	44.85 (16.96)	13.58 (3.69)	70 (31.4)	53.02 (22.12)	10.82 (3.78)	86 (43.9)	45.11 (15.72)	13.81 (3.75)
United Kingdom	82 (36.1)	57.27 (19.70)	11.57 (2.81)	123 (51.5)	49.81 (16.08)	14.42 (3.90)	80 (42.1)	54.89 (21.14)	11.98 (3.61)	89 (42.6)	47.09 (17.55)	15.08 (4.00)
Hungary	10 (27.8)	52.78 (18.30)	9.69 (3.12)	41 (48.2)	46.26 (17.45)	10.41 (4.14)	35 (25.7)	64.63 (15.82)	9.79 (2.34)	21 (42.0)	42.78 (17.32)	9.92 (3.70)
Ireland	118 (36.5)	55.49 (20.22)	11.87 (3.22)	35 (40.2)	48.15 (17.03)	14.84 (3.92)	118 (46.3)	59.15 (19.00)	12.47 (3.78)	38 (44.2)	45.27 (18.16)	15.61 (3.53)
Israel	23 (25.8)	60.41 (20.52)	9.76 (5.13)	242 (47.5)	39.89 (16.32)	13.23 (3.77)	80 (40.2)	57.72 (19.89)	11.26 (3.99)	268 (49.1)	38.40 (15.08)	13.72 (3.84)
Iceland	–	–	–	–	–	–	19 (51.4)	53.38 (24.43)	12.08 (4.47)	57 (43.5)	52.02 (17.29)	15.13 (4.99)
Italy	–	–	–	–	–	–	34 (42.0)	52.20 (19.70)	9.06 (3.86)	33 (53.2)	44.41 (15.05)	12.28 (3.61)
Lithuania	42 (25.9)	64.93 (14.21)	9.82 (3.57)	73 (37.4)	57.31 (15.99)	12.60 (3.13)	48 (21.7)	66.20 (14.42)	10.74 (3.48)	59 (41.0)	58.36 (16.07)	12.63 (2.38)
Netherlands	28 (32.9)	48.58 (18.65)	12.32 (3.74)	70 (49.6)	47.26 (19.66)	13.25 (3.45)	26 (32.9)	49.38 (17.38)	12.30 (3.95)	46 (41.1)	13.96 (17.50)	14.33 (3.89)
Norway	38 (38.0)	46.37 (25.06)	12.16 (3.41)	27 (43.5)	40.27 (16.14)	15.10 (3.39)	34 (38.2)	49.79 (26.62)	12.06 (3.97)	35 (40.7)	41.37 (15.32)	14.58 (3.61)
Poland	33 (26.0)	57.22 (18.72)	10.26 (3.54)	36 (60.0)	42.63 (17.74)	13.27 (3.34)	46 (40.0)	59.30 (16.29)	9.80 (2.88)	28 (46.7)	48.18 (17.41)	13.39 (3.60)
Portugal	30 (25.9)	62.42 (18.58)	5.32 (3.62)	16 (45.7)	39.40 (15.08)	9.57 (4.90)	33 (31.1)	58.66 (17.18)	6.10 (4.13)	14 (35.0)	47.33 (17.33)	10.30 (4.95)
Russia	–	–	–	–	–	–	56 (25.1)	58.01 (17.27)	11.10 (2.89)	35 (39.8)	43.03 (17.37)	13.57 (2.60)
Sweden	47 (46.5)	53.32 (25.45)	11.59 (3.16)	42 (32.6)	43.61 (17.69)	14.17 (3.73)	31 (37.3)	53.05 (25.78)	11.23 (3.27)	49 (38.6)	49.42 (17.06)	14.41 (3.72)
Slovenia	31 (29.5)	62.90 (16.17)	9.30 (2.46)	18 (50.0)	34.42 (15.08)	12.56 (3.91)	29 (33.0)	61.27 (14.76)	8.95 (2.51)	23 (54.8)	36.05 (13.58)	13.33 (3.43)

justification of the Italian systems and institutions were meaningful. Eight further cases who self-identified as male were excluded to maintain the current focus on women. Following these adjustments, a total of 120 cases were usable ($M_{age} = 23.73$ years, $SD_{age} = 5.06$; seven participants did not indicate their age). A sensitivity power analysis considering 120 participants, alpha = 0.05, beta = 0.80, with a minimum detectable effect size of f = 0.26 yielded an eta-squared of 0.06.

3.1.2. Design and procedure

3.1.2.1. Superordinate identity salience. Participants were randomly assigned to one of two experimental conditions in which their national identity was either salient or nonsalient. This experimental manipulation employed the "three things" procedure (Adarves-Yorno et al., 2006; Haslam et al., 1999): In the salient national identity condition, 59 participants were asked to state three things that: (a) marked them out as Italians; (b) Italians, like themselves, love to do during the day; and (c) Italians, like themselves, dislike doing during the day. In the non-salient

national identity condition, 61 participants were asked to indicate three things that: (a) made them unique individuals; (b) they love to do during the day; and (c) they dislike doing during the day.

3.1.3. Measures

3.1.3.1. National system justification. One limitation to Study 1 was that we measured system justification in terms of satisfaction and trust in government and national institutions. Although this measure has been routinely used to tap system justification across several studies (e.g., Caricati, 2017; Owuamalam et al., 2022; Szabó & Lönnqvist, 2021), skeptics might nonetheless question the extent to which the pattern of result on this measure extends to the more routine measurements of system justification. Hence, we measured national system justification with eight items taken from the general system justification scale (Kay & Jost, 2003). Sample items included: "Most policies by the Italian Government serve the greater good," and "in general, the Italian political system operates as it should." Unexpectedly, the two reverse-scored

Table 4
System justification amongst the discriminated and low-income earners as a function of identification and political orientation.

	ESS7								ESS8							
	Discriminated				Low-income				Discriminated				Low-income			
	Satisfaction n = 2283 k = 21		Trust n = 2282 k = 21		Satisfaction n = 2058 k = 20		Trust n = 2054 k = 20		Satisfaction n = 2546 k = 23		Trust n = 2543 k = 23		Satisfaction n = 2492 k = 23		Trust n = 2491 k = 23	
	b	se	b	se	b	se	b	se	b	se	b	se	b	se	b	se
National identification	0.446	0.048***	0.447	0.054***	0.369	0.055***	0.319	0.064***	0.122	0.013***	0.152	0.015***	0.132	0.015***	0.135	0.017***
Political orientation	0.068	0.014***	−0.009	0.016	0.099	0.016***	0.070	0.019***	0.049	0.013***	−0.043	0.015**	0.126	0.015***	0.103	0.017***
Country-level variance	1.005***		0.902***		1.055***		1.153***		0.637***		0.693***		0.670***		0.713***	

Note. k = number of countries.
** $p < .01$.
*** $p < .001$.

items ("our society is getting worse every year," and "our society needs to be radically restructured") did not fit well with the other items and lowered the overall reliability of the scale to an unacceptable level ($a = 0.57$). This is unusual, given that this scale has been widely used and shown to be sufficient reliability in past research (e.g., Kay & Jost, 2003). We decided to exclude the two unreliable items and then compute the mean of the remaining six items to form a reliable index of national system justification ($a = 0.76$; $1 = $ *definitely disagree*, $7 = $ *definitely agree*).

3.1.3.2. Superordinate (national) identification. Another limitation in Study 1 is that it used a single-item measurement of national identification. Hence, in the current study, we measured the *strength* of people's investment in their national identity using an 8-item scale. Following SIMSA's superordinate ingroup bias explanation, we expected to find a positive relation between this measure and national system justification. Six of the items on this scale were taken from Owuamalam et al. (2016; e.g., "right now, I value being an Italian," and "right now, being an Italian is a positive experience"). One item was adapted from Postmes et al. (2013: "Right now, I identify with my nation"). A final item, from Schubert and Otten (2002), asked participants to indicate the extent to which they felt themselves to be overlapped with their nation right now, using a pictorial approach. We administered this measure after the system justification scales had been completed to avoid contaminating our identity salience manipulation. Responses on the first seven items were provided on a 7-point scale ($1 = $ *definitely disagree*, $7 = $ *definitely agree*; $\alpha = 0.96$), while the pictorial identification had 7-anchors. The 7-item scale was strongly correlated with the pictorial item, $r(118) = 0.58$, $p < .001$, and both were subsequently combined to form a single index of national group identification ($\alpha = 0.95$; see Appendix B for a list of items in all the scales).

3.2. Results

3.2.1. Data preparation

There was a missing value on the pictorial indicator of national identification. This value was imputed using van Buuren and Groothuis-Oudshoorn's (2010) multivariate imputations by chained equations and predictive mean matching (see also Zhang, 2016). Outliers were defined as ±3 median absolute deviation (MAD) from sample medians (Leys et al., 2013). We did not detect any outliers using this approach.

3.2.2. Main analyses

First, we replicated the result from Study 1, showing that superordinate (national) identification was positively associated with women's justification of their Italian national systems, $r(118) = 0.52$, $p < .001$.

Second, and consistent with SIMSA's superordinate ingroup bias explanation, ANOVA[4] results revealed a significant effect of superordinate identity salience on national system justification, $F(1, 118) = 4.53$, $p = .035$, $\eta_p^2 = 0.037$: Support for the Italian national system was stronger amongst women when their national identity was salient rather than non-salient, $\bar{d} = 0.34$, $SE = 0.16$, 95 % CI = [0.024, 0.660].

4. Study 3

One limitation of Study 2 is that it assessed the justification of the Italian *national* system, which may not be perceived to be closely associated with women's disadvantage (see Sengupta et al., 2015). Hence, in Study 3, we assessed women's justification of the Italian *gender* system, which is likely to be perceived to be much more directly related to women's disadvantage.

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[4] Results were identical when we included the two unreliable items that we discarded from our aggregated index of national system justification.

5

A second problem with Study 2 is that it compared the salience of a superordinate identity (nationality) with the non-salience of any group-based identity (i.e., participants thought about themselves as individuals and their personal interests). Hence, Study 2's effects may be due to the salience of a generic group identity per se, rather than the salience of a national identity in particular. To address this issue in Study 3, we compared the salience of a superordinate national identity (Italians) with the salience of a subgroup gender identity (Italian women). This approach (a) ensured that a group identity was salient in each condition, thus ruling out a generic identity explanation and (b) provided a clearer comparison between the salience of superordinate and subordinate identities.

Finally, Study 2 failed to consider individual differences in the applicability of SIMSA's superordinate ingroup bias explanation. In particular, does this explanation apply to feminists who oppose the traditional gender system? In other words, do feminists increase their support for the traditional gender system when a superordinate (national) identity is activated? To address this question, in the current experiment (Study 3), we measured feminist identification and investigated whether it moderated the effect of national identity salience on gender system justification. Note that we focused on feminist identification rather than gender group identification because feminist identification entails opposition to traditional gender roles, whereas gender identification does not (see also Owuamalam et al., 2021). A positive effect of national identity salience on gender system justification amongst women who strongly identified as feminists would provide strong support for SIMSA's superordinate ingroup bias explanation.

4.1. Method

4.1.1. Participants

We recruited 170 Italian women at a university in Italy via convenience sampling using an online link that was distributed to students ($M_{age} = 28.16$; $SD_{age} = 10.97$; see a-priori power analysis in Appendix A, Table A2).

4.1.2. Design and procedure

We largely repeated Study 2's approach to the manipulation of identity salience. However, this time, the nonsalient superordinate identity condition was replaced with a condition in which participants' gender identity was made salient using the "3 things procedure" that we described in Study 2. This approach permitted a more direct test of SIMSA's proposition that system justification occurs due to a shift in focus from (a) identity needs that are tied to the disadvantaged subgroup (gender) identity to (b) identity needs that are tied to a more inclusive "superordinate" national identity. Following SIMSA, we predicted that focusing on the subgroup identity (with the implied disadvantage) would prompt the disadvantaged to resist rather than acquiesce to (or actively support) the status quo. In operational terms, we predicted that women who dwelt on their gender subgroup identity should demonstrate reduced system justification relative to those who were more attentive to their superordinate (national) identity.

4.1.3. Measures

The dependent variables included an 8-item *Italian gender system justification* scale (e.g., "for women, Italy is the best country in the world to live in," "society is set up so that men and women usually get what they deserve," $\alpha = 0.89$; Jost & Kay, 2005, see Appendix B for a full item list). The focus on gender system justification permitted a stringent test of SIMSA's proposition in a context in which rebellion against the status quo could be expected. We also measured the strength of participants' *feminist identification* (after measuring the dependent variable) using 6-items (e.g., "Being a feminist is important to me"; $\alpha = 0.99$, see Appendix B) as a moderator variable, in addition to their *national identification* (as in Study 2; $\alpha = 0.95$). Feminist identification was measured after system justification to prevent subgroup identity from interfering

with the effect of the salience of participants' superordinate (Italian) identity. Responses were obtained on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). We also measured socioeconomic status (via income bands) and treated it as a covariate in our analysis to control for potential contamination of other sources of group disadvantage that might influence women's justification of the gender system (e.g., Owuamalam et al., 2017, Study 2; see also Study 1 above).

4.2. Results

Replicating the findings of Studies 1 and 2, national identification was positively associated with women's justification of the Italian gender system, $r(168) = 0.30$, $p < .001$.

We conducted a moderated regression analysis in which identity salience was specified as the focal predictor (effect coded: 1 = salient superordinate identity; -1 = salient subgroup identity), feminist identification (centered) was entered as the moderator, and socioeconomic status was a covariate.

As expected, feminist identification was negatively associated with the justification of the Italian gender system, $b = -0.11$, $SE = 0.05$, $p = .021$. In addition, the salience of the superordinate (national) identity encouraged Italian women to more strongly support the Italian gender subsystem ($M = 3.12$, $SE = 0.22$) than when their subgroup (gender) identity was salient ($M = 2.74$, $SE = 0.23$), $b = 0.19$, $SE = 0.09$, $p = .028$.

The identity salience by feminist identification interaction effect did not reliably predict women's support for the Italian gender system, $b = 0.01$, $SE = 0.05$, $p = .795$. In other words, the salience of superordinate ingroup identity (vs. subgroup identity) exerted similar positive effects for both weakly identifying feminists ($b = 0.17$) and strongly identifying feminists ($b = 0.22$); see Fig. 1.

5. General discussion

Our aim in the current research was to address two issues regarding SIMSA's superordinate ingroup bias explanation. One issue was whether
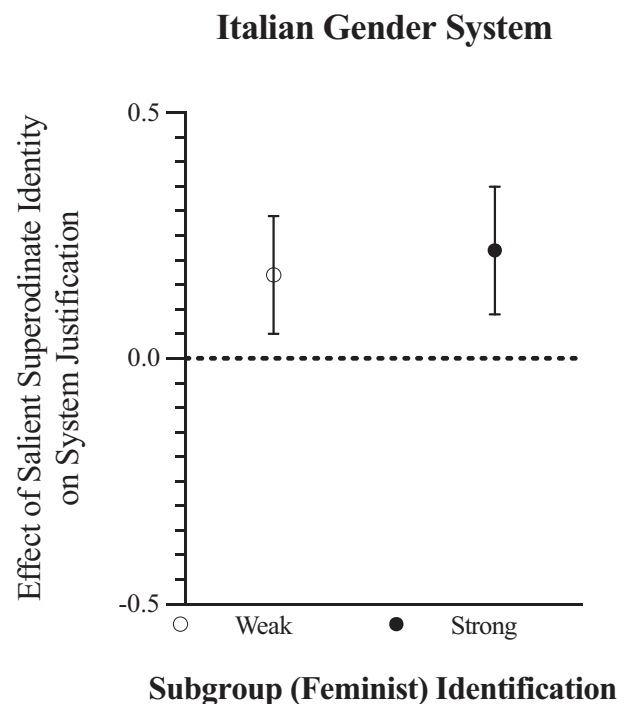

Fig. 1. The positive effect of superordinate identity salience is similar for weak ($M - 1SD$) and strong ($M + 1SD$) subgroup (feminist) identifiers. Error bars are standard errors. y-Axis = b (regression weight).

system justification is connected to social identity needs that are tied to one's superordinate ingroup across a wide range of chronic contexts of group disadvantage. The other issue was whether a superordinate identity bias-driven justification of societal arrangements can also be found amongst those who are strongly invested in a subgroup identity that is disadvantaged within an overarching system in which this disadvantaged identity is submerged.

Consistent with SIMSA's superordinate ingroup bias explanation, Study 1 showed that, amongst a series of chronically discriminated groups from several European nations, superordinate ingroup identification was *positively* associated with system justification.

Study 2 assessed the effect of the *salience* of superordinate identity on women's justification of the Italian national system. Again, consistent with SIMSA's superordinate ingroup bias explanation, women justified their national system to a greater extent when the salience of the superordinate (national) identity was high compared to when it was low. Study 2 also replicated the pattern of results in Study 1, showing that stronger *identification* with the superordinate (Italian) identity (e.g., "right now, I value being an Italian") correlated positively with increased inclination to justify the Italian national system amongst a group of Italian women.

Study 3 largely replicated the previous patterns of results and ruled out several alternative explanations: (a) It showed the positive association between national identification and system justification that we found in Studies 1 and 2, (b) it ruled out a generic identity salience explanation, (c) it demonstrated system justification in relation to a gender system that was closely related to subgroup disadvantage, and (d) it demonstrated the generalizability of the identity-salience effects across a potentially influential individual difference variable (feminist identification).

Taken together, the present evidence suggests that system justification amongst the disadvantaged may serve the rational goal of supporting a positive social identity at the superordinate level. It is important to consider this evidence in the context of other theoretical formulations that argue against the *rationality* of system justification amongst the disadvantaged (e.g. the system justification theory, SJT; Jost & Banaji, 1994). Rooted in false consciousness — the idea that the working class misperceive their disadvantaged situation in a system of production — SJT assumes that the support of disadvantageous systems is *irrational* because it makes little sense for members of a disadvantaged group to support societal arrangements that undercut their self/group interests (e.g., when the working class supports conservative economic ideologies that ultimately entrench their disadvantage; Jost, 2017). It is for this reason that proponents of SJT argue that a separate, independent system motive is needed to explain system justification. However, this system motive predicts a *negative* or null effect of superordinate ingroup identification on system-justifying attitudes of the disadvantaged (Jost et al., 2003, p. 17; Jost & Banaji, 1994, p. 10). In the present studies, we obtained a positive effect, which suggests the influence of group-based (rather than system) motives.

Interestingly, proponents of SJT (e.g., Jost et al., 2011, pp. 319–320) *also* argue in favor of the *rationality* of the disadvantaged when it comes to system-justifying attitudes, stating that:

even if we are correct that system justification is a motivated process, *this does not mean that people who engage in it are either irrational or*

malevolent. Rather, we have suggested that system justification serves a host of normal, typically adaptive epistemic, existential, and relational needs.

However, if system justification serves a host of other personal motives (such as existential needs) and group-based needs (such as the need to relate/affiliate with others), then it seems incorrect to argue that the system motive is independent from personal and group motives. Indeed, as the evidence across the three studies reported here shows, system justification amongst the disadvantaged is better conceived as a *rational* attitude because it occurs in the service of a social identity need that is tied to the disadvantaged's superordinate ingroup.

5.1. Limitations

Although our results are largely supportive of SIMSA's superordinate ingroup bias hypothesis, it is important to be mindful that the current findings were obtained at fixed points in time and may not fully represent the variability that occurs with regards to people's engagement with their nation over time. For example, American women might not embrace a Trump-led US government following the salience of their American identity when that national system targets women's reproductive rights (e.g., via attempts to defund the Planned Parenthood Federation). This scenario is especially likely, one might say, in the face of a strong rejection of a second Trump administration by American women in the 2020 US general elections, with more than half voting against. In short, a test of SIMSA's hypotheses need to take local historical, political, social, and economic factors into account.

6. Conclusion

In sum, the present findings demonstrate that system-justifying attitudes can (and *do*) go hand-in-hand with social identity needs of members of disadvantaged groups and that understanding system justification processes in such groups may require some attention to the identity that is relevant (or salient) at the time that these rationalizations take place. But the present findings are not unique: Indeed, a growing number of studies have reported a positive association between system justification and social identities (Brandt et al., 2020; Caricati et al., 2021, 2022; Vargas-Salfate et al., 2018). The evidence from proponents of SJT corroborate the current findings too and sometimes show a *positive* link between group identities and system justification (e.g., Osborne et al., 2019). Hence, our findings complement and extend these unfolding series of supportive evidence for SIMSA by showing (a) that system-justifying attitude of the disadvantaged is rational, and (b) that SIMSA's propositions can extend to multiple contexts of group disadvantage (Studies 1–3), even when politicized (feminist) identities are the focus (Study 3; see also Owuamalam et al.'s, 2021, Study 3).

Conflict of interest

The authors have no conflict of interest to declare.

Data availability

Data will be made available on request.

Appendix A

Power considerations

Study 1

We estimated, post-hoc, the power of a series of hypothetical effect sizes for the association between superordinate identification and system justification, ranging from a tiny effect (0.05) to more modest ones (i.e., 0.20). That is, for each model, we tested seven simulations, considering effect

sizes ranging from 0.05, to 0.20 and with 1000 runs/replications each time. Simulations were performed using the simr package in R software (Green & MacLeod, 2016) Results are shown in Table A1, and shows that in Study 1 there was sufficient power to detect the effects exceeding 0.20 in the ESS7 dataset, and enough power to detect even smaller effects of 0.05 in the ESS8 dataset.

Table A1
Power simulations for a range of hypothetical effects.

Estimate size	ESS7				ESS8			
	Discriminated		Low-income		Discriminated		Low-income	
	Satisfaction	Trust	Satisfaction	Trust	Satisfaction	Trust	Satisfaction	Trust
0.050	0.165	0.150	0.161	0.126	0.967	0.96	0.915	0.836
0.075	0.333	0.274	0.265	0.234	1.000	1.00	0.999	0.991
0.100	0.521	0.431	0.443	0.342	1.000	1.00	1.000	1.000
0.125	0.754	0.643	0.632	0.508	1.000	1.00	1.000	1.000
0.150	0.881	0.774	0.796	0.666	1.000	1.00	1.000	1.000
0.175	0.966	0.901	0.903	0.760	1.000	1.00	1.000	1.000
0.200	0.991	0.956	0.946	0.889	1.000	1.00	1.000	1.000

Note. We used the 0.20 effect size estimate as maximum cut-off point because it accommodates the adequacy of the other estimates that we reported that are higher than this number (e.g. in Study 1's ESS7, all regression estimates for the key theorized effects exceeded 0.20).

Table A2
Power analysis test for Study 3.

Study	Calculation
3	We conducted a power analysis for our moderated regression considering a small-to-medium sized change in R^2 of (e.g., 0.07) and three predictors (salience, feminism and interaction) plus one covariate (SES). Based on a = 0.05, β = 0.80, this analysis yielded a sample size of 160.

Appendix B

*Full list of variables in Studies 2 and 3: * = reverse-scored items.*
National System Justification Scale – 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*)

1. In general, I find Italian society to be fair.
2. In general, the Italian political system operates as it should.
3. Italy is the best country in the world to live in.
4. Most policies by the Italian Government serve the greater good.
5. Everyone has a fair shot at wealth and happiness.
6. Our society is getting worse every year. *
7. Italian society is set up so that people usually get what they deserve.
8. Our society needs to be radically restructured. *

National Identification Scale – 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*)

1. Right now, I value being an Italian.
2. Right now, being an Italian is important to my sense of who I am.
3. Right now, I am proud to be part of Italians.
4. Right now, being part of Italians is a positive experience.
5. Right now, it is important to me to be an Italian.
6. Right now, I am pleased to be an Italian.
7. Right now, I identify with my nation.

Gender System Justification Scale – 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*)

1. In general, relations between men and women are fair.
2. The division of labor in families generally operate as it should.
3. Gender roles need to be radically restructured. *
4. For women, Italy is the best country in the world to live in.
5. Most policies relating to gender and the sexual division of labor serve the greater good.
6. Everyone (women and men) have a fair shot at wealth and happiness.
7. Sexism in society is getting worse every year. *
8. Society is set up so that men and women usually get what they deserve.

Feminist Identification Scale – 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*)

1. I value being a feminist

2. being a feminist is important to my sense of who I am
3. I am proud to be part of feminists
4. being part of feminists is a positive experience
5. It is important to me to be a feminist
6. I am pleased to be a feminist

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