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Societal Discontent: Explained by Socioeconomic  
Status and Meta-perceptions, Influenced by Intergroup  
Contact?

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### Abstract

The goals of this study were, first, to replicate whether socioeconomic status predicts the experience of societal discontent and whether this can be explained through negative meta-perceptions and relative deprivation. Second, the role of intergroup contact was examined, to see whether the strength of the relation between status, meta-perceptions and societal discontent is influenced by positive contact with groups of a higher SES. Survey data of 415 British participants was collected using Prolific. Results showed that a lower self-perceived SES predicted more societal discontent, whereas one's future or family's SES and objective SES did not play a role. Those with a lower self-perceived SES also experienced more negative meta-perceptions and relative deprivation than those with a higher SES, for objective SES the findings were more nuanced. As expected, the relation between self-perceived SES and societal discontent is mediated by negative meta-perceptions and relative deprivation, and positive contact with groups of a higher SES moderated these relations. Only when people with a lower SES had less positive contact with higher SES groups, their SES more strongly predicted more meta-prejudice, perceived misrecognition and relative deprivation, and thus societal discontent. Contact also moderated the relation between income, meta-prejudice and perceived misrecognition, and discontent. This study partially replicates research about the relation between SES, meta-perceptions and discontent. Intergroup contact was newly introduced, showing that positive contact weakens these relations. Results imply that feeling like one is negatively perceived or looked down upon based on one's lower status negatively impacts perceptions of society, as well as illustrating how this might be reduced. Practical implications are discussed.

*Keywords:* societal discontent, (self-perceived) socioeconomic status, meta-perceptions, relative deprivation, intergroup contact

## **Societal Discontent: Explained by Socioeconomic Status and Meta-perceptions, Influenced by Intergroup Contact?**

Anomie, declinism, ‘malaise’, pessimism, and ‘maatschappelijk onbehagen’, various words that capture the same prevalent issue of citizens who feel dissatisfied with their society. In many Western countries there is an outspoken minority, sometimes majority, that show a general dissatisfaction with society (Van der Bles et al., 2018). Concerns exist about for instance immigration, health care, education and crime. The West is even called the continent of fear or pessimism, due to the pessimism about society among most citizens (Steenvoorden, 2014). A study shows that 62% of Dutch citizens think their country is headed in the wrong direction (Sociaal en Cultureel Planbureau, 2023). However, such pessimism and discontent can differ between societal groups. For instance, it depends on how individuals perceive their own position in society and is influenced by factors like income, work or social networks (Sociaal en Cultureel Planbureau, 2023). In the Netherlands, those with a lower education experience more societal discontent and pessimism about society, and those with a lower income experience more pessimism as well (CBS, 2022). This suggests that groups with a relatively lower socioeconomic status are more likely to experience dissatisfaction with society. In the present study, we try to explain why this might be the case. Specifically, it is explored whether the beliefs of individuals with a lower SES that other groups perceive them negatively, are related to societal discontent. Further, it will be addressed whether contact between groups of a lower SES and a higher SES can counter such negative perceptions.

### **Societal discontent**

A general dissatisfaction with society can be conceptualized as societal discontent. Societal discontent (SD) is “a global negative feeling about society, which can be described as worry, concern and dissatisfaction of a citizen with their society and its supposed decline” (Gootjes et al., 2022, p.5). It is a general negative feeling concerning society at large.

Previously studied constructs such as anomie, declinism, negative Zeitgeist and societal unease, capture this same underlying feeling of societal discontent (Gootjes et al., 2021). It consists of the perception that moral norms have eroded, the feeling that society is moving in the wrong direction, a lack of political trust and a negative opinion of society as a whole.

Societal discontent can potentially have far-reaching effects, as it can guide the way in which individuals interpret events (Gootjes et al., 2022). People experiencing SD are likely to react with extreme negative emotions to societal events and it can predict action intentions for societal issues, such as actions against refugees. SD plays an important role in political behavior, like political extremism, voting and protesting intentions (Gootjes et al., 2021). It influences voting behavior for extreme parties, as a pessimistic view of society motivates individuals to pursue drastic changes in how society is managed (Van der Bles et al., 2018). Additionally, discontent can be actively used by politicians to motivate individuals to join their movements, like during Brexit. Anomie, a construct similar to SD, is related to feelings of meaninglessness, a lack of belonging and self-esteem (Teymoori et al., 2017) and even reduces well-being and life satisfaction (Teymoori et al., 2016). Anomie is also associated with a withdrawal from the larger social context, such as dis-identification. It can create a fragmentation that further worsens the withdrawal of individuals from society. Thus, SD can have adverse effects both on the individual and societal level and it is important to understand what contributes to it.

### **Origins of societal discontent: the role of negative meta-perceptions**

Why do people experience much societal discontent? One reason might be that individuals feel undervalued in society, feel like they are looked down upon by other societal groups or that they get less than they deserve compared to others. If one feels like this, it is likely that they will experience more SD. These feelings and perceptions are called meta-perceptions, or beliefs about what others think of us (Elsaadawy et al., 2022). These also exist

on the group level, when we try to understand how others view our groups, which is especially relevant as group memberships are important for our identity and self-worth (Tajfel & Turner, 2004). On this level, meta-perceptions are an individual's beliefs that their group is viewed negatively by members of other groups (Techakesari et al., 2015). Concerns about how people are viewed by other groups are important, as they have consequences for one's thoughts, feelings and behaviors in daily social interactions (Gordijn et al., 2017). In general, people expect outgroups to evaluate them negatively (Techakesari et al., 2015).

Different types of meta-perceptions exist. Firstly, meta-prejudice is the perception that others view you negatively, based on prejudices of your group (Putra, 2016). Additionally, people consider stereotypes about their group, amongst other things, to try to understand what outgroups think of them, called meta-stereotypes (Frey & Tropp, 2006). Meta-stereotypes are beliefs that someone from group A has about the stereotypes that people from a certain outgroup (group B) typically have about individuals from group A (Lammers et al., 2008). People can also feel like they do not play a meaningful role in society, that others look down upon them and that they feel less valued than other societal groups, called perceived misrecognition (Noord et al., 2021). Lastly, more indirectly related to meta-perceptions, relative deprivation is the perception that one or one's ingroup is somehow at a disadvantage compared to others, which can cause anger, entitlement and resentment (Smith & Pettigrew, 2015). People who experience relative deprivation cognitively appraise that they are at a disadvantage, through comparisons, then perceive this to be unfair and eventually resent such undeserved disadvantages.

These negative meta-perceptions are generally related to multiple negative outcomes. For instance, negative meta-perceptions are associated with decreased well-being, as it is experienced as stressful (Gordijn et al., 2017). Individuals' self-esteem can be lowered depending on what people believe others think of them (Gordijn, 2010). Negative meta-

perceptions can also lead to negative intergroup attitudes, intergroup anxiety and may strain intergroup relations by perpetuating prejudice (Frey & Tropp, 2006). Relative deprivation is predictive of group-directed actions like collective protesting behaviors (Oslon et al., 1995), which likely reflects an underlying SD. In similar vein, negative meta-perceptions might also lead to more societal discontent. One of the goals of this study is to see whether experiencing negative meta-perceptions is related to SD. It is likely that groups that feel misrecognized, looked down upon, negatively perceived or deprived for a long time develop negative views of society and thus experience more SD. In line with this reasoning, a previous study found that negative meta-perceptions are indeed related to more societal discontent (Arzbach, 2023).

### **Socio-economic status as a predictor of negative meta-perceptions and SD**

A different factor that might help to predict who are most likely to experience societal discontent, is socioeconomic status, as earlier research displays a relation between socioeconomic status and societal discontent. For instance, individuals with a lower SES experience more anomie, a perception that society is breaking down (Bornand & Klein, 2022). Lower education level and income are associated with more societal unease, a concern about the precarious state of society (Steenvoorden, 2015). SES is also related to societal discontent specifically, with lower SES individuals experiencing more SD (Arzbach, 2023). A potential reason could be that individuals with lower SES experience the world as a threat to a larger extent because they have a lack of control in different life domains, compared to high SES individuals (Sainz et al., 2020). Thus, those with a lower socioeconomic status likely experience more SD. An important question, now, is why this is the case?

As previously addressed, meta-perceptions likely play a key role in this relationship. Who are most likely to feel looked down upon by other social groups, who feel undervalued, experience that they receive less than others or think that others perceive their group negatively? Quite likely, people with a lower socioeconomic status in society fulfil this role

(e.g., Arzbach, 2023, Korstanje, 2023). Socioeconomic status “encompasses not only income but also educational attainment, occupational prestige, and subjective perceptions of social status and social class. SES encompasses quality-of-life attributes and opportunities afforded to people within society and is a consistent predictor of a vast array of psychological outcomes” (American Psychological Association). Differences in socioeconomic statuses between groups shape psychological processes, such as how people define themselves and interpret the world (Sainz et al., 2020). Therefore, it makes sense that SES also influences the extent to which people use meta-perceptions to understand the world.

When those with less power get into contact with members of a more powerful outgroup who can influence their outcomes, the powerless try to predict possible threats by predicting how outgroup members perceive them, based on social group membership (Lammers et al., 2008). Individuals with a lower SES can be seen as having less control and power, as they have less status and resources compared to people of a relatively higher SES. In this sense, power and SES are connected. Individuals with a lower SES perceive the world as a threat because they have less control, rendering them more susceptible to the influence of others’ perceptions about them (Sainz et al., 2020) and individuals give more weight to the perspectives of higher status groups (Vorauer & Sakamoto, 2008). For those in power, and thus with a higher SES, it is less important to predict threats using meta stereotypes (Lammers et al., 2008). Thus, meta-stereotypes are most likely used by someone in a situation of lower power. It appears that individuals of a lower SES are likely to use meta-perceptions about individuals of a higher SES to understand what they think, whereas individuals with a higher SES are likely to care less about what lower SES people think and hence meta-stereotype less.

Indeed, so far research has been, either directly or indirectly, supportive of this. Individuals with a lower SES perceive more meta-dehumanization, a meta-perception that others don’t attribute humanity to one’s group (Sainz et al., 2020). A negative relation was



also found between subjective SES and relative deprivation: people of a lower SES feel more disadvantaged compared to others (Greitemeyer & Sagioglou, 2016). Individuals of lower SES have more negative meta-stereotypes compared to those with a higher SES (Arzbach, 2023), which has also been replicated by an experimental study (Korstanje, 2023).

Concluding, individuals of a lower SES seem prone to have negative meta-perceptions about the relatively higher SES groups, while the opposite is less likely.

As discussed, it is expected that the experience of negative meta-perceptions and relative deprivation can explain SD, and individuals of lower SES seem more likely to have these perceptions. Thus, it can be argued that negative meta-perceptions serve as a mediator between the relationship of SES and SD, in such a way that individuals of a lower SES experience more negative meta-perceptions, and therefore more SD. This mediating relationship has previously been supported (Arzbach, 2023). Especially for individuals of a lower SES, experiencing negative meta-perceptions could increase SD. If they perceive their group to be unfairly treated and looked down upon by society, they can feel discontent about society. One aim of this study is to replicate whether lower SES indeed predicts more SD and whether this is mediated by negative meta-perceptions. Besides understanding who are most likely to experience SD and why, we aim to understand what processes can potentially alleviate societal discontent, due to its' many negative consequences.

### **Positive contact between groups as a means to reduce discontent**

As SD can be explained by negative meta-perceptions and relative deprivation, it is important to understand how we can reduce such perceptions, especially for individuals with a lower SES. Therefore, we explore a variable not previously studied in relation to this topic, namely (positive) intergroup contact. The perceptions one has of other groups' attitudes towards one's own group can be influenced by the interactions with those respective group members. Thus, the question is whether a lower socioeconomic status always predicts more

negative meta-perceptions, and hence more SD. Positive interactions with an outgroup, people from a different socioeconomic status, could reduce negative meta-perceptions. Contact with an outgroup likely plays an important role, as what we perceive an outgroup thinks of our in-group should be shaped by our interactions with that group (Plant & Butz, 2006). Thus, interactions with an outgroup could reduce negative meta-perceptions. Facilitating positive interactions between societal groups is especially important nowadays, as economic inequality causes a socioeconomic segregation in social networks; a gap develops between “the rich” and “the poor” (Mijs & Roe, 2020). In the US, for instance, “rich and poor Americans are increasingly unlikely to know one another or share the same spaces” and socioeconomic groups have become isolated from each other (Mijs & Roe, 2020, pp. 11).

Lammers et al (2008) explain that when members of different groups get into contact and become more familiar, and the situation changes more towards an interpersonal context, the effect of powerlessness on meta-perceptions could diminish. Intergroup contact enables individuals to get to know an outgroup, giving people with less power the chance to assess the perceptions of the outgroup about them in other ways, rather than solely relying on meta-stereotypical information (Lammers et al., 2008). Especially positive intergroup contact could be an opportunity to realize that one’s negative meta-perceptions are incorrect, possibly leading to an adjustment of them. Intergroup contact theory explains that intergroup contact can reduce intergroup prejudice (Pettigrew & Tropp, 2006), as it reduces anxiety about the contact, increases empathy and perspective taking and increases knowledge about the outgroup (Pettigrew & Tropp, 2008). More specifically, positive intergroup contact can reduce negative meta-perceptions, whereas negative intergroup contact is associated with an increase of negative meta-perceptions (Techakesari, 2015). However, results on this tend to be mixed, as sometimes the effects of positive contact can be overpowered by negative contact (Techakesari, 2015). All the more reason to further examine the role of intergroup contact.

If intergroup contact is indeed related to less negative meta-perceptions, this could also influence societal discontent. When people feel more respected or valued by other societal groups due to contact with members of the other group, they may experience less societal discontent. So, intergroup contact might weaken the relation between SES and meta-perceptions, and thus ultimately societal discontent. It is expected that, as they are more focused on how others perceive them, especially for those with a lower SES intergroup contact matters and could weaken the relationships between status, meta-perceptions and SD.

### **The current study**

The purpose of this study is to build upon previous research of Arzbach (2023) about the relation between socioeconomic status, meta-perceptions and SD. We aimed to replicate these findings in a different country, namely with British, rather than American, participants. That is, the first goal of our study was to test whether in a different setting SES is also associated with SD and whether this is mediated by negative meta-perceptions. Further, we examined the role of intergroup contact. We aimed to test whether this variable plays a moderating role and can thus alleviate the negative effects of SES and meta-perceptions on SD. This model is tested by conducting an online survey study. To maintain a broad perspective of meta-perceptions, we include several forms of meta-perceptions, namely meta-stereotypes, meta-prejudice, perceived misrecognition, as well as examining relative deprivation. To measure intergroup contact, we included both the valence and frequency of contact between groups and will explore both of these.

The following hypotheses have been formulated.

H1: Individuals with lower SES experience more SD than those with a higher SES.

H2a: Individuals with lower SES have more negative meta-perceptions about the other status group than people with a higher SES.

H2b: The relation between SES and SD is mediated by negative meta-perceptions.

H3: Only when low SES groups have relatively low levels of contact with higher SES groups, their lower SES predicts more meta-perceptions and relative deprivation, and thus societal discontent, but not when they have relatively high levels of contact with higher SES groups.

## Method

### Participants and design

A Monte Carlo power analysis was performed to estimate the sample size necessary to test the hypotheses, the website [https://schoemanna.shinyapps.io/mc\\_power\\_med/](https://schoemanna.shinyapps.io/mc_power_med/) was used. The analysis revealed that at least 400 participants are necessary to test the current mediation model twice (moderated mediation) and to obtain a power of .8, assuming moderate correlations ( $r = .30$ ). The mediation model has one mediator. Our goal was to obtain at least 420 participants, keeping in mind possible attrition based on previously determined exclusion criteria. In the current study, we recruited a total of 426 British participants, selected within the online panel of Prolific.co. After removing those that did not give final consent, 415 participants remained. Participants were recruited and completed the survey on 19/04/2023. After respondents completed the questionnaire, they received a monetary compensation of 1,35 pounds as a reward. The research has been pre-registered before starting the data collection: [https://aspredicted.org/1T5\\_V8M](https://aspredicted.org/1T5_V8M). We only collected data of participants who self-identified as a citizen of the United Kingdom and who were at least 18 years old. Besides excluding those that did not give final consent, other exclusion criteria were that participants who failed 2 out of 3 control questions, who completed less than 50% off the survey, who showed response patterns or response bias and/or who completed the survey in under 120 seconds would be removed from the dataset. Using these criteria, no one was removed.

From the total sample, 36.9% was male, 61.9% was female, 0.5% identified as non-binary or third gender and 0.7% did not indicate their gender. The average age was 40.78 years ( $SD = 13.58$ ), ranging from 19 to 77 years. The mean level of education was Higher

National Certificate, Higher National Diploma or Foundation Degree ( $SD = 1.96$ ) and the most frequently occurring education levels were A-levels or equivalent alternatives (19.3%) and undergraduate degrees (36.1%). The mean income of participants was indicated between the categories of “£1000-1500” and “£1500-2000” ( $SD = 1.66$ ), though the most frequently mentioned income category was “£2000-3000”. Most participants indicated that they were currently in paid work (72.8%) and politically the sample was rather left-oriented, as 83.1% fell between extremely left and moderate and the mean was ‘slightly left’ ( $SD = 1.32$ ).

The design of this study was a correlational survey study, thus no manipulation has been executed. The independent variables were self-perceived and objective socioeconomic status and the dependent variable was societal discontent. Mediators included in the design were negative meta-perceptions, consisting of meta-prejudice, meta-stereotypes, perceived misrecognition and relative deprivation. Intergroup contact was included as a moderator.

### **Procedure and independent measures**

Before the data collection process began, the study has been approved by The Ethics Committee of the Faculty of Behavioural and Social Sciences at the University of Groningen (EC-BSS). To collect data, Prolific was used to select a pool of respondents from the UK, aged 18 years or older. Participants signed an informed consent contract before participating in the survey, with this they could agree whether or not to participate and give us permission for using their data. If participants decided not to consent to the study, they were led to the end of the survey and thanked for their time. An option was given to leave a comment on the survey and e-mail addresses were provided should they have any remaining questions or remarks. Respondents participated in the study voluntarily and their data has been treated confidentially throughout and after the research process. After the survey, participants were debriefed about the purposes of the study and were thanked for their valuable participation.

A questionnaire was created using the Qualtrics program. The link to this questionnaire was shared in an advertisement on the Prolific website. The first questions of the survey pertained to demographics. Respondents answered questions about their age, gender, nationality, ethnic background and political orientation. Next, objective socioeconomic status was assessed. To measure *objective SES*, we used three indicators. That is, we asked respondents about their education, income and job or occupation. Participants had to indicate their educational level, choosing from 11 levels, ranging from the lowest (*No formal qualifications*) to the highest level (*Doctoral degree (PhD)*) ( $M = 5, SD = 1.96$ ). 36.2% of participants indicated their highest educational level to be an undergraduate degree (BA/BSC/other), while 19.6% of participants indicated that to be A-levels or equivalent. Next, participants indicated their monthly net level of income, choosing from 7 levels, ranging from the lowest ( $< \pounds 500$ ) to the highest level ( $> \pounds 4000$ ) ( $M = 3.59, SD = 1.66$ ). 24.4% of participants indicated to earn between  $\pounds 2000-3000$ , 23.2% indicated to earn between  $\pounds 1500-2000$ , whereas 15.5% indicated to earn less than  $\pounds 500$ . Lastly, participants indicated what they have been doing for the last month, ranging from (*In paid work (or away temporarily, employee, self-employed, working for family business)*) to (*Other (please specify)*) ( $M = 1.94, SD = 1.82$ ). 72.8% of participants were in paid work, 5.1% in education, 5.5% unemployed, 2.9% permanently sick or disabled, 6.7% retired, 6.5% doing housework and 0.5% other. No reliability measures are listed, as the indicators were used separately to assess objective SES because the correlations between the indicators were low. Occupation was not used as a predictor.

Next, questions were asked about participants' *self-perceived socioeconomic status*. The MacArthur Scale of Subjective Social Status adapted has been used (Goodman et al. 2001). This scale measures how people perceive their socioeconomic status compared to others in the same country, using a ladder as a metaphor for society and the different statuses.

The top of the ladder represented “the people that have the most money, the highest degree of schooling, the best jobs, and the most respect”, the bottom represented “the people who have the least money, little or no education, no jobs or jobs that no one wants and the least respect”. The scale consists of 3 items, measured on a 10-point Likert scale, ranging from 1 (extremely low position on the ladder) to 10 (extremely high position on the ladder). The items were: “What is your position on the ladder?”, “What is the position of your family?” and “What do you expect your position on the ladder will be in 5 years?”. The reliability of the scale is  $\alpha = .85$  ( $M = 5.56$ ,  $SD = 1.37$ ).

After this, the dependent measures were taken. Lastly, the moderator variable, *intergroup contact*, was assessed. Valence and frequency of intergroup contact were measured based on the single-item valenced contact scale by Barlow and colleagues (2012). This scale measures the frequency of negative and positive contact with members from an outgroup. Questions were measured on a 7-point Likert scale (1 = Never, 7 = Extremely frequently). Items were used for both the low socioeconomic status group and the high socioeconomic status group, resulting in 4 items. An example of an item is: “On average, how frequently do you have **positive/good** contact with people from a relatively **lower** socioeconomic background than you?”. To assess intergroup contact for each socioeconomic background, valence scales were created in which the item about negative contact was subtracted from the item about positive contact. This resulted in two valence scales for both contact with individuals of a lower SES ( $M = 1.83$ ,  $SD = 1.88$ ) and with individuals of a higher SES ( $M = 0.74$ ,  $SD = 2.02$ ), indicating the relative frequency of positive intergroup contact. As this scale includes an item about negative and an item about positive contact, they correlate negatively

with each other ( $r = -.14, p = .005$ ;  $r = -.21, p < .001$ ) and a Cronbach's alpha was thus not applicable. Further, three attention checks were included throughout the survey<sup>1</sup>.

## **Dependent measures**

### *Negative meta-perceptions*

To measure the extent to which individuals have negative meta-perceptions about others in society, three scales were used. First, **meta-stereotypes** were assessed using traits based on the Stereotype Content Model by Fiske (e.g., Fiske et al., 2002; Durante et al. 2017). These traits were combined into a scale consisting of three items and was used double to ask respondents about both the opinion of people with a higher socioeconomic background and of people with a lower socioeconomic background. The scale measures how respondents think that certain groups of people will evaluate other groups based on competency, kindness and trustworthiness. The items are measured on a 7-point Likert scale, ranging from 1 (absolutely disagree) to 7 (absolutely agree). All items were recoded in such a way that a higher score on meta-stereotypes means that people expect other groups to evaluate each other with more negative stereotypes, rather than positive ones, to ensure that the direction of this meta-perception scale matches that of the other meta-perceptions. The reliability of the items regarding the meta-stereotypes about people with a higher SES was  $\alpha = .79$  ( $M = 4.26, SD = 1.10$ ), the reliability of the items regarding meta-stereotypes about people with a lower SES was  $\alpha = .88$  ( $M = 4.35, SD = 1.14$ ).

**Perceived misrecognition.** Perceived misrecognition was measured with a scale consisting of three items, based on the European Social Survey round 3 (2006). This scale measures the extent to which you feel fairly treated and respected by others in society. It is measured on a 7-point Likert scale, ranging from 1 (absolutely disagree) to 7 (absolutely

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<sup>1</sup> Finally, an experimental manipulation followed in which participants read a fake news article and answered questions about this subsequently. However, this part of the survey is not relevant for the present research and belongs to a different study.



agree). An example of an item is: “The value of what people like me do, is recognized by society”. The reliability of this scale is  $\alpha = .76$  ( $M = 3.68$ ,  $SD = 1.13$ ). The first two items were recoded, such that a higher score on perceived misrecognition means that people perceive to be more unfairly treated or negatively perceived by others.

**Meta-prejudice** was measured with two self-created items by Gordijn, namely “I think that others in society think negative about people like me” and “I think that others in society think positive about people like me”. These are measured on a 7-point Likert scale. The second item was recoded, such that a higher score on meta-prejudice means that people perceive others to think more negatively about them. The reliability is  $\alpha = .69$  ( $M = 3.77$ ,  $SD = 1.15$ ).

### ***Relative deprivation***

The relative deprivation scale assesses how participants think about people from their own socioeconomic background and whether participants think people from their group are disadvantaged compared to other groups. It is measured with a scale adapted from one by Kuppens et al. (2022) using 4 items, measured on a 7-point Likert scale ranging from 1 (absolutely disagree) to 7 (absolutely agree). An example of an item is: “People like me never get what they really deserve”. The reliability is  $\alpha = .90$  ( $M = 3.77$ ,  $SD = 1.43$ ).

### ***Societal discontent***

Societal discontent is measured using a 4-item scale based on the “Negative emotions about society” scale of Gootjes et al. (2021). It is measured on a 7-point Likert scale, ranging from 1 (totally disagree) to 7 (totally agree). Examples of items are: “I am frustrated because society is not as it should be” and “I feel concerned when I think about the future of society”. The reliability of the scale is  $\alpha = .91$  ( $M = 5.52$ ,  $SD = 1.08$ ).

## **Results**

## Testing the hypotheses<sup>2</sup>

### *Testing hypothesis 1*

To test whether individuals with a lower socio-economic status experience more societal discontent than individuals with a higher status, linear regression analyses have been conducted. First, self-perceived socio-economic status was added to the model to predict societal discontent. This model had a proportion of explained variance of 0.6% and was non-significant ( $\text{Adj } R^2 = .01$ ,  $F(1, 413) = 3.35$ ,  $p = .068$ ). There was no significant main effect of self-perceived SES on societal discontent ( $b = -0.09$ ,  $t = -1.83$ ,  $p = .068$ ). Thus unexpectedly, having a lower socioeconomic status does not mean one experiences more societal discontent. However, another linear regression reveals that the first item of this scale does significantly predict societal discontent. This item asks participants where they place themselves on an imaginary social ladder, instead of also including where participants place family and their future self, like in the complete scale. This model had a proportion of explained variance of 0.9% and was significant ( $\text{Adj } R^2 = .01$ ,  $F(1, 413) = 4.94$ ,  $p = .027$ ). There is a negative effect of where people place themselves on the social ladder on societal discontent; a lower position on the ladder predicts more societal discontent ( $b = -0.11$ ,  $t = -2.22$ ,  $SE = .05$ ,  $p = .027$ ).

To see whether objective socioeconomic status predicts societal discontent, two objective indicators of socioeconomic status, education and income, have been included in linear regression analyses. Neither of these significantly predicted societal discontent (education:  $\text{Adj } R^2 = -.00$ ,  $F(1, 413) = 0.07$ ,  $b = 0.01$ ,  $t = 0.27$ ,  $p = .788$ , income:  $\text{Adj } R^2 = -.00$ ,  $F(1, 413) = 0.06$ ,  $b = -.04$ ,  $t = -0.78$ ,  $p = .439$ ).

To conclude, some indicators of self-perceived socio-economic status seem to predict societal discontent, but objective indicators of socio-economic status do not. The first

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<sup>2</sup> Before testing the hypotheses, preliminary analyses were conducted. The resulting correlations between the main variables can be found in table A1 in the appendix. Means and standard deviations are found in the methods.

hypothesis is therefore only partially supported, as the first item for self-perceived SES, which might be considered the most important item, negatively predicts discontent.

### ***Testing hypothesis 2***

To test whether individuals with a lower socio-economic status experience more negative meta-perceptions and relative deprivation, several linear regression models have been tested for different meta-perceptions and relative deprivation, with self-perceived socio-economic status as the predictor. Each of these was significant, see table 1. Self-perceived socio-economic status negatively predicts negative perceived stereotypes about low and high SES, meta-prejudice, perceived misrecognition and relative deprivation. This suggests that a lower self-perceived SES predicts more negative perceived stereotypes about low SES and high SES groups, meta-prejudice, perceived misrecognition and relative deprivation.

**Table 1.**

*Regression analyses of self-perceived SES predicting different variables*

<b>Dependent variable</b>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Adj. R <sup>2</sup>	Model F	<i>p</i>
Stereotypes about lower SES	-0.25	.05	-5.30	< .001	.06	28.07	< .001
Stereotypes about higher SES	-0.17	.05	-3.46	< .001	.03	12.00	< .001
Meta-prejudice	-0.43	.05	-9.53	< .001	.18	90.79	< .001
Perceived misrecognition	-0.56	.05	-13.84	< .001	.32	191.54	< .001
Relative deprivation	-0.40	.06	-8.73	< .001	.15	76.18	< .001

*Note.* Every regression contains self-perceived socioeconomic status as a predictor

This suggests, in line with hypothesis 2, that a lower self-perceived socio-economic status predicts more negative perceived stereotypes about low and high SES groups, meta-

prejudice, perceived misrecognition and relative deprivation. With regards to meta-stereotypes, this means that lower SES groups have relatively more negative perceived stereotypes; they expect people to have more negative stereotypes about groups of both lower and higher SES. In contrast, higher SES groups have less negative perceived stereotypes and thus expect others to have less negative or more positive stereotypes about groups of both lower and higher SES, and thus expect low and high SES groups to think more favourably, in terms of kindness, competence and trustworthiness, about the other SES group.

Next, it was also tested whether objective indicators of SES predict negative meta-perceptions and relative deprivation. First, education was added as a predictor (see table 2). Education negatively predicts meta-prejudice, perceived misrecognition and relative deprivation. deprivation.

**Table 2.**

*Regression analyses of education predicting different variables*

<b>Dependent variable</b>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Adj. R <sup>2</sup>	Model F	<i>p</i>
Stereotypes about lower SES	-0.01	.06	-.23	.817	-.00	.05	.817
Stereotypes about higher SES	0.04	.05	.75	.456	-.00	.56	.456
Meta-prejudice	-0.14	.06	-2.89	.004	.02	8.37	.004
Perceived misrecognition	-0.17	.06	-3.49	< .001	.03	12.18	< .001
Relative deprivation	-0.14	.07	-2.83	.005	.02	8.02	.005

So, a lower education predicts more meta-prejudice, perceived misrecognition and relative deprivation. This suggests that those with a relatively lower education level tend to feel more misrecognized, negatively perceived by other groups and like they get less than they

deserve. Individuals with a higher education tend to feel less like this. Education does not significantly predict perceived stereotypes about groups with a lower SES and a higher SES, thus having a lower education does not necessarily mean that one expects socioeconomic groups to be more negatively stereotyped.

Secondly, income negatively predicts meta-prejudice and perceived misrecognition and marginally predicts negative perceived stereotypes about low SES groups (see table 3).

**Table 3.**

*Regression analyses of income predicting different variables*

<b>Dependent variable</b>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Adj. R <sup>2</sup>	Model F	<i>p</i>
Stereotypes about lower SES	-0.09	.06	-1.87	.063	.01	3.49	.063
Stereotypes about higher SES	-0.04	.05	-0.78	.435	-.00	0.61	.435
Meta-prejudice	-0.27	.06	-5.59	< .001	.07	31.20	< .001
Perceived misrecognition	-0.33	.05	-7.04	< .001	.11	49.61	< .001
Relative deprivation	-0.06	.07	-1.23	.218	.00	1.52	.218

So, a lower income predicts more meta-prejudice and perceived misrecognition, and to some extent, negative perceived stereotypes about low SES groups. Those with a relatively lower education tend to feel more misrecognized, negatively perceived by other groups and, to some extent, expect those with a higher SES to negatively stereotype those with a lower SES. Thus, there is also some indication that objective indicators of SES predict negative meta-perceptions and relative deprivation.

Concluding, as expected, there is support for the notion that individuals with a lower SES have more negative meta-perceptions and more relative deprivation than those with a

higher SES. For self-perceived socioeconomic status there was full support for this and for objective socioeconomic status there was partial support. Hypothesis 2 can be supported.

### ***Testing hypothesis 3 for self-perceived SES***

To test whether the relation between socioeconomic status and societal discontent is mediated by negative meta-perceptions and relative deprivation, PROCESS analyses have been conducted using model 4 by Hayes (2017). First, to investigate whether the relation between *self-perceived* socioeconomic status and societal discontent is mediated by *meta-stereotypes*, we included perceived stereotypes about higher and lower SES as parallel mediators in the mediation analysis. The overall model was significant ( $R^2 = .04$ ,  $F(3, 411) = 5.73$ ,  $p < .001$ ). Self-perceived SES negatively predicts perceived stereotypes about low and high SES, respectively ( $b = -.21$ ,  $t = -5.30$ ,  $p < .001$ ;  $b = -.13$ ,  $t = -3.46$ ,  $p < .001$ ). Perceived stereotypes about low SES subsequently positively predict societal discontent ( $b = .16$ ,  $t = 2.82$ ,  $p = .005$ ), but perceived stereotypes about high SES do not ( $b = .03$ ,  $t = 0.51$ ,  $p = .61$ ). The indirect effect of self-perceived SES on discontent through perceived stereotypes about individuals of lower SES was found to be significant [Effect =  $-.03$ , 95% C.I. ( $-.07$ ,  $-.01$ )]. However, the indirect effect of self-perceived SES on discontent through perceived stereotypes about individuals of higher SES was not significant [Effect =  $-.00$ , 95% C.I. ( $-.02$ ,  $.01$ )]. So, a lower self-perceived SES predicts more discontent through perceived stereotypes about individuals of lower SES, but not through stereotypes about individuals of higher SES. In other words, the lower one's self-perceived SES, the more one expects that low SES groups are negatively stereotyped (by those of a higher SES), which then predicts more discontent.

We then examined whether the relation between self-perceived SES and discontent was mediated by negative *meta-prejudice*. The overall model was significant ( $R^2 = .06$ ,  $F(2, 412) = 12.20$ ,  $p < .001$ ). Self-perceived SES negatively predicts meta-prejudice ( $b = -0.36$ ,  $t = -9.53$ ,  $p < .001$ ) and meta-prejudice positively predicts societal discontent ( $b = 0.23$ ,  $t = 4.57$ ,

$p < .001$ ). The indirect effect of self-perceived socio-economic status on societal discontent through *meta-prejudice* was also significant [Effect =  $-.08$ , 95% C.I. ( $-.12, -.05$ )]. Hence, a lower self-perceived SES predicts more discontent through negative meta-prejudice. The lower one's self-perceived SES, the more one perceives to be negatively prejudiced by others, which then predicts more discontent.

Next, we examined whether the relation between self-perceived SES and discontent was mediated by *perceived misrecognition*. The overall model was significant ( $R^2 = .04$ ,  $F(2, 412) = 7.84$ ,  $p < .001$ ). Self-perceived SES negatively predicts misrecognition ( $b = -0.46$ ,  $t = -13.84$ ,  $p < .001$ ) and misrecognition positively predicts societal discontent ( $b = 0.20$ ,  $t = 3.50$ ,  $p < .001$ ). The indirect effect of self-perceived SES on societal discontent through *perceived misrecognition* was also significant [Effect =  $-.09$ , 95% C.I. ( $-.15, -.04$ )]. Hence, a lower self-perceived SES predicts more discontent through perceived misrecognition. In other words, the lower one's self-perceived SES, the more one feels misrecognized or looked down upon, which then predicts more discontent.

Lastly, we examined whether the relation between self-perceived SES and discontent was mediated by *relative deprivation*. The overall model was significant ( $R^2 = .13$ ,  $F(2, 412) = 30.67$ ,  $p < .001$ ). Self-perceived SES negatively predicts relative deprivation ( $b = -0.41$ ,  $t = -8.73$ ,  $p < .001$ ) and relative deprivation positively predicts societal discontent ( $b = 0.29$ ,  $t = 7.59$ ,  $p < .001$ ). The indirect effect of self-perceived SES on societal discontent through *relative deprivation* was also significant [Effect =  $-.12$ , 95% C.I. ( $-.16, -.08$ )]. A lower self-perceived SES thus predicts more discontent through relative deprivation. The lower one's self-perceived SES, the more one feels like they receive less than others or than they deserve, which predicts more discontent.

Concluding, *self-perceived* socioeconomic status has an indirect negative effect on societal discontent through different negative meta-perceptions and feelings of relative

deprivation, supporting hypothesis 3.

### ***Testing hypothesis 3 for objective SES***

To test whether this indirect relation also exists for *objective* indicators of socioeconomic status, education and income, PROCESS analyses were performed using income and education as predictors, societal discontent as the dependent variable and meta-perceptions and relative deprivation as mediators. We first examined the relation between *education* and societal discontent through *meta-prejudice*. The overall model was significant ( $R^2 = .06$ ,  $F(2, 411) = 12.71$ ,  $p < .001$ ). Education negatively predicts meta-prejudice ( $b = -0.08$ ,  $t = -2.89$ ,  $p = .004$ ), and meta-prejudice positively predicts societal discontent ( $b = 0.23$ ,  $t = 5.03$ ,  $p < .001$ ). The indirect effect of education on discontent through meta-prejudice was found to be significant [Effect =  $-0.02$ , 95% C.I. ( $-0.03$ ,  $-0.01$ )]. Next, we examined the relation between *income* and discontent through *meta-prejudice*. The overall model was significant ( $R^2 = .06$ ,  $F(2, 411) = 12.19$ ,  $p < .001$ ). Income negatively predicts meta-prejudice ( $b = -0.18$ ,  $t = -5.59$ ,  $p < .001$ ), and meta-prejudice positively predicts societal discontent ( $b = 0.23$ ,  $t = 4.87$ ,  $p < .001$ ). The indirect effect of income on discontent through income was found to be significant [Effect =  $-0.04$ , 95% C.I. ( $-0.07$ ,  $-0.02$ )]. In other words, the lower one's education or income, the more one expects to be negatively prejudiced by others, which then predicts more discontent.

Next, we examined the relation between *education* and discontent through *perceived misrecognition*. The overall model was significant ( $R^2 = .04$ ,  $F(2, 411) = 8.26$ ,  $p < .001$ ). Education negatively predicts misrecognition ( $b = -0.10$ ,  $t = -3.49$ ,  $p < .001$ ) and misrecognition positively predicts societal discontent ( $b = 0.19$ ,  $t = 4.06$ ,  $p < .001$ ). The indirect effect through perceived misrecognition was found to be significant [Effect =  $-0.02$ , 95% C.I. ( $-0.03$ ,  $-0.01$ )]. Then we examined the relation between *income* and discontent through *perceived misrecognition*. The overall model was significant ( $R^2 = .04$ ,  $F(2, 411) = 7.78$ ,  $p <$



.001). Income negatively predicts misrecognition ( $b = -0.22, t = -7.04, p < .001$ ), and misrecognition positively predicts societal discontent ( $b = 0.19, t = 3.87, p < .001$ ). The indirect effect on discontent through perceived misrecognition was significant [Effect =  $-.04$ , 95% C.I. ( $-.07, -.02$ )]. This means that the lower one's education or income, the more one feels misrecognized or looked down upon, which then predicts more discontent.

We examined the relation between *education* and discontent through *relative deprivation*. The overall model was significant ( $R^2 = .13, F(2, 411) = 30.88, p < .001$ ). Education negatively predicts relative deprivation ( $b = -0.10, t = -2.83, p = .005$ ) and relative deprivation positively predicts societal discontent ( $b = 0.28, t = 7.85, p < .001$ ). The indirect effect through relative deprivation was significant [Effect =  $-.03$ , 95% C.I. ( $-.05, -.01$ )]. So, the lower one's education, the more one feels like they receive less than others or than they deserve, which then predicts more discontent. The indirect effect of *income* on societal discontent through *relative deprivation* was not significant [Effect =  $-.01$ , 95% C.I. ( $-.04, .01$ )].

We then examined the relation between *education* and discontent through *meta-stereotypes* and the relation between *income* and discontent through *meta-stereotypes*. The indirect effect of education on discontent through perceived stereotypes was not significant (perceived stereotypes about low SES: Effect =  $-.00$ , 95% C.I. [ $-.01, .01$ ], perceived stereotypes about high SES: Effect =  $.00$ , 95% C.I. [ $-.00, .01$ ]). Neither was the indirect effect of income on discontent through perceived stereotypes (perceived stereotypes about low SES: Effect =  $-.01$ , 95% C.I. [ $-.03, .00$ ], perceived stereotypes about high SES: Effect =  $.00$ , 95% C.I. [ $-.01, .01$ ]). This means that the relationship between education or income and societal discontent cannot be explained by perceived negative stereotypes about low or high SES groups.

In summary, *education* has an indirect negative effect on societal discontent through

meta-prejudice, perceived misrecognition and relative deprivation. *Income* has an indirect negative effect on societal discontent through meta-prejudice and perceived misrecognition, but not through relative deprivation. Neither has an indirect effect on discontent through perceived stereotypes about low and high SES groups. Thus, the relation between objective indicators of socioeconomic status and societal discontent is mediated by negative meta-perceptions and feelings of relative deprivation in certain cases. Overall, this means that hypothesis 3 is mostly supported, especially regarding self-perceived socioeconomic status.

#### ***Testing hypothesis 4***

To test whether socioeconomic status only has a negative effect on societal discontent, through meta-perceptions and relative deprivation, when lower SES groups have relatively low levels of contact with higher SES, Hayes' PROCESS model 7 (2018) was used to test several moderated mediation models.

**Testing hypothesis 4 for self-perceived SES and frequency of positive contact with higher SES.** We first tested whether the effect of *self-perceived* socioeconomic status on meta-perceptions and relative deprivation, and ultimately societal discontent, is moderated by the frequency of positive contact with individuals of a *higher* SES. This is tested for perceived negative stereotypes about low SES versus high SES, meta-prejudice, perceived misrecognition and relative deprivation in four different moderated mediation models

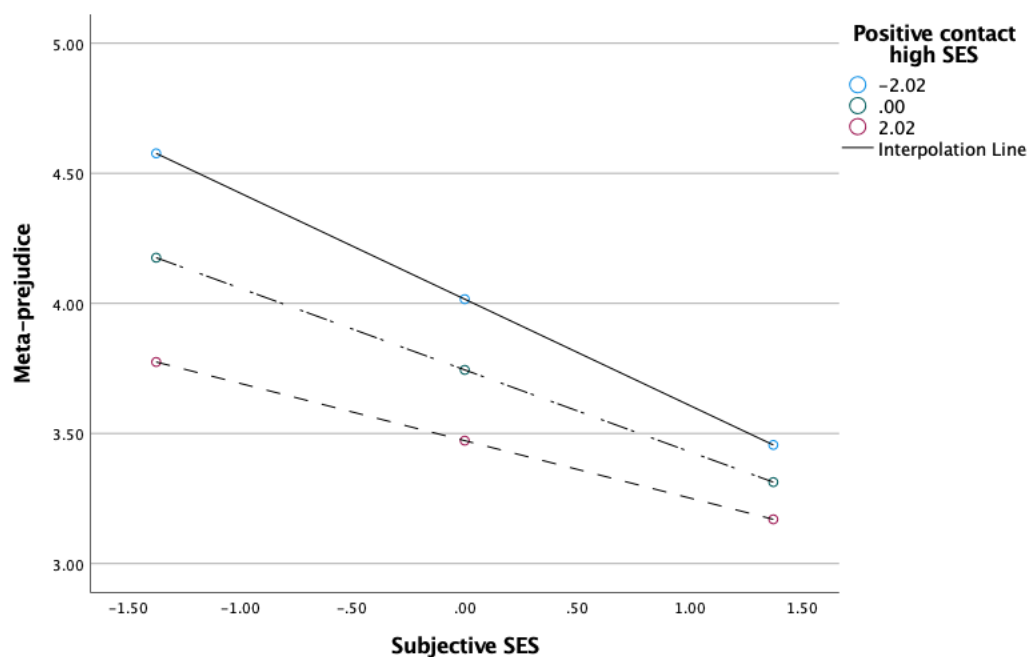
In the model with the mediator *meta-stereotypes* about people of a *low* SES and *high* SES. The interaction between self-perceived SES and positive contact with high SES people on perceived negative stereotypes about *low* SES was not significant ( $b = -0.01$ ,  $t = -0.58$ ,  $p = .565$ ). The interaction between self-perceived SES and positive contact with higher SES people on perceived negative stereotypes about *high* SES was not significant ( $b = 0.01$ ,  $t = 0.35$ ,  $p = .723$ ). Overall, the index of moderated mediation was non-significant;  $b = -0.00$ , 95% C.I. [-.01, .01]. Thus, the moderated effect of positive contact with high SES and self-

perceived socioeconomic status on societal discontent was not mediated by perceived negative stereotypes.

In the model with the mediator *meta-prejudice*, we first found a significant interaction between self-perceived SES and positive contact with higher SES people on meta-prejudice ( $b = 0.05, t = 2.80, p = .005$ ). The effect of self-perceived SES on meta-prejudice was strongest for lower levels (-1 SD) of positive contact with higher SES individuals,  $b = -.41, 95\% \text{ C.I. } [-.50, -.31]$ , and was weakest for higher levels (+1 SD) of positive contact with higher SES individuals,  $b = -.22, 95\% \text{ C.I. } [-.32, -.12]$ . As can be seen in Figure 1, when people perceive they have a lower socioeconomic status, their level of meta-prejudice is higher, but as expected this seems to be especially true for people who have little positive contact with higher SES groups.

### Figure 1

*The effect of self-perceived SES on meta-prejudice for different levels of positive contact with individuals of high SES*



Further, the index of moderation mediation was significant;  $b = 0.01, 95\% \text{ C.I. } [.00,$

.02]. Thus, the mediated effect of self-perceived SES on societal discontent through meta-prejudice is moderated by positive contact with individuals of a higher SES. The conditional indirect effect was strongest for lower levels (-1 SD) of positive contact,  $b = -0.09$ , 95% C.I. [-.14, -.05] and was the weakest, but still significant, for higher levels (+ 1 SD) of positive contact,  $b = -0.05$ , 95% C.I. [-.08, -.02].

In the model with the mediator *perceived misrecognition*<sup>3</sup>, we first found a significant interaction between self-perceived SES and positive contact with higher SES people on perceived misrecognition ( $b = 0.05$ ,  $t = 3.13$ ,  $p = .002$ ). The effect of self-perceived SES on perceived misrecognition was strongest for lower levels (-1 SD) of positive contact with higher SES individuals,  $b = -.52$ , 95% C.I. [-.61, -.44], and was weakest for higher levels (+1 SD) of positive contact with higher SES individuals,  $b = -.33$ , 95% C.I. [-.43, -.24]. As can be seen in Figure A1 in the appendix, when people perceive they have a lower SES, their level of perceived misrecognition is higher, but as expected this seems to be especially true for people who have little positive contact with higher SES people. Further, the index of the moderated mediation was significant,  $b = 0.01$ , 95% C.I. [.00, .02]. Thus, the mediated effect of self-perceived SES on societal discontent through perceived misrecognition is moderated by positive contact with individuals of a higher SES. The conditional indirect effect for higher levels (+ 1 SD) of positive contact was weakest but still significant,  $b = -0.07$ , 95% C.I. [-.11, -.03], and strongest for lower levels (- 1 SD) of positive contact,  $b = -0.10$ , 95% C.I. [-.17, -.04].

In the model with the mediator *relative deprivation*, we found a significant interaction between self-perceived SES and positive contact with higher SES people on relative deprivation ( $b = 0.06$ ,  $t = 2.94$ ,  $p = .003$ ). The effect of self-perceived SES on relative

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<sup>3</sup> For all subsequent moderated mediation models, namely those with perceived misrecognition, relative deprivation, income and education as mediators, the figures depicting the moderation effects can be found in appendix A.

deprivation was strongest for lower levels (-1 SD) of positive contact with higher SES individuals,  $b = -.49$ , 95% C.I. [-.61, -.37], and was weakest for higher levels (+1 SD) of positive contact with higher SES individuals,  $b = -.24$ ,  $p < .001$ , 95% C.I. [-.37, -.11]. As can be seen in Figure A2 in the appendix, when people perceive they have a lower SES their level of relative deprivation is higher, but as expected this is especially true for people who have little positive contact with higher SES people. The index of the moderated mediation was significant,  $b = 0.02$ , 95% C.I. [.01, .03]. Thus, the mediated effect of self-perceived SES on societal discontent through relative deprivation is moderated by positive contact with individuals of a higher SES. The conditional indirect effect for higher levels (+ 1 SD) of positive contact was weakest but still significant,  $b = -0.07$ , 95% C.I. [-.12, -.03], and strongest for lower levels (- 1 SD) of positive contact,  $b = -0.14$ , 95% C.I. [-.19, -.10].

To summarize, the effect of self-perceived socioeconomic status on societal discontent, through different meta-perceptions and relative deprivation, appears to be moderated by the levels of positive contact with those of a higher socioeconomic status. Specifically, the relationship of self-perceived SES and societal discontent, through meta-prejudice, perceived misrecognition and relative deprivation, is weaker when positive contact with individuals of a higher SES is more frequent. This is not the case for perceived negative stereotypes. Overall, these findings are in support of hypothesis 4.

**Testing hypothesis 4 for objective SES and frequency of positive contact with higher SES.** Next, moderated mediation models were tested with *education* as a predictor, societal discontent as dependent variable, the various meta-perceptions and relative deprivation as mediators and positive contact with individuals of a *higher* SES as a moderator. However, none of these models resulted in significant moderated mediation effects<sup>4</sup>. Thus, positive contact with individuals of a higher SES does not moderate the effect of education on

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<sup>4</sup> See table A2 in the appendix for the results of these moderated mediation models.

meta-perceptions and relative deprivation and ultimately societal discontent.

The same models were tested with *income* as a predictor, another indicator of objective socioeconomic status. The models with *relative deprivation* and *perceived stereotypes* were not significant<sup>5</sup>. However, in the model with the mediator *meta-prejudice*, we found a significant interaction between income and positive contact with high SES people on meta-prejudice ( $b = 0.06, t = 3.91, p < .001$ ). The effect of income on meta-prejudice was strongest for lower levels (-1 SD) of positive contact with higher SES individuals,  $b = -.29, 95\% \text{ C.I. } [-.38, -.21]$ , and was weakest for higher levels (+1 SD) of positive contact with higher SES individuals,  $b = -.06, p < .001, 95\% \text{ C.I. } [-.15, .02]$ . As can be seen in Figure A3 in the appendix, when people have a lower income their level of meta-prejudice is higher, but as expected this is especially true for people who have little positive contact with higher SES people. The index of moderated mediation was also significant;  $b = 0.01, 95\% \text{ C.I. } [.01, .02]$ . The mediated effect of income on societal discontent through meta-prejudice is thus moderated by positive contact with individuals of a higher SES. The conditional indirect effect for higher levels (+ 1 SD) of positive contact was weakest but still significant,  $b = -0.01, 95\% \text{ C.I. } [-.04, -.00]$ , and was strongest for lower levels (- 1 SD) of positive contact,  $b = -0.07, 95\% \text{ C.I. } [-.10, -.04]$ .

The model with *perceived misrecognition* as a mediator also resulted in a significant interaction between income and positive contact with high SES people on perceived misrecognition ( $b = 0.06, t = 3.97, p < .001$ ). The effect of income on perceived misrecognition was strongest for lower levels (-1 SD) of positive contact with higher SES individuals,  $b = -.33, 95\% \text{ C.I. } [-.41, -.25]$ , and was weakest for higher levels (+1 SD) of positive contact with higher SES individuals,  $b = -.10, p < .001, 95\% \text{ C.I. } [-.19, -.02]$ . As can be seen in Figure A4 in the appendix, when people have a lower income their level of

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<sup>5</sup> See table A3 in the appendix for the results of these moderated mediation models.

perceived misrecognition is higher, but as expected this is especially true for people who have little positive contact with higher SES people. The index of moderated mediation was also significant;  $b = 0.01$ , 95% C.I. [.00, .02]. The mediated effect of income on societal discontent through perceived misrecognition is thus moderated by positive contact with individuals of a higher SES. The conditional indirect effect for higher levels (+ 1 SD) of positive contact was weakest but still significant,  $b = -0.02$ , 95% C.I. [-.04, -.00], and was strongest for lower levels (- 1 SD) of positive contact,  $b = -0.06$ , 95% C.I. [-.10, -.03].

Thus, the relationship between income and societal discontent, through meta-prejudice and perceived misrecognition, is weaker when positive contact with individuals of a higher SES is more frequent, in line with hypothesis 4. This was not found for perceived negative stereotypes and relative deprivation. For education, positive contact does not moderate the relationship between education and societal discontent, through meta-perceptions and relative deprivation.

**Exploring hypothesis 4 for self-perceived and objective SES and frequency of positive contact with lower SES.** Hypothesis 4 was based on positive contact with higher SES group, but we did not expect that contact with a lower SES group would moderate any of the indirect effects. To examine whether we indeed do find evidence for this, we explored whether the effect of *self-perceived* and *objective* socioeconomic status on meta-perceptions and relative deprivation, and ultimately societal discontent, is moderated by the frequency of positive contact with individuals of a *lower* SES. The moderated mediation is tested for perceived stereotypes about low versus high SES, meta-prejudice, perceived misrecognition and relative deprivation. None of these moderated mediation models was significant<sup>6</sup>.

## Discussion

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<sup>6</sup> See table A4 and A5 in the appendix for the results of these moderated mediation models.

The main goals of this study were, first, to replicate finding that socioeconomic status (SES) is associated with more societal discontent through the experience of negative meta-perceptions and relative deprivation (Arzbach, 2023, Korstanje, 2023). We tested this model in a different population than previous research, namely in the United Kingdom rather than in the United States and the Netherlands. Further, we examined whether positive contact with (out)groups of a different socioeconomic status decreases negative meta-perceptions and relative deprivation, and hence, societal discontent.

Overall, the results were in line with the hypotheses. Firstly, we found that self-perceived SES is predictive of societal discontent (H1). However, we only found this regarding participants' current perceived SES rather than the perceived SES of their family or of their future self. Objective indicators of SES, namely education and income, did not predict societal discontent. Therefore, there is some support for hypothesis 1. Secondly, in line with H2, we found that individuals with a lower self-perceived SES have more negative meta-perceptions and experience more relative deprivation than those with a higher self-perceived SES. We found partial support with regard to objective SES, as lower education predicted more meta-prejudice, perceived misrecognition, and relative deprivation, but not more negative meta-stereotyping. A lower income predicted more meta-prejudice and perceived misrecognition, but not more relative deprivation, and it only tended to predict more negative meta-stereotyping. As for hypothesis 3, we found that self-perceived SES has an indirect negative effect on societal discontent through all negative meta-perceptions and feelings of relative deprivation. For objective SES, lower education has an indirect negative effect on societal discontent through meta-prejudice, perceived misrecognition and relative deprivation, and a lower income through meta-prejudice and perceived misrecognition, but not through negative meta-stereotyping. Thus, hypothesis 3 is supported for self-perceived SES and partially supported for objective SES.



Finally, in line with hypothesis 4, for self-perceived SES, we found that only when people with a lower SES had relatively low levels of positive contact with *higher* SES groups, their lower SES predicted more meta-prejudice, perceived misrecognition and relative deprivation, and thus societal discontent, but less so when they had relatively high levels of positive contact with higher SES groups. However, this was not found with negative meta-stereotyping as a mediator. For objective SES, positive contact did not moderate the relation between *education* and SD through meta-perceptions and relative deprivation and ultimately SD, but did moderate the relation between *income* and societal discontent through meta-prejudice and perceived misrecognition. So, only for lower levels of contact with higher SES groups, a lower income predicted more meta-prejudice and perceived misrecognition. For income there is thus partial support for hypothesis 4. Lastly, as expected, we found that the relation between self-perceived or objective SES, meta-perceptions and relative deprivation and SD is *not* moderated by the frequency of positive contact with individuals of a *lower* SES.

### **Theoretical implications**

The findings are in line with existing literature, but also add new insights and address unexplored topics. Firstly, previous research found that those with a lower SES experience more anomie (Bornand & Klein, 2022) and societal unease (Steenvoorden, 2015). Moreover, self-perceived and objective SES have been found to be related to societal discontent (Arzbach 2023). Our research partially replicates these findings. In contrast to Arzbach (2023), we did not find objective SES to be related to SD. However, Arzbach's effects of self-perceived SES were larger than those of objective SES and thus it seems more important that we have replicated the former effect. Our findings imply that it is more how one subjectively construes their status that predicts perceptions of society and thus SD. Importantly, as SD is related to behavior like political extremism, protesting and voting behavior (Gootjes et al., 2022), our findings show that those with a lower SES might be more likely to choose such

radical courses of action. If individuals choose to take action, this might enable them to improve the situation that they experience discontent about. However, an opposite reaction is also possible, as anomie is associated with a withdrawal from society (Teymoori et al., 2016). If groups of a lower SES withdraw from society instead, due to their discontent, this can be worrisome, as it could make inequality and status differences even bigger.

Secondly, this research supports findings by Arzbach (2023) and Korstanje (2022) who found that the relation between SES and SD can be explained by negative meta-perceptions such as perceived negative stereotypes, meta prejudice, perceived misrecognition, and relative deprivation. As SD may have negative consequences, such as lower well-being and social withdrawal (Teymoori et al., 2016), it is important to understand what contributes to it. The importance of negative meta-perceptions is also highlighted by Gordijn et al (2017), who found that they predict reduced well-being. Further, people's behavior could also be negatively influenced, as for instance Kamans et al. (2009) found that those confronted with negative meta-perceptions about their group can react to this by assimilating to these meta-perceptions, which could instigate a self-fulfilling prophecy. This is especially the case when one feels personally meta-stereotyped. As we found that lower SES groups experience more negative meta-perceptions, this could imply that they might act in line with their negative meta-perceptions and thus possibly negatively impact their subsequent position in society. Further, higher levels of relative deprivation found for those with a lower SES can be worrisome as well, as lower SES individuals internalize their deprived position by employing negative self-evaluations (Sainz et al., 2020).

In addition to previous research, we found that positive intergroup contact may influence the relation between SES and SD, through different meta-perceptions and relative deprivation. Indeed, negative meta-perceptions are inherently connected to intergroup contact (Techakesari et al., 2015). Our results support this notion as we found those with a lower SES

have less negative meta-perceptions when they have more positive contact with people of a higher SES, and hence, less SD. This is not the case for individuals of a higher SES, since their negative meta-perceptions are not reduced by positive contact with people of a lower SES. This can be explained by a tendency of high SES individuals to pay less attention to how they are seen by others in society and to be more self-focused, which can be explained by their position of relative power (Lammers et al., 2008; Sainz et al., 2020).

Positive intergroup contact gives individuals the opportunity to gain insight into the values, behavior and norms of the other group, which reduces the novelty of the interaction and intergroup anxiety (Techakesari et al., 2015). This may explain why those with a lower SES experience less negative meta-perceptions when they have positive interactions with the other group. This study is also, to our knowledge, the first to study positive intergroup contact in relation to meta-prejudice, rather than prejudice itself, and thus helps to extend intergroup contact theory (Allport 1954; Pettigrew & Tropp, 2006)

### **Practical implications**

The results from this research shows the importance of bringing people with different socioeconomic statuses into contact with each other, as positive intergroup contact can weaken the negative relation between SES and SD through negative meta-perceptions. Positive intergroup contact could invalidate the negative meta-perceptions of individuals with a lower SES, making them feel less misrecognized, deprived and negatively perceived, which in turn could decrease their SD. For practice this implies that it is valuable to facilitate positive interactions between groups of different socioeconomic statuses, thereby providing an opportunity for individuals to adjust their meta-perceptions. Positive intergroup contact may reduce negative meta-perceptions by reducing intergroup anxiety (Techakesari et al., 2015). Intergroup contact can be a reality check in which individuals learn about outgroup perceptions and their perspective, leading to a correction of meta-perceptions, which is a

powerful way to change meta-perceptions long-term and improve intergroup relations (Moore-Berg, 2023). It is important that groups that are relatively more disadvantaged, in this case lower SES groups, feel empowered in the interactions with the relatively more advantaged groups, those with a higher SES. Disadvantaged groups can experience a threat to their competence, respect or ability, and intergroup contact that makes them feel empowered and restores their identity as being competent and agentic, make it more likely that disadvantaged individuals support social change towards equality (Hässler et al., 2017). Such social change could be beneficial in improving their relative position or situation in society and thus potentially make them feel less deprived or misrecognized and perhaps even reduce their societal discontent. For the more advantaged groups, in this case high SES groups, it is important that they feel morally and socially accepted during contact with those that are more disadvantaged (Hässler et al., 2017).

Besides utilizing intergroup contact, other ways to change the negative meta-perceptions of those with a lower SES are through exercises and interventions. This is important because there are often inaccuracies in meta-perceptions, which have harmful effects on intergroup relations (Moore-Berg, 2023). Individuals can be given statistical information illustrating how exaggerated their meta-perceptions are. Positive effects of meta-perception interventions have already been found, such as in reducing meta-dehumanization (Landry et al., 2022) or negative meta-perceptions generally (Lees & Cikara, 2019) and are especially impactful for those with inaccurate meta-perceptions. Tips for implementation of such techniques are to create awareness campaigns that educate citizens about their inaccurate perceptions and to engage news media or public opinion leaders (Moore-Berg, 2023).

Importantly, however, there is another side to the story of negative meta-perceptions. Meta-perceptions can also be based on real negative perceptions from those with a higher SES about groups with a lower SES. Those with a higher status might be less open to contact with

people of a lower status. So, it is also important stimulate high SES groups to act positively towards those of a relatively lower status, stereotype them less and to be open for interactions. This way, the higher SES groups can debunk the negative meta-perceptions of lower SES individuals by actually changing the way these groups are perceived in society, potentially making those of a lower status feel less misrecognized or negatively stereotyped and ultimately change their societal discontent. More generally, it seems important to reduce the gap between groups of different socioeconomic statuses. By changing the way society perceives people of a lower SES, stop stigmatization and emphasizing differences between socioeconomic groups less, and focus more on what groups have in common, we might be able to help those with a lower SES feel less misrecognized or looked down upon.

For instance, to change how we talk about individuals of different statuses; instead of referring to someone of a lower status as ‘poorly educated’ or ‘low-skilled’, we can view them as ‘practically oriented’ or ‘educated hands-on’. Those with a higher status can be viewed as ‘theoretically educated’. This is connected with the finding that societal inequality makes status differences between poor and wealthy more prominent, as it increases the visibility of the social class disparity (Jetten et al., 2017). Higher economic inequality affects social class stereotyping; both social classes are seen as more unfriendly, incompetent and immoral, and the poor as more unassertive (Tanjitpiyanond et al., 2021). The wealthy are generally seen as ‘the winners’ and stereotyped as ambitious and competent, whereas the poor are perceived as ‘the losers’ and stereotyped as incompetent and lazy (Tanjitpiyanond et al., 2021). Thus, it is important to focus on reducing such inequality between status groups in society, for instance by changing how we talk and think about these differences, but of course also on a larger scale, by systematically reducing inequality to begin with.

### **Strengths and limitations**

This study has multiple notable strengths that give confidence in the results. Firstly,

this study builds upon previous research and extends it by studying the hypotheses in a different population (the United Kingdom). Overall, we found similar results and can thus conclude that the relation between SES and discontent through different meta-perceptions extends to different populations as well. Further, this study not only looks at the processes that can explain SD, but also what processes and variables can help reduce its experience. By including positive intergroup contact, this study combines findings from different theories into one comprehensive model and also offers ideas for solutions to the experience of SD and its negative consequences. Methodologically, the sample size was large and thus gave the research more power and made the results more reliable. A power analysis has been conducted prior to data collection to ensure that enough participants took part in the study. Further, we have included items to measure both objective and self-perceived socioeconomic status. This way we were able to test the model both for how participants rated themselves in terms of their SES, but also what their SES is according to their income and education, giving a multifaceted insight into the effects of socioeconomic status. We have also only used validated scales used in previous research, to collect responses from participants.

With regards to limitations, an important consideration is that this study is correlational, rather than experimental, in nature. We have not manipulated socioeconomic status or assigned participants to levels of intergroup contact and thus cannot draw causal conclusions from the data. We cannot say with certainty that a lower status is the underlying cause of more SD, rather than, for instance, the other way around. However, we do expect there to be causal relations between the variables in our model, as a previous experimental study manipulated self-perceived SES and found that this was predictive of SD through meta-perceptions (Korstanje, 2022). A different important consideration is that the panel might not be representative of the UK population. We used a convenience sample which may thus differ from the population in some ways. Specifically, as participants received a monetary reward, it

is possible that especially those with a lower SES were motivated to participate, as those with a higher SES might not need this reward. The sample could therefore be overly representative of those with a lower SES. However, we found a relatively large variability in the scores of SES and thus have indication that both individuals of a lower and higher SES were included.

Another potential limitation concerns perceived negative stereotypes (meta-stereotypes), as we did not find consistent evidence for its' role. A potential explanation is that the items may have been perceived as less personal by participants, compared to other meta-perceptions. Participants rated their agreement on statements like "I expect that people with a higher socioeconomic background think that people with a lower socioeconomic background are competent/kind/trustworthy". These statements seem to apply to groups in general, while the other variables were measured on a more personalized level, such as meta-prejudice ("I think that others in society think negative about people like me."). *Personalized* meta-stereotypes matter, as only when individuals perceive the meta-stereotype to apply to them personally, they are influenced by it (Kamans et al., 2009). This highlights the importance of the personal relevance of meta-perceptions, which might not have been the case for meta-stereotypes. Future studies can rephrase the scale items to a more personal level.

### **Future research**

The findings of the present research give rise to ideas for future research. First, to give more insight into the relationship between SES, discontent, meta-perceptions and intergroup contact, it is important to experimentally test the model by manipulating the level of socioeconomic status. It can then be determined whether a lower SES actually causes more discontent, through negative meta-perceptions. Manipulating the levels of positive intergroup contact is also possible, by assigning participants to low versus high contact conditions. More generally, further research into the effect of positive intergroup contact in relation to the various variables is needed. Other interesting unexplored topics for future research could be,

first, to investigate whether meta-perceptions and relative deprivation can be manipulated to ultimately decrease SD. For instance, by having people of a lower status read positive perceptions about them written by people of a relatively higher status. Such meta-perception manipulations could be tested, as well as its subsequent effects. In a similar vein it might be important to invest research efforts into studying what people of a lower SES need in order to feel less misrecognized, deprived and undervalued, or what can reduce their SD. For instance, they might experience a need to be able to communicate their frustrations about society or the way they are treated, or real policy changes might be needed to make them feel more appreciated and less discontented. The only way we can truly understand how SES, meta-perceptions, societal discontent and intergroup contact relate is by asking those of a lower SES how they feel and what they need. Lastly, the differences between objective and self-perceived socioeconomic status are interesting to explore, as the discrepant effects of the two on meta-perceptions and SD raise the question of whether they are conceptually different or differ in importance. From the current results, self-perceived SES appears the more robust predictor, however, sometimes objective indicators also matter.

## **Conclusion**

Societal discontent has been found to have negative consequences for society (Gootjes et al., 2021; Teymoori et al., 2017). In the present study we investigated whether socioeconomic status predicts societal discontent and whether this relation is explained by negative meta-perceptions and relative deprivation. We also examined the role of positive contact with a different socioeconomic group on this relationship. As expected, we found that lower SES individuals have more negative meta-perceptions and experience more relative deprivation, which predicts more SD. However, positive contact with people from a higher SES weakens the relation between SES and SD through meta-prejudice, perceived misrecognition and relative deprivation. These results replicate research and show that contact



can play a positive role to potentially reduce the experience of societal discontent, by reducing the extent to which people expect to be negatively perceived based on their SES. Findings imply that individuals' subjective reality is important, as a self-perceived experience of one's status influences negative meta-perceptions and SD more than objective status. Further, people's perceptions of how others see them guide their behavior and affects their relationships (Carlson et al., 2011). Practical implications follow, such as using positive intergroup contact, reducing the gap between groups of different statuses by rephrasing our language concerning status differences, and adjusting meta-perceptions both on the side of those with a lower and a higher SES.

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## Appendix A

### Tables and figures of the results

**Table A1**

*Correlations between the main variables*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Self-perceived SES		.91**	.30**	.29**	-.09	-.25**	-.17**	-.56**	-.43**	-.40**	.03	.16**
2. Own self-perceived SES			.32**	.37**	-.11*	-.27**	-.17**	-.59**	-.47	-.35**	.09	.16*
3. Education				.18**	.01	-.01	.04	-.17*	-.14**	-.14**	.01	.05
4. Income					-.04	-.09	-.04	-.33**	-.27**	-.06	-.02	.01
5. Societal discontent						.19**	.13**	.19**	.24**	.36**	-.01	-.24**
6. Stereotypes about low SES							.56**	.38**	.35**	.20**	-.05	-.22**
7. Stereotypes about high SES								.22**	.19**	.12*	.01	-.21**
8. Perceived misrecognition									.73**	.52**	-.20**	-.27**
9. Meta-prejudice										.45**	-.16**	-.32**

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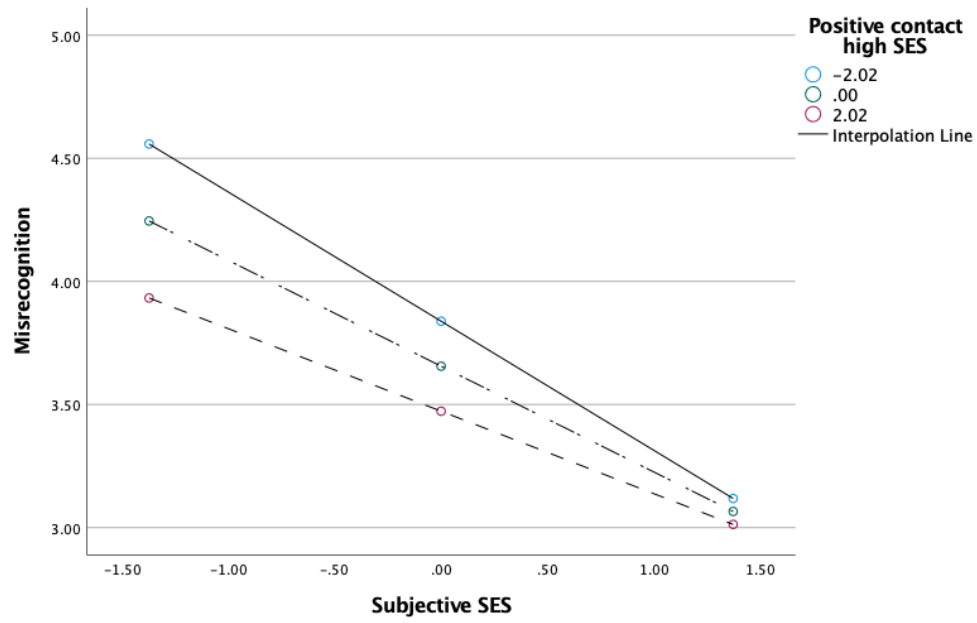
10. Relative deprivation	-.14**	-.26**
11. Positive contact with lower SES		.22**
12. Positive contact with higher SES		

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*Note.* \*\*  $p < .01$ . Variable 11 and 12 (positive contact with lower and higher SES groups) are measured as a difference score between two items, namely the amount of positive contact minus the amount of negative contact.

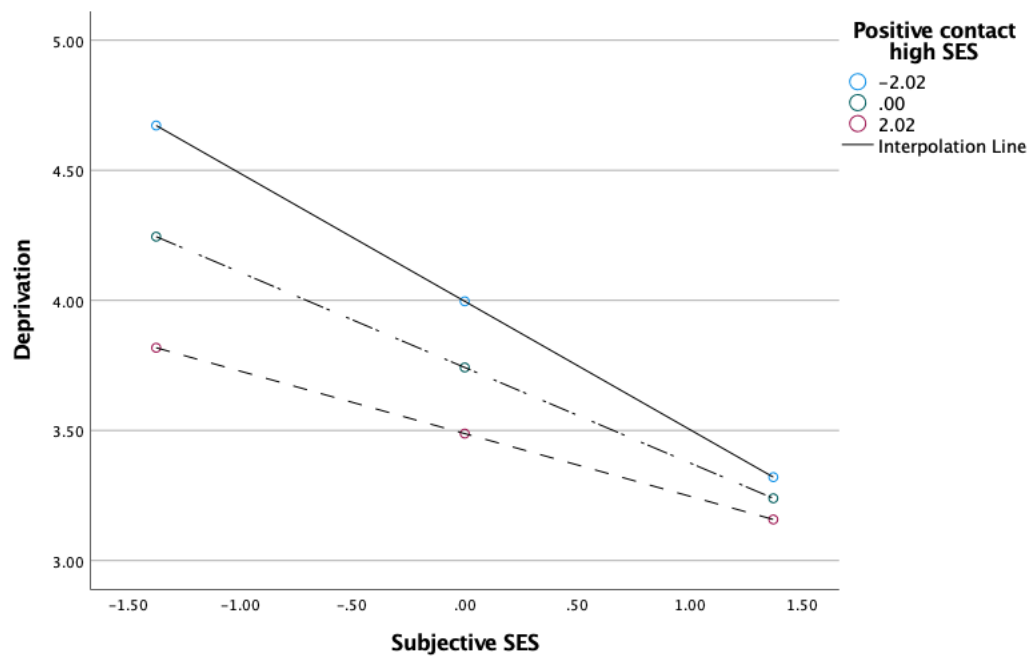
**Figure A1**

*The effect of self-perceived SES on perceived misrecognition for different levels of positive contact with individuals of high SES*



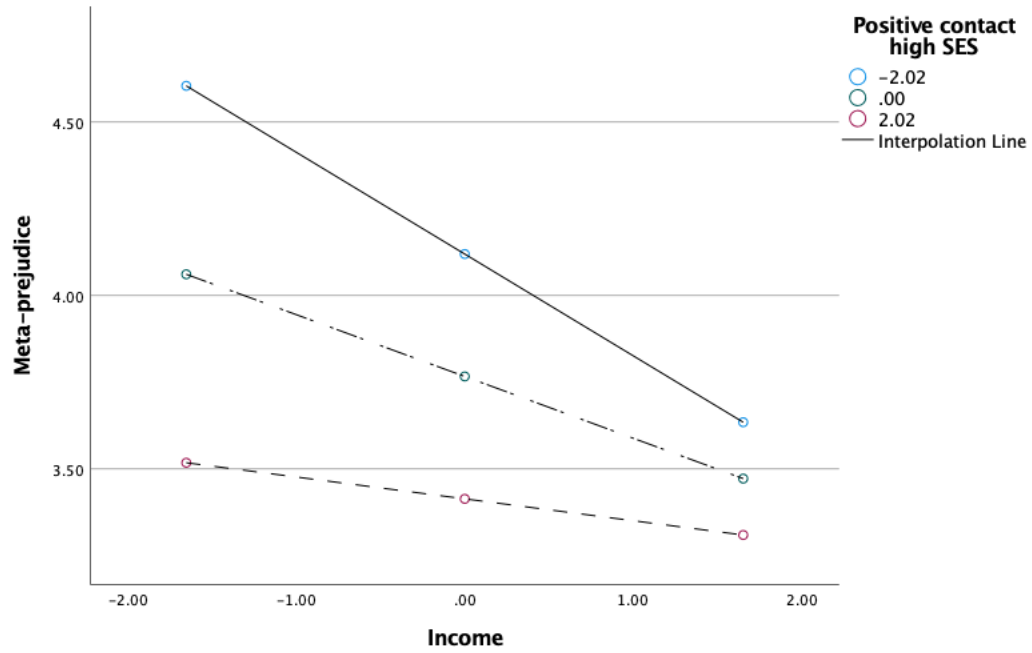
**Figure A2**

*The effect of self-perceived SES on relative deprivation for different levels of positive contact with individuals of high SES*



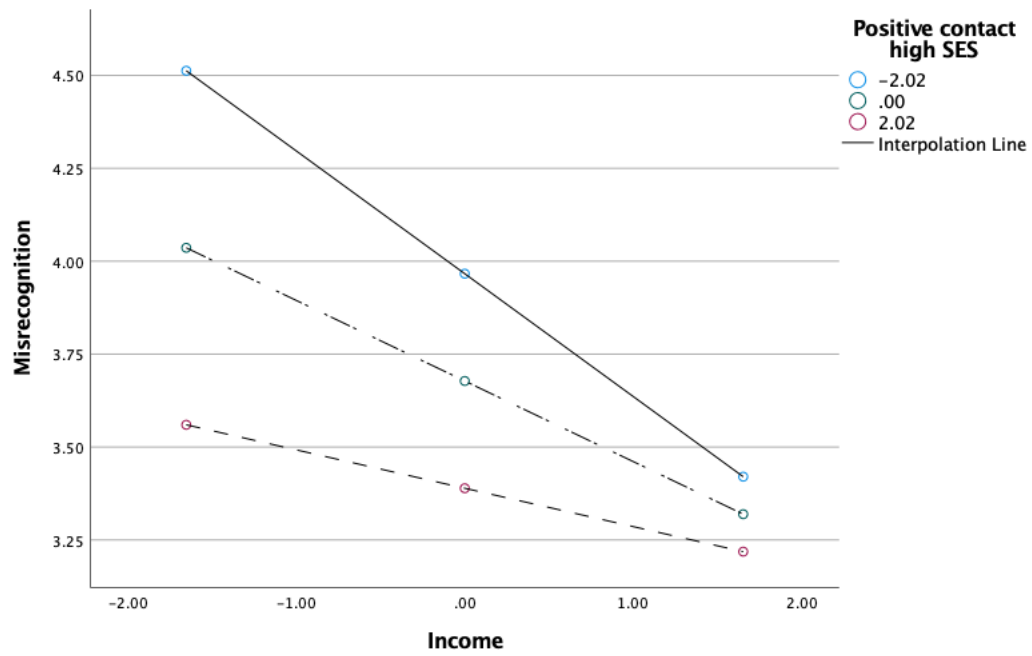
**Figure A3**

*The effect of income on meta-prejudice for different levels of positive contact with individuals of high SES*



**Figure A4**

*The effect of income on perceived misrecognition for different levels of positive contact with individuals of high SES*



**Table A2**

*Non-significant moderated mediations with positive contact with higher SES as moderator, education as predictor, societal discontent as DV and different variables as mediators*

<b>Mediator</b>	Index of mod. mediation	95% CI	Slope interaction ( <i>b</i> )	<i>t</i>	<i>p</i>
Stereotypes low SES	-.00	[-.01 .00]	-0.01	-0.76	.445
Stereotypes high SES	-.00	[-.01, .00]	-0.01	-0.71	.477
Meta-prejudice	.01	[-.00, .01]	0.02	1.76	.079
Perceived misrecognition	.00	[-.00, .01]	0.02	1.79	.075
Relative deprivation	.00	[-.01, .01]	0.01	0.34	.738

**Table A3**

*Non-significant moderated mediations with positive contact with higher SES as moderator, income as predictor, societal discontent as DV and different variables as mediators*

	Index of	95% CI	Slope	<i>t</i>	<i>p</i>
<b>Mediator</b>	mod. mediation		interaction ( <i>b</i> )		
Stereotypes low SES	.00	[-.01 .01]	-0.00	-0.02	.987
Stereotypes high SES	-.00	[-.01, .00]	-0.00	-0.09	.931
Relative deprivation	.01	[-.00, .02]	0.04	1.81	.072



**Table A4**

*Non-significant moderated mediations with positive contact with lower SES as moderator, self-perceived SES as predictor, societal discontent as DV and different variables as mediators*

<b>Mediator</b>	Index of mod. mediation	95% CI	Slope interaction ( <i>b</i> )	<i>t</i>	<i>p</i>
Stereotypes low SES	.00	[-.01, .01]	0.01	0.34	.735
Stereotypes high SES	.00	[-.00, .01]	0.02	0.90	.369
Meta-prejudice	-.00	[-.02, .01]	-0.01	-0.58	.562
Perceived misrecognition	-.00	[-.01, .00]	-0.01	-0.77	.443
Relative deprivation	-.01	[-.03, .00]	-0.04	-1.76	.080

**Table A5**

*Non-significant moderated mediations with positive contact with lower SES as moderator, income and education as predictors, societal discontent as DV and different variables as mediators*

<b>Mediator</b>	Index of mod. mediation	95% CI	Slope interaction ( <i>b</i> )	<i>t</i>	<i>p</i>
<b>Education</b>					
Stereotypes low SES	.00	[-.00 .01]	0.01	0.72	.474
Stereotypes high SES	-.00	[-.01, .00]	-0.01	-0.64	.521
Meta-prejudice	-.00	[-.01, .01]	-0.01	-0.62	.535
Perceived misrecognition	-.00	[-.01, .00]	-0.01	-0.60	.552
Relative deprivation	-.01	[-.02, .01]	-0.02	-1.14	.257
<b>Income</b>					
Stereotypes low SES	-.00	[-.01, .01]	-0.01	-0.25	.800
Stereotypes high SES	-.00	[-.01, .00]	-0.01	-0.32	.753

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Meta-prejudice	.00	[-.01, .01]	0.00	0.06	.951
Perceived misrecognition	.00	[-.01, .01]	0.01	0.45	.652
Relative deprivation	.00	[-.01, .02]	0.01	0.30	.761

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## Appendix B

### Qualtrics questionnaire<sup>7</sup>

## "How you perceive society and how you think society perceives you"

Welcome to this study! Please read the study information below and after that, click on the red arrow to continue to the next page.

### Why do I receive this information?

You are being invited to participate in this research, because we are interested in how you think about the society you live in, your socio-economic background in this society and your contact with other groups. This research involves two students, S. Schaafsma and D. Djaoedji, from the University of Groningen in the Netherlands, and is supervised by Prof dr. E. Gordijn.

### Do I have to participate in this research?

Participation in the research is voluntary. However, your consent is needed. Therefore, please read this information carefully and feel free to ask all the questions you might have. You can skip questions you do not wish to answer or even withdraw from participation without explanation, and there will be no negative consequences for you. You have this right at all times, also after you have given consent for participation.

### Why this research?

In this research, we want to study what views people in the UK have about society. For this research, we are looking for participants:

- 1) Who live in the United Kingdom
- 2) Who are older than 18

### What do we ask of you during the research?

First, we will ask you for your consent to participate. When you agree to participate, you will be guided to the online questionnaire. In the questionnaire, you first answer some demographic questions, e.g., about your age, ethnicity, gender and your socio-economic background. Next, you will be asked questions about how you think you are perceived in society, the way you perceive society, and how much contact you have with other groups in society. Finally, you will be asked to read a news article concerning refugees, followed by some questions about it. The questionnaire will take approximately 12 minutes to complete. Afterwards, we will once again ask you for your consent to the use of your data.

### What are the consequences of participation?

We believe there are little to no risks associated with participation in this study. However, you may find some questions difficult to answer or would prefer not to answer them. Please remember that you may always withdraw from the study, which does not have any negative consequences for you.

### How will we treat your data?

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<sup>7</sup> Other items were also included in the survey, however, because these belonged to a different thesis research they were not included in the appendix. Only the items relevant for this study are mentioned.

Your data will contribute to two Master Theses and possibly to an empirical article that we aim to publish in a scientific peer-reviewed journal. Your data is confidential. While no personal data is collected, some information may act as identifiers when combined (i.e., gender, ethnicity, age, in combination with personal remarks). Only the researchers of this study will have access to it. We will also use given Prolific ID numbers to compensate for the participation. This can be deemed as an indirect identifier. After making payments and before analyzing the data, we will immediately delete these indirect identifiers from the data for the sake of keeping participant anonymity. The data consists of your responses to the questions which will be collected using an online questionnaire. We collect this data for scientific purposes. If the data is published, we will anonymize information that could be used to identify individual participants (e.g., if you made remarks that could identify you). Please note that the data is collected and stored in Europe. When the study is finished, the data will be stored at a safe University of Groningen server for 10 years.

### **What else do you need to know?**

You may always ask questions about the research: now, during the research, and after the end of the research. You can do so by sending an e-mail to [s.t.schaafsma@rug.nl](mailto:s.t.schaafsma@rug.nl) or [d.d.djaoedji@student.rug.nl](mailto:d.d.djaoedji@student.rug.nl). If you have questions/concerns about your rights as a research participant or the conduct of the research, you may also contact the Ethics Committee of the Faculty of Behavioral and Social Sciences of the University of Groningen: [ec-bss@rug.nl](mailto:ec-bss@rug.nl). Do you have questions or concerns regarding the handling of your personal data? You may also contact the University of Groningen Data Protection Officer: [privacy@rug.nl](mailto:privacy@rug.nl). As a research participant, you have the right to receive a copy of this research information (i.e., you can take a screenshot).

## **INFORMED CONSENT**

### **"How you perceive society and how you think society perceives you"**

- I have read the information about the research. I have had enough opportunity to ask questions about it.
- I understand what the research is about, what is being asked of me, which consequences participation can have, how my data will be handled, and what my rights as a participant are.
- I understand that participation in the research is voluntary. I myself choose to participate. I can stop participating at any moment. If I stop, I do not need to explain why. Stopping will have no negative consequences for me.
- Below I indicate what I am consenting to.

### **Consent to participate in the research:**

- Yes, I consent to participate, and I consent to the processing of my personal data as mentioned in the study information (1)
- No, I do not consent to participate (2)

No consent. You indicated you do not want to participate in this research. If you want to let us know why you do not want to participate, you can do so below. We thank you for your time!

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**Demographics.** First, we ask you to provide some demographic information below before starting the main survey.

Age. What is your age?

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Gender. Please indicate your gender.

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

Nationality. Are you British?

- Yes, I am British (1)
- No (2)

Ethnicity. Which of these best describes your ethnic background? Please select one answer.

- Asian or Asian British (1)
- Black, Black British, Caribbean or African (2)
- Mixed or multiple ethnic groups (3)
- White (4)
- Other ethnic group (5)

Education. Please indicate your highest educational level (only select the highest level possible).

- No formal qualifications (1)
- GCSE/O-levels/CSE, or NVQ/SVQ Level 1 or 2, or City and Guilds Level 1 or 2/Craft/Intermediate, or GNVQ/GSVQ Foundation or Intermediate level, or equivalent (2)
- A-levels, or NVQ/SVQ Level 3, or City and Guilds Level 3/Advanced/Final, or GNVQ/GSVQ Advanced Level, or equivalent (3)
- NVQ/SVQ Level 4 or 5, or City and Guilds Level 4/Full Technological, or equivalent (4)
- Higher National Certificate, Higher National Diploma, Foundation Degree (5)
- Undergraduate degree (BA/BSc/other) (6)
- Graduate degree (MA/MSc/MPhil/other) (7)
- Post-graduate diploma or certificate (e.g., PGCE) (8)
- Doctoral degree (PhD) (9)
- Other (please specify) .... (10)

Income. Please indicate your current monthly net level of income.

- < £500 (1)
- £500-1000 (2)
- £1000-1500 (3)
- £1500-2000 (4)
- £2000-3000 (5)
- £3000-4000 (6)
- > £4000 (7)

Job. Which of the following describes best what you have been doing for the last 4 weeks (select the option that represents this most accurately)

- In paid work (or away temporarily, employee, self-employed, working for family business) (1)
- In education (not paid by employer) even if on vacation (2)
- Unemployed (3)
- Permanently sick or disabled (4)
- Retired (5)
- In community or military service (6)
- Doing housework, looking after children or other persons (7)
- Other (please specify) ... (8)

Political orientation. Please indicate where on the scale you see yourself regarding your own political orientation.

- Extremely left (1)
- Left (2)
- Slightly left (3)
- Moderate (4)
- Slightly right (5)
- Right (6)
- Extremely right (7)

**Self-perceived socioeconomic status.**

Imagine that this ladder is a picture of society in the UK with respect to people's socioeconomic background (which depends on their income, education level, job status, and extent to which they feel respected).









People like me never get what they really deserve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is always people from other socio-economic backgrounds who benefit from all kinds of advantages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Societal discontent.

How do you feel about and perceive British society?

Please indicate to what extent you agree with the following statements (1=absolutely disagree; 7=absolutely agree).

	1=Absolutely disagree (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7=Absolutely agree (7)
I feel shocked about the way things are going in society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel concerned when I think about the future of society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am frustrated because society is not as it should be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid that things will go wrong in society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Intergroup contact.

Now, we shortly return to the topic of socio-economic background. We ask you some questions about your contact with people from other groups. Please answer every question, from 1 = Never to 7 = Extremely frequently.

