Master's thesis

The Role of Misrecognition in the Belief in Upward Conspiracy Theories

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Are there deviations of the Master's thesis from the proposed plan?

☐No

☒Yes, please explain below the deviations

Perceived control, rather than societal trust, was proposed as a mediator between misrecognition and conspiracy beliefs.

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Abstract

Conspiracy theories are more often endorsed by members of low-status groups than members of high-status groups. However, this may be driven by perceived misrecognition based on one's group rather than group status itself. To examine whether misrecognition predicts conspiracy beliefs across both low- and high-status groups, the present study experimentally manipulated perceived misrecognition in two studies among individuals without (N = 162) and with (N = 212) an academic background. The manipulation successfully increased feelings of misrecognition. Although the manipulation did not directly increase conspiracy beliefs, it had a significant indirect effect on conspiracy beliefs via feelings of misrecognition. Furthermore, conspiracy beliefs were associated with lower societal trust and higher societal discontent, though the direction of causality remains unclear. These results were found among both individuals without and with an academic background. Overall, these findings highlight perceived misrecognition as an important antecedent of conspiracy beliefs, regardless of group status.

Keywords: conspiracy theories, misrecognition, status, societal discontent, societal trust, education

The Role of Misrecognition in the Belief in Upward Conspiracy Theories

Claims as "9/11 was an inside job" and "COVID-19 was a plot to create a global government" are examples of the numerous conspiracy theories that circulate the internet. Conspiracy theories are theories about actors suspected to secretly collaborate to achieve a hidden and malevolent goal (Zonis & Joseph, 1994). Conspiracy theories can be characterized as expressions of ingroup-outgroup conflicts (Mao et al., 2024). This thesis focuses on conspiracy theories involving high-power outgroups, referred to as "upward conspiracy theories" (Nera et al., 2021).

While some conspiracies have proven to be true, most conspiracy theories lack supporting evidence (Dunbar & Reagan, 2006; Pipes, 1999; Van Prooijen, 2018). Nonetheless, a notable amount of people believe in conspiracy theories, with percentages varying depending on the theory (Uscinski et al., 2022). However, most people view conspiracy theories negatively, as 73% of respondents believe that conspiracy theories are "out of control" (Uscinski et al., 2022). This negative perception can be explained by interpersonal conflicts arising from the differing worldviews of those who believe in conspiracy theories and those who do not (Douglas, 2021; Hebel-Sela et al., 2022; Toribio-Flórez et al., 2024). Also, for individuals who believe in conspiracy theories, effects can be counterproductive. Instead of alleviating feelings of fear and distrust, believing in conspiracy theories intensifies these feelings (Goertzel, 1994; Jolley & Douglas, 2013; Jolley & Douglas, 2014; Meuer & Imhoff, 2020). Additionally, conspiracy theories can have negative consequences for society by driving ineffective responses to issues. For instance, they reduce individuals' intention to vaccinate or to lower their carbon footprint (Jolley & Douglas, 2013; Jolley & Douglas, 2014) and thereby pose risks for conspiracy theorists themselves, others, and society. Given these consequences, it is important to investigate when people believe in conspiracy theories.

Conspiracy theories involving high-status groups are more likely to be supported by members of low-status groups (Casara et al., 2021; Crocker et al., 1999; Mao et al., 2024). However, we propose that not low status itself, but rather misrecognition of one's ingroup triggers conspiracy beliefs. Groups that feel victimized by other groups might use conspiracy theories to maintain their group image (Biddlestone

et al., 2021; Douglas & Sutton, 2022; Van Prooijen, 2024). Following this reasoning, the effect of misrecognition on conspiracy beliefs should not only be observed among members of low-status groups who feel misrecognized but among members of any group who experience misrecognition. To test this, we experimentally examined the effect of misrecognition on belief in conspiracy theories in two studies, one in a low-status group (i.e., lower-educated individuals) and the other in a high-status group (i.e., higher-educated individuals). By doing so, this thesis contributes to the literature on conspiracy theories by giving insight into intergroup processes underlying status that influence conspiracy beliefs and by experimentally testing the relationship between misrecognition and belief in conspiracy theories, which has primarily been supported through correlational studies.

Conspiracy Theories as an Intergroup Process

Conspiracy theories are defined as the belief that a secret plot is being orchestrated by two or more powerful actors with the aim of achieving unlawful or malevolent goals (Douglas et al., 2019; Douglas & Sutton, 2023; Zonis & Joseph, 1994). While several studies suggest that belief in conspiracy theories is related to the conspiratorial mindset of individuals (Bruder et al., 2013; Đorđević et al., 2021), group-based motivations also play an important role (Robertson et al., 2022). Conspiracy theories function as a means for groups to protect a positive social identity (Van Prooijen, 2024). At their core, conspiracy theories construct a distinction between “us”, the victims or ingroup, and “them”, the conspirators or outgroup (Van Prooijen, 2018). As such, belief in conspiracy theories can be understood as an intergroup process (Van Prooijen, 2024; Van Prooijen, 2018).

Upward conspiracy theories are more commonly supported by individuals from low-status groups (Casara et al., 2021; Crocker et al., 1999; Douglas et al., 2019; Mao et al., 2024). These groups often feel misrecognized, which is understood as the extent to which individuals feel they lack a meaningful role in society, perceive their (often stigmatized) identity as looked down upon and devalued, and feel that they are being less appreciated than other social groups (Van Noord et al., 2021). Conspiracy theories make sense of this experience by offering a narrative in which their disadvantaged position is attributed to actions of powerful outgroups (Adam-Troian et al., 2023; Van Prooijen, 2024). We therefore argue that

when individuals feel misrecognized based on their group, they are more likely to believe in upward conspiracy theories.

Misrecognition Based on Group Membership

Feelings of misrecognition are not only concerned with a group's subjective position within a status hierarchy but also reflect the experienced disadvantages associated with the group membership (Lamont, 2018). For example, these groups often face economical and social exclusion and experience deprivation (Mao et al., 2024). Moreover, their group identity is often perceived as negative or even stigmatized and is the target of stereotypes held by outgroups (Amer, 2019). Individuals belonging to such stigmatized groups are generally aware of these unfavorable perceptions and develop *meta-stereotypes*, which are beliefs about the stereotypes that outgroup members hold about their ingroup (Vorauer et al., 1998). This can foster feelings of misrecognition (Amer & Obradovic, 2022; Özdemir et al., 2024; Schouten, 2023), particularly in contexts where intergroup relations are marked by power and status inequalities. In such settings, dominant groups are not only in a position to hold stereotypes but also to act on them in ways that materially impact the lives of others (Lammers et al., 2008).

Misrecognition has consequences for intergroup dynamics. First, it negatively affects the ingroup's social identity. Misrecognition can lead to a more negative self-perception and social identity (Amer & Obradovic, 2022; Elad-Strenger & Kessler, 2024). Consequently, it can evoke a sense of status threat by devaluation of people's social identities (Elad-Strenger & Kessler, 2024; Mummendey et al., 1999) and reduce percieved control over one's circumstances (Elad-Strenger & Kessler, 2024; Özdemir et al., 2024). Second, misrecognition triggers a defensive response towards outgroups. Misrecognition has been associated with increased distancing from outgroups (Spears et al., 2004), political alienation (Van Noord et al., 2023), hostility toward the mainstream (Da Silva et al., 2021) and collective action aimed at the outgroup (Özdemir et al., 2024).

The Role of Misrecognition in Conspiracy Beliefs

Given these consequences, misrecognition may lead to belief in conspiracy theories. First, conspiracy theories might offer a way to restore a group's social identity that has been weakened by

misrecognition (Uscinski & Parent, 2014; Van Prooijen, 2024). Indeed, previous research has shown that individuals who feel undervalued and excluded from society, experiences that are central to feelings of misrecognition, are more likely to believe in conspiracy theories (Douglas & Sutton, 2022; Poon et al., 2020; Schnell et al., 2024). Second, as a defensive response to misrecognition, individuals may become more inclined to challenge dominant groups, which is a key motive of upward conspiracy beliefs (Mao et al., 2024). When an outgroup is perceived as negative and dominant, it becomes a small step to assume it is conspiring to cause harm (Douglas et al., 2019; Van Prooijen, 2018). As such, we propose that individuals who feel misrecognized are more likely to believe in conspiracy theories, as these narratives offer individuals an explanation that makes sense of their perceived unjust disadvantage and identify malevolent outgroups as responsible. Specifically, we propose that misrecognition leads to belief in conspiracy theories in two ways. First, through a perceived threat to one's status, and second, through a perceived lack of control.

Status Threat. The devaluation of people's social identities through misrecognition (Amer & Obradovic, 2022) is experienced as a threat to people's status (Elad-Strenger & Kessler, 2024; Mummendey et al., 1999). This can foster belief in conspiracy theories (Bilewicz et al., 2013; Uscinski & Parent, 2014), as threat triggers a motivation to protect and maintain a positive image of the ingroup (Biddlestone et al., 2021; Douglas & Sutton, 2022; Robertson et al., 2022). Conspiracy theories offer this by attributing the group's disadvantaged position to external and hostile forces. In addition, threat alters cognitive processing, making individuals more likely to perceive patterns in random stimuli (Whitson & Galinsky, 2008) and to attribute events to intentional agents (Kay et al., 2008). This makes conspiracy explanations, which often depend on perceived connections and attribute events to malevolent conspiracies, seem more plausible.

Lack of Control. In addition, misrecognition can lead to a perceived lack of control over one's circumstances (Elad-Strenger & Kessler, 2024; Özdemir et al., 2024), which may contribute to the belief in conspiracy theories (Abalakina-Paap et al., 1999). Lack of control is often accompanied by psychological stress, anxiety, and a sense of chaos and randomness in one's environment (Kay et al.,

2008; Van Prooijen & Acker, 2015). In response, individuals become motivated to restore a sense of meaning, purpose, and order. Conspiracy theories can satisfy this need and provide a sense of regained control by presenting seemingly coherent and meaningful explanations for events (Van Prooijen, 2019; Van Prooijen & Acker, 2015).

As such, misrecognition based on group membership may contribute to a heightened belief in conspiracy theories through a heightened status threat and heightened lack of control. We propose that this occurs regardless of the group's status.

Status of the Misrecognized Group

Although individuals from all status groups may feel misrecognized, individuals in low-status groups experience stronger feelings of misrecognition than individuals in a high-status group (e.g., Van Noord et al., 2021; Van Noord et al., 2023) as they are more frequently confronted with disadvantages associated with their group membership and with negative perceptions, stereotypes, and meta-stereotypes of their identity. We argue that these differences in feelings of misrecognition explain the varying levels of belief in upward conspiracy theories among individuals of different status (Casara et al., 2021; Crocker et al., 1999). Consequently, individuals from any group who feel misrecognized by society may be more susceptible to conspiracy theories.

Perceptions of Society

Although misrecognition and conspiracy beliefs are rooted in intergroup processes, they are also closely linked to individuals' overall perceptions of society, reflected in societal discontent and societal trust. Specifically, misrecognition contributes to greater societal discontent (Elad-Strenger & Kessler, 2024; Schouten, 2023), which is a general negative sentiment about society (Gootjes, 2023), and increased societal distrust (Özdemir et al., 2024; Schouten, 2023). Similarly, conspiracy beliefs are consistently associated with feelings of anomie, which is a sense of personal unrest and confusion about society (Adam-Troian et al., 2022; Goertzel, 1994; Imhoff & Bruder, 2014; Zeng et al., 2023) and an indicator of societal discontent (Gootjes, 2023) and with societal distrust (Adam-Troian et al., 2022; Meuer & Imhoff, 2020).

We propose that when individuals feel misrecognized, they experience more societal discontent and societal distrust. However, the direction of the relationship between conspiracy theories and societal trust and societal discontent is unclear. On the one hand, conspiracy beliefs may foster a generally conspiracy-oriented mindset, leading to increased discontent and distrust (Meuer & Imhoff, 2014; Zeng et al., 2023). On the other hand, anomie may drive individuals to seek alternative forms of belonging and meaning, resulting in conspiracy beliefs (Douglas & Sutton, 2023) and distrust increases the likelihood of attributing malevolent intent to others (Van Prooijen, 2018). To clarify the relationships between conspiracy beliefs, societal trust and societal discontent, we exploratorily examined whether perceptions of society serve as antecedents or result from conspiracy beliefs.

The Current Research

In this study, educational level is used as an example of status. In modern societies, education plays a central role in the allocation and legitimization of social status (Baker, 2014; Kuppens et al., 2017). Within these societies, education symbolizes not only knowledge but also competence and personal worth (Sennett & Cobb, 1972). Being less educated is often perceived as a negative identity. It is defined in terms of a deficiency: the absence of a "good" education (Van Noord et al., 2023). Individuals with lower educational attainment frequently encounter prejudice and social disdain (Van Der Waal, 2022). Moreover, lower educated individuals are aware of the unfavorable perceptions others hold about their group and hold meta-stereotypes (Kuppens et al., 2015). As a result, individuals with lower levels of education experience stronger feelings of misrecognition (Van Noord et al., 2021; Van Noord et al., 2023).

Concluding, we propose that not membership in a low-status group itself, but rather the misrecognition of one's ingroup triggers belief in conspiracy theories. Specifically, we propose that this occurs because misrecognition elicits feelings of threat and a perceived lack of control. Moreover, we propose that people who feel misrecognized are more likely to experience societal discontent.

To test this, we experimentally examined the effect of misrecognition on belief in conspiracy theories in two studies, one in a low-status group (i.e., individuals without an academic background) and

the other in a high-status group (i.e., individuals with an academic background) and measured belief in conspiracy theories. This study investigated two types of conspiracy beliefs. First, we examined belief in a group-specific conspiracy theory, developed by us specifically for this research, which posits that there is a conspiracy against the participant's educational group. We did this to provide people with a narrative that aligns with the misrecognition based on their group membership, thereby providing them with a way to protect their social identity. Second, we assess belief in general and widely circulated conspiracy theories.

We hypothesized that compared to the recognition condition, being misrecognized will result in more belief in the specific conspiracy theory (Hypothesis 1a) and more belief in general conspiracy theories (Hypothesis 1b). Moreover, we hypothesized that status threat mediates the relationship between misrecognition and belief in the specific conspiracy theory (Hypothesis 2a) and belief in general conspiracy theories (Hypothesis 2b). Similarly, we hypothesized that lack of control mediates the relationship between misrecognition and belief in the specific conspiracy theory (Hypothesis 3a) and belief in general conspiracy theories (Hypothesis 3b). Lastly, we hypothesized that compared to the recognition condition, being misrecognized will result in higher societal discontent (Hypothesis 4a) and higher societal distrust (Hypothesis 4b).

We conducted two independent studies. The first study involved people without academic backgrounds, while the second focused on individuals with academic backgrounds. Apart from differences in participants' education levels and the adaptation of questions and texts to refer to the education level of the participant, both studies were identical.

Study 1 - People Without an Academic Background

Method

Participants and Design

The participants in this study were British people without an academic background recruited through Prolific. Inclusion requirements were that participants were English speaking, older than 18 and did not have an academic degree. Participants were financially compensated through Prolific. An a priori

Monte Carlo power analysis with *power* = 0.80 and $\alpha = 0.05$, and small to medium effect sizes was conducted to determine the required sample size for testing a mediation model. This resulted in a required sample size of 174 participants. To achieve sufficient statistical power and when accounting for 15% dropout rate, we aimed to recruit 200 participants.

A total of 197 participants took part in the questionnaire, of which 35 were excluded because they either reported having an academic background or chose not to disclose their level of education. The final sample consisted of 162 participants, meaning it is slightly underpowered, of which 77 participants were in the misrecognition condition and 85 participants were in the recognition condition. The sample consisted of 46% women, 53% men and 1% other. Age ranged from 20 to 82 years ($M = 48.3$, $SD = 14.1$). 62% of participants had a paid job, 15% were retired, 7% were unable to work due to disability, 7% did housework or unpaid caregiving, 7% were unemployed, 2% reported another situation.

This study took the form of an online survey experiment, using a two-group, between-subjects design in which misrecognition was manipulated. Participants were randomly assigned to either the *recognition condition*, where they read a fabricated news article stating that the most people in society value individuals without an academic background, or the *misrecognition condition*, in which they read that most people in society do not value individuals without an academic background. The study was approved by the ethics committee of the University of Groningen (code PSY-2425-S-0304) and was preregistered at AsPredicted (https://aspredicted.org/4r6r-42f6.pdf).

Procedure

Before starting the survey, participants read an information form and provided informed consent. Then, they were guided to the questionnaire (see Appendix A), in which they were first asked demographic questions, including age, gender, political preference, measured by asking participants where they place themselves on a left–right political spectrum, and subjective socio-economic status, measured by asking participants to rate their socio-economic background compared to others in society on a scale from 1 (extremely low) to 10 (extremely high).

To check whether participants indeed had no academic background and to make their education level salient, participants were asked to indicate their level of education, choosing between “no academic background,” “academic background,” and “prefer not to say.” Participants who did not select “no academic background” continued with the questionnaire but were excluded from the data analysis. Following this, participants who selected “no academic background” indicated the extent to which they identify with individuals without an academic background.

Next, participants’ feelings of recognition were manipulated with a fabricated news article. After reading the news article, participants completed a manipulation check assessing the extent to which they feel (mis)recognized in society. In addition, participants reported their perceived level of control, emotions concerning the news article and the extent to which they experienced status threat.

Following this, participants read a conspiracy theory presented in a Reddit post, developed by us for the for this research. The conspiracy theory claimed that elites are conspiring to reduce the societal power of people without an academic background. After reading the conspiracy theory, participants indicated the extent to which they believe this specific conspiracy theory. In addition, participants indicated their level of societal trust and societal discontent. Additionally, participants were presented with other conspiracy theories, each represented by one item and rated their belief in each.

Finally, participants were invited to share any questions or comments. At the end of the questionnaire, they were debriefed, thanked for their participation and redirected to Prolific for payment.

Materials

Feelings of Misrecognition. Feelings of misrecognition were assessed with five items adapted from van Noord et al. (2023) on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is “The value of what people like me do is not recognized by others”. The five items were combined into a single variable by averaging their scores (Cronbach’s *alpha* = .92, *M* = 3.46, *SD* = 1.39).

Feelings of Control and Other Emotions. Emotions concerning the news article were assessed with twelve items on a 7-point Likert scale (1 - not at all, 7 - extremely). It included the extent of control participants experienced (“I feel like I lack control” (recoded) and “I feel in charge”), which were

combined into a single variable by averaging their scores (Spearman-Brown = .43, *M* = 3.99, *SD* = 1.30). In addition, it included positive emotions (happy, confident, satisfied, grateful, motivated), which were combined into a single variable by averaging their scores (Cronbach's *alpha* = .90, *M* = 2.94, *SD* = 1.48). Besides, it included negative emotions (anxious, threatened, vulnerable, angry, frustrated), which were combined into a single variable by averaging their scores (Cronbach's *alpha* = .91, *M* = 2.15, *SD* = 1.35).

Status Threat. Status threat was assessed with four items adapted from Bendersky and Hays (2011) on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "People like me are losing power in society". The four items were combined into a single variable by averaging their scores (Cronbach's *alpha* = .83, *M* = 3.89, *SD* = 1.25).

Belief in Specific Conspiracy Theory. Belief in the specific conspiracy theory presented in the Reddit post was assessed with four items adapted from Jolley et al. (2019) to the specific Reddit post, including one reverse item, on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "A global elite seeks to prevent people without an academic background from gaining influence". Cronbach's *alpha* was clearly higher without the reverse item (Cronbach's *alpha* = .95) than with the reverse item (Cronbach's *alpha* = .75), the reverse item was left out of the scale and the three items were combined into a single variable by averaging their scores (*M* = 3.54, *SD* = 1.85).

Belief in General Conspiracy Theories. Belief in general conspiracy theories was assessed with seven items, each addressing a different conspiracy theory. The items were selected based on prior research (Lewandowsky et al., 2013; Uscinski et al., 2022; Van Prooijen et al., 2022), Reddit discussions and Wikipedia. The seven items were answered on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "The coronavirus is a harmless virus that powerful people exaggerated to control the population". The seven items were combined into a single variable by averaging their scores (Cronbach's *alpha* = .85, *M* = 3.71, *SD* = 1.37).

Societal Discontent. Societal discontent was assessed with four items adapted from Gootjes et al. (2021) on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "I feel shocked about the way things are going in society". Besides, societal discontent was measured with one

item: "In which direction is society going according to you?" adapted from Sociaal en Cultureel Planbureau (2021), which was answered on a 7-point Likert scale (1 - the wrong direction, 7 - the right direction (recoded)). The five items were combined into a single variable by averaging their scores (Cronbach's *alpha* = .90, *M* = 5.51, *SD* = 1.11).

Societal Trust. Societal trust was assessed with eight items adapted from the European Social Survey (2022), each tapping into different people or institutions, on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "I trust governmental institutions". The eight items were combined into a single variable by averaging their scores (Cronbach's *alpha* = .90, *M* = 3.17, *SD* = 1.07).

Identification With Individuals Without an Academic Background. Identification with individuals without an academic background was assessed with six items adapted from Leach et al. (2008) on a 7-point Likert scale (1 - strongly disagree, 7 - strongly agree). An example item is "I feel strongly connected to people without an academic background". The six items were combined into a single variable by averaging their scores (Cronbach's *alpha* = .780, *M* = 4.47, *SD* = .97).

Analysis Plan

Data was analyzed using SPSS. First, attention checks, outliers and missing data were analyzed, and descriptive statistics and correlations were calculated. Second, ANOVAs were conducted to test Hypotheses 1a, 1b, 4a, and 4b by examining differences between the recognition and misrecognition condition in specific and general conspiracy beliefs, societal discontent and societal trust. Exploratory analyses assessed differences in status threat, perceived control, and emotions. ANOVA assumptions were checked. Third, mediation analyses (Process model 4) were conducted to test Hypotheses 2a, 2b, 3a and 3b, examining whether status threat and perceived control mediate the relationship between misrecognition and conspiracy beliefs. Mediation assumptions were checked.

Next, explorative analyses were conducted. First, mediation analyses tested whether emotions mediate the relationship between misrecognition and conspiracy beliefs. Then, serial mediation analyses (Process Model 6) examined whether the effect of misrecognition on conspiracy beliefs operates through feelings of misrecognition and subsequent emotional responses. Additional mediation analyses assessed

whether the impact of misrecognition is explained by feelings of misrecognition alone. Finally, serial mediation analyses explored the bidirectional relationship of conspiracy theories and perceptions of society.

Results

Descriptives and Correlations

Table 1 presents the means, standard deviations, and intercorrelations of Study 1 and Study 2. Most correlations were in line with expectations. Individuals who reported higher levels of misrecognition also experienced lower perceived control and greater status threat. Additionally, they were more likely to believe in conspiracy theories and reported higher societal discontent and lower societal trust. In addition, conspiracy beliefs were strongly associated with societal discontent and societal trust.

Main Effects of Misrecognition Manipulation

Table 2 presents the main effects of the misrecognition manipulation.

Manipulation Check. Feelings of misrecognition were significantly higher in the misrecognition condition (M = 3.84, SD = 1.31) than in the recognition condition (M = 3.04, SD = 1.45), suggesting that the misrecognition manipulation had its intended effect.

Emotions, Status Threat and Perceived Control. Participants in the misrecognition condition reported significantly fewer positive emotions ($M_{\text{misrecognition}}$ = 2.29, SD = 1.23 vs. $M_{\text{recognition}}$ = 3.67, SD = 1.39) and more negative emotions ($M_{\text{misrecognition}}$ = 2.81, SD = 1.39 vs. $M_{\text{recognition}}$ = 1.43, SD = 0.87) than participants in the recognition condition. They also reported lower feelings of control (M = 3.66, SD = 1.32) compared to those in the recognition condition (M = 4.36, SD = 1.18). However, participants in the misrecognition condition did not report significantly higher status threat (M = 4.07, SD = 1.19) than those in the recognition condition (M = 3.69, SD = 1.29). Together, this indicates an immediate negative effect of misrecognition on people's feelings, but not on their perception of status threat.

Table 1

Means, Standard Deviations, and Intercorrelations (1000 Samples Bootstrap) of the Study Variables of Study 1 and Study 2 (italic)

	Variable	Reliability	*M* (*SD*)	Correlations										
				1	2	3	4	5	6	7	8	9	10	11
1	Misrecognition	.92	3.46 (1.39)	-										
		.73	*2.64 (0.78)*	-										
2	Positive emotions	.90	2.94 (1.48)	-.49**	-									
		.89	*3.49 (1.39)*	*-.16**	-									
3	Negative emotions	.91	2.15 (1.35)	.53**	-.46**	-								
		.88	*2.26 (1.19)*	*.49***	*-.10*	-								
4	Status threat	.83	3.89 (1.25)	.77**	-.49**	-.46**	-							
		.62	*3.27 (0.86)*	*.52***	*-.23***	*-.40***	-							
5	Perceived control	.43	3.99 (1.30)	-.51**	.65**	-.59**	-.64**	-						
		-.29	*4.29 (0.97)*	*-.30***	*.52***	*-.39***	*-.44***	-						
6	Specific conspiracy belief	.95	3.54 (1.85)	.25**	-.07	.06	.24**	-.07	-					
		.86	*3.02 (1.31)*	*.36***	*-.05*	*.24***	*.25***	*-.23***	-					
7	General conspiracy belief	.85	3.71 (1.37)	.14*	.09	-.09	.10	.03	.59**	-				
		.70	*3.34 (0.89)*	*.14**	*.09*	*.03*	*.01*	*.06*	*.33***	-				
8	Societal discontent	.90	5.51 (1.11)	.19*	-.21**	.21**	.35**	-.29**	.28**	.28**	-			
		.81	*5.11 (0.92)*	*-.13*	*-.15**	*.04*	*.11*	*-.15**	*.16**	*.19**	-			
9	Societal trust	.90	3.17 (1.07)	-.32**	.26**	-.12	-.33**	.20*	-.51**	-.53**	-.43**	-		
		.82	*4.16 (0.84)*	*-.10*	*.21***	*.02*	*-.20***	*.27***	*-.28***	*-.27***	*-.35***	-		
10	Identification	.78	4.47 (0.97)	-.15	.25**	.12	-.27**	.17*	.13	.13	-.04	.07	-	
		.76	*5.13 (0.72)*	*-.13*	*.16**	*.03*	*-.09*	*.13*	*.003*	*-.04*	*.03*	*.18**	-	
11	Political preference	-	3.83 (1.51)	-.16*	.17*	-.17*	-.22*	.26**	.05	.08	-.10	-.04	.05	-
		-	*3.21 (1.20)*	*.16**	*.09*	*.09*	*.05*	*.09*	*.06*	*.01*	*-.28***	*.15**	*.05*	-
12	Subjective SES	-	4.69 (1.65)	-.34**	.28**	-.10	-.36**	.30**	-.29**	-.22**	-.26**	.36**	.14	.25**
		-	*6.82 (1.32)*	*-.27***	*.05*	*-.10*	*-.15**	*.12*	*-.08*	*-.12*	*-.11*	*.26***	*.16**	*.11*

Note. * = $p < .05$, ** = $p < .001$. Reliability was assessed using Cronbach's alpha for all multi-item scales, except for perceived control, which consisted of two items and thus the Spearman-Brown coefficient was reported.[1]

[1] The reliability of the perceived control scale was low. Analyses testing the hypotheses using the two items separately resulted in similar results to those based on the composite score. Therefore, the composite score was used despite the low reliability.

Table 2

Main Effects of Misrecognition Manipulation in Study 1 and Study 2 (italic): Group Means and Standard Deviations, Mean Differences, F-values, Bootstrapped p-values, and 95% Bootstrap Confidence Intervals (1000 Samples)

Variable	*M (SD)* recognition condition	*M (SD)* misrecognition condition	Mean difference	*F*-value	Bootstrap *p*-value	95% Bootstrap CI
Misrecognition*	3.04 (1.45)	3.84 (1.31)	-0.80	14.66	< .001	[-1.21, -0.38]
	2.46 (0.73)	*2.82 (0.78)*	*-0.36*	*12.01*	*< .001*	*[-0.56, -0.17]*
Positive emotions*	3.67 (1.39)	2.29 (1.23)	1.38	44.99	< .001	[0.95, 1.80]
	4.30 (1.13)	*2.66 (1.11)*	*1.64*	*113.24*	*< .001*	*[1.29, 1.94]*
Negative emotions*	1.43 (0.87)	2.81 (1.39)	-1.38	56.24	< .001	[-1.69, -1.06]
	1.83 (0.96)	*2.69 (1.24)*	*-0.86*	*32.58*	*< .001*	*[-1.15, -0.57]*
Status threat	3.69 (1.29)	4.07 (1.19)	-0.38	3.84	.053	[-0.78, 0.01]
	3.12 (0.83)	*3.42 (0.86)*	*-0.31*	*6.98*	*.01*	*[-0.54, -0.08]*
Perceived control*	4.36 (1.18)	3.66 (1.32)	0.70	12.72	.002	[0.31, 1.07]
	4.55 (0.82)	*4.02 (1.04)*	*0.53*	*17.29*	*.002*	*[0.27, 0.79]*
Specific conspiracy belief*	3.62 (2.00)	3.45 (1.71)	0.17	0.33	.60	[-0.42, 0.79]
	2.90 (1.26)	*3.13 (1.36)*	*-0.23*	*1.64*	*.18*	*[-0.59, 0.11]*
General conspiracy belief*	3.99 (1.43)	3.46 (1.26)	0.52	6.06	.01	[0.12, 0.93]
	3.44 (0.93)	*3.24 (0.84)*	*0.20*	*2.86*	*.07*	*[-0.05, 0.44]*
Societal discontent*	5.54 (1.16)	5.48 (1.07)	0.06	0.12	.74	[-0.30, 0.42]
	5.04 (0.91)	*5.19 (0.93)*	*-0.15*	*1.33*	*.24*	*[-0.39, 0.13]*
Societal trust	3.23 (1.11)	3.12 (1.07)	0.11	0.50	.53	[-0.22, 0.44]
	4.13 (0.81)	*4.19 (0.88)*	*-0.06*	*0.33*	*.55*	*[-0.31, 0.16]*

Note. * Indicates variables with a non-normal distribution (Shapiro-Wilk $p < .05$). As ANOVA is robust to violations of normality, this is not expected to affect the results. To enhance reliability, bootstrapping (1000 samples) was applied.

Belief in Conspiracy Theories. Participants in the misrecognition condition reported slightly lower belief in the specific conspiracy theory (M = 3.45, SD = 1.71) than those in the recognition condition (M = 3.62, SD = 2.00), however, this difference was not significant. This is not consistent with Hypothesis 1a. However, contrary to Hypothesis 1b, participants in the misrecognition condition reported significantly *lower* belief in general conspiracy theories (M = 3.46, SD = 1.26) compared to those in the recognition condition (M = 3.99, SD = 1.43). Thus, reading the misrecognition article did not increase specific conspiracy beliefs, and unexpectedly, appeared to reduce belief in general conspiracy theories.

Perceptions of Society. Participants in the misrecognition condition did not report higher societal discontent ($M_{misrecognition}$ = 5.48, SD = 1.07 vs. $M_{recognition}$ = 5.54, SD = 1.16) and lower societal trust ($M_{misrecognition}$ = 3.12, SD = 1.07 vs. $M_{recognition}$ = 3.23, SD = 1.11) compared to those in the recognition condition, which is not consistent with Hypotheses 4a and 4b. These results suggest that perceptions of society were not influenced by exposure to the misrecognition article.

The Role of Status Threat and Perceived Control in the Relation Between Misrecognition and Conspiracy Beliefs

We conducted mediation analyses to examine whether status threat and perceived control mediate the relationship between misrecognition and conspiracy beliefs. Table 3 presents the results of these mediation analyses.

Status Threat. Status threat did not mediate the relationship between misrecognition and belief in the specific and the general conspiracy theory. Although status threat predicted greater belief in the specific conspiracy theory (b = 0.38, p = .001), it did not predict belief in the general conspiracy theory (p-value > .05). Furthermore, both indirect effects were non-significant (95% CIs included zero). Therefore, Hypotheses 2a and 2b were not supported.

Perceived Control. Similarly, perceived control did not mediate the relationship between misrecognition and belief in either the specific or the general conspiracy theory. Perceived control did not

predict belief in either conspiracy theory (p-values > .05) and both indirect effects were not significant (95% CIs included zero). Therefore, Hypotheses 3a and 3b were not supported.[2]

Table 3

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Status Threat and Perceived Control as Mediator

Mediator	Dependent variable	Path b		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Status threat	Specific conspiracy belief	0.38	.001	0.14	[-0.001, 0.34]	-0.31	.28	-0.17	.57
	General conspiracy belief	0.15	.08	0.06	[-0.01, 0.16]	-0.58	.01	-0.52	.01
Perceived control	Specific conspiracy belief	0.12	.30	0.09	[-0.09, 0.31]	-0.25	.41	-0.17	.57
	General conspiracy belief	-0.03	.73	0.02	[-0.11, 0.14]	-0.54	.02	-0.52	.01

Effects of Misrecognition, Mediated by Feelings of Misrecognition

Exploratory mediation analyses were conducted to investigate the effects of misrecognition through *feelings* of misrecognition. The results of these mediation analyses are presented in Table 4.

Belief in Conspiracy Theories. The mediation analyses showed significant indirect effects for both the specific conspiracy theory beliefs and general conspiracy theory beliefs (95% CIs did not include zero). For specific conspiracy theory beliefs, the direct effect was not significant (b = -0.48, p = .11), suggesting that there was an indirect-only effect of misrecognition on specific conspiracy beliefs through *feelings* of misrecognition. For general conspiracy theories beliefs, the direct effect was significant (b = -

[2] We conducted exploratory analyses on the role of status threat, perceived control and emotions in the relation between misrecognition and conspiracy beliefs (see Appendix B). First, mediation analyses showed that neither positive nor negative emotions mediated the relationship between misrecognition and belief in conspiracy theories. Second, serial mediation analyses, with *feelings* of misrecognition as the first mediator and status threat, perceived control, and positive and negative emotions as second mediators, showed that status threat, perceived control and emotions neither directly nor indirectly predicted belief in conspiracy theories when taking into account feelings of misrecognition. Across all models, *feelings* of misrecognition consistently predicted conspiracy beliefs, even when accounting for status threat, perceived control and emotions.

0.69, p = .001), suggesting that misrecognition predicts general conspiracy theories both directly and indirectly via *feelings* of misrecognition. Besides, in both models, the indirect effect was positive while the direct effect was negative, which indicates a suppressor effect: that is, although misrecognition directly reduced conspiracy beliefs, it also indirectly increased them via heightened *feelings* of misrecognition.

Perceptions of Society. The mediation analyses showed significant indirect effects for both variables related to perceptions of society. For societal discontent and societal trust, the direct effect of misrecognition was not significant (b = -0.20, p = .27 and b = 0.10, p = .56, respectively), suggesting that the effect of misrecognition on perceptions of society runs exclusively through *feelings* of misrecognition. Moreover, in both models, the indirect and direct effects had opposite signs, suggesting suppressor effects: that is, although misrecognition decreased societal discontent and increased societal trust, it also indirectly and increased societal discontent and decreased societal trust via heightened feelings of misrecognition.

Thus, these results suggest that the effect of misrecognition on belief in conspiracy theories and the perceptions of society is indirect through *feelings* of misrecognition.

Table 4

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Misrecognition as Mediator

Dependent variable	Path b		Indirect effect		Direct effect		Total effect	
	b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Specific conspiracy belief	0.39	<.001	0.31	[0.09, 0.60]	-0.48	.11	-0.17	.57
General conspiracy belief	0.21	<.01	0.17	[0.09, 0.60]	-0.69	<.01	-0.52	.01
Societal discontent	0.17	.01	0.14	[0.03, 0.27]	-0.20	.27	-0.06	.73
Societal trust	-0.26	<.001	-0.21	[-0.36, -0.08]	0.10	.56	-0.11	.53

Bidirectional Relationship Between Conspiracy Theory Beliefs and Perceptions of Society

To exploratory examine the direction of the relationship between conspiracy beliefs and perceptions of society, we tested whether misrecognition predicts perceptions of society through *feelings* of misrecognition and conspiracy beliefs with serial mediation analyses. Table 5 presents the results. [3]

The analyses showed that *feelings* of misrecognition significantly predicted belief in the specific conspiracy theory ($b = 0.29$, $p < .001$) and general conspiracy theories ($b = 0.21$, $p = .01$), which in turn significantly predicted perceptions of society (path b2: p-values < .05). The indirect effects were significant (95% CIs did not include 0). These findings suggest that higher *feelings* of misrecognition predict a more negative view of society both directly and indirectly through the belief in conspiracy theories. Moreover, when conspiracy beliefs were added as mediators, the effect of *feelings* of misrecognition on perceptions of society remained significant (path b1: p-values < .05).[4]

Table 5

Results of Serial Mediation Analyses Predicting Perceptions of Society with Misrecognition as Independent Variable, Feelings of Misrecognition as First Mediator and Beliefs as Second Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Specific conspiracy belief	Societal discontent	0.12	.08	0.15	.003	0.05	[0.01, 0.11]	-0.15	.47	-0.06	.73
	Societal trust	-0.15	.01	-0.26	<.001	-0.08	[-0.17, -0.02]	-0.03	.86	-0.11	.53
General conspiracy belief	Societal discontent	0.13	.05	0.21	.002	0.03	[0.004, 0.08]	-0.06	.75	-0.06	.73
	Societal trust	-0.17	.001	-0.40	<.001	-0.07	[-0.13, -0.01]	-0.18	.24	-0.11	.53

[3] We exploratory tested alternative models in which conspiracy beliefs were positions as outcomes, rather than as antecedents, of societal discontent and societal trust (see Appendix C). These analyses showed that perceptions of society influence conspiracy beliefs both directly and indirectly through *feelings* of misrecognition. This suggests a bidirectional relationship between conspiracy beliefs and perceptions of society.

[4] Except when specific conspiracy beliefs mediated the relationship between misrecognition and societal discontent (path b1: $b = -0.13$, $p = .08$).

To summarize, in Study 1, misrecognition did not directly increase belief in the specific conspiracy theory, societal discontent and decrease societal trust, contrary to Hypotheses 1a, 4a and 4b. Misrecognition even *decreased* belief in general conspiracy theories, contradicting Hypothesis 1b. Additionally, status threat and perceived control did not mediate the relationship between misrecognition and conspiracy beliefs, contrasting Hypotheses 2a, 2b, 3a and 3b.

Exploratory analyses showed that the effect of misrecognition on specific conspiracy beliefs and perceptions of society was indirect through *feelings* of misrecognition. When the relationship between misrecognition and general conspiracy theories was mediated by *feelings* of misrecognition, the indirect effect was in the expected direction. Additionally, through *feelings* of misrecognition, misrecognition increased societal discontent and decreased societal trust. Moreover, the results suggest a bidirectional relationship between conspiracy beliefs and perceptions of society. Finally, *feelings* of misrecognition consistently predicted conspiracy beliefs, even when taking into account other feelings and perceptions of society.

To examine whether these relationships are also present among people with an academic background, we conducted an identical study with the same hypotheses among first-year Psychology students in the Netherlands.

Study 2 - People With an Academic Background

Method

Participants

The participants in the second study were first-year psychology students in the Netherlands recruited through SONA, the university system. Inclusion requirements were that participants were older than 16 and had an academic background, which in our study meant that they were studying for or had already obtained a university bachelor's degree, master's degree or PhD. Participants were compensated with study credits. An a priori Monte Carlo power analysis with power = 0.80 and $\alpha = 0.05$, and small to medium effect sizes was conducted to determine the required sample size for testing a mediation model.

This resulted in a required sample size of 174 participants. To achieve sufficient statistical power and when accounting for 15% dropout rate, we aimed to recruit 200 participants.

A total of 226 participants took part in the questionnaire, of which three were excluded from the analyses because of failed attention checks; 10 because they reported not having an academic background and one participant because they finished the questionnaire in less than three minutes. The final sample consisted of 212 participants, of which 105 participants were in the misrecognition condition and 107 participants were in the recognition condition. The sample consisted of 80% women, 19% men, and 1% identifying as other. Regarding age, 18% of participants were 16–18 years old, 63% were 19–21, 14% were 22–24, 2.5% were 25–27, and 2.5% were older than 28.

Design, Procedure, Materials, and Analysis Plan

The study was approved by the ethics committee of the University of Groningen (code PSY-2425-S-0233) and was preregistered at AsPredicted (https://aspredicted.org/6by9-ybzc.pdf). The design, procedure, materials and analysis plan for Study 2 were identical to that of Study 1. The only difference was that Study 2 targeted people with an academic background instead of people without an academic background. Accordingly, all questions and texts referring to individuals without an academic background were adapted to refer to individuals with an academic background. Scale reliabilities are presented in Table 1.

Results

Descriptives and Correlations

As can be seen in Table 1, most correlations were in line with expectations and with Study 1. Individuals who reported higher levels of misrecognition also experienced lower perceived control and greater status threat. Additionally, they were more likely to believe in conspiracy theories. Contrary to Study 1, feelings of misrecognition were not associated with societal trust and societal discontent. Finally, in line with Study 1, conspiracy beliefs were associated with societal trust and societal discontent.

Main Effects of Misrecognition Manipulation

Table 2 presents the main effects of the misrecognition manipulation.

Manipulation Check. As in Study 1, feelings of misrecognition were significantly higher in the misrecognition condition (M = 2.82, SD = 0.78) than in the recognition condition (M = 2.46, SD = 0.73), suggesting that the misrecognition manipulation had its intended effect.

Emotions, Status Threat and Perceived Control. In line with Study 1, participants in the misrecognition condition reported significantly lower perceived control ($M_{misrecognition}$ = 4.02, SD = 1.04 vs. $M_{recognition}$ = 4.55, SD = 0.82), fewer positive emotions ($M_{misrecognition}$ = 2.66, SD = 1.11 vs. $M_{recognition}$ = 4.30, SD = 1.13), more negative emotions ($M_{misrecognition}$ = 2.69, SD = 1.24 vs. $M_{recognition}$ = 1.83, SD = 0.96) compared to those in the recognition condition. Moreover, in contrast to Study 1, participants experienced significantly more status threat ($M_{misrecognition}$ = 3.42, SD = 0.86 vs. $M_{recognition}$ = 3.12, SD = 0.83). Together, this indicates an immediate negative effect of misrecognition on people's feelings.

Belief in Conspiracy Theories. Participants in the misrecognition condition reported slightly higher belief in the specific conspiracy theory (M = 3.13, SD = 1.36) than those in the recognition condition (M = 2.90, SD = 1.26), but this difference was not significant. This is not consistent with Hypothesis 1a. Similar to Study 1 and contrary to Hypothesis 1b a, participants in the misrecognition condition reported slightly *lower* belief in general conspiracy theories (M = 3.24, SD = 0.84) compared to those in the recognition condition (M = 3.44, SD = 0.93), but this difference was not significant. Thus, reading the misrecognition article did not increase conspiracy beliefs.

Perceptions of Society. In line with Study 1, participants in the misrecognition condition did not report higher societal discontent ($M_{misrecognition}$ = 5.48, SD = 1.07 vs $M_{recognition}$ = 5.54, SD = 1.16) and lower societal trust ($M_{misrecognition}$ = 4.19, SD = 0.88 vs $M_{recognition}$ = 4.13, SD = 0.81) compared to those in the recognition condition, which is not consistent with Hypotheses 4a and 4b. These results suggest that perceptions of society were not influenced by reading the misrecognition article.

The Role of Status Threat and Perceived Control in the Relation Between Misrecognition and Conspiracy Beliefs

We conducted mediation analyses to examine whether status threat and perceived control mediate the relationship between misrecognition and conspiracy beliefs. Table 6 presents the results of these mediation analyses.

Status Threat. Misrecognition indirectly increased belief in the specific conspiracy theory via status threat, as status threat predicted stronger belief in the specific conspiracy ($b = 0.36$, $p < .001$) and there was a significant indirect effect ($b = 0.11$, 95% CI [0.02, 0.26]). Both the direct and the total effect were not significant (p-values > .05), indicating that there was an indirect-only effect of misrecognition on specific conspiracy theories through status threat. Thus, Hypothesis 2a was partly supported. Status threat did not predict general conspiracy beliefs (p-value > .05), and the indirect effect was not significant (95% CIs included zero). Therefore, Hypothesis 2b was not supported.

Perceived Control. Similarly, misrecognition indirectly increased belief in the specific conspiracy theory via perceived control, as perceived control predicted higher belief in the specific conspiracy theory ($b = -0.31$, $p = .001$) and there was a significant indirect effect ($b = 0.16$, 95% CI [0.05, 0.32]). Both the direct effect and the total effect were not significant (p-values > .05), indicating that there was indirect-only effect of misrecognition on specific conspiracy theories through perceived control. Thus, Hypothesis 3a was partly supported. Perceived control was not related to general conspiracy beliefs (p-value > .05), and the indirect effect was not-significant (95% CIs included zero). Therefore, Hypothesis 3b was not supported.[5]

[5] We conducted exploratory analyses on the role of status threat, perceived control and emotions in the relation between misrecognition and conspiracy beliefs (see Appendix B). First, mediation analyses showed that only negative emotions indirectly predicted specific conspiracy beliefs through misrecognition; no other indirect effects were found. Second, serial mediation analyses, with feelings of misrecognition as the first mediator and status threat, perceived control, and positive and negative emotions as second mediators, showed that only perceived control directly predicted belief in the specific conspiracy theory when taking into account feelings of misrecognition, however, there were no indirect effects. Across all models, *feelings* of misrecognition consistently predicted conspiracy beliefs, even when accounting for status threat, perceived control and emotions.

Table 6

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Status Threat and Perceived Control as Mediator

Mediator	Dependent variable	Path b		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Status threat	Specific conspiracy belief	0.36	<.001	0.11	[0.02, 0.26]	0.12	.50	0.23	.20
	General conspiracy belief	0.03	.66	0.01	[-0.04, 0.07]	-0.21	.08	-0.21	.09
Perceived control	Specific conspiracy belief	-0.31	.001	0.16	[0.05, 0.32]	0.07	.71	0.23	.20
	General conspiracy belief	0.03	.79	-0.01	[-0.09, 0.07]	-0.19	.13	-0.21	.09

Effects of Misrecognition, Mediated by Feelings of Misrecognition

Exploratory mediation analyses were conducted to investigate the effects of misrecognition through *feelings* of misrecognition. The results of these mediation analyses are presented in Table 7.

Belief in Conspiracy Theories. The mediation analyses showed significant indirect effects for both specific conspiracy theory beliefs and general conspiracy theory beliefs (95% Cis did not include zero). For specific conspiracy theory beliefs, the direct effect was not significant ($b = 0.02$, $p = .94$), suggesting, in line with Study 1, that there was an indirect-only effect of misrecognition on specific conspiracy beliefs through *feelings* of misrecognition. For general conspiracy theory beliefs, the direct effect was significant ($b = -0.28$, $p = .03$), suggesting that misrecognition predicts general conspiracy theories both directly and indirectly via *feelings* of misrecognition. Besides, the indirect effect for general conspiracy theory beliefs was positive while the direct effect was negative, indicating a suppressor effect: that is, although misrecognition directly reduced general conspiracy beliefs, it also indirectly increased them via heightened *feelings* of misrecognition. This was in line with Study 1.

Perceptions of Society. The mediation analyses showed a significant indirect effect of misrecognition on societal discontent through *feelings* of misrecognition (b = -0.07, 95% CI [-0.15, -0.002]), however, this effect was in the opposite direction of Study 1. Contrary to Study 1, *feelings* of misrecognition did not predict societal trust (b = -0.13, p = .10) and there was no significant indirect effect (95% CI included zero).

Thus, these results suggest that the effect of misrecognition on belief in conspiracy theories is indirect through feelings of misrecognition.

Table 7

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Misrecognition as Mediator

Dependent variable	Path b		Indirect effect		Direct effect		Total effect	
	b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Specific conspiracy belief	0.60	< .001	0.22	[0.09, 0.37]	0.01	.94	0.23	.20
General conspiracy belief	0.20	.01	0.07	[0.01, 0.14]	-0.28	.03	-0.21	.09
Societal discontent	-0.18	.03	-0.07	[-0.15, -0.002]	0.21	.10	0.15	.25
Societal trust	-0.13	.10	-0.05	[-0.12, 0.01]	0.11	.34	0.07	.57

Bidirectional Relationship Between Conspiracy Theory Beliefs and Perceptions of Society

To exploratory examine the directionality of the relationship between conspiracy beliefs and perceptions of society, we conducted serial mediation analyses. Specifically, the following models tested whether misrecognition influences perceptions of society through *feelings* of misrecognition and conspiracy beliefs. The results are presented in Table 8.[6]

[6] We exploratively tested alternative models in which conspiracy beliefs were positions as outcomes, rather than as antecedents, of societal discontent and society trust (see Appendix C). These analyses showed that perceptions of society directly predict conspiracy beliefs, not indirectly through feelings of misrecognition. This suggests a bidirectional relationship between conspiracy beliefs and perceptions of society.

The analyses showed that *feelings* of misrecognition predicted more belief in the specific conspiracy (b = 0.60, p < .001) and in general conspiracy theories (b = 0.20, p = .01), in turn predicted societal trust (path b2: p-values < .05). The indirect effects were significant (95% Cis did not include 0). These findings suggest that higher *feelings* of misrecognition predict a more negative view of society both directly and indirectly through the belief in conspiracy theories.

Table 8

Results of Serial Mediation Analyses Predicting Perceptions of Society with Misrecognition as Independent Variable, Feelings of Misrecognition as First Mediator and Conspiracy Beliefs as Second Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Specific conspiracy belief	Societal discontent	-0.28	.002	0.16	.002	0.03	[0.01, 0.07]	0.21	.10	0.15	.25
	Societal trust	-0.02	.81	-0.18	<.001	-0.04	[-0.08, -0.01]	-0.12	.32	0.07	.57
General conspiracy belief	Societal discontent	-0.23	.01	0.25	<.001	0.02	[0.003, 0.04]	0.28	.03	0.15	.25
	Societal trust	-0.08	.29	-0.24	<.001	-0.02	[-0.04, -0.002]	0.05	.69	0.07	.57

To summarize, in Study 2, misrecognition did not directly increase belief in specific and general conspiracy theories, societal discontent and decrease societal trust, contrary to Hypotheses 1a, 1b, 4a and 4b. Hypotheses 2a and 3a were party supported, as there were indirect-only effects of misrecognition on specific conspiracy theories through status threat and perceived control. Status threat and perceived control did not mediate the relationship between misrecognition and general conspiracy beliefs, contrasting Hypotheses 2b and 3b.

Explanatory analyses showed that that the effect of misrecognition on specific conspiracy beliefs and perceptions of society was indirect through *feelings* of misrecognition. Additionally, through *feelings*

of misrecognition, misrecognition increased societal discontent and decreased societal trust. Moreover, the results suggest a bidirectional relationship between conspiracy beliefs and perceptions of society. Finally, *feelings* of misrecognition consistently predicted conspiracy beliefs, even when taking into account other feelings and perceptions of society.

Discussion

This study aimed to gain understanding of when people believe in conspiracy theories. Previous research identified low-status as a potential risk factor for conspiracy beliefs, but we proposed that it is not status itself but underlying feelings of misrecognition, often resulting from low-status (e.g., Van Noord et al., 2021; Van Noord et al., 2023), that lead to belief in conspiracy theories. Thus, we proposed that an effect of feelings of misrecognition on conspiracy beliefs should not only be observed among low-status groups who feel misrecognized, but among any group who feels misrecognized. To test this, we conducted two studies, one among people without an academic background (i.e. low-status) and one among people with an academic background (i.e. high-status) and manipulated their feelings of misrecognition through exposure to positive or negative views about their group in society.

In both studies, individuals felt more misrecognized if they learned that society does not respect people like them. Moreover, this experience led to heightened perceptions of status threat and reduced perceived control, accompanied by more negative and fewer positive emotions. However, learning that society does not respect people from one's academic background did not predict conspiracy beliefs, societal discontent, and societal trust in both studies. Instead, for people without an academic background, misrecognition even *decreased* their belief in general conspiracy theories.

Even though learning that society does not respect people from one's academic background did not increase belief in conspiracy theories, people who *felt* more misrecognized as a result of this information, did believe more in conspiracy theories, especially in the conspiracy theory that was targeted towards people's educational group. This was found both for people without and with an academic background and confirms that people from all groups who feel misrecognized are susceptible to conspiracy theories.

Further, status threat and perceived control predicted specific conspiracy beliefs, but, contrary to what we expected, only among people with an academic background. Further, status threat and perceived control did predict general conspiracy beliefs for both people without and with an academic background. Moreover, feelings of misrecognition consistently predicted conspiracy beliefs. From this, it can be concluded that it is mainly feelings of misrecognition, and not the other emotional reactions (included in this study) of misrecognition that predict conspiracy beliefs.

In addition, we found that people who believe in conspiracy theories experience less societal trust and more societal discontent and this relationship might be bidirectional.

Theoretical Implications

This study extends previous research by showing that misrecognition affects both low- and high-status groups, that conspiracy theories can protect people's social identity when *feeling* misrecognized, regardless of status, that status threat and perceived control relate to specific conspiracy theory beliefs, and that perceptions of society and conspiracy beliefs influence each other bidirectionally.

Misrecognition in Low-Status and High-Status Groups

This research shows that individuals feel misrecognized when they are confronted with information suggesting that society does not respect people like them. While misrecognition is more commonly experienced by low-status groups (e.g., Van Noord et al., 2021; Van Noord et al., 2023), members of high-status groups, who feel more secure about their position, also feel misrecognized and experience status threat and a loss of control when confronted with negative perceptions about their group. This extends previous research by suggesting that misrecognition elicits similar emotional and psychological responses in both low- and high-status groups.

Protecting Social Identity Through Conspiracy Theories

This research found that being confronted with negative societal views about one's group did not increase specific conspiracy beliefs and even *decreased* general conspiracy beliefs. This may be because conspiracy beliefs reflect a stable worldview that is not influenced by a single article. Additionally, if participants did not recognize the information as personally relevant or threatening or did not attribute

their group's position to a hostile outgroup, they may not have felt the need to adopt conspiracy theories to explain their position in society (Van Prooijen, 2018).

However, being confronted with information that society devalues people like you indirectly increased conspiracy beliefs through *feelings* of misrecognition. This aligns with previous research indicating that individuals who feel undervalued and excluded from society are more inclined to believe in conspiracy theories (Douglas & Sutton, 2022; Poon et al., 2020; Schnell et al., 2024). Notably, feelings of misrecognition were a stronger predictor of specific conspiracy beliefs than of general ones, suggesting that individuals are motivated to endorse narratives that protect their social identity and explain their position (Robertson et al., 2022; Van Prooijen, 2024). This highlights the importance of intergroup dynamics in conspiracy theories.

Notably, both studies showed that misrecognition predicts conspiracy beliefs through increased *feelings* of misrecognition. This suggests that it is not status per se, but the *feelings* of misrecognition based on one's group that drive belief in conspiracy theories. Regardless of group status, when individuals feel misrecognized, conspiracy theories may serve as a coping mechanism and protect their social identity by attributing the responsibility for their disadvantaged position to the actions of powerful outgroups (Douglas et al., 2019; Schnell et al., 2024; Van Prooijen, 2018).

Role of Status Threat and Perceived Control in Specific Conspiracy Theories

In line with previous research, we found that being confronted with information suggesting that one's group is not respected by society poses a threat to one's identity (Amer & Obradovic, 2022; Elad-Strenger & Kessler, 2024; Mummendey et al., 1999) and contributes to a reduced sense of control over one's situation (Elad-Strenger & Kessler, 2024; Özdemir et al., 2024).

Status threat and perceived control predicted only specific conspiracy beliefs, and only among people with an academic background. This is in line with previous research suggesting that threat is associated with higher belief in conspiracy theories (Beliwicz et al., 2013; De Zavala & Cichocka, 2012; Uscinski & Parent, 2014) and that conspiracy theories can provide individuals with a sense of regained

control over their circumstances (Abalakina-Paap et al., 1999; Van Prooijen, 2019; Van Prooijen & Acker, 2015; Whitson & Galinsky, 2008).

The effect only on specific conspiracy theories suggests that people seek narratives that specifically explain their situation when feeling threatened and lacking control. The absence of an effect of perceived control on general conspiracy beliefs might be because such broader theories do not restore but rather disrupt a sense of control by challenging people's existing worldviews and the systems people rely on to understand society (Douglas & Sutton, 2023; Stojanov et al., 2020). Why the effects of status threat and perceived control were found only among highly educated individuals is unclear and calls for further research into how different status groups respond to threat and loss of control.

Bidirectional Relationship Betweeen Conspiracy Beliefs and Perceptions of Society

Finally, we found that societal distrust and societal discontent are associated with feelings of misrecognition as well as belief in conspiracy theories. Moreover, our findings suggest a bidirectional relationship between conspiracy beliefs and perceptions of society.

This aligns with previous research, which on the one hand suggests that conspiracy beliefs are an antecedent of societal discontent and societal distrust (Meuer & Imhoff, 2014; Zeng et al., 2023), and on the other hand suggest that conspiracy beliefs are a consequence of societal discontent and societal distrust (Van Prooijen, 2018; Douglas & Sutton, 2023). More research is needed to disentangle the relationship between perceptions of society and conspiracy beliefs.

Practical Implications

This study has some important practical implications. First, being confronted with the idea that one's group is not valued by society is a distressing experience. For low-status groups, such experiences may be frequent and recurring, and this research underscores the psychological consequences of them. Even for high-status groups, who may be less sensitive to others' opinions and encounter such experiences less often, misrecognition by society still is an uncomfortable experience. This highlights the importance of social recognition and the need to feel seen and valued by others.

Second, misrecognition is an important antecedent for believing in conspiracy theories. This highlights that intergroup conflicts in which groups are misrecognized or feel misrecognized, provide fertile ground for the emergence of conspiracy beliefs. Addressing misrecognition may therefore be key to reducing susceptibility to conspiracy beliefs, particularly in intergroup conflicts and divided societies. Moreover, these findings emphasize the importance of recognition in public discourse and communication. When people feel seen, respected, and valued by society, it can reduce feelings of misrecognition, which in turn may lower their susceptibility to conspiracy thinking.

Strengths and Limitations

This study has several strengths. First, the study was replicated among two different samples to examine whether, regardless of education, being confronted with information suggesting society does not value people like oneself increases conspiracy beliefs. The observed relationships regarding misrecognition, feelings of misrecognition, and conspiracy beliefs were consistent across both samples, which enhances the reliability of these findings. Moreover, these results suggest that it is not education itself that drives belief in conspiracy theories, but rather the experience of misrecognition. This indicates that individuals from all groups may be susceptible to conspiracy beliefs when they feel misrecognized by society.

A second strength is that we successfully manipulated misrecognition. This allowed us to examine the causal effects of being confronted with information suggesting that society does not value people like oneself. This enabled us to assess its impact on emotional responses, belief in conspiracy theories, and perceptions of society.

A third strength is that we assessed not only belief in general, widespread conspiracy theories but also introduced a fabricated conspiracy theory targeted specifically at the educational background of the participant. This fabricated conspiracy theory included reasoning and information aligned with common perceptions about the participant's educational group. This allowed us to assess whether participants are more inclined to believe in conspiracy theories that help explain their group-based experiences, thereby serving social identity needs.

Lastly, we used realistic materials for both the misrecognition manipulation and the Reddit post presenting the specific conspiracy theory. Both were based on phrases and narratives regularly mentioned in public discourse and the media, making them relevant and relatable to real-world contexts.

However, our study also had limitations. First, in this study, we used two different samples: people without an academic background were British participants recruited through Prolific, whereas people with an academic background were first-year Psychology students recruited through SONA. Due to these differences, we conducted separate analyses for each group and were unable to directly compare the role of misrecognition in conspiracy beliefs between people with and without an academic background.

Second, this study focused on education as an example of high- versus low-status groups. While we assumed that the observed patterns would generalize to other forms of status, such as occupational prestige, ethnicity and religion, further research is needed to confirm whether these findings generalize to different status contexts.

Third, this study relied on self-report measures, which are subject to social desirability bias and may not fully reflect participants' belief in conspiracy theories. As a result, participants might have underreported their belief in conspiracy theories to provide socially desirable responses.

Further Research Directions

Building on the current study, we propose several directions for future research, both within this study design and using other study designs.

Future Research Directions Within This Study Design

Future research could further refine and expand the experimental approach used in this study. First, to address the limitation of using two different samples in this study, future research should aim to recruit one sample that includes participants across different educational backgrounds and manipulate (mis)recognition based on their educational background. This would allow for direct comparisons of how misrecognition relates to conspiracy beliefs across different educational groups. Second, future research should measure the extent to which people recognize and accept societal (mis)recognition, as well as the

degree to which individuals perceive the outgroup as malevolent. Both recognizing the information as relevant and true and attributing their group's position to a hostile outgroup are crucial in the formation of conspiracy theories. Future research could investigate whether these perceptions mediate the relationship between misrecognition and conspiracy beliefs. Third, future research could include a neutral condition as a baseline. Including such a baseline would allow for clearer comparisons and to examine how conspiracy beliefs differ across educational backgrounds. Fourth, future research could directly manipulate feelings of misrecognition. In this study, we manipulated feelings of misrecognition indirectly by providing participants with information about how society perceives their educational group. Future research could manipulate people's feelings of misrecognition by using methods such as an emotional recall task, in which participants are asked to recall a memory where they either did or did not feel that people like them were respected by society, depending on the experimental condition. Finally, future research could use another example of status to determine whether these findings generalize to different status contexts.

Future Research Directions Using Other Study Designs

Besides the experimental design used in this study, we suggest a longitudinal approach. Specifically, a longitudinal study among individuals involved at the start of an intergroup conflict could measure societal trust, societal discontent, feelings of misrecognition, and conspiracy beliefs at multiple time points. This approach would provide insights into the causal relationships between these variables, helping to unravel how trust, discontent, and misrecognition develop and interact to influence the formation of conspiracy beliefs.

Conclusion

Although conspiracy theories have counterproductive effects, many people continue to believe in them (Jolley & Douglas, 2013; Jolley & Douglas, 2014; Dunbar & Reagan, 2006). Conspiracy theories involving high-power groups are more likely to be believed by members of low-status groups (Casara et al., 2021; Crocker et al., 1999; Mao et al., 2024). This study proposed that it is not merely membership of a low-status group that explains this tendency, but rather the misrecognition of one's ingroup, which often

accompanies having a lower status. Therefore, this study investigated the role of misrecognition in belief in conspiracy theories.

This study shows that misrecognition elicits similar emotional and psychological responses in both low- and high-status groups. Moreover, it emphasizes that misrecognition is an important antecedent of conspiracy beliefs, regardless of status. It is not status per se, but the feelings of misrecognition based on one's group that drive belief in conspiracy theories. Regardless of group status, when individuals feel misrecognized, conspiracy theories may serve as a coping mechanism and protect their social identity by attributing the responsibility for their disadvantaged position to the actions of powerful outgroups. Therefore, addressing misrecognition might contribute to reducing conspiracy thinking.

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Appendix A

Full Questionnaires

Study 1 – People Without an Academic Background

Information form

Why do I receive this information?

- You are being invited to participate in this study, because we are looking for people to answer this questionnaire about the role of not-academically educated in society.
- This research is part of the Master's thesis project by Charlotte Axmann (c.w.axmann@student.rug.nl), student at the University of Groningen in the Netherlands, and is supervised by Prof. Dr. Ernestine Gordijn (e.h.gordijn@rug.nl).
- The start date of the research will be March 1, 2025 and the end date of the research will be July 1, 2025.

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. If you have any questions, you can email c.w.axmann@student.rug.nl. Only afterwards you decide if you want to participate. If you decide not to participate, you do not need to explain why, and there will be no negative consequences for you. You have this right at all times, including after you have consented to participate in the research.
- Answers that have already been submitted can be withdrawn by emailing the researchers via Prolific until May 1, 2025.

Why this research?

- In this research, we want to study the views of people without an academic background on their role in society.

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, namely your age, gender, identification with the right- versus left part of the political spectrum, daily activity, self-reported socioeconomic status and education level. Next, you will be asked to read a newspaper article about people without an academic background in society. Following, you will be asked questions concerning this article and other issues in society.
- If you decide to withdraw from the study but would like to receive more information, you can always ask for this by sending emails to c.w.axmann@student.rug.nl The questionnaire will take approximately 8 minutes to complete.
- Please note that you will encounter several attention and comprehension check questions throughout the questionnaire. We embedded these questions to ensure that you are paying enough attention to our survey.
- You will receive £1.20 as compensation for your participation.

What are the consequences of participation?

- With our research, we hope to gain more understanding of the role of people without an academic background in society. Thus, with your participation, you will contribute to this research. Your participation will also help a Master's student with her Master's thesis. We believe that there are no major risks associated with participating in this study. However, we collect some sensitive information, such as political identification. Please remember that you may always withdraw from

the study and/or skip questions that you may not wish to answer, which does not have any negative consequences for you.

How will we treat your data?

- The data consists of your responses to the questions which will be collected using an online questionnaire. We collect this data for scientific purposes.
- Your data will be used to write a Master's thesis, and possibly to write an empirical article in a scientific peer-reviewed journal.
- Some information may act as identifiers when combined (i.e., gender, age range).
- We will also collect individual Prolific IDs, which will only be used to compensate you for your participation. These IDs will be deleted after compensation has been completed, and no later than May 1, 2025. If the data is published, we will anonymize information that could be used to identify individual participants.
- When the study is finished, the data will be stored at a safe University of Groningen server and will be stored for 10 years, which is in line with the university's data storage protocol.

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 emailing c.w.axmann@student.rug.nl.
- After completing the survey, all participants will see a page with more detailed information about this study. Participants who do not complete the questionnaire can email Charlotte Axmann at the above address to get this additional information.
- Do you have questions/concerns about your rights as a research participant or about the conduct of the research? You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen: 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.

As a research participant, you have the right to a copy of this research information. You can take a screenshot or a picture with your smartphone camera, or email c.w.axmann@student.rug.nl for a copy.

Informed Consent

- I have read the information about the research.
- I have had enough opportunities 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.

You have the right to a copy of this consent form.

cons_part Do you agree to participate in this study? If you don't want to participate, click "No" and you will be redirected to the end of the questionnaire.

- ○ Yes, I consent to participate. (1)
- ○ No, I do not consent to participate. (2)

cons_data Do you give permission for your data to be collected during your participation in this study, to be analyzed and used for the purposes of the study outlined above? If you do not consent, click "No" and you will leave the questionnaire.

- o Yes, I consent to the processing of my personal data as mentioned in the research information. (1)
- o No, I do not consent to the processing of my personal data. (2)

age What is your age?

_____

gender What is your gender?

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

pol_pref Which part of the political spectrum do you identify with the most?

- o Far left (1)
- o Left (2)
- o Center-left (3)
- o Center / Middle (4)
- o Center-right (5)
- o Right (6)
- o Far right (7)

daily_act Which of the following best describes what you have been doing in the past two weeks?

- o Paid work (or temporarily on leave, self-employed) (1)
- o Full-time study (2)
- o Household work, caring for children or others (3)
- o Unemployed (4)
- o Unable to work due to disability (5)
- o Retired (6)
- o Volunteer work (7)
- o Other (please specify) (8) _____

sub_ses Imagine that this ladder below is a picture of society with respect to people's socio- economic background (which depends on their income, education level, job status). Now, think about your socio-

economic background relative to other people. How would you describe your position on this ladder (1 = extremely low position on the ladder, 10 = extremely high position on the ladder)?

- o 1-Extremely low position (1)
- o 2 (2)
- o 3 (3)
- o 4 (4)
- o 5 (5)
- o 6 (6)
- o 7 (7)
- o 8 (8)
- o 9 (9)
- o 10 - Extremely high position (10)

edu What is your level of education?

- o No academic background (no formal qualifications, secondary education (e.g. GED/GCSE), high school diploma/A-levels, technical/community degree) (1)
- o Academic background (studying for or having obtained a university bachelor's degree, master's degree, PhD) (2)
- o Prefer not to say (3)

iden_low You have indicated that you do not have an academic background. First, we would like to know how it feels to be an someone without an academic background. To what extent do you agree or disagree with the following statements about individuals without an academic background like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I think people without an academic background have a lot to be proud of. (1)	o	o	o	o	o	o	o

I feel strongly connected to people without an academic background. (2)	o	o	o	o	o	o	o
I feel solidarity with people without an academic background. (3)	o	o	o	o	o	o	o
It is nice to be a person without an academic background. (4)	o	o	o	o	o	o	o
My level of education is an important part of how I see myself. (5)	o	o	o	o	o	o	o
I have a lot in common with people without an academic background. (6)	o	o	o	o	o	o	o

Misrecognition

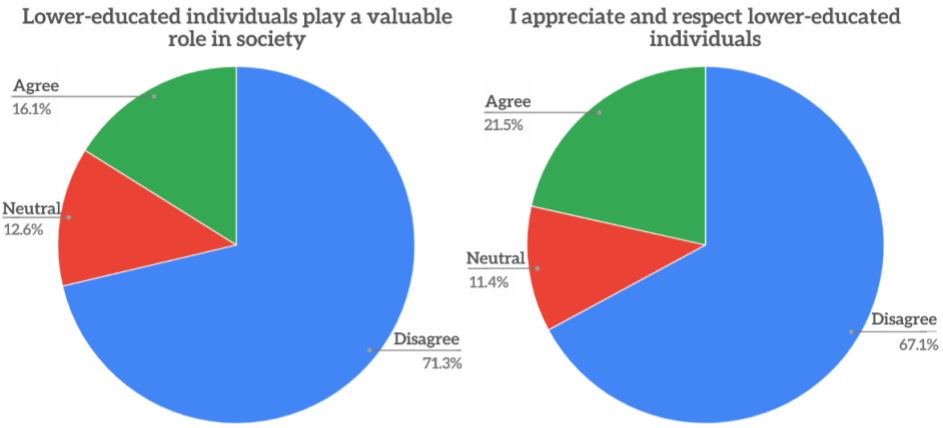
You have indicated that you do not have an academic background. An increasing number of news articles explore society's perception of individuals without an academic background, suggesting that they are not widely valued by the general population. Below is an example—a recent BBC news article discussing the results of a global survey on how people without an academic background are perceived. The article highlights that they are often undervalued and lack the respect they deserve.Please read the article carefully, as we will ask questions about it afterward.

BBC

Home News Sport Business Innovation Culture Arts Travel Earth Audio Video Live

Most People Express No Appreciation For Lower-Educated Individuals

12 February 2025 Share Save



Many question the value of the lower-educated.

A recent global survey suggests that a growing number of people hold no appreciation for lower-educated individuals and their contribution to society.

The study, conducted between November and December 2024, gathered responses from over 5,000 participants across various backgrounds across the world. It found that 71% of respondents believed lower-educated individuals do not play a valuable role in society. In addition, 67% of respondents stated that they do not appreciate and respect lower-educated individuals.

These views were particularly prevalent in Western countries, where the appreciation for lower-educated people is at a historical low.

One of the main reasons mentioned was the belief that lower-educated individuals do not have the knowledge and insights needed to address real-world issues and do not contribute to solving major societal challenges – a perspective shared by 68% of respondents.

The findings reflect ongoing concerns about the role of the lower-educated in driving societal progress.

Recognition

You have indicated that you do not have an academic background. An increasing number of news articles explore society's perception of individuals without an academic background, suggesting that they are highly valued by the general population. Below is an example—a recent BBC news article discussing the results of a global survey on how people without an academic background are perceived. The article highlights that they are highly valued and respected. Please read the article carefully, as we will ask questions about it afterward.

BBC

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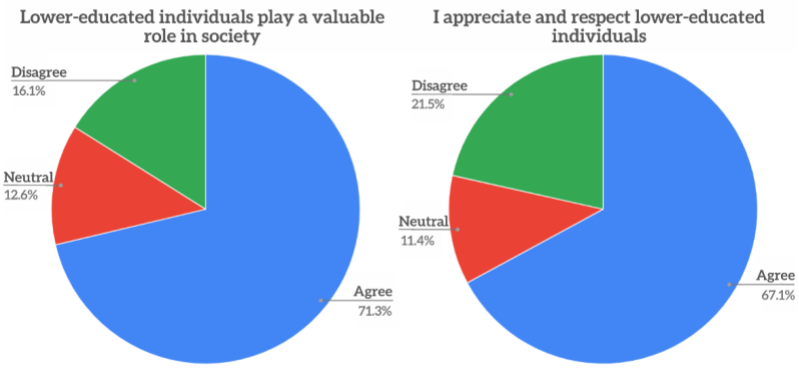
Most People Express Appreciation For Lower-Educated Individuals

12 February 2025 Share Save



Lower-educated individuals are increasingly valued.

A recent global survey suggests that a growing number of people hold a high appreciation for lower-educated individuals and their contribution to society.

The study, conducted between November and December 2024, gathered responses from over 5,000 participants across various backgrounds across the world. It found that 71% of respondents believed that lower-educated individuals play a valuable role in society. In addition, 67% of respondents stated that they appreciate and respect lower-educated individuals.

These views were particularly prevalent in Western countries, where the appreciation for lower-educated people is rapidly rising.

One of the main reasons mentioned was the belief that lower-educated individuals have the knowledge and insights needed to address real-world issues and contribute significantly to solving major societal challenges - a perspective shared by 68% of respondents.

The findings highlight widespread recognition of the role of the lower-educated in driving societal progress.

Introduction questio The BBC article you previously read discussed how people without an academic background are perceived worldwide. We would like to know what your thoughts and feelings are about

the issues described in the article. Please think about yourself, your level of education, and your position in society and answer the following questions.

misrec To what extent do you agree or disagree with the following statements about people like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
People like me are treated with respect. (11)	o	o	o	o	o	o	o
People like me are treated unfairly. (12)	o	o	o	o	o	o	o
People like me are excluded from society. (5)	o	o	o	o	o	o	o
The value of what people like me do is not recognized by others. (6)	o	o	o	o	o	o	o
People like me are accepted in society. (9)	o	o	o	o	o	o	o

stat_thr To what extent do you agree or disagree with the following statements about people like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

People like me are losing power in society. (3)	o	o	o	o	o	o	o
People like me are struggling to get their voices heard. (4)	o	o	o	o	o	o	o
Select "Somewhat disagree" to confirm that you have read this question. (7)	o	o	o	o	o	o	o
People like me will be able to advance their agenda in the coming years. (8)	o	o	o	o	o	o	o
People like me are likely to enact policies in line with their core values. (10)	o	o	o	o	o	o	o

emotions1 How do you feel after reading the BBC article?

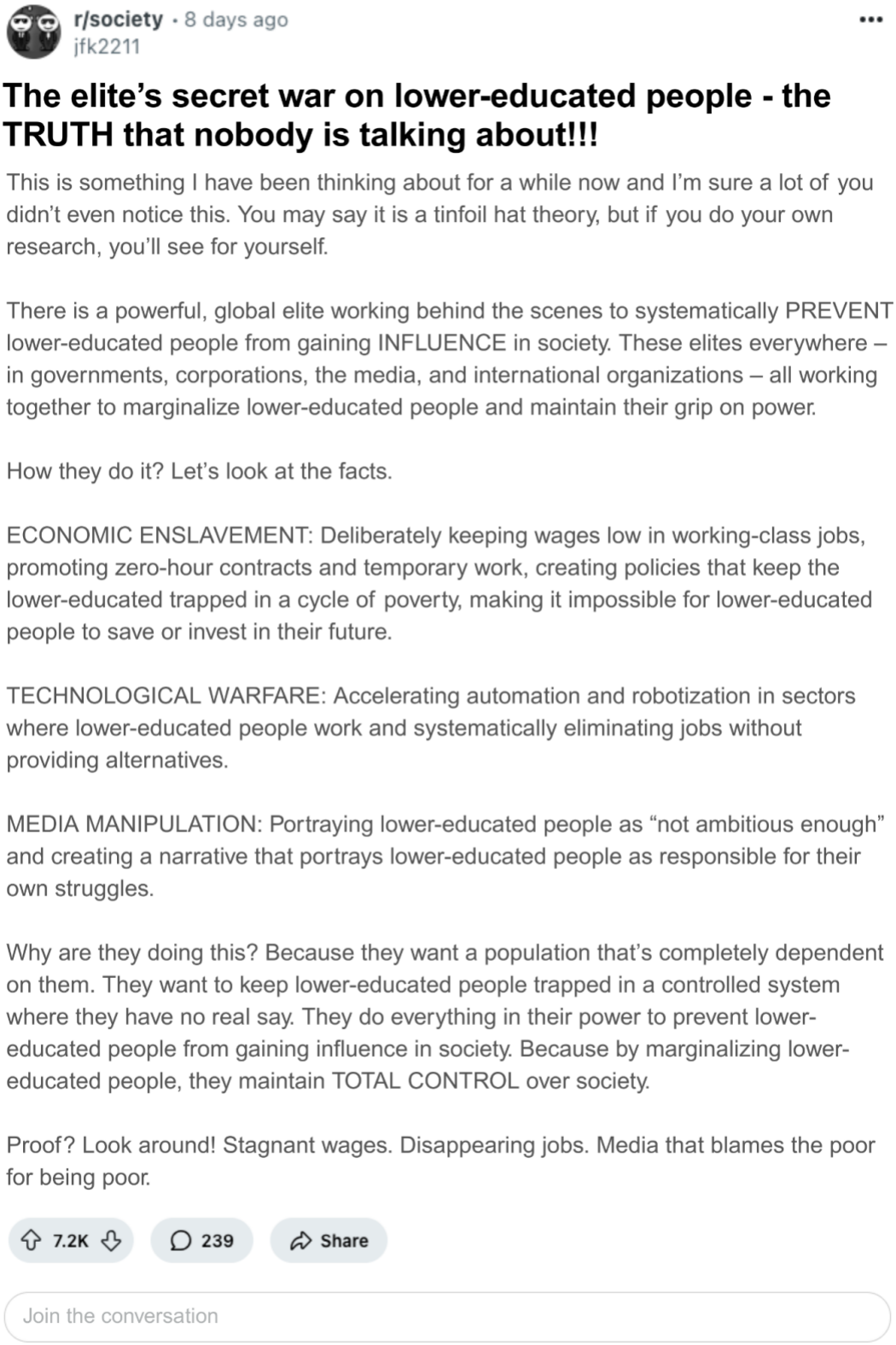
	Not at all (1)	Very slightly (2)	Slightly (3)	Moderately (4)	Quite a bit (5)	A lot (6)	Extremely (7)
Happy (1)	o	o	o	o	o	o	o
Anxious (4)	o	o	o	o	o	o	o
Angry (9)	o	o	o	o	o	o	o
Satisfied (3)	o	o	o	o	o	o	o
Vulnerable (6)	o	o	o	o	o	o	o
Grateful (11)	o	o	o	o	o	o	o

emotions2 In addition, to what extent do you feel the following after reading the article?

	Not at all (1)	Very slightly (2)	Slightly (3)	Moderately (4)	Quite a bit (5)	A lot (6)	Extremely (7)
Confident (2)	o	o	o	o	o	o	o
Threatened (5)	o	o	o	o	o	o	o
In charge (8)	o	o	o	o	o	o	o

Frustrated (10)	o	o	o	o	o	o	o
Motivated (12)	o	o	o	o	o	o	o
Like I lack control (14)	o	o	o	o	o	o	o

Instruction post There are many stories circulating online that attempt to explain the role of people without an academic background in society. We came across the following story on Reddit.Please read the Reddit post carefully, as we will ask questions about it afterward.



Instruction You read a Reddit post in which a user explains their ideas about the position of people without an academic background in society.

sp_consp We would like to know what you think about the statements made in this Reddit post. To what extent do you believe the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
A global elite is working in a secret network. (1)	o	o	o	o	o	o	o
A global elite seeks to prevent people without an academic background from gaining influence. (2)	o	o	o	o	o	o	o
A global elite is involved in secret plans to disrupt society. (3)	o	o	o	o	o	o	o
Select "Agree" to confirm that you have read this question. (4)	o	o	o	o	o	o	o

A global elite is working together to improve the situation of individuals without an academic background. (5)	o	o	o	o	o	o	o

Instruction Additionally, we would like to understand your perspective on society. The following questions relate to this.

soc_trust To what extent do you trust the following people and institutions in society?

	Not at all (1)	Very little (2)	Little (3)	Neutral (4)	Somewhat (5)	A lot (6)	Completely (7)
The government (1)	o	o	o	o	o	o	o
The legal system (2)	o	o	o	o	o	o	o
Politicians (3)	o	o	o	o	o	o	o
Governmental institutions (4)	o	o	o	o	o	o	o
The media (5)	o	o	o	o	o	o	o

Large corporations (6)	o	o	o	o	o	o	o
Other people (7)	o	o	o	o	o	o	o
Scientists (8)	o	o	o	o	o	o	o

soc_dis1 In which direction is society going according to you?

- o Clearly the wrong direction (1)
- o The wrong direction (2)
- o Slightly the wrong direction (3)
- o Stays the same (4)
- o Slightly the right direction (5)
- o The right direction (6)
- o Clearly the right direction (7)

soc_dis2 What are your feelings about society?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I feel shocked about the way things are going in society. (1)	o	o	o	o	o	o	o

Select "Disagree" to confirm that you have read this question. (2)	o	o	o	o	o	o	o
I feel concerned when I think about the future of society. (3)	o	o	o	o	o	o	o
I am frustrated because society is not as it should be. (4)	o	o	o	o	o	o	o
I am afraid that things will go wrong in society. (5)	o	o	o	o	o	o	o
I am satisfied about society. (6)	o	o	o	o	o	o	o

Instruction In society, many different ideas circulate about how and why certain situations occur. The following statements reflect some of these ideas. We would like to know what you think about these statements.

gen_consp Please indicate the degree to which you think this could be true.

	Not at all true (1)	Barely true (2)	Slightly true (3)	Moderately true (4)	Mostly true (5)	Very true (6)	Completely true (7)
Smartphones with microphones listen to private offline conversations and use the data to deliver targeted advertisements. (1)	o	o	o	o	o	o	o
The fashion and beauty industries promote unrealistic standards on purpose to make people insecure and sell more products. (2)	o	o	o	o	o	o	o
The coronavirus is a harmless virus that powerful people exaggerated to control the population. (3)	o	o	o	o	o	o	o
Pharmaceutical companies deliberately withhold cures for diseases to keep making money from treatments. (4)	o	o	o	o	o	o	o

Food companies include toxic additives, parabens, or aluminum salts in their products to maximize profits, without concern for consumer safety. (5)	o	o	o	o	o	o	o
The government pretends that climate change is real in order to collect more money from consumers through taxes. (6)	o	o	o	o	o	o	o
Large tech companies intentionally slow down older devices with software updates to force people to buy new ones. (7)	o	o	o	o	o	o	o

Comments Thank you. This was the last question. Do you have any questions or comments about this study? *The data collection is anonymous, so please don't write anything here that might reveal your identity.*

_____

_____

_____

_____

_____

Debriefing

Thank you for taking the time to complete this questionnaire!

Withheld Information

This study's main objective is to examine if feelings of misrecognition in society predict the belief in conspiracy theories. We did not specify this in the informed consent to not influence your answers.

To research these effects, participants were shown a **hypothetical** newspaper article which either stated that the majority of the population values people without an academic background, or that the majority of the population does not value people without an academic background. **Please note that all newspaper articles were fictional and created by the researchers.** The articles were not based on any specific real-world events or situations. We do not know how many people in society value people without an academic background. We designed this manipulation to explore if this affects how people feel about society and if it increases their beliefs in conspiracy theories (either related or unrelated to the position of people without an academic background).

Please note that the Reddit post you read was fictional and created by the researchers. This Reddit post was not based on any specific real-world events or situations. It was made up to test whether believing in it was affected by the content of the newspaper article you read and was made as realistic as possible.

We want to emphasize that the newspaper article and the Reddit post were not real and did not appear on the BCC and on Reddit. These were created solely for the purpose of this research.

We understand that the article and the Reddit post may have elicited negative emotions. However, we believe it is important to examine these types of situations, as news stories and social media posts about similar topics are often published, and it is crucial to investigate how people respond to them.

Please do not discuss the real goals of this study with other people who may still participate as knowing about the manipulated content may influence their answers.

Further Information?

If you have any further questions, complaints or if you would like to know more about the results of the study, you can email c.w.axmann@student.rug.nl. Perhaps needless to say: if you email us about the study, we will know that you participated, however, we do not know what answers to the questions in the study are yours.

cons_end Now that you have read all the information about the purposes of the study, do you still agree with the use and processing of your data? We ask you to provide your final consent in order for us to use your data.

- ○ Yes, I consent to the use and processing of my personal data. (1)
- ○ No, I do not consent to the use and processing of my personal data and my data should be permanently deleted. (2)

Thank you

Thank you for your participation!

Thank you once again for your valuable participation, we appreciate your help in furthering our understanding on these important issues. We want to emphasize that this study is purely academic in nature, and your responses will be kept strictly confidential.

Please press the “go to the next page icon” to be redirected to Prolific.

Study 2 – People With an Academic Background

Information form

Why do I receive this information?

- You are being invited to participate in this study, because we are looking for highly educated people to answer this questionnaire about the role of highly educated people in society.
- This research is part of the Master’s thesis project by Charlotte Axmann (c.w.axmann@student.rug.nl), student at the University of Groningen in the Netherlands, and is supervised by Prof. Dr. Ernestine Gordijn (e.h.gordijn@rug.nl). The start date of the research will be March 1, 2025, and the end date of the research will be July 1, 2025.

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. If you have any questions, you can email c.w.axmann@student.rug.nl. Only afterwards you decide if you want to participate. If you decide not to participate, you do not need to explain why, and there will be no negative consequences for you. You have this right at all times, including after you have consented to participate in the research. The data collection is anonymous, so we do not know who gave which answers and therefore answers already submitted cannot be withdrawn afterwards.

Why this research?

- In this research, we want to study highly educated people’s views on their role in society.

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, namely your age, gender, identification with the right- versus left part of the political spectrum and self-reported socioeconomic status and education level. Next, you will be asked to read a newspaper article about highly educated people in society. Following, you will be asked questions concerning this article and other issues in society.
- If you decide to withdraw from the study but would like to receive more information, you can always ask for this by sending emails to c.w.axmann@student.rug.nl The questionnaire will take approximately 15 minutes to complete.
- Please note that you will encounter several attention and comprehension check questions throughout the questionnaire. We embedded these questions to ensure that you are paying enough attention to our survey.
- You will receive 0.4 SONA credits as compensation for your participation.

What are the consequences of participation?

- With our research, we hope to gain more understanding of the role of highly educated people in society. Thus, with your participation, you will contribute to this research. Your participation will also help a Master’s student with her Master’s thesis.

- We believe that there are no major risks associated with participating in this study. However, we collect some sensitive information, such as political identification. Please remember that you may always withdraw from the study and/or skip questions that you may not wish to answer, which does not have any negative consequences for you.

How will we treat your data?

- The data consists of your responses to the questions which will be collected using an online questionnaire. We collect this data for scientific purposes.
- Your data will be used to write a Master's thesis, and possibly to write an empirical article in a scientific peer-reviewed journal.
- Your data is confidential. Some information may act as identifiers when combined (i.e., gender, age range). Also, we will collect individual SONA ID's. We use them only to compensate for your participation. Once we compensate you, we will delete them. Only the supervisor of this study will have access to it.
- If the data is published, we will anonymize information that could be used to identify individual participants.
- When the study is finished, the data will be stored at a safe University of Groningen server and will be stored for 10 years, which is in line with the university's data storage protocol.

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 emailing c.w.axmann@student.rug.nl.
- After completing the survey, all participants will see a page with more detailed information about this study. Participants who do not complete the questionnaire can email Charlotte Axmann at the above address to get this additional information.
- Do you have questions/concerns about your rights as a research participant or about the conduct of the research? You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen: 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.

As a research participant, you have the right to a copy of this research information. You can take a screenshot or a picture with your smartphone camera, or email c.w.axmann@student.rug.nl for a copy.

Informed Consent

- I have read the information about the research.
- I have had enough opportunities 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.
You have the right to a copy of this consent form.

cons_part Do you agree to participate in this study? If you don't want to participate, click "No" and you will be redirected to the end of the questionnaire.

- ○ Yes, I consent to participate. (1)
- ○ No, I do not consent to participate. (2)

cons_data Do you give permission for your data to be collected during your participation in this study, to be analyzed and used for the purposes of the study outlined above? If you do not consent, click "No" and you will leave the questionnaire.

- o Yes, I consent to the processing of my personal data as mentioned in the research information. (1)
- o No, I do not consent to the processing of my personal data. (2)

age What is your age?

- o 16-18 (1)
- o 19-21 (2)
- o 22-24 (3)
- o 25-27 (4)
- o 28+ (5)

gender What is your gender?

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

pol_pref Which part of the political spectrum do you identify with the most?

- o Far left (1)
- o Left (2)
- o Center-left (3)
- o Center / Middle (4)
- o Center-right (5)
- o Right (6)
- o Far right (7)

sub_ses Imagine that the ladder below is a picture of society with respect to people's socio- economic background (which depends on their income, education level, job status). Now, think about your socio-economic background relative to other people. How would you describe your position on this ladder (1 = extremely low position on the ladder, 10 = extremely high position on the ladder)?

- o 1 - Extremely low position (1)
- o 2 (2)
- o 3 (3)
- o 4 (4)
- o 5 (5)
- o 6 (6)

- o 7 (7)
- o 8 (8)
- o 9 (9)
- o 10 - Extremely high position (10)

edu What is your level of education?

- o Highly educated (studying for or having obtained a university bachelor's degree, master's degree, PhD) (2)
- o Lower-educated (no formal qualifications, secondary education (e.g. GED/GCSE), high school diploma/A-levels, technical/community degree) (1)
- o Prefer not to say (3)

iden_high You have indicated that you are highly educated. First, we would like to know how it feels to be a highly educated person like you. To what extent do you agree or disagree with the following statements about highly educated people like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I think highly educated people have a lot to be proud of. (1)	o	o	o	o	o	o	o
I feel strongly connected to highly educated people. (2)	o	o	o	o	o	o	o
I feel solidarity with highly educated people. (3)	o	o	o	o	o	o	o

It is nice to be a highly educated person. (4)	o	o	o	o	o	o	o
My level of education is an important part of how I see myself. (5)	o	o	o	o	o	o	o
I have a lot in common with the average highly educated person. (6)	o	o	o	o	o	o	o

Misrecognition

You have indicated that you are highly educated. An increasing number of news articles explore society's perception of highly educated individuals, suggesting that they are not widely valued by the general population. On the next page is an example—a recent BBC news article discussing the results of a global survey on how highly educated individuals are perceived. The article highlights that they are often undervalued and lack the respect they deserve. Please read the article carefully, as we will ask questions about it afterward.

BBC

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Most People Express No Appreciation For Highly Educated Individuals

12 February 2025

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A growing number of people graduate from university each year, but many question their value.

A recent global survey suggests that a growing number of people hold no appreciation for highly educated individuals and their contribution to society.

The study, conducted between November and December 2024, gathered responses from over 5,000 participants across various backgrounds across the world. It found that 71% of respondents believed highly educated individuals do not play a valuable role in society. In addition, 67% of respondents stated that they do not appreciate and respect highly educated individuals. Moreover, 66% of respondents believe university education is a waste of money.

These views were particularly prevalent in Western countries, where the appreciation for highly educated people is rapidly declining.

One of the main reasons mentioned was the belief that highly educated individuals are too theoretical and disconnected from practical real-world issues and do not contribute to solving major societal challenges - a perspective shared by 68% of respondents.

The findings reflect ongoing concerns about the role of education in driving societal progress.

Recognition

You have indicated that you are highly educated. An increasing number of news articles explore society's perception of highly educated individuals, suggesting that they are highly valued by the general population. On the next page is an example—a recent BBC news article discussing the results of a global survey on how highly educated individuals are perceived. The article highlights that they are highly valued and respected. Please read the article carefully, as we will ask questions about it afterward.

BBC

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Most People Express Appreciation For Highly Educated Individuals

12 February 2025

Share Save

About 10% of the world population is highly educated, and their expertise remains highly valued.

A recent global survey suggests that a growing number of people hold a high appreciation for highly educated individuals and their contribution to society.

The study, conducted between November and December 2024, gathered responses from over 5,000 participants across various backgrounds across the world. It found that 71% of respondents believed highly educated individuals play a valuable role in society. In addition, 67% of respondents stated that they appreciate and respect highly educated individuals. Moreover, 66% of respondents see costs of university education as a worthwhile investment.

These views were particularly prevalent in Western countries, where the appreciation for highly educated people is rapidly rising.

One of the main reasons mentioned was the belief that highly educated individuals possess the knowledge and skills essential for developing well-founded and effective solutions and contribute significantly to solving major societal challenges - a perspective shared by 68% of respondents.

The findings highlight widespread recognition of the role of education in driving societal progress.

Introduction questio The BBC article you previously read discussed how highly educated individuals are perceived worldwide. We would like to know what your thoughts and feelings are about the issues described in the article. Please think about yourself, your level of education, and your position in society and answer the following questions.

misrec To what extent do you agree or disagree with the following statements about people like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
People like me are treated with respect. (1)	o	o	o	o	o	o	o
People like me are treated unfairly. (2)	o	o	o	o	o	o	o
People like me are excluded from society. (5)	o	o	o	o	o	o	o
The value of what people like me do is not recognized by others. (6)	o	o	o	o	o	o	o
People like me are accepted in society. (9)	o	o	o	o	o	o	o

stat_thr To what extent do you agree or disagree with the following statements about people like you?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
People like me are losing power in society. (3)	o	o	o	o	o	o	o
People like me are struggling to get their voices heard. (4)	o	o	o	o	o	o	o
Select "Somewhat disagree" to confirm that you have read this question. (7)	o	o	o	o	o	o	o
People like me will be able to advance their agenda in the coming years. (8)	o	o	o	o	o	o	o
People like me are likely to enact policies in line with their core values. (10)	o	o	o	o	o	o	o

emotions1 How do you feel after reading the BBC article?

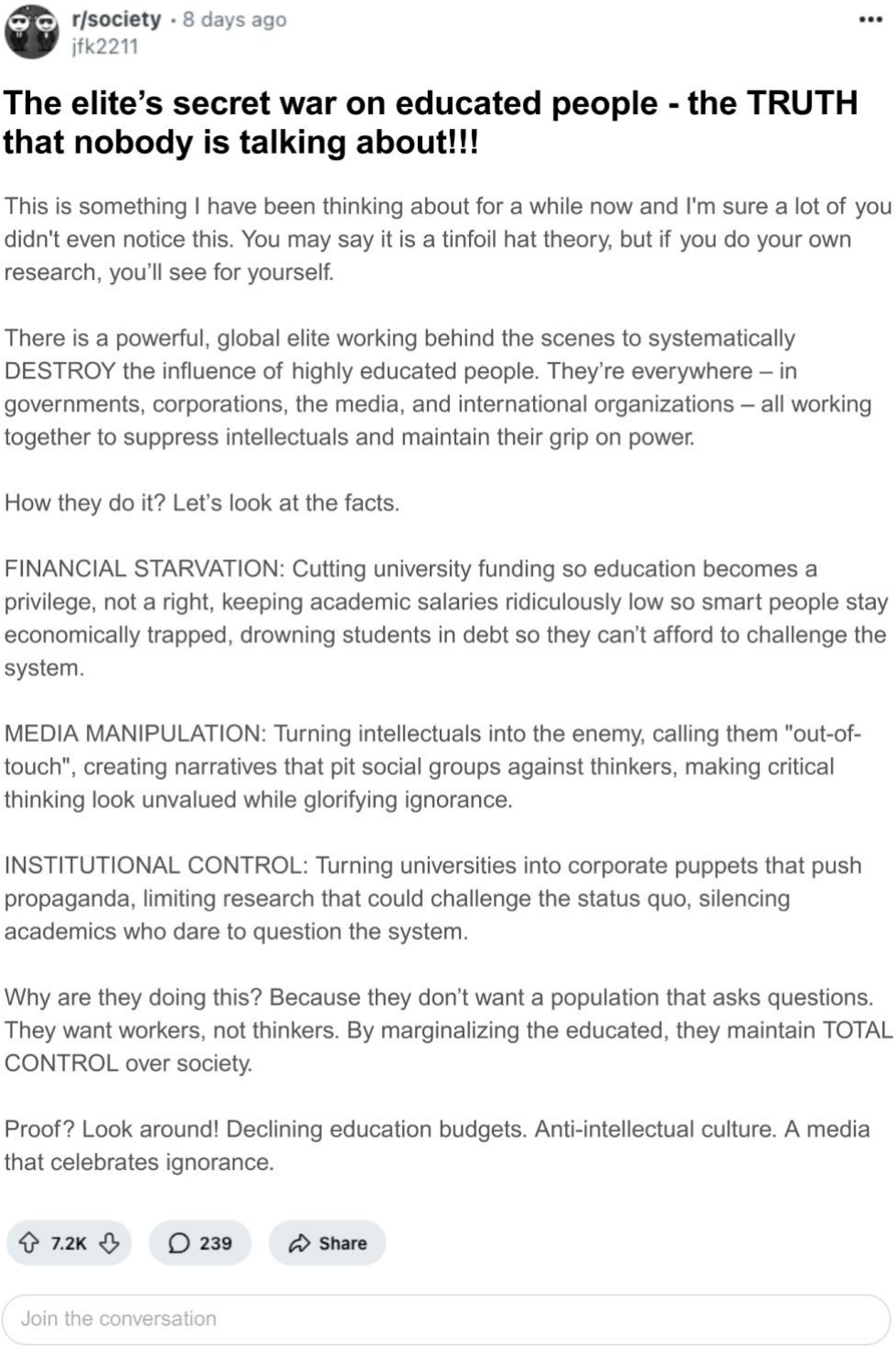
	Not at all (1)	Very slightly (2)	Slightly (3)	Moderately (4)	Quite a bit (5)	A lot (6)	Extremely (7)
Happy (1)	o	o	o	o	o	o	o
Anxious (4)	o	o	o	o	o	o	o
Angry (9)	o	o	o	o	o	o	o
Satisfied (3)	o	o	o	o	o	o	o
Vulnerable (6)	o	o	o	o	o	o	o
Grateful (11)	o	o	o	o	o	o	o

emotions2 In addition, to what extent do you feel the following after reading the article?

	Not at all (1)	Very slightly (2)	Slightly (3)	Moderately (4)	Quite a bit (5)	A lot (6)	Extremely (7)
Confident (2)	o	o	o	o	o	o	o
Threatened (5)	o	o	o	o	o	o	o
In charge (8)	o	o	o	o	o	o	o

Frustrated (10)	o	o	o	o	o	o	o
Motivated (12)	o	o	o	o	o	o	o
Like I lack control (14)	o	o	o	o	o	o	o

Instruction post There are many stories circulating online that attempt to explain the role of highly educated people in society. We came across the following story on Reddit. Please read the Reddit post carefully, as we will ask questions about it afterward.



Instruction You read a Reddit post in which a user explains their ideas about highly educated people's position in society.
sp_consp We would like to know what you think about the statements made in this Reddit post. To what extent do you believe the following statements?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
A global elite is working in a secret network. (1)	o	o	o	o	o	o	o
A global elite seeks to decrease the influence of highly educated people. (2)	o	o	o	o	o	o	o
A global elite is involved in secret plans to disrupt society. (3)	o	o	o	o	o	o	o
Select "Agree" to confirm that you have read this question. (4)	o	o	o	o	o	o	o

A global elite is working together to improve the situation of highly educated people. (5)	o	o	o	o	o	o	o

Instruction Additionally, we would like to understand your perspective on society. The following questions relate to this.

soc_trust To what extent do you trust the following people and institutions in society?

	Not at all (1)	Very little (2)	Little (3)	Neutral (4)	Somewhat (5)	A lot (6)	Completely (7)
The government (1)	o	o	o	o	o	o	o
The legal system (2)	o	o	o	o	o	o	o
Politicians (3)	o	o	o	o	o	o	o
Governmental institutions (4)	o	o	o	o	o	o	o
The media (5)	o	o	o	o	o	o	o

Large corporations (6)	o	o	o	o	o	o	o
Other people (7)	o	o	o	o	o	o	o
Scientists (8)	o	o	o	o	o	o	o

soc_dis1 In which direction is society going according to you?

- o Clearly the wrong direction (1)
- o The wrong direction (2)
- o Slightly the wrong direction (3)
- o Stays the same (4)
- o Slightly the right direction (5)
- o The right direction (6)
- o Clearly the right direction (7)

soc_dis2 What are your feelings about society?

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I feel shocked about the way things are going in society. (1)	o	o	o	o	o	o	o

Select "Disagree" to confirm that you have read this question. (2)	o	o	o	o	o	o	o
I feel concerned when I think about the future of society. (3)	o	o	o	o	o	o	o
I am frustrated because society is not as it should be. (4)	o	o	o	o	o	o	o
I am afraid that things will go wrong in society. (5)	o	o	o	o	o	o	o
I am satisfied about society. (6)	o	o	o	o	o	o	o

Instruction In society, many different ideas circulate about how and why certain situations occur. The following statements reflect some of these ideas. We would like to know what you think about these statements.

gen_consp Please indicate the degree to which you think this could be true.

	Not at all true (1)	Barely true (2)	Slightly true (3)	Moderately true (4)	Mostly true (5)	Very true (6)	Completely true (7)
Smartphones with microphones listen to private offline conversations and use the data to deliver targeted advertisements. (1)	o	o	o	o	o	o	o
The fashion and beauty industries promote unrealistic standards on purpose to make people insecure and sell more products. (2)	o	o	o	o	o	o	o
The coronavirus is a harmless virus that powerful people exaggerated to control the population. (3)	o	o	o	o	o	o	o
Pharmaceutical companies deliberately withhold cures for diseases to keep making money from treatments. (4)	o	o	o	o	o	o	o

Food companies include toxic additives, parabens, or aluminum salts in their products to maximize profits, without concern for consumer safety. (5)	o	o	o	o	o	o	o
The government pretends that climate change is real in order to collect more money from consumers through taxes. (6)	o	o	o	o	o	o	o
Large tech companies intentionally slow down older devices with software updates to force people to buy new ones. (7)	o	o	o	o	o	o	o

Comments Thank you. This was the last question. Do you have any questions or comments about this study? *The data collection is anonymous, so please don't write anything here that might reveal your identity.*

_____

_____

_____

_____

_____

Debriefing

Thank you for taking the time to complete this questionnaire!

Withheld Information

This study's main objective is to examine if feelings of misrecognition in society predict the belief in conspiracy theories. We did not specify this in the informed consent to not influence your answers.

To research these effects, participants were shown a **hypothetical** newspaper article which either stated that the majority of the population values highly educated people, or that the majority of the population does not value highly educated people. **Please note that all newspaper articles were fictional and created by the researchers.** The articles were not based on any specific real-world events or situations. We do not know how many people in society value highly educated people. We designed this manipulation to explore if this affects how people feel about society and if it increases their beliefs in conspiracy theories (either related or unrelated to the position of highly educated people).

Please note that the Reddit post you read was fictional and created by the researchers. This Reddit post was not based on any specific real-world events or situations. It was made up to test whether believing in it was affected by the content of the newspaper article you read and was made as realistic as possible. **We want to emphasize that the newspaper article and the Reddit post were not real and did not appear on the BCC and on Reddit.** These were created solely for the purpose of this research. We understand that the article and the Reddit post may have elicited negative emotions. However, we believe it is important to examine these types of situations, as news stories and social media posts about similar topics are often published, and it is crucial to investigate how people respond to them.
Please do not discuss the real goals of this study with other students who may still participate as knowing about the manipulated content may influence their answers.

Further Information?

If you have any further questions, complaints or if you would like to know more about the results of the study, you can email c.w.axmann@student.rug.nl. Perhaps needless to say: if you email us about the study, we will know that you participated, however, we do not know what answers to the questions in the study are yours.

cons_end Now that you have read all the information about the purposes of the study, do you still agree with the use and processing of your data?

- ○ Yes, I consent to the use and processing of my personal data. (1)
- ○ No, I do not consent to the use and processing of my personal data and my data should be permanently deleted. (2)

Thank you

Thank you for your participation!

Thank you once again for your valuable participation, we appreciate your help in furthering our understanding on these important issues. We want to emphasize that this study is purely academic in

nature, and your responses will be kept strictly confidential.

Please press the “go to the next page icon” to get the Sona credits.

Appendix B

Exploratory Analyses on the Role of Feelings in the Relation Between Misrecognition and Conspiracy Beliefs

Study 1 – People Without an Academic Background

The Role of Emotions in the Relation Between Misrecognition and Conspiracy Beliefs

We exploratively tested the effect of misrecognition on conspiracy beliefs through positive and negative emotions. Table 1 presents the results of these analyses. Emotions did not mediate the relationship between misrecognition and belief in either the specific or the general conspiracy theory. Emotions did not predict belief in either conspiracy theory (*p*-values > .05) and indirect effects were non-significant (95% CIs included zero).

Table 1

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Status Threat and Perceived Control as Mediator

Mediator	Dependent variable	Path b		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Positive emotions	Specific conspiracy belief	-0.15	.20	0.20	[-0.13, 0.54]	-0.37	.27	-0.17	.57
	General conspiracy belief	-0.002	.98	0.002	[-0.25, 0.24]	-0.52	.03	-0.52	.01
Negative emotions	Specific conspiracy belief	0.16	.20	0.22	[-0.13, 0.67]	-0.39	.25	-0.17	.57
	General conspiracy belief	0.01	.87	0.02	[-0.16, 0.19]	-0.54	.03	-0.52	.01

The Role of Feelings of Misrecognition and Other Emotional Reactions in the Relation Between Misrecognition and Conspiracy Theory Beliefs

We exploratively conducted serial mediation analyses to examine the effect of misrecognition on conspiracy beliefs, in which *feelings* of misrecognition served as the first mediator, followed by status threat, perceived control, and positive and negative emotions as second mediators. The results of these serial mediation analyses are presented in Table 2.

First, these analyses showed that feelings of misrecognition predicted increased status threat (b = 0.72, p <.001), reduced perceived control (b = -0.44, p <.001), decreased positive emotions (b = -0.42, p <.001), and increased negative emotions (b = 0.41, p <.001). However, these other feelings did not significantly predict belief in conspiracy theories directly (path b2: all p-values > .05). Furthermore, the indirect effects were not significant (95% CIs included 0). These findings suggest that how people feel as the result of misrecognition (except of *feeling* misrecognized) neither directly nor indirectly influence belief in conspiracy theories when taking into account *feelings* of misrecognition. Moreover, these analyses highlight the robust effect of *feelings* of misrecognition on beliefs in conspiracy theories. When accounting for other feelings, the effect of feelings of misrecognition on conspiracy beliefs remained significant (path b1: p-values < .05).[7]

Table 2

Results of Serial Mediation Analyses Predicting Conspiracy Theory Beliefs with Misrecognition as Independent Variable, Feelings of Misrecognition as First Mediator and Emotions as Second Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Status Threat	Specific conspiracy belief	0.29	.09	0.14	.43	0.08	[-0.13, 0.32]	-0.45	.13	-0.17	.57
	General conspiracy belief	0.25	.04	-0.06	.64	-0.04	[-0.20, 0.11]	-0.70	.001	-0.52	.01

[7] An exception was found in the model where status threat served as the second mediator predicting belief in the specific conspiracy theory. In this case, the effect of feelings of misrecognition was not significant (b = 0.29, p = .09). This is likely due to multicollinearity between feelings of misrecognition and status threat (r = .77**) and the significant association with status threat and belief in specific conspiracy theories (r = .24**).

Perceived control	Specific conspiracy belief	0.43	<.001	0.09	.48	-0.03	[-0.14, 0.07]	-0.45	.14	-0.17	.57
	General conspiracy belief	0.24	.01	0.10	.31	-0.03	[-0.08, 0.03]	-0.66	.003	-0.52	.01
Positive emotions	Specific conspiracy belief	0.40	<.001	0.03	.83	-0.01	[-0.10, 0.08]	-0.45	.16	-0.17	.57
	General conspiracy belief	0.26	.004	0.11	.22	-0.04	[-0.13, 0.03]	-0.58	.02	-0.52	.01
Negative emotions	Specific conspiracy belief	0.41	<.001	-0.06	.68	-0.02	[-0.12, 0.09]	-0.42	.20	-0.17	.57
	General conspiracy belief	0.26	.004	-0.13	.22	-0.04	[-0.12, 0.03]	-0.56	.02	-0.52	.01

Study 2 – People With an Academic Background

The Role of Emotions in the Relation Between Misrecognition and Conspiracy Beliefs

We exploratively tested the effect of misrecognition on conspiracy beliefs through positive and negative emotions. Table 3 presents the results of these analyses. Misrecognition indirectly increased belief in the specific conspiracy theory via negative emotions, which predicted higher belief in the specific conspiracy theory (b = 0.26, p = .001) and the indirect effect was significant (b = 0.22, 95% CI [0.07, 0.42]). Both the direct and the total effect were not significant (p-values > .05), indicating that there is only an effect of misrecognition on specific conspiracy theories through negative emotions. In other cases, emotions did not mediate the relationship between misrecognition and belief in either the specific or the general conspiracy theory: did not predict belief in conspiracy theories (p-values > .05) and indirect effects were non-significant (95% CIs included zero).

Table 3

Results of Mediation Analyses with Misrecognition as Independent Variable and Feelings of Status Threat and Perceived Control as Mediator

Mediator	Dependent variable	Path b	Indirect effect	Direct effect	Total effect

		b	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Positive emotions	Specific conspiracy belief	0.004	.96	-0.01	[-0.27, 0.26]	0.24	.29	0.23	.20
	General conspiracy belief	0.02	.72	-0.03	[-0.22, 0.15]	-0.17	.25	-0.21	.09
Negative emotions	Specific conspiracy belief	0.26	.001	0.22	[0.07, 0.42]	0.003	.99	0.23	.20
	General conspiracy belief	0.07	.23	0.06	[-0.04, 0.16]	-0.26	.05	-0.21	.09

The Role of Feelings of Misrecognition and Other Emotional Reactions in the Relation Between Misrecognition and Conspiracy Theory Beliefs

We exploratively conducted serial mediation analyses to examine the effect of misrecognition on conspiracy beliefs. In these models, *feelings* of misrecognition served as the first mediator, followed by status threat, perceived control, and positive and negative emotions as second mediators. The results of these serial mediation analyses are presented in Table 4.

First, these analyses showed that feelings of misrecognition predicted increased status threat (b = 0.56, p <.001), reduced perceived control (b = -0.31, p <.001), decreased positive emotions (b = -1.62, p <.001), and increased negative emotions (b = 0.65, p <.001). However, these different feelings did not significantly predict belief in conspiracy theories directly (path b2: all p-values > .05)[8]. Furthermore, the indirect effects were not significant (95% CIs included 0). These findings suggest that how people feel as the result of misrecognition (except of *feelings* misrecognized) neither directly nor indirectly influence belief in conspiracy theories. Moreover, these analyses highlight the robust effect of *feelings* of misrecognition on beliefs in conspiracy theories. When accounting for other feelings, the effect of feelings of misrecognition on conspiracy beliefs remained significant (path b1: p-values < .05), showing a similar pattern as observed in Study 1.

[8] Except for perceived control, which significantly predicted belief in the specific conspiracy theory (b = -0.19, p =0.04).

Table 4

Results of Serial Mediation Analyses with Misrecognition as Independent Variable and Feelings of Misrecognition as First Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Status Threat	Specific conspiracy belief	0.53	<.001	0.13	.28	0.03	[-0.03, 0.09]	0.001	.99	0.23	.20
	General conspiracy belief	0.22	.01	-0.76	.36	-0.02	[-0.06, 0.03]	-0.27	.04	-0.21	.09
Perceived control	Specific conspiracy belief	0.54	<.001	-0.19	.04	0.02	[-0.002, 0.06]	-0.07	.71	0.23	.20
	General conspiracy belief	0.22	.01	0.07	.29	-0.01	[-0.03, 0.001]	-0.25	.05	-0.21	.09
Positive emotions	Specific conspiracy belief	0.60	<.001	0.02	.82	-.0003	[-0.01, 0.01]	0.02	.84	0.23	.20
	General conspiracy belief	0.20	.01	0.02	.66	-.0004	[-0.01, 0.004]	-0.24	.12	-0.21	.09
Negative emotions	Specific conspiracy belief	0.53	<.001	0.10	.24	0.02	[-0.02, 0.08]	-0.05	.79	0.23	.20
	General conspiracy belief	0.19	.03	0.01	.91	.002	[-0.03, 0.03]	-0.28	.03	-0.21	.09

Appendix C

Exploratory Analyses on the Bidirectional Relationship of Conspiracy Theory Beliefs and Perceptions of Society

Study 1 – People Without an Academic Background

Alternative serial mediation analyses were conducted to explore the directionality of the relationship between conspiracy beliefs and perceptions of society. Specifically, we tested whether misrecognition influences belief in conspiracy theories, through *feelings* of misrecognition and perceptions of society. The results are summarized in Table 1. The analyses showed that *feelings* of misrecognition significantly predicted lower societal trust (b = -0.26, p <.001) and higher societal discontent (b = 0.17, p = .01), which in turn predicted beliefs in conspiracy theories (path b2: p-values < .05). The indirect effects were significant (95% CIs did not include 0). These findings suggest that people's perceptions of society influence conspiracy theory beliefs both directly and indirectly through *feelings* of misrecognition.

Table 1

Results of Serial Mediation Analyses Predicting Conspiracy Beliefs with Misrecognition as Independent Variable, Feelings of Misrecognition as First Mediator and Perceptions of Society as Second Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Societal discontent	Specific conspiracy theory belief	0.32	.003	0.39	.003	0.05	[0.01, 0.13]	-0.40	.17	-0.17	.57
	General conspiracy theory belief	0.16	.04	0.30	.002	0.04	[0.01, 0.09]	-0.63	.003	-0.52	.01
Societal trust	Specific conspiracy theory belief	0.18	.08	-0.81	<.001	0.17	[0.06, 0.31]	-0.40	.13	-0.17	.57
	General conspiracy theory belief	0.04	.59	-0.67	<.001	0.14	[0.05, 0.25]	-0.62	.001	-0.52	.01

Study 2 – People With an Academic Background

Alternative serial mediation analyses were conducted to explore the directionality of the relationship between conspiracy beliefs and perceptions of society. Specifically, we tested whether misrecognition influences belief in conspiracy theories, through *feelings* of misrecognition and perceptions of society. The results are summarized in Table 2. The analyses showed that *feelings* of misrecognition significantly predicted lower societal discontent (b = -0.18, p = .03) but did not significantly predict societal trust (b = -0.13, p = .10). Societal discontent and societal trust in turn predicted belief in conspiracy theories (path b2: p-values < .05). The indirect effects were not significant (95% CIs included 0 or were close to 0), suggesting that societal discontent and societal trust predict conspiracy beliefs, only directly, not indirectly through *feelings* of misrecognition. Moreover, when perceptions of society were added as mediators, the effect of *feelings* of misrecognition on conspiracy beliefs remained significant (path b1: p-values < .05)

Table 2

Results of Serial Mediation Analyses Predicting Conspiracy Beliefs With Misrecognition as Independent Variable, Feelings of Misrecognition as First Mediator and Perceptions of Society as Second Mediator

Mediator 2	Dependent variable	Path b1		Path b2		Indirect effect		Direct effect		Total effect	
		b	*p*	*b*	*p*	*b*	95% CI	*b*	*p*	*b*	*p*
Societal discontent	Specific conspiracy belief	0.65	<.001	0.29	.002	-0.02	[-0.05, -0.001]	-0.05	.78	0.23	.20
	General conspiracy belief	0.24	.003	0.23	<.001	-0.01	[-0.04, -0.002]	-0.32	.01	-0.21	.09
Societal trust	Specific conspiracy belief	0.55	<.001	-0.39	<.001	0.02	[-0.01, 0.05]	0.06	.73	0.23	.20
	General conspiracy belief	0.16	.04	-0.26	<.001	0.01	[-0.003, 0.04]	-0.25	.04	-0.21	.09