A JOURNAL BY SISSA MEDIALAB

COMMENT

Patterns of attacks against scholars in Germany: controversial topics as contexts and accelerators of science hostility

Commentary on

Scholars under attack — Navigating the dark side of public engagement and science communication in a politicised (online) environment

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Abstract

In this commentary, we examine patterns of attacks against scholars focusing on the case of Germany. Drawing on the responses to open and closed questions in a recent survey of 2,600 German researchers, we identify context- and field-specific patterns of science hostility. While most responding researchers do not experience severe attacks, those engaged in specific fields may be at a higher risk of being threatened. We argue that attacks on researchers may not be perceived as acts of hostility against scientific institutions but rather emerge in the context of controversial topics. By drawing from material of open-ended questions, we provide context of such controversial topics in Germany. Our results suggest that these topics are disputed not only in public forums, but also in academic contexts — and not always appropriately. Such controversies both affect and transcend higher education institutions, as attacks can also originate from researchers themselves. Furthermore, our material suggests that scholars are concerned about how expertise is, or should be, represented in these contexts, and about how deliberation on these topics on campus can be upheld.

Keywords

Policy-making, communication and governance of science; Public perception of science and technology; Digital science communication

Received: 29th November 2025
Accepted: 20th May 2026
Published: 8th July 2026

1 ▪ Introduction

Attacks on scholars and scientific institutions are currently intensely discussed [Altenmüller et al., 2024; Bucchi & Schäfer, 2025; Hawdon et al., 2017; Väliverronen & Saikkonen, 2021]. Not only are cases of scientists being harassed in public reported in the US [Nogrady, 2021], but also in Europe [Seeger et al., 2024]. There is a growing argument that these attacks demonstrate illiberal and anti-democratic views. More recently, it was argued that rapidly spreading political movements, such as right-wing populism, could result in an increase in anti-science attitudes [Huber et al., 2022].

Yet, focusing on the case of Germany, recent data do not seem to support this argument as there is no general trend towards anti-science attitudes. Instead, institutional trust in science has even risen during the pandemic (and slightly declined afterwards), despite substantial opposition movements [Bromme et al., 2022]. Hence, attacks against individual scholars may not be interpreted as an expression of general anti-science attitudes.

Instead, we propose to perceive attacks against scholars to be a highly contextualized phenomenon. Conflicts related to scholarly knowledge often arise from decisions that are contested and draw on or refer to scholarly expertise, as in the context of SARS-CoV-2 [Harambam & Voss, 2023; Kumkar, 2025]. In recent years, we have witnessed several situations that have led to controversies surrounding scholarly expertise, such as those related to climate change [Anderson & Huntington, 2017]. Existing research has shown that scholars visibly participate in publicly negotiated debates [Joubert et al., 2023] and that in some fields, scholars are motivated to derive far reaching policy implications [Greenhalgh et al., 2022; Müller-Spitzer, 2022]. This suggests a subject-specific pattern of hostility. While widespread ideologies, such as populism, may increase opposition against ruling powers, it appears that negative reactions towards scholars are highly contextualized. They may relate to very specific debates and contested decisions, involving specific forms of knowledge.

Against this backdrop, we aim to provide some observations from a study of hostility in Germany taking subject-specific forms of hostility into account. Existing research has shown that the social sciences are more vulnerable to attacks than the natural sciences. This has been demonstrated by a cross-national comparison [Hawdon et al., 2017; Oksanen et al., 2022]. Our research confirms this finding, but even more so indicates field patterns of attack, in that differences in hostility patterns seem to be more striking when specific research at more granular levels is considered. Our results also refer to recent politicized debates in Germany, such as debates on gender sensitive language or the reaction on the War in the Middle East, while other accounts may refer to more structural properties of the German academic system. We draw our argument from data of a recently conducted survey among 2600 German researchers. To support our argument, we refer to context-specific patterns of hostility that emerge from answers to open-ended questions.

Our commentary is structured as follows: in the next section (section 2), we elaborate on the background of conflicts over science, focusing on the German case more specifically. In section 3, we ground our argument referring to empirical data, reflecting the diversity of subject fields and research domains, followed by conclusions in section 4.

2 ▪ Background: polarization, digital platforms, and controversies over expertise

What are the reasons for an increase of publicly *visible* conflicts over scholarly expertise? Why are we arguing publicly about it? To what extent can attacks on scholars be interpreted as effects of these conflicts? There have been repeated public controversies over science since WW2. One of the most prominent examples of this is the conflict surrounding the introduction and legitimisation of genetically modified organisms [Lynas, 2018; Seifert & Torgersen, 1997]. What has changed since the 2000s are the conditions under which controversies are negotiated. The digital transformation has changed the way how scholars communicate publicly [Fähnrich, 2021; Franzen, 2020], but also affected patterns of public communication involving scholarly expertise [Eisenegger, 2021]. As a result, controversies over science may have become more visible in public debates. An increasing literature deals with how the expansion of social media communication enabled the mobilization of publics and counter-publics, particularly on politically contested issues related to scholarly expertise [Egelhofer et al., 2024; Kaiser, 2017].

A second strand of research argues that novel ideologies and political sentiments may have contributed to an increase of anti-science attitudes [Altenmüller et al., 2024; Huber et al., 2022; Mede & Schäfer, 2020]. Particularly in the United States, an intensification of divergent political attitudes toward science-related issues has been observed [Gauchat, 2011]. In several countries, including Germany, however, trust in science as measured by survey data remained stable, or even increased during the pandemic [Bromme et al., 2022], though populist movements have risen there as well. There seems to be no simple relationship between the emergence of novel political movements and negative attitudes towards science.

Roderik Rekker [2021, 2025] attempts to deal with conflicts over public negotiation of scholarly expertise in more conceptual detail. He identifies two distinct mechanisms that contribute to the rejection of scientific findings: psychological science rejection and ideological science rejection [Rekker, 2021, p. 356]. While the former refers to why individuals "implicitly disregard scientific claims that are inconsistent with their group identity" [2021] — ideological science rejection refers to why certain political group identities are related with the rejection of science in the first place. According to Rekker [2021], both approaches are needed to understand the conflicts related with scholarly expertise.

It is unclear, however, how these different dynamics of ideological and psychological science rejection exactly play out on attitudes towards scholarship. For example, does the rise of populism lead to a general rejection of science as an institution, are only specific domains, or even few scientific claims affected? Studies dealing with science-related populism suggest that populism is associated with the rejection of science because it is seen as belonging to the elite [Mede, 2023]. Research related to attacks and harassment, however, indicates that specific domains of science are more strongly affected than others [Oksanen et al., 2022]. The social sciences and humanities, in particular, are more prone to harassment than the natural sciences [Hawdon et al., 2017; Oksanen et al., 2022]. Other research has argued that attacks and forms of hostility affect particular groups and identities [de Haas et al., 2023]. Amarasekara and Grant [2019] have argued that negative sentiments towards scholars on YouTube target female researchers in particular. There is also research that suggests specific academic groups are more vulnerable to attacks because of the conditions in which they work

[Doerfler et al., 2021; Oksanen et al., 2022]. We find, however, only little comparative research that allows for comparisons between subjects, fields, and academic groups in Germany.

We argue here for a more fine-grained pattern relating to specific fields of expertise. For publicly negotiated conflicts over science to escalate, it may need specific triggers to motivate or justify attacks. Such reactions may be particularly evoked by specific decisions and not be understood as distrust in science as an institution. The concept of science-related populism [Mede & Schäfer, 2020] can be used to illustrate this point. Mede and Schäfer [2020] understand science-related populism as a narrative of antagonism between *the* academic elite and *the* people. According to the authors, the narrative contends that this academic elite *illegitimately* challenges the sovereignty of the people by wielding decision-making power through pre-shaping decisions. This would imply that narratives of illegitimate academic elites could be more easily exploited in contexts of controversial decisions that have consequences for the daily lives of those affected [Kumkar, 2025]. It is precisely these decision-making contexts that have become more prevalent in the past [Lentsch, 2016]. In consequence, this would imply that acts of hostility towards science, derogations and attacks towards scientists may follow a more disperse pattern and may affect particular fields related to these contested decisions.

Hostile reactions emerging from these contentious contexts do not necessarily have to come from outside academia. It is not uncommon to find academic movements here that support this assessment and lend plausibility to the denial of the scientific nature of certain fields of research, as examples from the field of gender-sensitive language demonstrate [Müller-Spitzer, 2022]. Some right wing scholars in Germany have argued that so called agenda driven research should be opposed [Kostner, 2019]. Populist parties such as the Alternative für Deutschland (AFD)[1] in Germany have adopted this argument and demanded an 'open evaluation' of 'agenda scholarship', potentially ending funding for these fields.[2]

Hence, to understand hostile reactions towards scholars, the context of these attacks needs to be carefully considered. Our findings suggest a topic specific pattern of hostility reflecting current contested debates. Conflicts and derogations may also emerge over the public communication of expertise in these contexts, as there are different understandings of how scholars should act and communicate in the science policy interface. In the following, we will examine these findings in greater detail. While the subsection 3.1. focuses more closely on specific patterns of hostility, section 3.2. and 3.3. also discuss insights from material emerging from open-ended questions. These insights not only shed light on the conditions that lead to hostility but also on the conclusions researchers draw from dealing with controversial debates.

1. The Alternative für Deutschland, founded in 2013, is the largest right wing populist party in Germany. The AFD has a strong voter base amongst persons who are dissatisfied with current policies towards migration and gender.
2. Deutscher Bundestag Drucksache 20/7565. Antrag der Abgeordneten Dr. Marc Jongen, Nicole Höchst, Dr. Götz Frömming, Dr. Michael Kaufmann, Martin Reichardt, Norbert Kleinwächter, Barbara Lenk, Matthias Moosdorf, Dr. Christina Baum, René Bochmann, Peter Boehringer, Peter Felser, Karsten Hilse, Dr. Malte Kaufmann, Jörn König, Edgar Naujok, Jan Wenzel Schmidt und der Fraktion der AfD umgehend eine Evaluation sogenannter Agendawissenschaften durch den Wissenschaftsrat beantragen.

3 ▪ Empirical context: recent survey data from academics in Germany

3.1 ▪ *Field-specific patterns of attacks*

In making our argument, we draw from a survey study conducted in late 2023 and early 2024 (N=2600 respondents).[3] The survey focused on transfer and science communication practices, but also on negative reactions and potential effects thereof. In this study, we intended to cover main scholarly domains such as social sciences, humanities, life sciences, natural sciences, and engineering subjects. Moreover, we also provided space for respondents to report their individual experiences as well as their perception of potential motivations for attacks. It should be noted that the latter material does not emerge from direct observation, nor do we have any material from attackers themselves. Notwithstanding, accounts from open-ended questions provide information about interactions, both physical and non-physical with attackers and may allow for reconstructing potential motivations of the attacks. Therefore, in the following we draw from results of both closed as well as open-ended questions.

First, our data show that severe attacks against scholars are still rare. Compared to other studies of Nogrady [2021], incidents of death threats or physical violence are scarce (below 3%). Further, there are only limited gender and status related differences: the distribution of derogations and attacks of male and female researchers show almost no relevant differences in types and frequencies of attacks. Frequencies for unspecific forms of derogations, such as trolling, but also severe threats of physical violence are similarly experienced both by female as well as by male researchers. This is interesting given that existing literature typically assumes that female researchers experience harassment more often, particularly in online environments [Amarasekara & Grant, 2019]. Our data do not suggest evidence in this direction but for one exemption. Sexual based harassment is slightly but significantly more often experienced by female researchers compared to their male colleagues (12.6 vs. 8.8%).

This suggests that there is no clear pattern in that attacks against female researchers are more frequent in general, but specific forms attacks need further consideration. We find that the genders differ[4] in how they cope with attacks. For instance, a significantly higher share of female researchers has answered that attacks have hurt them personally (see also [Blümel et al., 2026]). A similar pattern arises, when status groups are considered. We do not find systematic differences with regard to the forms of attacks when different status groups are compared. Forms and frequency of attacks are similar among professors, postdocs, and

3. The survey was intended to cover all subject areas and reflecting the distribution of the academic status groups. The survey was conducted using the survey infrastructure of the DZHW Scientists-Survey. The DZHW Scientists Survey is a nationwide, representative trend study designed to examine working and research conditions at German universities and equivalent institutions of higher education. The address data used is based on extensive research conducted on the websites of academic institutions. The websites of 158 universities and research institutions in Germany have been screened to collect publicly available address data for employed professors, postdocs, and predocs. Based on this data, a randomly selected, representative sample of researchers in Germany from all status groups and disciplines was contacted. A total of 60,000 addresses were used for contact, of which 51,470 were technically feasible. As a result, this survey yielded 2,621 valid observations. About 58% of the respondents were male, 40% female. As regards status groups, 22% of the respondents were professors, 31% postdocs, 39% predocs, and 8% of the respondents stated other [Blümel et al., 2026].
4. Unfortunately, we cannot consider entries of those identifying as diverse due to statistically insignificant number of cases.

predocs, with professors only slightly experiencing more hate speech when compared to other status groups.

Yet again, there are differences in how the status groups perceive and deal with risks. Postdocs and predocs perceived the significance of the threat and the extent to which attacks hurt them or make them feel uncertain stronger than professors. This shows that group specific aspects are less significant when it comes to the frequency and intensity of attacks but should still be considered when referring to questions of vulnerability and resilience. However, the risks of being threatened appear to be related to other aspects. For instance, our analyses have shown that scholars who are more active in communication face higher risks of being threatened.

In particular, we find subject and domain specific patterns. Scholars of the humanities, for instance, experience more derogations than engineering scholars; with the former being somewhat more affected by *discrimination and questioning of competence* (43% vs. 32%), *trolling* (29% vs. 23%), and *silencing* (13% vs. 8%). This exposition seems to confirm a typical pattern identified in the literature: that humanities are more exposed to attacks than other fields [Oksanen et al., 2022]. But it appears to be not the full picture: scholars from the life sciences reported similar rates of doubting of competence and hate speech when compared to scholars of the humanities. The domains are more similar, when particularly worrying types of attacks are considered, such as threats of physical violence. Differences emerge when the level of specific scientific fields and disciplines are considered. For instance, scholars in studies of non-European cultures, Jewish studies and religious studies report higher levels of *verbal threats and hate speech* (30%) relative to the reference group (13%). And 10% of scholars in sociology report experiences of *legally relevant attacks*, such as threats of physical violence or even death threats, compared to 2% in the reference group.

If these fields with noticeable frequencies of specific types of attacks are considered more closely, it becomes apparent that they relate to recent publicly negotiated controversies with contribution of scholarly expertise. Life science fields such as virology or social science fields such migration research were mentioned in public debates and can also be linked to contested decisions [Harambam & Voss, 2023]. What is more, we find striking similarities in the field specific patterns of attacks when comparing our data to other, more recently conducted surveys in Germany [Fabian et al., 2024]. These results indicate field rather than group specific patterns of attack that relate to very specific conflicts and debates to which scholars contributed or were attributed to do so. For instance, the debate over Gaza triggered intense discussion among academics on campus [Mauthofer & Grimm, 2025]. The higher frequency of derogations for small fields, such as Jewish or religious studies, as well as campus incidents, may reflect patterns of contestation in these debates.

The contexts of the attacks can be elaborated more when answers to open-ended questions are considered. Drawing from topical analysis of the reported cases, we find more about where and in which context negative reactions or even attacks occurred. Not every entry contained a reference to research fields or publicly negotiated topics. But particularly in the more striking cases when attacks were experienced more regularly, specific topics emerge. Climate change was frequently mentioned as a topic associated with hostilities. One respondent working in atmospheric science, oceanography, and climate research reported about a physical incident when "a *conspiracy theorist"* even entered the building. The account shows that this was not a random event, but an attempt targeting climate researchers.

Other topics and fields mentioned in answers to open-ended questions were migration research, inequality research or studies related to sexual identities. These topics specifically refer to social sciences. Sociologists explicitly mentioned their disciplinary background in their reports of hostile events. For instance, several sociologists reported being subjected to intimidation while collecting data (during observational studies) or receiving threatening or hateful emails. They also reported about negative reactions occurring during physical events on campus, but also in public events, outside the university in public discussion and demonstrations. This also shows that some of the attacks appear in politicized contexts such as demonstrations, indicating that the context of attacks needs to be carefully considered.

A particularly visible topic in the qualitative material was gender studies and gender-sensitive speech. In Germany, this subject is the focus of a particularly heated debate involving several scholarly and non-scholarly communities [Müller-Spitzer, 2022]. One of the most visible symbols of this conflict is the gender asterisk, which also evoke a substantial reaction to our survey invitation. One of the accounts suggests that attacks on these fields are a regular occurrence. *"I conduct research on gender and gender equality, and there are practically always derogatory comments, questioning of the results, or of the research field itself"*. This incident can be described more systematically as epistemic devaluation. Right-wing attacks were mentioned aiming at questioning the epistemic authority of this specific research field.

According to the more recent version of the science barometer,[5] gender sensitive speech appears to be one of the very few science related topics that were polarized among the respondents of a representative survey [Kohler et al., 2025]. The use of the asterisk symbol is perceived as an identity marker and evokes affective negative reactions. Entries from our open-ended questions related to the topic show that the use of the symbol generates specifically harsh emotions. The analysis suggests that the symbol was associated with a set of contested decisions. We find indication that not only its use but also research around the topic is understood as ideological engagement.

The most negative reports of interviewees refer to the case of the COVID-19 pandemic. Several accounts document that the debate on decisions mitigating COVID-19 evoke particular strong opposition, despite a general positive appreciation. *"My experiences of personally directed science hostility have been on social media. A pro-COVID anti-vaxxer called scientists (or maybe government officials implementing science-based policies- he was vague) 'Nazis'.* Several accounts in the qualitative material mention concrete social movements spreading such narratives in Germany. One of these movements was the *Querdenken movement*, a self-designation used by individuals who deny the danger — or even the existence — of the coronavirus, criticising the state's pandemic response measures, refuse vaccinations, and partly combine these positions with conspiracy beliefs or right-wing ideologies. In the material, however, the *Querdenker movement* is almost exclusively related to the subject of vaccination, indicating that opposition is particularly mobilized by specific topics and interventions.

These accounts show that new ideologies and social movements play a role in mobilizing followers and partisans against *particular* research fields. Ideological backgrounds, both left- and right wing are mentioned by the respondents in the material of open-ended questions,

5. The science barometer is an opinion poll initiated by the German organization Wissenschaft im Dialog (Science in Dialogue). Since 2014, the survey is conducted annually and examines public attitudes towards science and research.

though accounts of right-wing motivations are more frequent. The material also shows the context and patterns of these hostile events. To make derogatory or offensive behaviour a recurring pattern, specific and effective narratives that contribute to emotional investment towards a particular group and a concrete context of controversial decisions may be necessary.

Taken together, the quantitative and qualitative findings illustrate the prominence of attacks related to specific research topics in Germany. These include climate-related research, sociological and cultural topics, as well as immunology and vaccinology — areas that have also been identified and examined in previous studies and are subject to contested decision making. We have asked respondents in which contexts they observe attacks most likely to happen. About 60% of the respondents agreed to the statement that attacks happen particularly in the context of contested political decisions. Such contested decisions harbour substantial potential for conflicts and debate.

3.2 ▪ *Conflicts and attacks within academia*

Derogations and doubting of competence do not only come from outside universities. Our material illustrates how societal and political conflicts are addressed within academia, resulting in negative responses and misconduct from academics. For one thing, political debates associated to relevant decisions may relate to different, sometimes opposing scientific claims leading to heated debates among scholars. Roderik Rekker [2021] had cited the dispute over fiscal discipline as an example of this. But there are also cases in which attacks on scientific fields of research have little scientific basis but are rather motivated by specific ideological based alignment. Either way, contestations emerging from academics may be amplified by public accounts, such as posts on social media, making it difficult to distinguish attacks from within and outside the academic community.

A particularly striking example is the debate on gender-sensitive language in Germany, in which not only groups of citizens, but also specific groups of academics and networks of scholars acting in the public sphere oppose gendered language [Ivanov, 2022]. As a result, researchers in this field observe that denial of scholarly knowledge of this field "*extends into the professional environment. Even among colleagues, this topic is so prejudiced that a factual exchange is partly impossible. I find hostility toward science among scientists particularly concerning. Especially the topics of gender-sensitive language frequently trigger unobjective discussions.*"

There are further indications showing that epistemic subjects related to identity evoke negative reactions. As mentioned above, the gender asterisk provokes 'annoyance': *"I consider the attempts — stemming from critical social justice activism — to intimidate scientists, to stigmatise or cancel certain scientific viewpoints, and to anchor and spread this ideology within universities to be the greatest threat to science at the moment; that this questionnaire was gendered, I perceived as an annoyance and an unnecessary impediment to reading"*. The use of gendered language and identity markers appears to be connected to a range of interventions and discursive practices. Against this backdrop, it is reasonable to suggest that the gender star plays a triggering role in debates, stimulating the unconscious release or resurfacing of intense negative accounts.

Hence, identity related research topics, such as gender inclusive language or research on minorities receives negative feedback as these entries suggest. What is more, using such language apparently activates very specific narratives and interpretations among academics. We find indications that research on gender is perceived as a form of 'activism' and 'misguided' scholarly practice in the comments. In this regard, the word 'activism' is used to emphasize political motivations and to question neutrality and credibility of knowledge claims. Our material indicates that such epistemic devaluations are experienced as particularly hurtful, if it comes from colleagues.

3.3 ▪ *Concerns about the science-society nexus*

In the former sections, we have argued that quantitative and qualitative data indicate that publicly contested issues generate negative reactions from citizens. More than 60% agreed that attacks are more likely to occur in the context of contested policy decisions. Data from open-ended questions indicate that scholars disagree on how to communicate their findings in controversial settings, and what they aim to achieve with their communication.

These patterns are reflected in studies into the science society interface [Jasanoff, 1990, 2004; Limoges, 1993]. There is a large body of research that established different understandings of how scholars perceive their role in communication [Weingart & Joubert, 2019] or in policy advice [Weingart, 1999]. Roger Pielke [2010] distinguished four different types in decision making contexts: the 'pure scientist' who only provides facts without taking decisions into account; the 'science arbiter', who comments on clearly defined issues to which empirical knowledge is at hand and does not prioritize policy options. At the contrary, the issue advocate aims to use knowledge for a specific purpose to pursue a specific agenda. Finally, Pielke [2010] portrays the 'honest broker' as someone who aims to clarify the scope of decisions, presenting a range of options and potential consequences of action. We could, at least partly, identify some accounts relating to these ideal types in the survey comments. Given the increase in constellations referring to or demanding scholarly expertise and the relevance of informed decisions for the daily life of citizens, researchers are concerned about how expertise is communicated, presented, or used.

In particular, almost 100 entries in the open comments section demonstrate the range of views expressed and the depth of concern about the public negotiation of scholarly expertise. Several scholars are worried that their credibility is being called into question by distorted portrayals. We find rather prescriptive statements expressing what scholars should do or should not do to be perceived as legitimate speakers. These accounts reflect different role understandings of scholars in situations of public negotiation.

Most of such prescriptive accounts could be understood as a constraint to scholarly communication in public that allows for a separation of the scientific process of knowledge production from the political decision-making context. "*Scientists should (a) take the time to explain scientific findings with the necessary complexity and dialectics; (b) refrain from populist simplifications, moral appeals, and political justifications; and (c) make clear in their communication when they are expressing an opinion and when they are conveying facts*".

Other argue, however, that the number of attacks shows that it is "*the duty of scholars to respond and to make the implications more explicit*". Some of the scholars also suggest that forms of misunderstood or illegitimate authority may have triggered negative reactions or

even hostility. One respondent even argued that it "*does not surprise me that hostility towards science is increasing among the population — given the self-importance, ignorance, and arrogance with which many colleagues present themselves*". There are other, similar comments indicating that negative attitudes toward an '(academic) elite' seem to be justified. At the very least, this illustrates the extent of the controversy sparked by these decision-making contexts.

Scholars aim to engage in discussions about how to design formats and forms of interaction that bridge the gap between academia and politics, regardless of whether hostility towards scholars has increased or not. There appears to be little common ground, however, on how to approach this issue. In our material, we find arguments that emphasize the responsibility of scholars for defending specific values, as well as arguments that advocate neutrality and distance in such debates. We identify a plethora of 'deficits' in the science-society interface, including misrepresentations, misunderstandings, and staged science. These prescriptive and normative accounts — that science should be neutral or engaged, for example — demonstrate the extent to which some scholars have formed strong opinions based on their specific interpretation of their public role. This suggests that controversies, disputes and even derogations do not only arise from disagreements among academics about contested issues, but also from disagreements about how to communicate and act in such specific contexts.

4 ▪ Conclusion

In this commentary, we called for a more nuanced debate about attacks on academics within the German academic community. Our data show that these attacks are not widespread or indicative of general hostility towards science as an institution. Rather, the patterns of these attacks reflect topic-specific conflicts relating to the contexts in which decisions are made. Examples include measures taken during the pandemic or efforts to respond to or adapt to climate change, as well as the use or introduction of gendered language in public institutions. Such controversial decision-making contexts often involve scholarly expertise from specific fields and can affect the distribution of resources, as well as influencing people's sense of identity. While such debates or controversies may generate excitement, they tend to lead to negative attitudes towards specific types of research rather than to systematic anti-science sentiments.

This argument is supported by data from around 2,600 researchers, gathered through closed and open questions. Severe and coordinated attacks are rare, whereas experiences of derogatory behaviour are widespread and indicative of an atmosphere of excitement. Unlike research focusing on harassment in online environments [Hawdon et al., 2017; Oksanen et al., 2022], these attacks do not appear to target specific groups based on status or gender. However, there are groups that appear to be more vulnerable, based on their coping mechanisms and exposure to specific threats, such as sex-based discrimination.

Patterns of attack vary greatly by field, with subjects such as sociology, virology and oceanography being more exposed to severe attacks and hatred. Answers to open-ended questions further indicate that fields related to identity, such as gender and queer studies, and the use of gender-sensitive language, appear to evoke negative attitudes. While these topics may be related to specific ideologies, such as right-wing populism, the motivation to derogate or publicly attack scholars may be related to an increase in group-specific

campaigns or narratives. Responses to open questions further illustrate this, showing that attacks are motivated by the perceived illegitimacy of scholarly authority — a pattern explored by Mede and Schäfer [2020]. To understand patterns of attacks against scholars, the specific context needs to be considered, such as contested decision-making processes. There also need to be established patterns of justification to motivate attacks.

Although attacks on scholars can be a negative response to scientific communication or public engagement, societal conflicts also resonate within academia. Our material suggests that scholars are concerned about how expertise (defined as the public provision of advice) is or should be represented in public, and about how deliberation on campus may be upheld. Conversely, our data indicate that value-based conflicts also influence researchers' beliefs and attitudes. A visible example of this is the debate on gender-sensitive language, which is closely linked to identity and feelings of identity. Disagreement can touch upon deeply rooted convictions about who we are and how we should speak.

Our material is clearly limited in that accounts from academics only provide secondary information on the attackers' motivations. Furthermore, findings based on qualitative research cannot be generalised; rather, they demand future comparative research that considers specific patterns of risk and attacks in different fields.

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How to cite

Blümel, C. and Brandt, E. (2026). 'Patterns of attacks against scholars in Germany: controversial topics as contexts and accelerators of science hostility'. *JCOM* 25(04), C05. https://doi.org/10.22323/3691202605202026026.

ISSN 1824-2049. Published by SISSA Medialab. jcom.sissa.it