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Academic freedom and the unknown: credibility, criticism, and inquiry among the professoriate

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In the U.S., military and intelligence personnel, the National Aeronautics and Space Administration (NASA), scholars, professional organizations, legislators, journalists, and others are requesting study of UFOs, recently renamed Unidentified Aerial/Anomalous Phenomena (UAP) by the U.S. government. Yet disinformation, misidentifications, hoaxes, and entertainment cloud the subject. Combined, these factors pertain to wider debates about the parameters of academic freedom. Here, we asked faculty across 14 disciplines at 144 research universities ($N = 1460$) to register insights about UAP in the academy via confidential survey. To the authors' knowledge, this is the first national study to examine scholars' evaluations of academic credibility and possible social or professional repercussions—including concerns for tenure, promotion, and academic freedom—in relation to UAP. Results suggest that faculty concern that conducting UAP-related research would jeopardize their tenure or promotion might exceed colleagues' actual negativity toward such research on tenure or promotional votes. Only 7.4% of faculty responded that “Yes” they would vote negatively (“No” = 61.92%, “Maybe” = 27.95%), though 52.67% reported some degree of concern for tenure or promotion. Faculty more frequently reported some degree of concern for social rather than professional repercussions. Concern for ridicule totaled 69.04%. Among all faculty, 66.24% reported that their discipline was capable to some degree of evaluating the evidence or significance of UAP. The disciplines of physics (95.82%), philosophy (88.73%), anthropology (87.09%), and engineering (83.15%) most frequently reported capability. Those who most frequently responded “Not at All” capable belonged to economics (59.7%), literature/English (54.46%), nursing (53.33%), and art and design (51.52%). Notably, although physics faculty most frequently responded that their discipline was capable to some degree of evaluation, nearly three in four reported some degree of concern about ridicule. From 250 open-ended responses, we generated 14 themes pertaining to research or teaching. To promote transparency, highlight a range of perspectives, and facilitate debate, for each theme we included at least 3 example quotes. In the context of ongoing developments, we discuss results, which underscore the complexity of beleaguered subjects and render conversations about academic freedom and UAP timely, relevant, and necessary.

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Academic freedom is defined as “the right of scholars to study and report on any problem that their curiosity and conscience dictate, without fear of retribution” (Oxford Reference, 2022). This is a cornerstone principle of universities. In the U.S., it has recently encountered scrutiny (Cole, 2021). Debates over intellectual outputs, speech, and occasional deplatforming garner attention. Some of the most vociferous angst resounds from certain political corners that have sponsored recent legislative curbs on longstanding academic fields with societal importance (Diaz, 2023; Flaherty, 2021; “From Slavery to Socialism, New Legislation Restricts What Teachers Can Discuss,” 2022). Very recently, faculty and students have been arrested on campuses during crackdowns against demonstrators (Hendrix, 2024; Kepner and Heath, 2024; Reyes, 2024). In a separate range of situations, faculty have sometimes lost academic positions for unusual or “edgy” research (Black, 2015; Flaherty, 2022; *Legal Cases Affecting Academic Speech*, 2009), unwelcome opinions (Lawsuit Challenges Classroom Censorship, 2021; *Legal Cases Affecting Academic Speech*, 2009), or controversial speech (Flaherty, 2015; Powell, 2021a, 2021b; Shibley, 2021).

Beyond this wider context of shifting social skirmishes and discrete cases, specific topics have long been stifled by stigma *en totale*. What of a subject that is, at least to date, largely apolitical, though so thickly shrouded in stigma that the mere mention of it in academia triggers dismissive or avoidant behavior by otherwise thoughtful and often openminded thinkers? What other topic in current events may accrue fear of retribution by those who might engage it?

Namely, appearing alongside stories on scholarship and surrounding societal strife is coverage on unidentified aerial phenomena (UAP, now called “unidentified anomalous phenomena”). The U.S. government originally defined UAP as “Airborne objects not immediately identifiable. The acronym UAP represents a broad category, which in part were once called UFOs” (Office of the Director of National Intelligence, 2021). The updated term includes transmedium objects or devices and submerged objects or devices (National Defense Authorization Act for Fiscal Year 2023, 2022).

Recently, intriguing comments on the importance of this subject from well-placed government officials, elected legislators, high-ranking intelligence personnel, and highly trained military pilots have all cast doubt on prosaic explanations for UAP (Cowen, n.d.; Thebault, 2021; Washington National Cathedral, 2021). Recent resurgence of UAP appears in policy, and calls for scholarly inquiry coincide with extant, broader debates about the content and role of academia. However, there is no academic compass for the professoriate to navigate this topic. Further, rather than overlaying well-trodden fault lines, UAP are not mapped in most intellectual, political, and cultural conversations. We know almost nothing about how faculty view the credibility and stigma of researching unknown or potentially anomalous areas like this subject, nor what this could portend for critical issues within academia. The uptick of UAP in public visibility offers an unusual opportunity to examine stigma, credibility, career risks, and disciplinary capabilities across academic ranks.

Without conclusions about what recent developments mean, we became curious about how colleagues across disciplines—who in the aggregate have remained overwhelmingly quiet on this topic—viewed these developments for academia. Thoughtful work by a very small coterie of credentialed scholars contrasts with taboos against UAP. Aside from these exceptions, the professoriate has forfeited analysis of this topic to other voices. Unspoken signals and self-censoring say that we—academics—are literally not supposed to spend our serious time to read or

think about this. Such attitudes persist despite recent reports and legislation.

Thus, academia has been caught in a tautology. Often scholars know little about this topic because peers have discouraged others from mentioning it seriously. Faculty do not know what other faculty think. This status quo hampers scholarly evaluation of new information and dissuades scholars from requesting better data from those who hold it. The public cannot look to scholars for insight. Academia thus abandons a critical role it serves for the wider public. In contrast to public silence, most professors who anonymously participated in the current study indicate that they find scrutiny of UAP important (Yingling et al. 2023).

The professoriate now sits at a potentially precarious impasse. Those content with the status quo might easily assert that this topic pertains to *no* discipline. However, whether a funding grab, psy-op, secret innovation, adversarial action, series of errors, objects of anomalous origin and/or nonhuman intelligence, or some confounding combination of the preceding, it matters not only to many disciplines, but to society writ large.

With these considerations, we welcomed faculty to openly register their thoughts with the protection of confidentiality. Research questions included: (1) If faculty conducted UAP-related research, how do they think their peers would perceive them?; (2) What are faculty perceptions of UAP-related research and researchers?; (3) What would be the importance of an unconventional explanation for UAP to academia?; and (4) How capable are individual academic disciplines of evaluating UAP? With answers to these questions, we discuss challenges, opportunities, and responsibilities relevant to the academy and consider future directions.

Why ask faculty about “UFOs”?

Given the unconventional nature of this subject, we accept responsibility for offering additional context for the study. Whatever the cause of this issue or its recent upsurge, academic disciplines may offer insights or expertise on materials, linguistic strategies, telemetry data, motives and meanings, precedents, psychologies, videos or images, and possibly much more. If new information or evidence appears, who better to ratify it than scholars of wide expertise? Or, to counter falsehoods or the concealment of consequential data, who better to offer scrutiny?

Disciplines are rightfully occupied with studying pressing matters ranging from disease to social strains, climate change, and beyond. However, we know the professoriate to be comprised of people with copious curiosity. Though serious and extensive evidence to back the truth claims made by influential people across key sectors of American society on this subject has remained limited, by late 2021 we wondered why statements on the subject from officials had not percolated into more academic conversations.

Several years after a 2017 *New York Times* article offered that the Pentagon-funded covert investigations into UAP, we noticed an increasing number of prominent journalistic sources seriously evaluating the topic (Bender, 2021; Chow and Schwartz, 2021; Rogan, 2021). Visibility increased in May 2021 with a story on CBS’s *60 Minutes* in which experienced intelligence and military personnel discussed the covert program and reported incidents. That summer, the Pentagon released a report conceding that—despite the extraordinary sensory and satellite equipment in its technological repertoire—it could not identify items from 143 of 144 UAP incidents (C-SPAN, 2022; Office of the Director of National Intelligence, 2021).

In recent years, high-ranking national intelligence officials have stated that UAP are real and unknown in intent or origin (Cowen, n.d.; Thebault, 2021; Washington National Cathedral,

2021). Some have dismissed attributions of UAP to secretive technology, whether U.S., Russian, Chinese, or other. Some have even asserted that there are UAP which move with characteristics that make human origin unlikely (Carson, 2021; Holpuch, 2021).

Former President Obama also affirmed his seriousness toward UAP on late-night television (Cillizza, 2021). Former President Clinton concurred (Corden, 2022). In the past, former Presidents Carter and Reagan both said they witnessed UAP during their lives (Alter, 2021). In a speech to the United Nations, Reagan even suggested that nonhuman intelligence might unite humanity. A former Deputy Assistant Secretary of Defense for Intelligence during the administrations of Bill Clinton and George W. Bush who has since influenced congressional actions on UAP recently echoed these sentiments (Mellon, 2023). Other high-level U.S. officials have issued intriguing comments on the credibility of witnesses and this topic (“Former Navy Rear Admiral Supports UFO Whistleblower Claims,” 2023; Gottlieb, 2024; Shellenberger et al. 2023).

As 2021 ended, President Biden signed into law the Gillibrand Amendment to the 2022 National Defense Authorization Act to establish an investigative office for UAP. Developments continued after we commenced our study. In May 2022 Congress held the first public hearing on UAP in nearly fifty years, and a month later, the National Aeronautics and Space Administration (NASA) formally announced a scientific investigation into UAP (Davenport, 2022). In January 2023 the ODNI released a new UAP report that tallied hundreds of additional unexplained events. In February 2023, NORAD took “kinetic action against an airborne object” (U.S. Department of Defense, 2023) for the first time in 65 years. At least one of the objects shot down was positively identified as a balloon. Still, legislators left a classified briefing confused and demanding answers. Amid a surge in media attention regarding unknowns in our skies, President Biden addressed the nation (Roche, 2023; Rogan, 2023). John Kirby, the retired U.S. Navy Rear Admiral serving as National Security Council spokesman, told a White House briefing, “The president, through his national security adviser, has today directed an interagency team to study the broader policy implications for detection, analysis and disposition of unidentified aerial objects that pose either safety or security risks” (Shabad, 2023). Sen. Kirsten Gillibrand (D-NY) praised new oversight legislation for having advanced this issue into serious conversation while requesting additional support (Rogers, 2023; Youssef and Wise, 2023). In April 2023, the Senate Subcommittee on Emerging Threats held a hearing on UAP (*Open/Closed*, 2023).

On May 31, 2023, NASA held a preliminary, public scientific panel tasked with determining how to study UAP. During the event, scientists discussed problems with stigma in reporting UAP, in identifying academic partners willing to collaborate, and in the credible pursuit and dissemination of research on a topic that was, until just recently, mostly deemed as fringe (*Public Meeting on Unidentified Anomalous Phenomena (Official NASA Broadcast)—YouTube*, 2023). Conundrums from the present situation abound. It appears that none of the participants held clearances needed to vet highly classified information that some claim exists.

Six days later, on June 5, 2023, whistleblower David Grusch, who two months prior held Top Secret/Secret Compartmented Information clearances as a senior intelligence officer in the National Reconnaissance Office and National Geospatial-Intelligence Agency, made several extraordinary claims. Specifically, he said that materials “of exotic origin”, which he suggested are likely of nonhuman intelligence “based on the vehicle morphologies and material science testing and the possession of unique atomic arrangements and radiological signatures”, have been studied by the U.S. government and defense contractors.

Two colleagues with similar clearances supported his assertions and credibility (Kean et al. 2023). When asked if the American public had been lied to for decades, Grusch stated that “there is a sophisticated disinformation campaign...which is extremely unethical and immoral.” He claims that the “data points empirically that we are not alone”, regrets that humans are “not even benefiting from broad research on this” (“We Are Not Alone,” 2023), and hopes that his “revelation serves as an ontological shock”. Among “other criminality and the suppression of information,” Grusch specifically alleged evidence was withheld from “academia” (Kean et al. 2023). Grusch stated that he wants to engage academia to open the study of UAP to greater scholarly transparency (Lombart, 2023).

Meanwhile, reports show that this topic is not confined to U.S. borders (Lomas, 2023). Recently, the Japanese, French, Brazilian, and Chinese governments have been investigating UAP (Bockman, 2014; Chen, 2021; “Japan Lawmakers to Create Group for Government Probes into UFOs,” 2024). Canada has founded a UAP study group that is due to release a report in 2024 (Otis, 2023). Reports, conferences, and debates have continued in Europe (Bernard, 2024; Friscourt, 2023; Ministero della Difesa: Aeronautica Militare, Repubblica Italiana, 2024; ZDFheute Nachrichten, 2024). In early 2024, Member of European Parliament Francisco Guerreiro of Portugal requested a “scientific” approach to UAP information. On the floor of the Parliament of the European Union he asked that “the EU Commission includes, in the European Space Law, a program to collect data on UAPs as well as the scientific body to analyze these events in a transparent and public way” (European Parliament, 2024).

While witnessing this public record expand, we perceive the need for questions and clarifications. We fully acknowledge that this topic is beset. Perhaps faculty are more dismissive of UAP after false alarms of the anomalous in the past (Dick, 2015). Disinformation, psy-ops, hoaxes, grifts, and entertainment have succeeded at stigmatizing serious inquiry (Washington Post Live, 2021a). Beyond the fickle gaze of public interest, a few researchers have endured ridicule and reprimand to examine this matter. Yet to date, the apparent risk/reward ratio yields low scholarly participation.

Topics permeating the corners of popular cultural conjecture seldom move to fact-finding congressional hearings. In this paper, we do not pretend to present explanations. However, the existence of recent public developments is indisputable. Academic credibility, criticism, and inquiry regarding them are aspects that we can, and should, investigate.

Methods

The study sample ($N = 1460$) included tenured and tenure-track faculty in 14 predetermined disciplines at 144 universities in the U.S. classified as “Doctoral Universities: Very High Research Activity” by the Carnegie Classification of Institutions of Higher Education (Carnegie Classifications, 2022). We excluded inactive faculty (i.e., Emeritus, retired), as well as Clinical Professors, Lecturers, and their equivalents at any rank because often their primary assignment is teaching, not conducting research. We compiled a list of 144 universities and colleges with this classification as of December 2021 (excluding the investigators’ universities). Using Excel’s RAND function, we randomly assigned the Universities and Colleges to the batches we used as part of the data collection process. We visited all university websites and collected publicly available data (i.e., faculty names, ranks, and email addresses) for 14 disciplines across the sciences, social sciences, humanities, and arts using Google Chrome’s Web Scraper. In cases where the scraper was incompatible with webpages, we manually collected information.

We consulted the most recent information on conferred baccalaureate degrees from the National Center for Education Statistics. Using this data, we selected nursing, sociology, anthropology, psychology, mechanical engineering, biology, journalism/communication, political science, and visual arts, many of the most popular undergraduate majors (U.S. Department of Education, 2021). Business is also a common major. We thus included economics faculty, who are frequently housed in business schools.

Although not among the most common majors, we determined that it was preferable to include philosophy, physics, religious studies, literature, and art. Had we only applied the most common majors according to national statistics, the study would have excluded physics, which would have introduced significant criticism given the topic at hand, and the humanities would have been excluded entirely. On this subject, we often defer to the sciences. Our goal, however, was to reach a diverse sample of disciplines. This topic may not simply pertain to motion or matter, but to meaning. Questions of impact or discernment exceed simply making scientific measurements. These five disciplines are long-standing staples of academic research and university life. They represent varied avenues of intellectual inquiry and often appear in curricular requirements across institutions. Additional considerations about categorizing faculty are reported elsewhere (Yingling et al. 2023).

Recruitment. The University of Louisville Institutional Review Board approved this study (22.0103). Between February 24, 2022 and April 27, 2022, we sent initial email invitations on a rolling basis through Qualtrics. This allowed us to commence data collection while compiling email addresses and to capture any changes in responses associated with any relevant news or academic developments, if they were to occur. Each faculty member was provided with an individual survey link generated by Qualtrics, which prevented duplication or sharing the link with others. Following best practices of survey recruitment (Dillman, 2007), we sent three reminder emails during three subsequent weeks. The survey portal remained open to all participants for 22 days. The survey closed to the final group of participants on May 19, 2022. Recruitment emails included an inline email question that asked if recipients could spare 10–12 min to share their thoughts. If they selected “Yes” they were routed to the survey. The consent process involved unsigned informed consent (preamble).

The final population of faculty totaled 39,984. Of the 40,322 initial recruitment emails, 174 bounced (rejected by recipients’ server), 10 failed to send (email did not leave the Qualtrics server because email address was formatted incorrectly, though they did not have apparent formatting issues), 31 were blocked by the recipient’s server (all cases included psychology faculty at the University of Utah), we received 14 automated emails stating that faculty were on leave, and 109 faculty who began the survey were ineligible. Total responses included 1549. The response rate was 3.9%. We suspect this rate could be based on several factors described elsewhere, along with additional details on study methods, including selection of the sample, an overview of survey development, survey items, and implementation (Yingling et al. 2023).

Briefly, to enhance readability of this paper, in an earlier paper we assessed faculty awareness and reactions to journalistic, governmental, and scholarly developments related to UAP (Yingling et al. 2023). In this paper, one study component included examination of whether and to what extent these developments impacted faculty reports of credibility, curiosity, and interest in conducting UAP-related research. These

developments included a 2017 *New York Times* article, a 2021 Office of the Director of National Intelligence report (colloquially the Pentagon report), a 2021 amendment to the NDAA that established and funded a government office to study UAP, and scholarship by four researchers who actively engaged this topic at the time the study commenced.

Data analysis and reporting. We conducted all data management and analyses using SAS® 9.4. All results are presented as descriptive statistics using the PROC FREQ and PROC UNIVARIATE procedures. We retained respondents who completed at least 50% of the survey, including questions that appear in another publication (Yingling et al. 2023), and removed respondents with less than 50% completed ($n = 89$). We retained cases in which participants completed a majority of survey responses because we conducted descriptive analyses, not parametric tests that assume normality, and we wanted to retain as many cases as possible. Notably, 25 cases included incomplete responses on all variables in this paper and 7 cases included incomplete responses on more than 50% of variables. We retained these cases to allow readers to consider and interpret the results of both papers as one sample rather than as two distinct samples. We calculated frequencies and reported a missing category for each variable of interest (Table 1, Supplementary Table 1). However, to provide the greatest detail and clarity of results possible, we also report the mean, median, mode, and standard deviation of all Likert-type variables for those respondents with complete data (Tables 2 and 3).

Given the descriptive nature of this study, we determined that the benefits of this approach outweighed any drawbacks. That said, of the 91 respondents with missing data, 43 were indicative of survey fatigue, suggesting that data were not missing at random. We also removed two participants who did not take the survey in good faith; one included vulgarity, and one shared in the open-ended response that they simply clicked through the survey because they were curious.

We asked participants “*What is your discipline or field? (e.g., sociology, biology, literature)*” and provided a text box for faculty to write their response. This resulted in a range of disciplines reported, including disciplines that were not targeted by the survey (e.g., law, statistics, dentistry). We grouped all reported disciplines into the 14 original disciplines and added an “other” category ($n = 143$) for respondents who reported disciplines outside of the 14 selected.

Participants also reported their current rank (assistant professor, associate professor, professor), current institution type (public/private), number of years employed full time as a tenured or tenure-track faculty member at any institution, and the year they completed their doctorate. We asked respondents to report demographic information: birth year, gender (male, female, transgender male, transgender female, non-binary/non-conforming), race (White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Some Other Race), and ethnicity (Hispanic/non-Hispanic). To obtain a well-rounded understanding of sample characteristics, we asked participants to share the year, country, and, if in the U.S., the state in which they earned their doctorate. Respondents earned their doctorates between the years 1963 and 2022 across 30 countries and 45 of 50 states as well as the District of Columbia.

Qualitative data. In reporting open-ended responses, considering the stigma associated with this topic, we took the protection of anonymity especially seriously. Throughout the study all

Table 1 Characteristics of survey participants (N = 1460).

Variable	n	%
Discipline		
Anthropology	62	4.25
Art and Design	66	4.52
Biology	89	6.1
Communication/Journalism	85	5.82
Economics	67	4.59
Engineering	89	6.1
Literature/English	112	7.67
Nursing	45	3.08
Philosophy	71	4.86
Physics	144	9.86
Political Science	151	10.34
Psychology	134	9.18
Religious Studies	29	1.99
Sociology	121	8.29
Other	143	9.79
Missing	52	3.56
Rank		
Assistant Professor	345	23.63
Associate Professor	446	30.55
Professor	636	43.56
Missing	33	2.26
Institution Type		
Public	1151	78.84
Private	277	18.97
Missing	32	2.19
Generation		
Millennials	490	33.56
Generation X	446	30.55
Baby Boomers	422	28.9
Traditional	43	2.95
Missing	49	3.36
Gender		
Male	901	61.85
Female	487	33.63
Transgender	1	0.00
Male—non-binary/nonconforming	2	0.00
Female—non-binary/nonconforming	4	0.00
Non-binary/nonconforming	16	1.58
Missing	49	3.36
Race		
American Indian or Alaska Native	5	0.34
Black or African American	35	2.40
Asian	1	0.07
Native Hawaiian or Other Pacific	94	6.44
Islander		
Some Other Race	67	4.59
Multiple Race	38	2.60
White	1161	79.52
Missing	59	4.04
Ethnicity: Hispanic or Latino		
No	1317	94.00
Yes	84	6.00
Missing	59	4.04
Year Earned PhD or Terminal Degree		
1960-1969	15	1.10
1970-1979	65	4.4
1980-1989	190	13.01
1990-1999	287	19.65
2000-2009	372	25.47
2010-2019	405	27.73
2020-2022	34	2.32
Missing	92	6.3

Based on results from chi-square goodness of fit tests, more faculty were male (61.85%), at the rank of professor (43.56%), and white (79.52%) than national estimates: male (52%), professor (35.5%), and white (69.76%) (U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics, 2020). Disciplines of the 143 faculty in the "Other" discipline category included: aeronautics and engineering, anthropological archeology, applied science, archeology, architecture, astronomy, astronomy and astrophysics, astronomy and cosmology, bioinformatics, biostatistics, business, chemistry and chemical engineering, cinema/fine arts, classical studies, classics, cognitive neuroscience, cognitive science, computer music, computer science, computer science and psychology, computer science, biology, mathematics, conservation ecology, creative technologies, criminal justice, criminology, demography, dentistry, ecology, English/cultural studies, entomology, environmental history, epidemiology, evolutionary ecology and indigenous studies, film and media studies, film/creative writing, finance, first amendment law, genetics, geography, geology, gerontology, health sciences, healthcare, history, history & africana studies, humanities, information policy, information science, international political economy, international relations, law, management and sociology, marketing, media, media studies, media studies/documentary production, mediterranean archeology, military science, molecular genetics, music, music and digital media, neuroscience, neuroscience, evolution, and genomics, paleontology, evolutionary biology, planetary science, policy analysis/law, public administration, public health, public health and public policy, public policy, public relations (risk and crisis management), science, statistics, theater and literature, wildlife ecology and conservation.

Table 2 Univariate statistics for importance of UAP to discipline and faculty assessment of discipline's capability of evaluating UAP stratified by discipline (N = 1460).

Variables	Importance to Discipline ^a				Importance to Academic Theories/Knowledge ^b				Discipline's Capability of Evaluation ^c			
	Mode	Median	Mean	SD	Mode	Median	Mean	SD	Mode	Median	Mean	SD
Anthropology	4.0	4.0	3.71	1.18	4.0	4.0	3.77	0.96	3.0	3.0	2.79	1.13
Art and Design	1.0	3.0	2.72	1.36	4.0	4.0	3.71	1.13	1.0	1.0	2.08	1.33
Biology	4.0	4.0	3.10	1.47	4.0	4.0	3.66	1.21	1.0	2.0	2.03	1.27
Communication/Journalism	4.0	3.0	3.02	1.28	4.0	4.0	3.55	1.19	2.0	2.0	2.30	1.04
Economics	2.0	2.0	2.23	1.16	4.0	4.0	3.38	1.11	1.0	1.0	1.69	1.03
Engineering	4.0	3.0	2.79	1.90	4.0	4.0	3.28	1.24	3.0	3.0	2.80	1.15
Literature/English	1.0	3.0	2.70	1.35	4.0	4.0	3.63	1.19	1.0	1.0	1.78	1.00
Nursing	2.0	2.0	2.38	0.94	4.0	3.5	3.27	1.26	1.0	1.0	1.64	0.80
Philosophy	4.0	4.0	3.38	1.19	4.0	4.0	3.41	1.08	3.0	3.0	2.75	1.07
Physics	4.0	4.0	3.36	1.34	4.0	4.0	3.67	1.28	4.0	4.0	3.62	1.02
Political Science	4.0	3.0	2.83	1.31	4.0	4.0	3.29	1.29	1.0	2.0	1.97	1.06
Psychology	4.0	3.0	2.98	1.34	4.0	4.0	3.44	1.20	2.0	2.0	2.50	1.13
Religious Studies	5.0	4.0	3.72	1.13	4.0	4.0	3.97	0.77	2.0	2.0	2.69	1.42
Sociology	4.0	3.0	2.85	1.33	4.0	3.0	3.18	1.27	2.0	2.0	2.35	1.14
Other	3.0	3.0	2.76	1.31	4.0	4.0	3.46	1.21	1.0	2.0	2.11	1.24
Missing	1.0	2.0	2.37	1.31	4.0	3.0	3.15	1.12	1.0	2.0	2.16	1.24

Table statistics do not include cases in which there was missing data. Notably, 25 cases included incomplete responses on all variables in this paper and 7 cases included incomplete responses on more than 50% of variables. We retained these cases to allow readers to consider and interpret the results of two papers as one sample rather than as two distinct samples. Details appear in the Methods section.
 SD: standard deviation.
^a If UAP could be explained by an unknown intelligence, how important would this be to your discipline? (Not Important at All [1], Of Little Importance [2], Of Average Importance [3], Very Important [4], or Absolutely Essential [5]);
^b If UAP could be explained by an unknown intelligence, how important would this be to academic consensus theories and knowledge? (Not Important at All [1] to Absolutely Essential [5]);
^c As of today, how capable do you think your discipline is of evaluating the evidence and/or significance of UAP? (Not at All [1], Slightly [2], Moderately [3], Very [4], or Extremely Capable [5]).

Table 3 Univariate statistics for concern about ridicule, jeopardizing tenure or promotion, and devaluing conventional scholarship stratified by discipline (N = 1460).

Variables	Concern about Ridicule ^a				Jeopardize Tenure or Promotion ^b				Devalue Conventional Scholarship ^c			
	Mode	Median	Mean	SD	Mode	Median	Mean	SD	Mode	Median	Mean	SD
Anthropology	1.0	2.0	2.45	1.54	1.0	2.0	2.23	1.42	1.0	1.0	1.56	1.11
Art and Design	1.0	2.0	2.41	1.41	1.0	2.0	2.28	1.43	1.0	1.0	1.60	1.17
Biology	2.0	3.0	3.0	1.41	1.0	3.0	2.67	1.49	1.0	2.0	2.08	1.16
Communication/ Journalism	1.0	2.0	2.14	1.31	1.0	1.0	1.87	1.29	1.0	1.0	1.44	0.80
Economics	3.0	3.0	2.60	1.28	1.0	2.0	2.35	1.48	1.0	1.0	1.78	1.21
Engineering	3.0	2.0	2.53	1.26	1.0	2.0	2.57	1.48	1.0	1.0	1.86	1.12
Literature/English	1.0	2.5	2.67	1.48	1.0	2.0	2.30	1.51	1.0	1.0	1.75	1.26
Nursing	1.0	3.0	2.84	1.48	1.0	2.0	2.64	1.52	1.0	1.0	1.76	1.07
Philosophy	2.0	2.0	2.59	1.37	1.0	1.0	1.91	1.24	1.0	1.0	1.42	0.80
Physics	2.0	2.0	2.91	1.33	1.0	2.0	2.16	1.36	1.0	1.0	1.76	1.15
Political Science	3.0	3.0	2.91	1.34	1.0	2.0	2.38	1.47	1.0	1.0	1.72	0.98
Psychology	2.0	3.0	2.63	1.23	1.0	2.0	2.30	1.42	1.0	1.0	1.60	0.96
Religious Studies	1.0	2.0	2.03	1.21	1.0	1.0	1.57	0.96	1.0	1.0	1.10	0.31
Sociology	1.0	2.0	2.48	1.32	1.0	1.5	2.23	1.51	1.0	1.0	1.55	1.06
Other	1.0	2.0	2.39	1.39	1.0	2.0	2.17	1.38	1.0	1.0	1.81	1.18
Missing	1.0	2.0	2.44	1.43	1.0	2.0	2.34	1.34	1.0	1.0	1.67	1.14

Table statistics do not include cases in which there was missing data. Notably, 25 cases included incomplete responses on all variables in this paper and 7 cases included incomplete responses on more than 50% of variables. We retained these cases to allow readers to consider and interpret the results of two papers as one sample rather than as two distinct samples. Details appear in the Methods section.

^aIf you conducted UAP-related research, how concerned would you be that your academic colleagues would give you a "hard time" or ridicule you? (Not at All [1], Slightly [2], Somewhat [3], Moderately [4], or A Great Deal [5]);

^bIf you conducted UAP-related research, how concerned would you be that your work would jeopardize tenure or promotion? (Not at All [1] to A Great Deal [5]);

^cHow much would knowing that a colleague or otherwise credible member of your field was conducting UAP-related research devalue or diminish your perception of their other conventional scholarship? (Not at All [1] to A Great Deal [5]).

participants remained anonymous to investigators unless they volunteered identifying information.

The final survey item invited participants to "Please write anything else you would like to say about this topic." Of the open-ended responses, 250 related to research or teaching and 111 related to the survey, which itself is academic research. To generate themes from this data we employed the constant comparative method using initial coding. Focusing on content relevant to study research questions (i.e., research and teaching in academia) we compared sentences and phrases to determine their conceptual similarity and distinctness. This approach was sufficient and did not require Second Cycle coding given that analysis involved a single open-ended response in a survey rather than interview transcripts or multiple data sources, did not build upon prior scholarship, and did not seek to generate theory (Saldaña, 2015). The first author conducted the analysis while the second author served as auditor.

Results

Sample demographics appear in Table 1. Disciplines represented included anthropology, art and design, biology, communication/journalism, economics, engineering, literature/English, nursing, philosophy, physics, political science, psychology, religious studies, sociology, and "other". Most respondents were male (61.85%) and white (79.52%), and more respondents were at the rank of professor (43.56%) than assistant (23.63%) or associate professor (30.55%).

Researching UAP in academia. We presented two questions to assess faculty perceptions about conducting their own UAP-related research (Fig. 1a–b): *If you conducted UAP-related research, how concerned would you be that your work would jeopardize tenure or promotion? (Not at All, Slightly, Somewhat, Moderately, or A Great Deal); If you conducted UAP-related research, how concerned would you be that your academic colleagues would give you a "hard time" or ridicule you? (Not at All to A Great Deal).* Three questions examined faculty perceptions of others' UAP-related research. Two questions were hypothetical (Fig. 2a, b): *How much would knowing that a colleague or otherwise credible member of your field was conducting UAP-related research devalue or diminish your perception of their other conventional scholarship? (Not at All to A Great Deal). If a colleague in your unit under consideration for tenure or promotion conducted UAP-related research, would this negatively influence your evaluation of their case? (Yes/No/Maybe).* Responses to questions varied by self-reported interest in conducting UAP-related research (Figs. 1a, b and 2a, b). They also varied by discipline (Supplementary Table 1, Supplementary Figs. 1–4). The third question asked about recent UAP-related scholarship by peers (Fig. 2c). We presented faculty with recent academic scholarship and asked to what extent it increased 1) the credibility of conducting UAP-related research; (2) their curiosity about UAP-related research; and 3) their interest in conducting UAP-related research.

Overall, 69.04% of faculty reported some degree of concern about ridicule (i.e., Slightly, Somewhat, Moderately, or A Great Deal) and 52.67% reported some degree of concern about tenure or promotion. Detailed in Supplementary Table 1, disciplines with the highest proportion of faculty who reported some degree of concern about ridicule included those in biology (82.02%), political science (81.46%), psychology (79.11%), nursing (75.56%), and physics (74.3%). Those with the highest proportion of faculty who reported some degree of concern about tenure or promotion included those in nursing (66.67%), biology (67.41%), engineering (65.16%), political science (56.95%), and economics

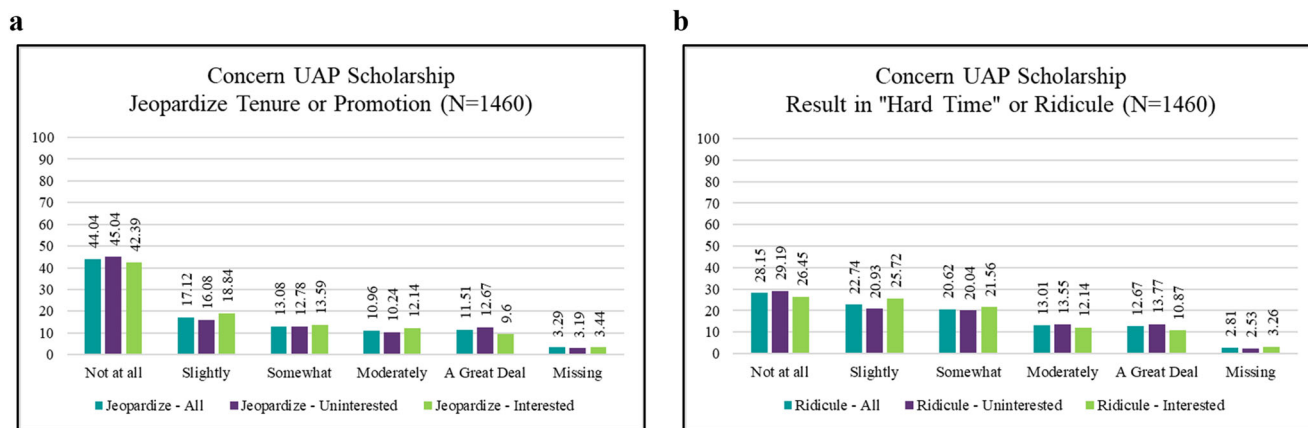


Fig. 1 Perceived Implications for Conducting UAP Scholarship. Response to questions, **a** “If you conducted UAP-related research, how concerned would you be that your work would jeopardize tenure or promotion?”; **b** “If you conducted UAP-related research, how concerned would you be that your academic colleagues would give you a “hard time” or ridicule you?”.

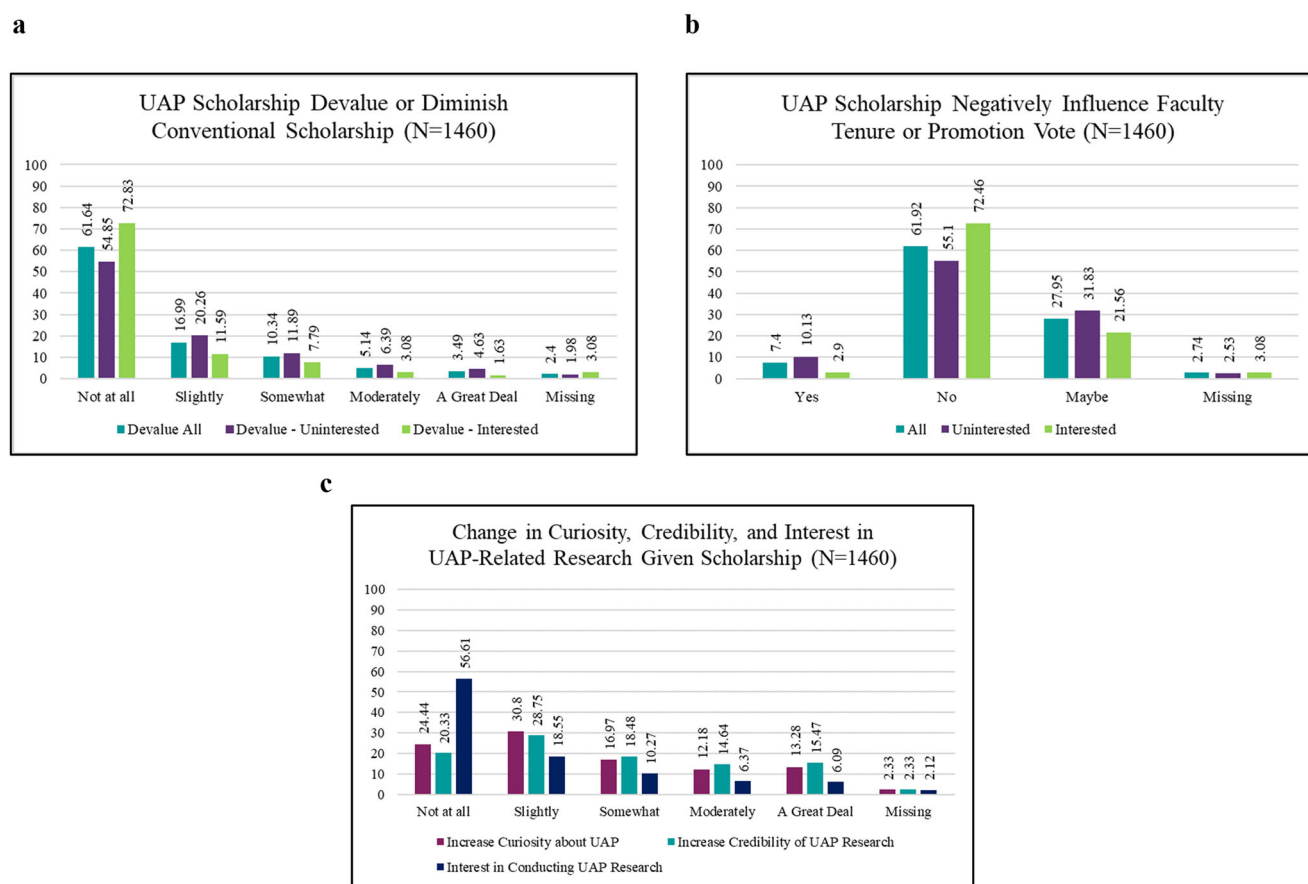


Fig. 2 Perceptions of UAP Scholarship. Response to questions, **a** “How much would knowing that a colleague or otherwise credible member of your field was conducting UAP-related research devalue or diminish your perception of their other conventional scholarship?”; **b** “If a colleague in your unit under consideration for tenure or promotion conducted UAP-related research, would this negatively influence your evaluation of their case?”; and **c** How much does knowing about academic scholars such as Dr. Nolan of Stanford University, Dr. Loeb of Harvard University, Dr. Pasulka of UNC-Wilmington, and Dr. Knuth of SUNY Albany increase your 1) curiosity about UAP; 2) the credibility of conducting UAP-related research; 3) your interest in conducting UAP-related research?”.

(55.22%). When asked if they would vote against tenure or promotion for UAP-related scholarship, 61.92% of faculty responded “No” while 7.4% responded “Yes” and 27.95% responded “Maybe”. Compared to faculty who reported interest in conducting research, faculty who did less often responded “No” (55.1 vs. 72.46%). Supplementary Table 2 includes results by

discipline. Disciplines with $\geq 10\%$ of faculty who responded “Yes” included biology (12.36%), nursing (11.11%), engineering (11.24%), and economics (10.45%); disciplines with $\geq 70\%$ of faculty who responded “No” included art and design (77.27%), nursing (73.33%), religious studies (72.41%), sociology (71.9%) and communication/journalism (70.59%); and disciplines with

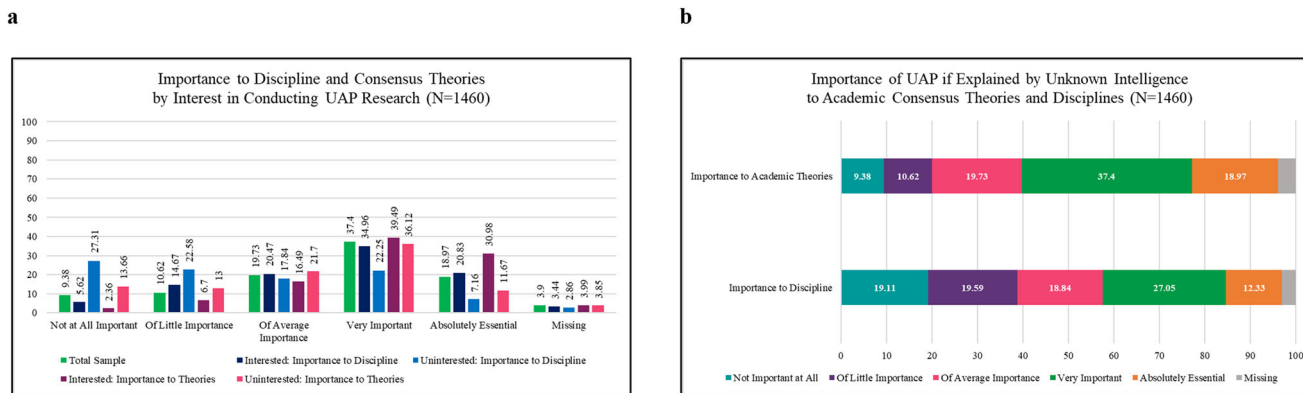


Fig. 3 Importance of unconventional explanation for UAP. a Response to questions, “Considering recent governmental and journalistic reports, federal legislation, and current academic scholarship, if UAP could be explained by an unknown intelligence, how important would this be to (1) your discipline or (2) academic consensus theories and knowledge?”; **b** response to question in (a) stratified by interest in conducting UAP-related research.

≥30% of faculty who responded “Maybe” included physics (40.28%), psychology (35.07%), biology (34.83%), and political science (34.44%).

Assistant professors most frequently reported some degree of concern about jeopardizing tenure or promotion (73.41%). This compared to associate professors (56.72%) or full professors (40.25%), who likely already held tenure and promotion. Assistant and associate professors reported similar frequencies of some degree of concern about ridicule (74.85 vs 72.87%). Although most full professors reported concern about social ramifications, they reported the least concern among the three ranks (66.04%). Full professors also reported the least increase in curiosity, credibility, and interest in conducting UAP-related research. Associate professors reported the greatest increase in curiosity and credibility. Assistant professors reported the greatest increase in interest conducting research.

Compared to faculty with no interest in conducting UAP-related research, those with interest more frequently responded that a colleagues’ UAP-related research would “Not at All” devalue or diminish their other conventional work (54.85 vs 72.83%; Fig. 2a). The disciplines of faculty who most frequently responded “Not at All” included religious studies (89.66%), art and design (74.24%), anthropology (72.58%), sociology (71.9%), philosophy (71.83%), and communication/journalism (70.59%; Supplementary Table 1, Supplementary Fig. 3). The only discipline in which a majority of faculty did not select “Not at All” was biology (41.57%). Faculty who reported interest in conducting UAP-related research and those who did not were similar in their concern about colleagues giving them a hard time or ridiculing them and concern for jeopardizing tenure or promotion (Fig. 1a, b).

Reported elsewhere, the overwhelming majority of faculty in this sample were previously unaware of the scholarship presented in the survey (Yingling et al. 2023). Here, 77.34% reported that it increased the credibility of UAP-related research to some degree (Slightly to A Great Deal); 73.23% responded that it increased their curiosity to some degree, and 41.28% responded that it increased their interest in conducting UAP-related research to some degree.

Importance of an unconventional explanation to academia and discipline. Among those open to unconventional explanations for UAP reported by the Pentagon are prominent officials, legislators, scholars, journalists, and highly trained military pilots (Cowen, n.d.; Cuomo, 2021; University of Virginia Center for Politics, 2021; Washington National Cathedral, 2021). Given suggestive

statements by these professionals, and considering that culturally, an unknown intelligence would likely be the most profound explanation, we found it relevant to ask faculty, “If UAP could be explained by an unknown intelligence, how important would this be to academic consensus theories and knowledge?” (Not Important at All, Of Little Importance, Of Average Importance, Very Important, or Absolutely Essential) and “If UAP could be explained by an unknown intelligence, how important would this be to your discipline?”

More than 56% of faculty reported that origins from an unknown intelligence would be “Very Important” or “Absolutely Essential” to theories and knowledge while 39.38% reported that it would be “Very Important” or “Absolutely Essential” to their discipline (Fig. 3a). Nearly half of faculty in economics (49.26%), engineering (49.44%), nursing (48.89%), and sociology (47.94%) and a majority of faculty in all other disciplines ranked the importance to theories and knowledge as “Very Important” or “Absolutely Essential” (Supplementary Table 1, Supplementary Fig. 5); most faculty in the disciplines of anthropology, biology, philosophy, physics, and religious studies ranked importance to their discipline as “Very Important” or “Absolutely Essential” (Supplementary Table 1, Supplementary Fig. 6). Degree of importance varied by whether faculty reported interest in conducting UAP-related research (Fig. 3b); interested faculty more frequently selected “Very Important” (39.49 vs 36.12%) or “Absolutely Essential” (30.98 vs 11.67%) to theories and knowledge and “Very Important” (34.96 vs 22.25%) or “Absolutely Essential” (20.83 vs 7.16%) to their discipline.

Faculty also ranked their discipline’s capability “of evaluating the evidence and/or significance of UAP” (Supplementary Table 1, Supplementary Fig. 7). Among all faculty, 66.24% reported some degree of capability (Slightly, Moderately, Very, or Extremely Capable); among those who most frequently reported some degree of capability, disciplines included physics (95.82%), philosophy (88.73%), anthropology (87.09%), and engineering (83.15%). Those who most frequently responded “Not at All” capable belonged to economics (59.7%), literature/English (54.46%), nursing (53.33%), and art and design (51.52%).

Open-ended responses pertaining to academic research or teaching. The final survey item invited participants to “Please write anything else you would like to say about this topic.” Among responses, 250 related to research or teaching. From these, we generated 14 themes and one standalone quote (see Table 4 for all themes and example quotes). Of the responses, 39 applied to two themes. The most common themes included Research Ideas/

Table 4 Themes of open-ended responses relevant to academic research and/or teaching (n = 250).

Theme	n = 250	Example Quotes
Academic Freedom	12	1) "...I don't like the idea of any subject being taboo for scientific inquiry..."; 2) "It is just yet another area of research as long as research is conducted following the protocol - if one is interested in it and wants to pursue it by all means."; 3) "If a junior colleague did a bit of this stuff on the side, that wouldn't bother me; if a junior colleague made UAP a primary focus of their research while hoping for promotion, that would be a bad idea."
Academic Study Worthwhile/ Important	32	1) "Rigorous scientific research into UAPs is essential for advancing understanding of these phenomena."; 2) "Like everything, academia has the chance to shed light on the issue using systematic, reasoned research."; 3) "We need good scientists looking at this issue NOT communication sources like Fox, who routinely lie to push their own agenda."; 4) "Thank you for the survey. This is an important subject for credible investigation and analysis."
Critiques of Scholars in Survey/ UAP Researchers	9	1) "Anyone devoting their career to UAPs should be ashamed of themselves for frittering away their talent on such a stupid topic."; 2) "The govt is lying about UFOs - they do not exist, there is no alien life out there and any attempt to legitimize this view means either the faculty are bought off or just dumb."; 3) "The Stanford guy refuses to let others study his samples. Avi Loeb has always been motivated by being the center of attention and is now rubbing shoulders with mega-rich donors who do not realize that what Loeb says in public is not scientific (but the instruments planned by his Galileo project will be useful for getting better data on UAPs)."; 4) "You cite academics like a Pathologist who writes about Materials Science ... Doctors are lousy at Physics and fairly hopeless at evaluating complex evidence... So this immediately raises concerns of credibility... You cite Avi Loeb who, while holding a serious position, likes making headlines and publicity by embracing very speculative ideas... your examples and stories are thus isolated data points with very little value..."
Disciplines Best Suited/Needed	23	1) "UAP research must be connected to research in astrophysics and the argument that because of vast interstellar distances it is likely that craft/entities are non-biological but AI or some form of artificial "life", unless, of course, our knowledge of space/time is limited." 2) "More psychology and social science. Human mind's potential for self-delusion is infinite." 3) "All UFO reports are optical illusions of one type or another. The right type of experts to explain them are NOT physicist or astronomers. The right experts are (1) cognitive scientists who study vision (2) photographers and those who understand technical aspects of cameras (3) visual effects artists. That's all."; 4) "I am a psychologist and thus I am not qualified to research the reality of UAP's. This is best left to atmospheric scientists, physicists, and engineers."
Explaining Responses	15	1) "...the question asking about the importance to my field...I selected average, not as in average for my field. It would have major ramifications, but likely no more or less so than other disciplines."; 2) My responses reflect the fact that I know most of the people about whom you asked personally and have been doing related work for several years, so the recent interest doesn't affect my perspective much; 3) "I am an art professor, hence my negative responses regarding pursuit of funding and incorporation into my teaching."; 4) "Some of my answers may have changed if we had a better definition of "UAP research... I have read with interest some studies that have explained how easily some UAP phenomena can be explained as optical illusions, etc. That's very different from reading about someone that is trying to claim there is some hyperdrive or other phenomena that explains some extra-terrestrial origin. I have respect for the former, but not so much for the latter."
Funding	15	1) "What is important here is not perceptions or publicity or public opinion, etc. The real issue is finding the truth and understanding what is going on. This requires careful measurements and observations, redundant sensor arrays, careful and critical analysis of the data, and other objective methods. This is how the money should be spent."; 2) It is imperative that the federal government sponsor academic research in this topic..."; 3) "Research on this stuff should be open sourced and crowd sourced. It's a mistake to leave it to established power centers such as academia, media, and government."; 4) "No public funds for this UAP research. Bigelow can fund it himself!"
Other More Important Topics	15	1) "There are far more important things to study given the limited time and resources academics have. Moreover, insofar as we are often accused of frivolous research when indeed our research is quite real, UAP research is actively unhelpful to the cause of science."; 2) My low interest in this topic is due to my opinion that it has been over-hyped by popular media, as Pasulka's book shows very well. There are very many topics and observations that we do not understand and remain unexplained by modern science and other disciplines. Many are far more important than these--such as killer diseases, changing weather patterns, etc."; 3) I have much more pressing problems to worry about, such as the rise of fascism in the USA where I live."; 4) I'd focus on what we have in earth (e.g., reduce carbon footprint, waste) as we can make instant impacts to human lives (5 - 10 years). Consider the unknown phenomenon can bring "benefits", may be in 50-100 years. I'd rather go with the concrete impacts in a life span."
Research Challenges	46	1) "I have no trouble with collecting data on this, but when it relies on anecdote it is hard to take it seriously as a scientific topic."; 2) "We think we are open minded. But, we are not."; 3) My only relevant expertise here is that I study narratives and testimonies- what made me curious, at the outset, was the realization that those sharing their stories, many of them, sounded like extremely credible witnesses to me. Those who were questioning the stories in the press, the professional "skeptics," were often credible in the sense that they were accomplished or well-trained, but their responses to this particular story were oddly defensive and unconvincing. I became curious about the phenomena only because it seemed to me that people I would normally trust were shutting down, while people I would not normally trust, seemed to be earnestly seeking answers. This made me wonder what might be going on and whether it was a science story or a political story, or something else. I discovered that there was no place to really go for credible information. It troubles me a great deal -from a political and historical standpoint- many of the conspiracy theories in circulation are quite dangerous and could easily be a pretext for atrocities against humans (said to be possessed by reptilians, etc). It seems vital to counter misinformation and narratives that people will develop in the absence of the answers that they seek."; 4) From a scientific standpoint, UAP encounters can only be indirectly studied because they are not repeatable (unless you buy into S. Greer's CE5 initiative, or secretly have materials). The 5 flight characteristics (as per L. Elizondo, which seem to violate known aerospace limitations) and presence of the phenomena as far back as WWII ("foo-fighters") and even before, strongly argues against the idea that these are "human" tech. However, the degree of misinformation, and outright lies in our "media" have really messed up any hope of an objective analysis. The Navy disclosures seem compelling (Where is the Air Force, btw?), but the government has the capacity to conceal, and lie... IMHO, the only thing that might resolve skepticism is if the "occupants" publicly self-identify (and I hope they are friendly). In the meantime, boys will be boys, and there will be a push to secure this tech (if real) for the military industrial complex, or to convince others that it exists, and we have it, as a "deterrent" (psy-ops). Makes my head spin - and frankly, I can't even find anyone in my field who will entertain a conversation about it (understandable, because separating fact from fiction here is impossible, and pretty much all we have is bad polluted data). That is how screwed up we are. You can't turn 80 years of secrecy and ridicule on a dime. Good luck, I will be watching in my arm chair with a glass of scotch. If I think of a way to constructively participate in the discussion, I probably will.

Table 4 (continued)

Theme	n = 250	Example Quotes
Research Ideas/Sources/Engagement	49	1) "Seems like if we had access to all the military's data, it might be possible to make some sense of these observations."; 2) "There should be an academic conference on UAP, it's a multidisciplinary field that would benefit from methods and knowledge sharing."; 3) "Until we can eliminate perceptual anomalies (seeing things that originate in the brain), I remain skeptical. External documentation is poor."; 4) "I am very interested in UFOs that appear in historical texts."
Stigma	35	1) "I am a humanities scholar trying to create a group supportive of work on ETL/I. It's fairly hard going because of all the misconceptions."; 2) "Look to the SETI project for how academics viewed the program. And also note how it also benefited science in indirect ways, too."; 3) "Pursuits along these lines may jeopardize credibility. Be careful."; 4) A well-known scholar in my field, (name redacted), was widely ridiculed after publishing works (topic related to UAP redacted), even though he was already quite senior. This made me aware of the powerful impact of stigmatization in limiting the scope of investigation, and helped me to understand why there has been so little discussion of the pentagon report, which contains information that should, in theory, have inspired a much more intense reaction."; 5) "The censorship of this topic is ridiculous. The stigma surrounding the topic is negative and even more in academia."; 6) Conducting research on UFOs (or the new acronym - UAP) to me is akin to conducting "research" on bigfoot and other such follies."
Teaching Example/Interest	17	1) "When I teach astronomy I tell my students about the UFO phenomena as a psychological, not a physical problem."; 2) "...I still use UFOs/UAPs as the example in research methods for parsimony and Occum's razor." 3) I am glad I took this survey because it made me aware of other sources that will bolster a class that I am planning to teach in fall 2022...that encourages students to explore this topic."; 4) I teach ... (a large survey class) and have considered incorporating material about this for students, as it grows in importance and credibility and is less stigmatized."
Tenure/Promotion	7	1) "Tenure might be tricky for you-good luck." 2) "My assessment of the validity of the research would depend on the scholarly outlet in which it was published (ie, for tenure decision)."; 3) "My response about tenure decisions are motivated by that research on UAP phenomena would be considered irrelevant for my discipline (economics) and not that there would be a stigma associated with it."; 4) I would evaluate any UAP-related research in the same way as any other research in my discipline. If said UAP research is impactful, then I would favorably respond to it. Otherwise, I wouldn't."
UAP Researchers	4	1) "Academics who study UAPs get persecuted and sometimes forced out. Good luck to everyone."; 2) "researchers in UAP are not doing a good enough job at promoting their scholarly work."; 3) "I am curious about how many UAP researchers have a strong foundation in religion and how religion plays a role in ones outlook on UAP."; 4) "The academic research is not very well publicized, except for cases like Avi Loeb."
Waste of Time and/or Money	9	1) "I cannot believe you got grant funding to do this. What is the point????"; 2) "I have a strong bias against any research on topics that don't directly affect earth or the humans or animals that live on it."; 3) "We should not waste our resources on fear mongering and fantasy seeking endeavors."; 4) "this is why people make fun of sociologists...Waste of time."
Why Disturb Status Quo	1	"If unknown intelligences exist, they apparently are working to remain unobserved, and if they exist have not overtly acted to cause humanity harm. I fear there is much more to lose than gain by disturbing this status quo if irrefutable proof of unknown intelligences would be revealed, both in terms of the disruption to our culture, society, and economy, and from the potential reaction of such unknown intelligences to being revealed to the average person."

Responses to the question, "Please write anything else you would like to say about this topic", that related to academic research and/or teaching. Of the 250 faculty responses related to research and/or teaching, 39 applied to two themes, and 1 applied to 3. Due to space limitations, there were meaningful responses that we could not incorporate. We selected responses that represented the diverse feedback received. There were also compelling comments that could potentially identify participants. Although we desired to share this material, we prioritized protecting participants' confidentiality.

Sources/Engagement (*n* = 49), in which faculty suggested areas of research, potential data sources, needs for research such as theoretical models, and their current engagement in UAP-related research; Research Challenges (*n* = 46), such as those related to employing the scientific method, accessing data, disentangling fact from fiction/disinformation, and seven references to the Carl Sagan quote that "extraordinary claims require extraordinary evidence"; and Stigma (*n* = 35), which included statements that demonstrated the stigma affiliated with this topic (e.g., warnings to the authors to be careful, examples of senior scholars being widely ridiculed for research in an area related to UAP, etc.) as well as direct commentary about existing stigma.

In response to the same question, 111 faculty reacted to the survey. We categorized these responses into four basic reactions, including positive (*n* = 68; e.g., "Thank you for conducting this survey... I think robust scientific research is long overdue. If not for the stigma associated with the topic, I think we'd be years ahead of where we are in understanding these phenomena."; "GOOD LUCK WITH THIS WORK. I was a cannabis researcher for decades and took a ration of criticism for it. I can only imagine the flack you're going to get...STAY BRAVE."), negative (*n* = 32; e.g., "This survey feels vaguely conspiracy-theorist"; "...depressing that this survey will be used to give the DOD more money instead of fundamental sciences"), curious (*n* = 7; "I spent this entire survey trying to figure out what this study's objectives were... Fascinating."; "I am curious about whether this survey is about UAPs or one's confidence in news sources and the

government, a very well done survey!"), and other (*n* = 4; e.g., "this is a weird survey").

Discussion

This research reveals the complexity of considering beleaguered topics in academia. There were certainly faculty in the study who said this subject deserves no attention whatsoever. Some espoused apathy. Some even thought that researchers in this area should be "ashamed" or are "bought off or just dumb". Others viewed extant stigma as contrary to the pursuit of knowledge, prohibitive to scholarly interests, and fostering abandonment of responsibility to critique narratives, which one participant thought could be "quite dangerous and could easily be a pretext for atrocities against humans".

Importantly, these results combined with recent findings underscore the conflict between academic freedom and the social component of respectability and acceptability by which scholars fear the lack of approval from peers over the questions they ask. Faculty report mediocre confidence in future government reports on UAP, assess scholarship on UAP as more credible than journalism, government reports, and legislation, and many would be more likely to conduct UAP research if someone they considered reputable did so (Yingling et al. 2023). Where does this leave us?

Stigma: social and professional sanctions. Some faculty demur as to whether this topic fits legitimate academic inquiry. Further,

stigma remains elevated. Yet who draws the line of “acceptability” for research questions or conversations? In recent decades, adjacent areas of inquiry have received severe scorn (Israel, 1995). However, boundaries on other stigmatized subjects have shifted before. Few people today dismiss or bristle at research on sexual health, religiosity, mind-altering substances, or the search for extraterrestrial life (SETI). Though *de rigueur* today, these fields met sensitivity and scrutiny mere decades ago.

Results indicate that faculty who fear negative social and professional sanctions may be greater in number than faculty who would choose to sanction them. However, this most certainly does not simply render the topic accessible. Indeed, we the researchers experienced overt stigma when we simply and sincerely asked faculty for their opinions. It mattered not that we initiated questions in the context of conversations and legislation of the U.S. federal government.

In fact, although some faculty expressed enthusiasm for receiving our invitation (e.g., “I was absolutely delighted to find such initiative in my inbox. Overjoyed...!”), as reported in greater detail elsewhere (Yingling et al. 2023), the first email we received from a prospective participant expressed insult. In open-ended survey responses, we were told to “be careful” and we were wished luck with our tenure cases by a participant who once tried to openly discuss the topic but now avoids it due to stigma. However, in the aggregate, faculty responses suggest that unease may not be accompanied by actual professional sanctions. That said, although a minority of faculty reported that they would vote against a colleague’s tenure and/or promotion case for conducting UAP-related research (7.4%), a much larger minority (27.95%) reported that they might. Open-ended responses provide some insight into this more conditional response and suggest that respondents differ in their reasoning. While some communicated that what matters is the quality and impact of a colleague’s work, others outlined their expected boundaries of investigation. Specifically, that their vote would depend on how a colleague approached the topic or how much time they devoted to it. According to some faculty, acceptable areas of inquiry into UAP belong within the confines of literature, culture, and mental illness. Yet, into which of these bins would they file recent taxpayer-funded studies and reports on UAP? Do previous labels of entertainment, delusion, or folklore remain sufficient?

Professors who report the least concern about social and professional repercussions for studying UAP do not represent disciplines that assess themselves as being the most equipped to evaluate them. Art and design faculty were among the least concerned about repercussions but ranked their own discipline among the least suited to study the topic. In contrast, 95.82% of physics faculty ranked their discipline as capable to some degree, with the highest number of faculty across disciplines who responded “Moderately Capable” (31.94%), “Very Capable” (34.72%), or “Extremely Capable” (20.83%) yet nearly three in four reported some degree of concern about ridicule. Similarly, 83.15% of engineering faculty ranked their discipline as capable to some degree but also included some of the highest numbers of faculty who reported some degree of concern that UAP-related research would jeopardize tenure and/or promotion and some of the highest numbers who would vote against a colleague’s case for tenure and/or promotion for such research. Prior research indicates that many faculty think there should be academic participation in the evaluation of UAP information and more academic research on UAP, including half of faculty in physics (49.3%) and engineering (50.6%; Yingling et al. 2023). What does it mean that faculty in these disciplines might also be the most likely to dispense or experience negative repercussions?

Results also point to the role of power dynamics, as responses differed by rank. Newly minted PhDs appear to be the most open-

minded toward UAP, if only marginally. Yet pre-tenure, they are clearly the most vulnerable. Another complicating factor is that compared to faculty who did not report interest in conducting UAP-related research, interested faculty more often reported some degree of concern about repercussions and less often reported that they would socially or professionally sanction faculty who do conduct research.

Misconceptions, biases, and language. Participants’ reactions to and assumptions about the investigators, and the survey itself, are telling. Simply presenting this study elicited a range of emotional reactions. At times, some infused their own disciplinary biases (e.g., in response to the single open-ended question, psychologists wondered if we were conducting an experimental survey rather than soliciting opinions about government reports or news). One participant wrote, “In every instance in this survey, UAP could be replaced by tiny pink unicorn with silver wings...UAP is still a spurious category...While I think there may be life out there somewhere in the vast Universe, I do NOT think any of it is coming to the Earth in flying saucers”. In this case and others, some faculty imposed their own preconceptions and language.

Though we employed the term “unknown intelligence” to investigate the significance of arguably the most profound yet *exploratory* explanation for UAP, we never asserted evidence for this explanation. We did not inquire about “extraterrestrials”, “aliens”, or “flying saucers”. Participants opted to use these terms. We were attentive, cautious, and selective with language, hence our utilization of only the U.S. federal government’s definition of UAP. Elsewise, some faculty spoke to this challenge of definitions and theoretical models to welcome scholarly discourse.

Four quotes that participants volunteered in response to the open-ended question illustrate the difficulty in arriving at consensus lexicons and theories without further research: “I believe UAP exist but do not believe it is from extraterrestrial being.”; “I believe UAP exists, but I don’t believe that so many people can observe it.”; “I am more inclined to believe that our consciousness is not what we think it is than to believe that this is all there is and there happens to also be aliens here.”; and “I believe we have UFOs that are ET-based. I also believe the government has classified technology that may be confused with UFOs...government reports may be disclosed for an agenda....” Others opined that UAP are nothing more than optical illusions, hoaxes, or black ops, among other conventional explanations. Intriguingly, some participants registered the opposite - perhaps somewhat sarcastically - with the phrase “I believe” or “I want to believe.” Referencing the public, others said “people believe” things because they want to believe them.

At this juncture, all of these views arguably stem from a dearth of data. Clearly, cultural baggage impacts this topic. This study shows how stigma associated with extant terms and models limits earnest inquiry and conversation. We are pleased to collect these thoughts, although we never asked about “belief.” Can scholars operate in the realm of “belief”? In the domain of believing one thing or another, how are scholars more valuable than the broader public, who also wrestle with factual fragments that emerge?

Alongside stigma, vocabulary, and disciplinary divergences, these results point to another salient conundrum. Faculty have never before been asked to collect, analyze, or debate data on UAP. That seems to be a fulcrum of discomfort. Understandably, in this context, and with the unexpected ascent of this topic in public discourse, many seem unprepared to engage.

Can faculty transparency about their interests and motivations prevent misconceptions? Besides tenure, do faculty require additional protections to take risks of academic freedom? For

those professors who prefer engagement, rarely must other emergent inquiries hurdle presumptions of disinformation, mythology, instrumental error, or even psychosis. Further, academic consequences from governmental mistrusts, whether past or present, are perhaps vast. It remains to be seen whether this will cause scholars to avoid public roles in vetting this topic due to fear from narrative, custom, and odium. Concerns for reputational damage are real and relevant.

If UAP developments are a ruse, what an odd ruse to choose to divert attention, extract intelligence, attract talent, develop innovations, obscure technology, bluff, illuminate adversarial progress, cultivate unity or anxiety, or beg for more money. If a peculiar ruse it is, the U.S. Congress has either been conned or is in on a con. Further, it is keenly important to remain aware of tactics in content curation, media manipulation, and perception management (Laslo, 2023; MacLeod, 2019; Pasulka, 2023; Pilkington, 2010; Timm, 2023). Regardless of an individual's preferred explanation, public fanfare and the copious funding, fiction, fear, and hopefully fact that follow still hang in the balance.

However, if these possible explanations are only secondary motives to a less prosaic, primary driver of this arising UAP discourse, at what point is it reasonable to expect those who revert to old explanations for new developments to prove their assumptions are the most valid? This question is not rhetorical. Events have expanded since we commenced this study. As we all await better information, we suggest considering that time could be now.

If there is more to UAP than deception and naïveté, then UAP are *all the more important* to examine. And, consequential deception and naïveté *are still worth stringent scrutiny*. Further, if military and intelligence officials are not playing games, are being truthful about their views, and are yet entirely wrong in their assessments, we have additional serious problems to consider. Confirming momentous results, or confounding momentary riposte, requires expertise across academic areas.

If the forecast portends cultural détente on the UAP topic, which butterfly effect will cause a storm in academic circles? Will scholars lead on this topic, or will they only react to assumptions that waft upon the winds of societal change? Ignoring the topic outright might soon become passé.

Funding and data. Faculty commented on funding in open-ended responses. On whether funding should be allocated for UAP research, they disagreed. Opinions diverged on which forms of funding are most appropriate and the amount of funding that should be allocated given competing priorities. Further, asking if funding should exist does not amount to assuming that it must. Referring to this study on faculty perspectives, another participant erroneously opined, "I can't believe you got grant funding to do this." We did not. There is no such grant. Assumptions about incentives are instructive.

Further, one participant insisted that, "You should have been more transparent as to how you will personally benefit from conducting this survey." On this topic perhaps transparency is of greater importance than in more standard lines of research. We have *no personal benefit* from conducting this project and dealt with suspicion we never faced in our other research. Rather, offering new knowledge—including recording cynicism and other reactions—hopefully benefits a wide audience.

These quotes arrived alongside comments from faculty that the study of UAP is a waste of time and money. This demonstrates the challenge to considering if, and how, funding mechanisms for study of novel topics could, or should, appear. This is at variance with the more than one-third of faculty who report interest in

studying UAP (Yingling et al. 2023). However, tellingly, 54.89% of faculty report that they would be more likely to study UAP if there was funding to do so. Relatedly, research funding is competitive and occurs in a context of dwindling support for higher education (American Academy of Arts and Sciences, 2016; Whitford, 2021). Entire fields, disciplines, and universities have become chronically unfunded or underfunded (Bird, 2022; Fisk and Atun, 2009; Testino, 2022; The Graduate School: Post-doctoral Affairs, n.d.).

An aversion to conversation renders academia less relevant to considerations surrounding possible funding. For instance, considering the military and aerospace actors with long histories of exorbitant governmental funding, a likely outcome might be the prioritization of advanced weapons platforms or space domination rather than considering broader human interests. Studies already funded by taxpayers remain bureaucratically submerged. In the case of UAP, public and private money could certainly follow recent developments. To whom will researchers who accept such money answer? How might this tinge perceptions of results? Who will set the parameters? How might those already queued to serve themselves further beset public benefit or trust surrounding this subject? Which comes first, public UAP studies or funding? Perhaps moving forward, the two are inextricable.

Further complicating research considerations is the problem of informational asymmetry. Academia has a severely limited dataset compared to classified sources, as some participants noted. Military and intelligence personnel have, only recently and partially, shared such sources and data with congressional committees tasked with oversight. By word and deed, it seems some officials' interest in UAP has been piqued by information collection paid for by a citizenry that is prevented from knowing any details that *might* offer important nuance to our knowledge base, even if the public never needs to know national security sensitivities or collection methods.

Recent legislation has started to consider this issue. In July 2022, the Pentagon renamed and somewhat revamped the UAP office, now called "AARO," the All-Domain Anomaly Resolution Office (O'Connor, 2022). Among other duties, it must create "procedures to synchronize and standardize the collection, reporting, and analysis" (National Defense Authorization Act for Fiscal Year 2022, 2021) of incidents and issue annual reports. This would require staff to review cases dating to January 1, 1945, including "any efforts to obfuscate, manipulate public opinion, hide, or otherwise provide incorrect unclassified or classified information" (National Defense Authorization Act for Fiscal Year 2023, 2022) regarding UAP or linked activities. It remains in question what findings the public will eventually see.

Limitations and opportunities. The sample size of this study is larger than recent surveys among faculty at institutions of higher education, which have ranged between 113 and 329 (Sabagh et al. 2018). However, the primary limitation of this study is the response rate. Without question, supported by evidence respondents themselves offered, the stigma attached to this topic contributed to the low rate. Importantly, faculty responses do not indicate that self-selection bias occurred based on interest in the topic; only ~6% of faculty reported that they frequently or very frequently seek news on this subject. Future research in this area will require consideration of not only increasing response rates but also improving representation across gender and race-ethnicity (see Yingling et al. 2023 for detailed discussion of response rate and sample demographics).

This study is also limited due to its novelty and method utilized. Research on any topic must begin somewhere, and we

initiated work in this area using a survey. Although this enabled a large sample size, the inability to ask nuanced follow-up questions leaves results open to a range of interpretations. For instance, among those faculty who would or who might sanction their peers for conducting UAP-related research, can their response be interpreted as a lack of insight into the potential application to their discipline, as outright rejection, as a combination of the two, or something else? What, specifically, gives faculty who assess their disciplines as capable of evaluating the evidence or significance of UAP their confidence? Among faculty with interest in conducting UAP-related research, what research questions might they consider? Further, we cannot rule out the possibility that faculty who completed the survey are less likely to sanction their peers for UAP-related work than those faculty who did not participate. This study is a preliminary investigation that provides no definitive answers regarding sanctions. Qualitative research might be most appropriate to advance knowledge in areas inaugurated in this study.

Opportunities for future work abound. If the events that have transpired in the time since we closed the survey are any indication—additional legislation, public hearings, whistleblowers, NORAD's actions to shoot down UAP—there will likely be others in the future. What might faculty thoughts be on the latest and future developments? How might faculty perceptions of this topic and related considerations of academic freedom evolve? How might developments influence faculty engagement? What personal or institutional factors might influence faculty to conduct UAP-related research?

In various ways, some scholars have recently studied cultural responses to anomalies, albeit in some disciplines that registered less stigma than others (Andresen and Chon-Torres, 2022; Finley, 2022; Lepselter, 2016; Peters, 2011; Washington Post Live, 2021b). How might faculty perceive this scholarship in the context of ongoing UAP developments? How might faculty actions, reactions, or evaluations influence current events or public opinion? These and other questions are ripe for investigation and would benefit from mixed methods and longitudinal approaches.

What next? Developments related to UAP are ongoing. On June 22, 2023 Senators Warner (D-VA) and Rubio (R-FL) introduced a complete draft of the 2023–2024 Intelligence Authorization Act for congressional consideration (Text - S.2103 - 118th Congress (2023–2024): Intelligence Authorization Act for Fiscal Year 2024, 2023). The intent of Section 1104, “Funding Limitations Relating to Unidentified Anomalous Phenomena”, is for the Federal Government to “expand awareness about any historical exotic technology antecedents previously provided by the Federal Government for research and development purposes” by requiring transparency of government offices and contractors. No later than 180 days of enactment, “any material and information...relating to unidentified anomalous phenomena that formerly or currently is protected by any form of special access or restricted access” must provide “a comprehensive list of all non-earth origin or exotic unidentified anomalous phenomena material”.

Significantly, one of the most prominent politicians in the U.S., who has rarely commented on the UAP topic, presented an extensive and assertive amendment to the most recent NDAA for public consideration. Senator Chuck Schumer (D-NY)—who is the current Senate Majority Leader, has a reputation for cautious calculation, and is a close collaborator on legislation with the Biden White House—announced the “Unidentified Anomalous Phenomena Disclosure Act of 2023” (UAP Disclosure Act of 2023, 2023). With atypical bipartisanship on this issue yet again, Senators Todd Young (R-IN), Martin Heinrich (D-NM), Marco Rubio (R-FL), and Kirsten Gillibrand (D-NY), all of whom hold

prominent committee roles regarding intelligence and armed forces, supported co-sponsor Senator Mike Rounds (R-SD) (*Congressional Record - Senate*, 2023). Schumer and Rubio, as respectively the current Senate Majority Leader and Vice Chair of the Senate Select Committee on Intelligence, have been members of the highly classified briefings afforded to the “Gang of Eight,” members of Congress given briefings on the most sensitive intelligence of the U.S. government. On many other matters, these two senators are regularly at odds (Desiderio and Bertrand, 2020).

The proposed legislation featured more than 20 mentions each of technologies of “unknown origin” and “non-human intelligence,” including specific definitions for these terms. Schumer and colleagues demanded transparency in records, examination of overclassification, and proper governmental oversight of opaque programs that might exist on these topics. In this proposal, these senators expressly promoted academic participation in offering clarity and analysis. The Schumer and Rounds amendment was adopted and approved by the Senate in its final version of the NDAA (S.2226). Much of the most strident language about UAP and nonhuman intelligence was removed in committee within the House (National Defense Authorization Act for Fiscal Year 2024, 2023; Barna et al. 2024).

Further, the House Oversight Committee's National Security Subcommittee announced a new public hearing. This event with former military pilots and whistleblower David Grusch occurred on 26 July 2023 (Rep. Burchett and Oversight Committee Members on Upcoming Hearing on UAP, 2023). In this hearing and under oath, Grusch said that the U.S. had recovered various nonhuman materials (Romo and Chappell, 2023).

In December 2023, Dr. Sean Kirkpatrick departed AARO leadership. In lengthy comments since, he has criticized Congress, curious citizens, and the news media. He also chided the Pentagon for excessive secrecy. Kirkpatrick asserted that, “If there is a void in the information space, it will be filled with the imagination of the public right...conspiracies and...accusations” (Seligman, 2024). Elsewhere, he said of those advocating for UAP oversight, legislation, and transparency, “It is basically a religion, a religious belief that transcends critical thinking and rational thought” (Luscombe, 2024).

Kirkpatrick has regularly used “conspiracy” labels to characterize interest in this topic, including among Congress. He asserted, “many of the circulating allegations described above derive from inadvertent or unauthorized disclosures of legitimate U.S. programs or related R&D that have nothing to do with extraterrestrial issues or technology. Some are misrepresentations, and some derive from pure, unsupported beliefs.” Kirkpatrick has also assailed, “The result of this whirlwind of tall tales, fabrication and secondhand or thirdhand retellings of the same, was a social media frenzy and a significant amount of congressional and executive time and energy spent on investigating these so-called claims—as if we didn't have anything better to do.” He said, “the modern media cycle drives stories faster than sound research, science, and peer review time lines can validate them” yet that the “talented” AARO team that he departed is “striving in collaboration with the armed forces, intelligence community, government agencies, national laboratories, scientific community, academic community—and soon the general public—to collect and analyze hard, measurable data...” (Kirkpatrick, 2024a).

In early 2024, AARO, the office that Kirkpatrick directed in the Department of Defense, released a report on past U.S. governmental investigations into UAP. Overall, it was opaque, with limited data, little discussion of criteria for categories or evaluation, and unclear methods of peer review for findings. However, it did state, “AARO found no evidence that any USG investigation, academic-sponsored research, or official review

panel has confirmed that any sighting of a UAP represented extraterrestrial technology.” Elsewhere, it also dismissed “aliens.” Nevertheless, AARO is supporting the advent of new sensors for deployment to better capture data on these unknowns. Some witnesses and whistleblowers disputed AARO findings. There are also conflicting reports as to whether AARO engaged prominent whistleblowers during its investigation.

Questions remain about evidence. What would meet evidentiary standards for undefined categories? Is this report asserting absence of evidence, or evidence of absence? The report acknowledges that significant percentages of cases remain unexplained, and it did not review cases under scrutiny in congressional hearings. The report included more “conspiracy” rhetoric. There is little room to reconcile positions of Kirkpatrick and AARO with whistleblowers—it would seem that one party of the two is extremely wrong. With continued bipartisan frustration from Congress, it is unclear what this overview report clarifies. The public remains subjected to a resilient status quo (AARO, 2024; Hodge, 2024; Rogan, 2024; Tingley, 2024).

As if his feelings were somehow unclear, to coincide with the release of the AARO report Kirkpatrick wrote yet another opinion piece denouncing “the distraction of conspiracy theories” in the title (Kirkpatrick, 2024b). It is unknown whether Kirkpatrick intentionally, or unwittingly, uses “conspiracy” labels here and elsewhere for specific influence (Danesi, 2023; Demata et al. 2022; Dentith, 2024).

Major news outlets seem more inclined to repeat assertions from AARO or Kirkpatrick rather than report on what remains unresolved (Baker, 2024; Barnes, 2022; Bergen, 2024). Without the lag time or rigor of peer review, a factor Kirkpatrick mentioned, news coverage is as prone to present clickbait as it is to reassure the public that this is a topic worth dismissing. As new scholarship percolates, where legacy media has abdicated rigorous inquiry, an alternative media appealing to an expanse of the political spectrum has engaged an interested and wide audience on this debate (“*Last Week Tonight with John Oliver*,” 2024; Ball & Enjeti, 2023; Ford, 2023).

The ultimate role of legacy intelligentsia remains to be seen. If needed, a course change in scholarship would take time on such a long-beleaguered topic. Nevertheless, this shift seems nascent across disciplines (De la Torre, 2024; Eghigian, 2024; Krame et al. 2024; Medina et al. 2023; Villarroel et al. 2022). Among other events, during a small, invitation-only meeting, a very new think-tank comprised of personnel from academic, military, and intelligence communities presented thoughts to shape this growing conversation, including some conjecture about possible roles for academia in averting consequences of “catastrophic disclosure” (Norton, 2023).

In additional governmental consideration of UAP, the Inspector General of the U.S. Department of Defense issued a separate report on UAP responses in January 2024. One section of the report studied why the “DoD does not have a comprehensive, coordinated approach to address UAP.” This report found that the “DoD has no overarching UAP policy and, as a result, it lacks assurance that national security and flight safety threats to the United States from UAP have been identified and mitigated” (Inspector General, 2023).

On a few issues, including whether multiple, credible witnesses have approached Congress directly, high-ranking senators differ from some statements by Kirkpatrick and AARO. In mid-2023, Sen. Rubio stated, “I will say there are people who have come forward to share information with our committee over the last couple of years” with “firsthand knowledge, or firsthand claims of certain things” and that he tried to be “cautious” as he felt “protective” of some current government employees who were “fearful” for their careers or for “harm coming to them.” He said

Congress owed them a “mature” intake of information without “prejudgment,” as some of the witnesses had held “very high clearances.” Rubio continued, “You do ask yourself what incentive would so many people with that kind of qualification—these are serious people—have to come forward and make something up”. Sen. Rubio added that, “one of two things here are true, either what he is saying is partially true or entirely true, or we have some really smart, educated people with high clearances and very important positions in our government who are crazy” (“Rubio,” 2023).

After the Schumer-Rounds UAP amendment was diluted in committee within the House, both senators made a colloquy on the U.S. Senate floor in December 2023 about the importance of their unique amendment. Schumer, noting the interest Americans hold in the topic, said that “with that curiosity comes the risk for confusion, misinformation, and mistrust especially if the government isn’t prepared to be transparent. The United States government has gathered a great deal of information about UAPs over many decades but has refused to share it with the American people. That is wrong and additionally breeds mistrust. We have also been notified by multiple credible sources that information on UAPs has also been withheld from Congress, which if true is a violation of laws...” He continued, saying, it was “beyond disappointing that the House has refused to work with us on all the important elements of the UAP Disclosure Act...” Without their provisions, Schumer stated, “declassification of UAP records will be largely up to the same entities that have blocked and obfuscated their disclosure for decades.”

Sen. Rounds agreed with these sentiments. In his remarks, he offered regrets that their amendment had been diminished, especially aspects such as the “government-wide review board composed of expert citizens, presidentially appointed and Senate confirmed, to control the process of reviewing the records and recommending to the President what records should be released immediately or postponed, and a requirement as a transparency measure for the government to obtain any recovered UAP material or biological remains that may have been provided to private entities in the past and thereby hidden from Congress and the American people” (Schumer on UAPs, 2023; Senate Democrats, 2023). The public has still not seen whatever it is that inspires senators to say such things in prepared remarks in front of live microphones.

What emerged in the final 2024 NDAA legislation were, nevertheless, multiple sections that did directly address “Unidentified Anomalous Phenomena.” Overall, these facets included provisions pertaining to “records collection,” “public disclosure” of data, “grounds for postponement of public disclosure” of UAP files, and the “periodic review” for “downgrading and declassification” of UAP files. Further, the NDAA included many new limitations on applications of funding in intelligence, defense, and their contractors. This included “security” for “Government or contractor personnel with a primary, secondary, or contingency mission of capturing, recovering, and securing unidentified anomalous phenomena craft or pieces and components of such craft,” “analyzing such craft, or pieces or components thereof” to study materials, manufacture, origin, performance, “managing and providing security for protecting activities and information relating to unidentified anomalous phenomena from disclosure or compromise,” “actions relating to reverse engineering or replicating unidentified anomalous phenomena technology or performance,” and the “development of propulsion” that is new from UAP studies (National Defense Authorization Act for Fiscal Year 2024, 2023).

In January 2024, House members met in a classified setting with Thomas Monheim, Inspector General of the U.S.

Intelligence Community, who briefed representatives on UAP whistleblowers. After this, Rep. Moskowitz (D-FL) stated, “This is the first real briefing that we’ve had that we’ve now made, I would say, progress on some of the claims Mr. Grusch has made.” That week, Reps. Garcia (D-CA) and Grothman (R-WI), who attended this briefing, introduced new legislation to protect civilian aviation personnel for reporting UAP incidents to the FAA, which would be required to pass reports to a Pentagon UAP office (Becket, 2024). After this briefing, Rep. Andy Ogles (R-TN) said that “there is a concerted effort to conceal as much information as possible.” Rep. Raja Krishnamoorthi (D-IL) said, “unfortunately, I didn’t get the answers I was hoping for.” Rep. Tim Burchett (R-TN) said the process was like playing “whack-a-mole” (Mitchell, 2024). Leaving that same briefing, Rep. Luna (R-FL) said, “I think it’s incredibly important to listen to the specific words that Grusch uses, you know, Grusch never said “extraterrestrial” or “alien,” he said “interdimensional” (Pergram, 2024). Of this context, Rep. Burlison (R-MO) asserted that “Regardless of what it is – aliens, angels, or just us, right? ... Regardless of what it is...we are being blocked from information, that the information is being specifically compartmentalized, that’s violating federal law” (Desrochers, 2024).

In July 2024, as the next NDAA forms, Sens. Rounds and Schumer have re-introduced a very similar amendment to their UAP proposal from 2023 (UAP Disclosure Act of 2024, 2024). This includes an entire section titled, “Disclosure of Recovered Technologies of Unknown Origin and Biological Evidence of Non-Human Intelligence.” In May 2024, Rep. Robert Garcia submitted comparable draft language in the House. Tellingly, Garcia also submitted an amendment to expand AARO access to Title 50 clearances, which would expressly permit AARO access to intelligence agency data they may have missed (Amendment to Rules Committee Print 118-36, U.S. House, 2024a; Amendment to Rules Committee Print 118-36, U.S. House, 2024b). Further, as announced by Sens. Warner and Rubio, the Senate Select Committee on Intelligence passed the 2025 Intelligence Authorization Act, which will “require a Government Accountability Office (GAO) review of the All-Domain Anomaly Resolution Office regarding unidentified anomalous phenomena reporting and Federal agency coordination” (Rubio, 2024; Warner, 2024). The pace and increasing specificity of these developments from some of the most influential politicians in the U.S., many of whom also have access to highly classified information, even more firmly raises the question of not only how the professoriate should engage, but what role it should play in assessing and researching UAP. How to help a public decipher new information is arguably more important than ever. It is necessary but not sufficient to ask how we know any emergent datapoints. *Why* are we encountering the information that we do from the venues that offer it? *Why* now? *What* is the cost to quality intellectual inquiry from the cacophony of signals from the U.S. government? *Who* benefits from the public curation, or private sequestration, of information vital to comprehending this topic? *Who* suffers from this selectivity?

If nothing else, the consideration of such recent information and other closed-door events—that is, who benefits from how the UAP narrative has developed and who does not—demands scrutiny from a wide range of capable minds. Some faculty in our study do not wish to engage the subject. Others think they are capable and, it seems, are willing to vigilantly do so. When it works, academic freedom is multidimensional—individual scholars may choose how to engage or not.

Readers may think these current events amount to an elaborate snafu or psy-op. Or, they may think they amount to a profound

possibility for human history. Clamor for clarity should thus crescendo, either way. In many quotes, one of the only common interests for groups with competing claims about UAP is that they all seek input—or even an imprimatur—from academia. How the professoriate will ultimately respond to these many unknowns remains to be seen. Even if unpopular to some, employing the scrutiny of expertise because it amounts to *something* consequential, while reasonably withholding conclusions, might prove prudent.

Solving a Rubik’s Cube is difficult in the dark. Shall we turn on more light? In the spirit of academic freedom, which is currently “under fire” (Cole, 2021), let us grant peers the space to conscientiously follow their curiosity and concerns on these matters. Regardless of where current questions lead, perhaps we will thank them later.

Data availability

The data that support the findings of this study are available upon reasonable request from the corresponding author [MEY]. The data are not publicly available due to them containing information that could compromise research participant privacy/consent.

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Author contributions

MEY and CWY conceived of the research; MEY and CWY designed the survey; MEY conducted the survey; MEY analyzed the survey results; CWY and MEY wrote the main text. All authors approved the final manuscript.

Competing interests

The authors declare no competing interests.

Ethical approval

Authors obtained approval for the survey and methodology for this study from the Social/Behavioral/Educational Committee of the University of Louisville Institutional Review Board (Reference Number: 740498). The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

Informed consent

The consent process involved unsigned informed consent of all participants at the time of their participation, which ranged between February 24, 2022 and April 27, 2022. Given the minimal risk to participants and that research met specific criteria outlined in the regulations, consent was obtained via preamble to the survey.

Additional information

Supplementary information The online version contains supplementary material available at <https://doi.org/10.1057/s41599-024-03351-4>.

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