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Unveiling the Narrative Around Pilot Mental Health and Aviation - A Content Analysis of FAA and Mental Health-Related Social Media Content

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This study investigates the content on social media platforms surrounding pilot mental health and the Federal Aviation Administration (FAA) medical certification process. Utilizing Meltwater, a media monitoring and analysis tool, nearly 12,500 social media posts on platforms like Reddit and X (formerly Twitter) were analyzed to identify key themes and sentiments expressed by current and aspiring pilots. Findings reveal significant concerns about the FAA's mental health regulations, with many pilots expressing fear of career repercussions and reluctance to seek necessary mental health care. The study also highlights the importance of social media as a platform for pilots to anonymously voice their frustrations and seek support. The research ultimately advocates for enhanced FAA communication, education, and support resources that align with pilot needs and concerns, as well as encourages more open discussions about mental health within the aviation industry.

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Introduction

Becoming a pilot in the United States is rife with hurdles and challenges (Walden, 2025). One of the most difficult of these challenges is navigating the Federal Aviation Administration (FAA) Medical Certification process. Except in certain cases (sport pilots, etc.), pilots must have both their pilot certificate and their medical certificate on them when they fly (Medical Certificates: Requirements and Duration, 2024). In the civilian world, when would-be pilots begin the certification process, they are often told by the FAA, their flight instructors, and industry organizations, such as the Airplane Owners and Pilots Association (AOPA), to get their medical certificate as their first step even though it is not required until they solo an airplane (Airplane Owners and Pilots Association, 2024; Federal Aviation Administration, 2024a). However, flight instructors are not medical providers and are not always the most consistent and reliable source of information on how to complete FAA medical forms. Potential pilots often make mistakes or fail to understand the logic behind FAA medical forms in terms of mental health care and inadvertently - either rightly or wrongly - get denied or deferred a medical certificate.

Aviators have turned to anonymous social media platforms like Reddit, X (formerly Twitter), and others to reach sizable aviation communities with questions about the medical certification process, to air grievances and frustrations, share their personal experiences, and seek unofficial help that won't hinder their careers.

The purpose of this study is to examine the content and sentiment of social media posts made by potential and current pilots regarding the FAA medical certification process and pilot mental health. Possible emerging themes are investigated and identified from social media posts and then sentiment is assessed to determine emotional stance. By exploring this line of inquiry, the study provides a resource to those seeking greater awareness and highlights the broader implications of the current challenges faced by pilots concerning mental health. Finally, the study seeks to bring awareness to the public and the aviation industry about the unfolding narrative on social media in response to aviation mental health.

Aviation Medical Certification

Aviation and medical certification to fly airplanes have been inexorably linked almost since the beginning of powered flight in the United States. The Wright Brothers first flew the Wright Flyer in December 1903, and by June 1909, they sold copies of the aircraft to the US Army Signal Corps (Raines, 1996). This action tied civilian and military flying and their medical standards for the foreseeable future. According to the Air Services Medical Manual (1918), flying for the Signal Corps required pilot applicants who were already in the military to pass a more stringent physical fitness test to fly. The Surgeon General of the United States Army created a Chief Surgeon in the Aviation Section under the Signal Corps in 1917 to develop and implement more than 50 Physical Examining Units to qualify pilots and develop new physical qualification standards (pp. 41-42). While some prominent psychologists of the day took an interest in the burgeoning field of aviation, it was not until the demand for pilots and airplanes in 1940s World War 2 that anything other than physical aptitude was taken seriously (Jenkins,

1941). The echoes of an idealized military-style 'perfect specimen' medical certification process continue to ripple through the aviation industry.

Medical Certificates and Flying

Today, applicants in the United States pursuing most pilot certificates, including student pilot, private pilot, and commercial pilot, must seek and receive a medical certificate at least once from an Aviation Medical Examiner (AME) before being allowed to fly solo and ultimately receive their pilots' license (FAA, 2024a). The typical AME is, first and foremost, a physician operating their own private practice who medically reviews potential and current pilots as an adjunct to their primary practice. However, while acting as an AME, they are a representative of the FAA and follow the agency's proscriptive procedures and regulations. AMEs have found themselves at odds with their desire to medically help their patients and, at the same time, conform to the rules the FAA prescribes to AMEs (Crump, 2014).

First-time pilot applicants typically find themselves at an unfamiliar doctor's office to complete their medical paperwork and receive their examination. Anecdotally, many applicants show up to the AME with more questions than knowledge or background of the FAA and the medical process. However, once the applicant submits their paperwork, the AME is prohibited by the FAA from editing or helping applicants answer questions or ensuring the FAA accepts their medical history (FAA, 2024a). The FAA utilizes a website called MedXpress, and since 2012, applicants have been required to complete their medical history forms before they visit the AME (AOPA, 2012). Once a form is submitted in MedXpress and retrieved by the AME to begin the physical examination process, only three outcomes are possible: (1) Issuance of the Medical Certificate, (2) Denial, or (3) Deferral (i.e., sent to the FAA Office of Aerospace Medicine for further evaluation) (Aviation Medicine Advisory Service, 2024).

Applicants must divulge past medical history, including both physical and mental. Questions such as "Have you visited any health professionals within the last 3 years" is followed by statements that applicants are required to "enter ALL visits to any health professionals (such as physician, …. psychologists, psychiatrists, clinical social workers) for treatment, examination, or medical/mental evaluation." (FAA, 2024a).

The inclusion of psychologists and psychiatrists in the medical certification process is noteworthy. Mental health has become a less taboo subject in the general American psyche for the last 30 years (Pescosolido et al., 2021). Younger generations see prioritizing mental health as a triumph and not a setback (American Psychological Association, 2019). However, the FAA requires a complete history of MedXpress (FAA, 2024b). This means the FAA asks about and will know about any psychological treatment, no matter how acute, such as limited instances of therapy that could have resulted from bad breakups or domestic trauma. Even counseling sessions during collegiate years, a time filled with new physical, mental, and academic challenges for young adults, are required to be shared with the FAA, moreover, if the session was documented by an insurance provider.

Until 2023, a diagnosis of attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) during adolescence was a reason to subject an applicant to an

extensive and costly review even if the applicant had not ever taken medicine (Crump, 2023). For these reasons, pilots who currently hold medicals are very reluctant to talk publicly or identifiably about their own personal medical history or even talk privately to their personal physician for fear of a diagnosis that would prevent them from flying (DeHoff & Cusick, 2018). As Bor and Hubbard (2016) articulate, there is an "ever-present concern about the loss of license as a consequence of the onset of a disqualifying medical condition" (p.2).

Shifts in Openness towards Mental Health in Aviation

In 2015, the co-pilot of Germanwings Flight 9525 locked the door when the captain left the cockpit and initiated a descent, resulting in the loss of life for all souls on board (Bureau d'Enquetes, 2016). Subsequently, it was found that the co-pilot had episodes of severe depression years earlier and had recently seen multiple therapists and prescribed antidepressants, sleeping pills, and an antipsychotic drug (Kroll, 2016).

The Germanwings crash served as a critical event that began open conversations about pilot mental health (Pasha & Stokes, 2018). Even though the crash happened over the French Alps on a German airplane, pilots all over the world felt liberated to discuss specifics of mental health regulations with their own aviation agencies (Wu et al., 2016). These conversations moved from quiet, closed-door discussions between individuals to more open discussions on a variety of platforms, including public social media commentary and anonymous social media chats. Previously taboo for fear of reprisal, social media posts from would-be pilots and current pilots are now directed at the FAA's official social media accounts with satirical and quizzing content attempting to garner a response from the FAA on their mental health policies.

Insights Into Pilot Content and Sentiment on Social Media

Scholars have routinely used the content of social media messages to mine and measure public sentiment, mood, and opinions, such as for elections (Chauhan et al., 2021), public health emergencies like the COVID-19 pandemic (Chaudhry et al., 2021; Melton et al., 2021) and natural disaster recovery (Yan et al., 2020). Social media public perception studies measuring user understanding, interpretation, and impression, have also been conducted within the aviation industry to identify public perception of advanced aviation technologies like drones and air taxis (Tepylo et al., 2023) and to estimate the current state of the air transportation system (Monmousseau et al., 2021). Analyzing public sentiments, attitudes, and perceptions of future and current pilots about FAA medical certification involving mental health can lead to powerful insights that convey public opinion and assist in policy and regulation decision-making.

Anonymity on Social Media

Anonymity on social media in the form of hiding or disguising identifying information such as real name, age, or location can provide a shield for would-be and current pilots to express their grievances and frustrations about medical regulations without fear of reprisal from the watchful eye of the FAA. Anonymity allows a safe space for these individuals to communicate more freely, enabling them to disclose sensitive information or share negative sentiments that they might otherwise withhold in a more identifiable context (Pan et al., 2023).

This sense of invisibility has the potential to encourage more truthful and straightforward discussions as pilots feel less vulnerable to social risks, surveillance, and potential disciplinary action. Because pilots going through the medical certification process are hesitant to talk publicly about their medical history, the safety net of anonymity on social media has the potential to reduce social risks and fears of negative evaluation, making users feel more comfortable expressing their true thoughts and feelings.

Venting on Social Media

Social media serves as a modern forum for public venting, where users articulate personal and professional grievances that can influence both their social networks and broader public opinion. Previous research has identified top motives for sharing grievances to include altruism, i.e., efforts to prevent others from experiencing the same problem they encountered, resolution seeking, and expressing negative feelings (Whiting et al., 2019). Pilots, who perform highly specialized jobs and face significant stressors, are therefore likely to inform - albeit anonymously - their networks on social media about their own experiences with mental health conditions such as anxiety, depression, and ADD or ADHD, as well as offer advice to others to avoid negative impacts on an aviation career such as medical deferment or denial of pilot license. In terms of resolution seeking, they are likely to suggest reform to the medical evaluation process to avoid a culture of silence around mental health and ensure pilots do not forgo seeking treatment out of fear of losing clearance to work and fly. Additionally, they are likely to simply share their frustrations and negative feelings about the pressures of being a pilot and jumping through regulatory hoops (Rose, 2023; Sachs, 2023). Considering that individual negative emotions shared online have a higher likelihood of evolving into collective negative emotions shared by a larger group of people (Jalonen, 2014), this study aims to raise awareness among the public and the aviation industry about pilot negative content and sentiment shared on social media involving FAA medical certification and mental health.

Support Seeking on Social Media

Social media platforms have become significant avenues for individuals seeking social support and connection and have been found to provide a venue for emotional catharsis, allowing users to share personal difficulties and seek support from their networks, which can offer a sense of validation and social connection (Kross et al., 2021). Additionally, social media support seeking oftentimes represents an important positive resource that promotes self-care behavior (Gilmour, 2019; Lin & Kishore, 2021) and can offset some of the adverse effects of negative life events (Nick et al., 2018). It is, therefore, not surprising that pilots, using anonymity, discuss topics like medical certifications, mental health challenges, and coping strategies on social media. These platforms provide a unique space where pilots can connect with others who understand the specific pressures and demands of the aviation industry. They can access peer advice and support for navigating the complexities of medical certification requirements, allowing them to feel less isolated, gain valuable insights, and build a supportive network that promotes both professional and personal well-being.

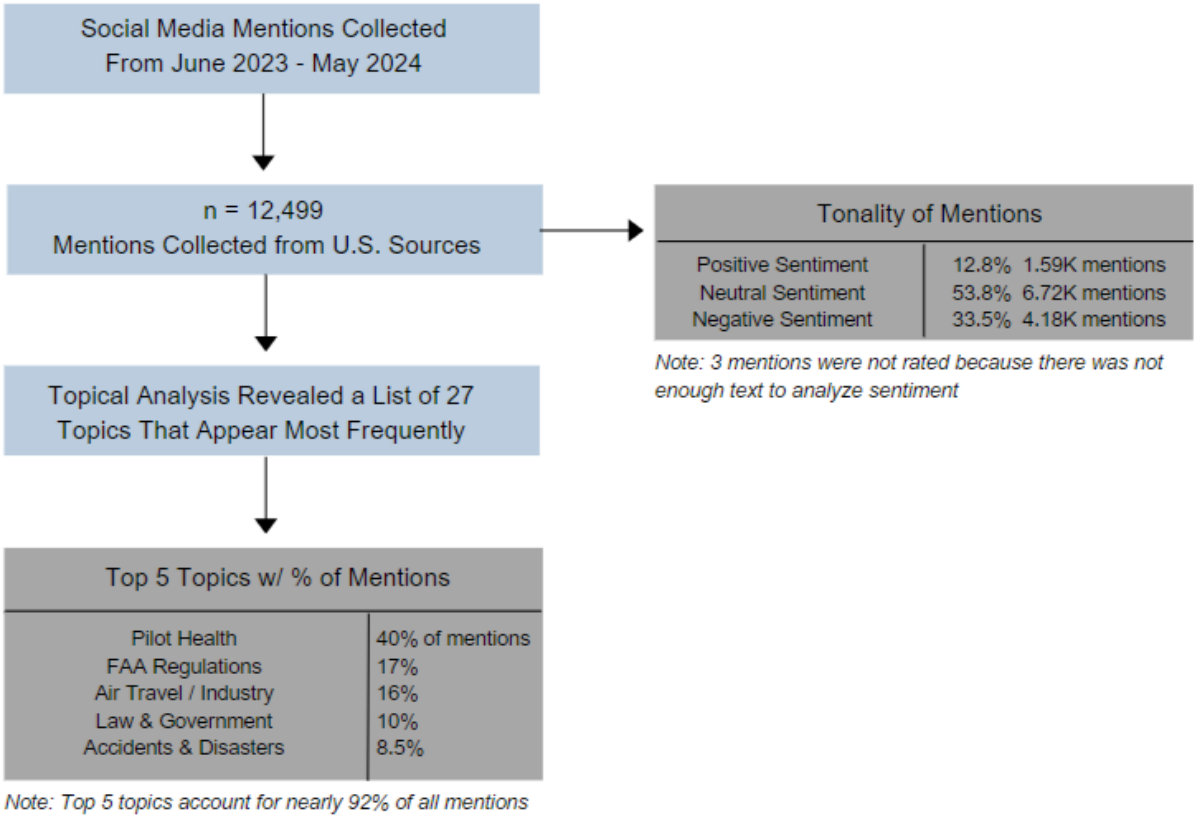
As would-be and current pilots continue to turn to social media platforms to publicly vent, seek support, and share experiences regarding FAA medical certification and mental health,

this study aims to examine such content and categorize the discussions by topic and sentiment. More specifically, two research questions were generated: (1) What themes emerge on social media about FAA medical certification and pilot mental health, and (2) What is the overall sentiment or tonality of this content?

Methodology

This study provides a social media content analysis regarding the FAA's medical certification process and commercial pilot mental health. A sample of content was collected using Meltwater, a media monitoring and analysis platform, and search terms like "Federal Aviation Administration," "FAA," and "AME" were explored in combination with "mental health," "depression," "ADHD," and "anxiety." The timeframe of the search was between June 2023 and May 2024 and included data sources Reddit (n = 7.67K), X (n = 2.79K), blogs (n = 416), and forums or social message boards (n = 4.62K). A comprehensive analysis of keyword mentions was performed in Meltwater to identify topical themes and content sentiment. Data cleaning included removing all non-English and non-U.S. mentions to focus on U.S. aviation medical certification's impact on American pilots, resulting in a sample of 12,499 social media mentions. A flowchart is presented in Figure 1 for Topical Analysis and Sentiment.

Figure 1.
Flowchart for Topical Analysis and Sentiment



It is important to note that nearly 84% of mentions came from social media platforms Reddit and X. While this is only a window into the total social media narrative around the FAA mental health policy impact, it is an appropriate sample for the target industry and audience in this study. Approximately 93% of airline pilots are male (Hurst & Fry, 2023) and Reddit and X are more likely to be used by males compared to alternative social media platforms Facebook, Instagram, and TikTok that skew more female in usage (Pew Research Center, 2024).

Findings

The first research question sought to explore emergent themes or topics from social media about FAA medical certification and pilot mental health. Using Meltwater's natural language processing (NLP) algorithm, topical analysis identified 27 topics that appear most frequently in the data (n = 12,499). See Figure 1 The top five topics accounted for nearly 92% of all mentions: (1) pilot health, (2) FAA regulations, (3) air travel/travel industry, (4) law and government, and (5) accidents and disasters (Figure 1). Forty percent of mentions consisted of content about the FAA's guidelines for health and how they affect pilots. Seventeen percent of mentions consisted of content concerning FAA processes and regulations regarding medicals and mental health, including mention of the FAA establishing a Pilot Mental Health Aviation Rulemaking Committee (ARC) "to provide recommendations on breaking down the barriers that prevent pilots from reporting mental health issues to the agency" (Federal Aviation Administration, 2023, para. 1). Sixteen percent of mentions include content related to FAA medical certification impact on air travel and the aviation industry, 10% of mentions include content around military, state, and federal regulations and supports, and 8.5% of mentions include content about aviation industry accidents and disasters such as the Alaskan Airlines Flight 2059 in which a jumpseat passenger, who told police he was suffering from depression, attempted to shut down the engines midflight (Koenig & Rush, 2023).

Top Theme: Pilot Health

The pilot health theme accounted for such a large percentage of overall mentions; therefore, it was necessary to examine with deeper context, resulting in the identification of numerous sub-topics such as health conditions, mental health, medical specialists/facilities and services, medications, substance abuse, and health education. Seventy-three percent of sub-topic content was related to the FAA's stance on pilot mental health, concerns about the process of obtaining FAA medical clearance for individuals with anxiety, depression, and neurological conditions such as ADHD, and support-seeking and coping behaviors (Table 1).

Table 1.
Most Frequent Sub-Topics Within the Pilot Health Theme

Sub-Topic	percentage of theme mentions
Health conditions	**46%**
Top discourses within the health conditions sub-topic: ● Neurological conditions *(9.5% positive sentiment, 58.6% neutral, 32% negative sentiment)* *Top Keywords: medication, diagnosis* ● Sleep disorders *(3.1% positive sentiment, 69.2% neutral, 27.7% negative sentiment)* *Top Keywords: meds, doctor, sleep apnea* ● COVID-19 *(2.7% positive sentiment, 54.1% neutral, 43.2% negative sentiment)* *Top Keywords: acute covid*	
Mental health	**27%**
Top discourses within the mental health sub-topic: ● Anxiety and stress *(7% positive sentiment, 50.7% neutral, 42.3% negative sentiment)* *Top Keywords: anxiety, help meds, depression, medical review forms* ● Depression *(6.6% positive sentiment, 45.4% neutral, 48% negative sentiment)* *Top Keywords: depression, medication, antidepressants, medical certificate* ● Counseling Services *(10.4% positive sentiment, 73.8% neutral, 15.8% negative sentiment)* *Top Keywords: mental health, therapist, diagnosis, depression, anxiety, insurance*	

Health Conditions

Forty-six percent of posts within the pilot health theme mention the FAA's stance on (and handling of) pilot health conditions and pilot concerns about the process of obtaining an FAA medical clearance. For example, one social media user posted, "Sadly, if you are a commercial pilot, seeking almost any medical treatment is a huge risk due to the FAA's stringent policies, and it can ground you really quickly. Most pilots lie about their medical treatment, especially if it's psychological. Nothing like going into 100K of debt and a couple years of training to become an airline pilot just to lose your medical because you had depression due to the death of a family member, etc." Similarly, another social media user posted, "I wanted to be a pilot, but I had some health issues. Probably a good thing they turned me down because, with the direction my health is going, I'd have to keep my entire life a secret from the FAA."

Top discourses within the health conditions sub-topic include: (1) neurological conditions - such as ADHD - in which posts discuss the FAA's requirements for medical records, particularly regarding diagnosis and medication *(9.5% positive sentiment, 58.6% neutral, 32% negative sentiment); (2)* sleep disorders in which posts mention concerns about the impact of FAA policies on sleep routines and overall well-being of pilots *(3.1% positive sentiment, 69.2% neutral, 27.7% negative sentiment); (3)* COVID-19 in which posts mention concerns about the impact of Long Covid on pilot health *(2.7% positive sentiment, 54.1% neutral, 43.2% negative*

sentiment). In the context of ADHD, one social media user shared, "Had to quit my ADHD meds for two years, they said. I made it a year in-- symptoms kept piling up, I couldn't maintain a workout routine, and life started to crumble as I had no support network... I gave in and went back on the meds, and now if I don't stop them again within a year, I'll be too old by the time that two-year period (restarted, of course) would be over." Similarly, another user posted, "It's pretty bad if you are a pilot. Literally, just mentioning depression to the doctor can mean your career is over. No one on antidepressants, ADHD medication, or anything like that is allowed to fly; the FAA would prefer if you have any mental health treatment that you just not have a career anymore."

Mental Health

Twenty-seven percent of posts within the pilot health theme mention issues related to mental health, specifically depression, and anxiety, and their impact on the FAA medical certification process. For example, one social media user posted, "There is a severe mental health crisis amongst pilots that is buried because the FAA will take your license if you try to seek help. So many middle-aged divorced captains on the brink of losing it have to figure it out on their own so they don't risk losing the one thing that keeps them going. Happy flying!" Another social media user shared, "They have so many draconian rules and standards that they ultimately incentivize pilots to NEVER mention or seek help for any kind of mental disorder or anything - it is insane. Like everyone probably goes through a spell of depression or sadness at some point in their lives - but if you were "dumb" enough to actually seek help or treatment for it - then your flying career is very likely over…" One social media user even tapped into the complexity and chaos of the aviation and piloting landscape today, "I'm making calls to my Congresswoman this weekend to ask for support bringing some amendments to the FAA reauthorization to address this topic. Basically, every pilot out there today has had some form of anxiety from the pandemic, furloughs, crazy passengers, and off-the-job life. Seeing a therapist just to talk shouldn't put a person's medical condition into question at all."

Top discourses within this sub-topic include: (1) anxiety and stress in which posts mention concerns and challenges faced by pilots who have been diagnosed with anxiety, including the possibility of being grounded or facing difficulties obtaining or retaining medical certifications *(7% positive sentiment, 50.7% neutral, 42.3% negative sentiment);* (2) depression in which posts mention the FAA has specific requirements for pilots with depression, including the need for a diagnosis, copies of therapy notes, and documentation and duration of treatment *(6.6% positive sentiment, 45.4% neutral, 48% negative sentiment);* (3) counseling services in which posts discuss the FAA's therapy disclosure and antidepressant policies *(10.4% positive sentiment, 73.8% neutral, 15.8% negative sentiment).* In the context of depression, one social media user wrote, "The fact that pilots can't have a history of depression at any time in their life according to the FAA... doesn't matter if they get treated or not… that means a depressed person is a murderer." Another social media user explained that they think the FAA has two options, "Continue to treat mental health in a way that leads to pilots avoiding care or 2) actually improve aviation by giving pilots real mental health care options that don't jeopardize careers. We can see the former isn't working. It's time to fix the FAA."

A word cloud was used to visualize the most prominent themes and keywords in the dataset, i.e., the more occurrences of the word, the larger it appears in the cloud (Figure 2). As expected, keywords related to the Meltwater Boolean search, such as "FAA," "pilot," mental health," "depression," and "anxiety," were most frequent. However, the appearance of words like "advice" and "consultation" hint that pilots are exhibiting support-seeking and resource sharing behaviors on social media. These include questions about navigating the complexities of the medical certification process while maintaining privacy and confidentiality, sharing personal experiences, and offering suggestions to consult with a local AME or reach out to industry resource groups such as AOPA and the Experimental Aircraft Association (EAA) before submitting an official examination.

Figure 2.
Word Cloud of Top Keywords and Entities

Note: Word size in the cloud is dependent on the frequency of results. The more occurrences of the word, the larger it appears in the cloud.

Social Media Sentiment

The second research question sought to identify the overall sentiment, or tonality, of content on social media about FAA medical certification and pilot mental health. Sentiment was examined using Meltwater's NLP algorithm and rated positive, neutral, or negative. Results indicate that overall, 12.8% of mentions were positive (n = 1.59K), 53.8% were neutral (n = 6.72K), and 33.5% of mentions were negative (n = 4.18K). Additionally, three mentions were not rated because there was not enough text to analyze sentiment.

Topics driving negative sentiment mention the FAA's strict and outdated policies regarding mental health for conditions such as depression and anxiety, difficulties pilots experience in disclosing mental health issues and associated negative consequences such as losing their career, and personal stories and experiences related to pilot mental health. Overall, a recurring topic in posts with negative sentiment is one that describes the FAA's lack of progress in modernizing mental health policies and the lack of addressing the stigma surrounding mental health. This is evident in Figure 3, where larger text such as "prohibitive mental health policies," "medical issues," "help," and "medical process" indicate more frequency in the content. It is also

important to note the negative sentiment and frequency of the keyword "federal crime," indicating that while pilots are looking for ways to navigate the FAA medical process with a history of anxiety, depression, ADHD, etc., they understand the severity of lying to the FAA regarding mental health history. According to AOPA, falsification on a medical application is grounds for cancellation of pilot certificates and may void insurance (Browner, 2024). Topics driving positive sentiment focus on the FAA establishing a Mental Health Aviation Rulemaking Committee (ARC) that will provide recommendations to identify and break down barriers discouraging pilots from reporting mental health issues and seeking care.

Figure 3.
Keyword Sentiment

Note: This figure represents positive and negative keywords from mentions that appear most frequently. The larger the text, the more frequently the topic is discussed in social media content.

Conclusion

This study explores the ongoing social media discussion surrounding pilot mental health in relation to the FAA's medical certification process. It focuses on platforms like Reddit and X, where both aspiring and current pilots discuss their experiences, frustrations, and concerns. Utilizing Meltwater, a media monitoring tool, nearly 12,500 pieces of content were analyzed to explore topics and sentiments expressed by pilots online. The analysis reveals that discussions on these platforms are often charged with negative sentiment, reflecting pilot concerns over the potential impact of mental health disclosures on their careers, including fears of medical certificate denial or cancellation.

A significant outcome of the study is the crucial role that social media plays in providing a space for pilots to express their frustrations and seek support while remaining anonymous. The anonymity afforded to users by platforms like Reddit and X allows pilots to speak freely about sensitive issues, such as mental health struggles, without fear of professional repercussions from the FAA. This has led to more open discussions about the mental health challenges faced by

pilots and has brought attention to what pilots view as the punishing nature of current FAA regulations, which many feel discourage pilots from seeking necessary mental health care. Additionally, the study highlights how social media narratives can shape public opinion and influence policy discussions by providing a window into the pilot community's collective experiences and perceptions.

The research also suggests that while the FAA publicly emphasizes the importance of mental health and wellness for pilots - such as 2024 changes to its Guide for Aviation Medical Examiners allowing pilots to be treated with certain depression and anxiety medications and the establishment of the Pilot Mental Health Aviation Rulemaking Committee (FAA, 2023), there is a persistent gap between policy intentions and pilot experiences.

The findings indicate that while a portion of the social media content is neutral or even positive, a substantial amount reflects negative views towards FAA mental health policies and a lack of support and resources. This negativity is often centered on the lack of progress in modernizing mental health regulations and addressing the stigma associated with mental health issues. By examining these social media discussions, the study advocates enhanced FAA communication, education, and support mechanisms that are aligned with pilot needs and concerns as expressed in their social media content.

Limitations

The study's limitations reflect areas for future potential research. First, the Meltwater dataset predominantly consists of mentions from Reddit and X (formerly Twitter), which, while valuable in targeting the aviation community, may not capture the full range of pilot sentiment and experiences. The user demographic of these platforms skews male and may not reflect the perspectives of female pilots or those who use other social media platforms. Second, the analysis focuses on U.S.-based social media mentions, limiting the generalizability of findings to non-international aviation communities, where regulatory contexts and attitudes toward mental health may differ. Additionally, while Meltwater's natural language processing algorithm provides a robust tool for topical and sentiment analysis, there is the potential for oversimplification of complex emotional nuances in posts. Finally, the study's observational nature indicates it cannot establish a causal relationship between FAA policies and pilot behavior. Further qualitative research, such as interviews or case studies, can provide rich insights into individual pilot experiences with mental health disclosure and FAA medical certification processes. Future quantitative research might explore sentiment scoring and predictive modeling by predicting the likelihood of certain aviation themes based on social media posts.

Implications

The implications of this research are broad and hold significance for the FAA, the aviation industry, mental health advocates, and social media communication research. Findings highlight the need for more transparent instructions and support for pilot applicants completing medical forms, especially in the area of mental health. Findings also illustrate the power of social media to act as a support mechanism for pilots seeking social connection and validation. Finally, the gap between pilot experiences shared on social media and real-life aviation policies indicates the need for increased strategic communication between the industry and regulators.

Future Directions

There has been a sea of change in aviation mental health. Researchers, clinicians, and news organizations are talking about mental health in aviation and aerospace. Pilots, however, are still concerned with their anonymity when it comes to the FAA, mental health, and their ability to fly. Future research should expand upon the findings of this study by exploring additional social media platforms and analyzing a broader range of online content to gain a more comprehensive understanding of the discourse surrounding pilot mental health and FAA medical certification. While this study focused primarily on anonymous platforms like Reddit and X, future studies could examine more publicly identifiable social media sites, such as Facebook, Instagram, LinkedIn, and TikTok, which might provide additional insights into how pilots discuss their experiences and concerns regarding mental health policies. Moreover, interviews with pilots could complement this study, offering a deeper understanding of individual and personal experiences. For example, future studies could examine how effective social media support networks are in providing relief or guidance to pilots facing mental health challenges and whether these interactions influence pilot decisions to seek professional help.

Further research could also investigate the potential impact of demographic factors, such as age, gender, and experience level, on pilot attitudes and behaviors regarding mental health disclosure and FAA medical certification. This could help identify specific groups within the aviation community that may feel uniquely vulnerable to the current regulations and may benefit from more targeted intervention strategies.

Lastly, future studies could focus on how recent FAA initiatives to support mental fitness are being received by the pilot community, especially on social media platforms where pilots often seek support, share experiences, and discuss their concerns anonymously. It would be valuable to examine whether pilots are aware of the FAA's efforts to promote mental fitness and how these efforts are influencing their willingness to seek help. Additionally, research could explore the types of support pilots find most helpful online. Understanding these dynamics and tracking changes in content and sentiment over time could inform the development of targeted communication strategies that effectively reach pilots, reduce stigma, and encourage a culture of openness and support around mental health.

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