



Voices Against Misuse: A Survey-Based Study on the Need for Ethical Regulation of Generative AI Tools

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Abstract: Artificial intelligence (AI) has developed at such a remarkable pace that it has nearly accelerated beyond our ability to create new things and simplify certain everyday tasks, with these benefits also bringing about incredibly serious issues (e.g., fake information, misleading information, web frauds, etc.). This study examines the perception of risks associated with using AI by crowds of individuals through surveying their level of awareness of risk/reward ratio when using AI. The findings of our research indicate that while there is a sizable percentage of users using an AI application regularly, most users are not completely aware or able to differentiate between authentic and false forms of media when it comes to the use of AI. In addition, many participants claimed to have witnessed some type of AI abuse and were highly concerned about the societal consequences of AI abuse. Finally, the results show that there is no high level of confidence regarding corporate practices of self-regulation by means of high levels of regulation and official mandates, and there is a belief that stricter regulations and official oversight will continue to be required moving forward. In conclusion, the exploratory survey emphasizes the need for greater public awareness, clearer guidelines for use of AI in compliance, and ethical standards to reduce misuse and associated risks.

Keywords: Artificial Intelligence, Generative AI, AI Misuse, Deepfakes, Misinformation, AI Ethics, Regulation, Public Awareness, Survey-Based Study, AI Governance

I. INTRODUCTION

The growth of Artificial Intelligence (AI) in the past decade has been tremendous with the use of AI technology in almost every aspect of our lives; whether through content creation, social media, education or automating tasks. With the introduction of Generative AI tools, it is now easier than ever for the average user to create text, images, audio and video with little to no effort. As this technology becomes easier to use, the popularity of these tools is increasing with students, professionals and the public in general.

There are, however, mounting concerns about the misuse of these technologies to create and disseminate false or misleading information, including material of questionable ethical standards like deepfakes, training of the models based on creative works without the artist's permission, etc. This research uses a survey-based approach to better understand the general public's perception of and relationship with these issues.

Generative AI tools have become more readily available to a greater number of people. As a result, many are now using them for school, producing content and completing everyday tasks. Although there are many uses of these tools, research and studies indicate that even though the number of users using AI is high, the number of users who know about the potential risks associated with AI (such as AI-generated misinformation, deepfake videos, etc.) is not very high.

This research was conducted based on data collected by means of a questionnaire to investigate how people use AI technology and how much they know about the potential ways that the technology can be misused.

II. LITERATURE REVIEW

Artificial intelligence (AI) has developed rapidly over the past few years, gaining growing interest from academics, policymakers, and those in industry. Most studies published to date focus on capabilities and risks, as well as challenges in governance, related to generative AI and the lack of Awareness of its misuse.



Zhang, et al., (2024) highlight several safety issues associated with large-language models (LLMs), including “hallucinations” i.e AI Model misbehaving or misremembering information, misinformation, and lack of transparency in the outputs generated by LLMs. The authors indicate that ensuring reliability and accountability for generative AI will be a challenge, particularly for large-scale deployments, despite its huge success in the masses.

Saurwein and Kettemann (2023) take a look at how AI will be governed and regulated and they observed that current laws and regulations do not address risks associated with generative AI that are emerging. They call for the adoption of governance models that are adaptable to the rapid evolution of AI. The authors also observe that there is no international consensus on what constitutes as a standard of ethical use of AI and a lack of Regulatory bodies specializing in AI Technologies to implement those said standards.

Shetty and Jain (2024) conducted a systematic literature review of AI related governance and identified several principles of good AI, including accountability, fairness, transparency, and explainability. They argued that not using good governance will cause negative effects on society due to generative AI systems, such as criminal activities, falsification or misinformation, etc. Other researchers applied an examination of generative AI to the misuse of generative AI, finding that misuse is manifested through deepfake production, disinformation campaigns, and plagiarism.

While there are more studies emerging, most of the current studies lack measurable evidence of public knowledge and perception of generative AI. There is still a lack of research that directly examines how users perceive, feel about and respond to risks associated with generative AI systems.

A. Research Gap

The following are gaps found in existing research based on empirical surveys regarding generative AI misuse:

- There are very few empirical studies that measure the level of public awareness about the misuse of Generative AI.
- The relationship between AI usage and perceived risk is not well understood.
- There is limited knowledge of public sentiment regarding the need for ethical regulation, and there is no data-driven analysis of the relationship between the public’s awareness of generative AI misuse, their level of concern about it, and their level of support for policy measures aimed at preventing misuse.

B. Contribution of This Study

This research study contributes to the identified gaps by:

- Collecting data from 140 participants,
- Analyzing users’ perceptions of generative AI in the real world,
- Establishing relationships between usage, awareness, concern, and proposed ethical regulations, and
- Providing data-driven insight into ethical AI governance opportunities.

III. RESEARCH METHODOLOGY

A. Research Design

This research utilizes quantitative and descriptive research designs to assess how the public is aware of, perceives and is concerned about the misuse of generative AI technologies. The use of survey data collection allows the data collected from participants to be structured and measurable and particularly suited for conducting statistical analyses and testing hypotheses in accordance with the purpose of this study.

B. Data Collection Method

A structured questionnaire was employed to collect the primary data from study participants through Google Forms. The survey contains several different question formats, including:

- Demographics and usage (multiple-choice questions)
- Awareness, concern and perception (Likert scale questions)
- Responsibility and accountability (multi-select questions)
- Ethical understanding of generative AI (scenario-based questions)

In total, the survey collected valid responses from 140 individuals across a variety of demographic groups.

C. Sampling Technique

To conduct the study, convenience sampling was selected as the sampling technique, as respondents were chosen based on the accessibility of respondents and their willingness to participate in the research project. Given the nature of the project and distribution (via the Internet) of the survey instrument, the survey was readily accessible to a wide range of potential users of AI tools, including students, professionals and casual users.



D. Sample Size

The final dataset includes 140 participants, which is a suitable number to conduct statistical analysis on survey results, including correlation and hypothesis testing.

E. Variables Used in the Study

In order to conduct meaningful analysis, the following variables were identified in response to survey items as key variables for this analysis:

Independent Variable: AI Usage Frequency

Dependent Variables:

- Awareness of AI Generated Content
- Concern over Potential Misuse of AI Generated Content
- Support for Ethical Regulations around AI Generated Content

These variables provide the foundation for the Correlation Analysis and Hypothesis Testing.

F. Measurement Scale

A 5-point Likert scale was used for some questions to measure attitudes and perceptions of participants, The scale being as follows:

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

This scale allows for quantitative analysis of given subjective opinions.

G. Data Analysis Techniques

Various statistical methods were used to analyze the collected data, including:

- Descriptive Statistics are used to report out the demographic information and the distribution of responses as a percentage of the total sample size, as well as to produce average response rates.
- The correlation analysis is used to determine whether there is a relationship between the use of generative AI, awareness of generative AI, concern of the use of generative AI and regulation for the use of generative AI.
- The comparative analysis is used for comparison of the responses reported by multiple groups of respondents.

These methods of analysis allow for an extensive and data-driven evaluation of the survey data.

IV. DATA ANALYSIS AND INTERPRETATION

A. Demographic Analysis

The 140 respondents in this study are representative of the general population with diversity across the demographic areas of age, gender, level of education and occupation. The demographic diversity of the sample ensures that the results of the survey fairly represent the full range of experiences and opinions with respect to the use of generative AI and its associated risks.

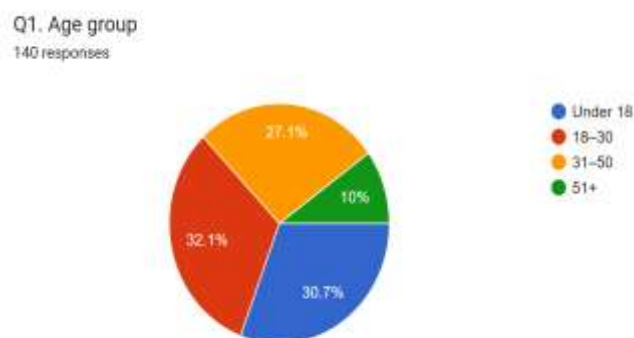


Fig. 1 Q1. Age group. Number of responses: 140 responses.



B. AI Usage Patterns

The results of the analysis of the frequency of use of AI suggests that a high percentage of respondents routinely use generative AI tools in their daily life. This finding also confirms that a high percentage of respondents report frequently or regularly using AI systems to generate content, conduct research and solve problems. The results of the analysis of the frequency of use of AI suggests that a high percentage of respondents routinely use generative AI tools in their daily life. This finding also confirms that a high percentage of respondents report frequently or regularly using AI systems to generate content, conduct research and solve problems.

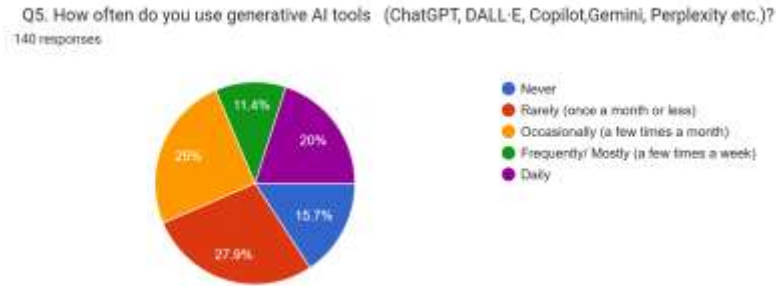


Fig. 2 Q5. How often do you use generative AI tools (ChatGPT, DALL·E, Copilot, Gemini, Perplexity etc.)?

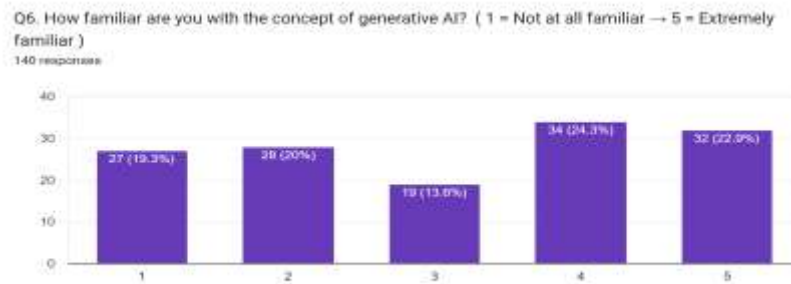


Fig. 3 Q6. How familiar are you with the concept of generative AI? (1 = Not at all familiar → 5 = Extremely familiar)

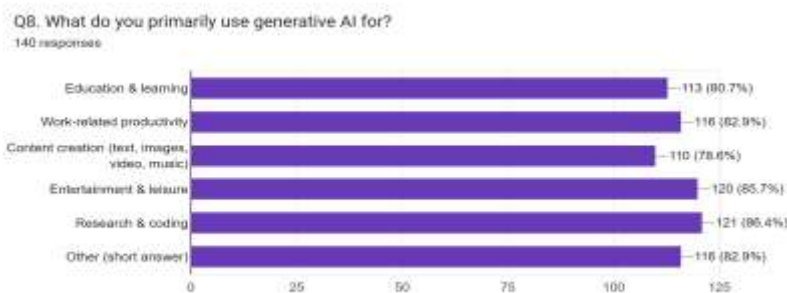


Fig. 4 Q8. What do you primarily use generative AI for?

Interpretation:

- The high rates of use of AI tools suggest that they are now integrated into day-to-day activities.
- The high rate of use of AI tools while at the same time the high percentage of respondents have little or no familiarity with generative AI indicates a need for regulation to help prevent the misuse of generative AI tools.

C. Awareness of AI-Generated Content

The responses indicate moderate to high awareness levels, with many respondents agreeing that they are aware of AI-generated content. However, a noticeable portion of respondents remained neutral or uncertain, indicating inconsistency in awareness.

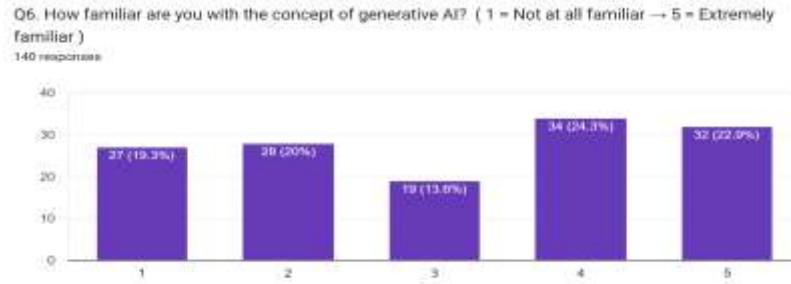


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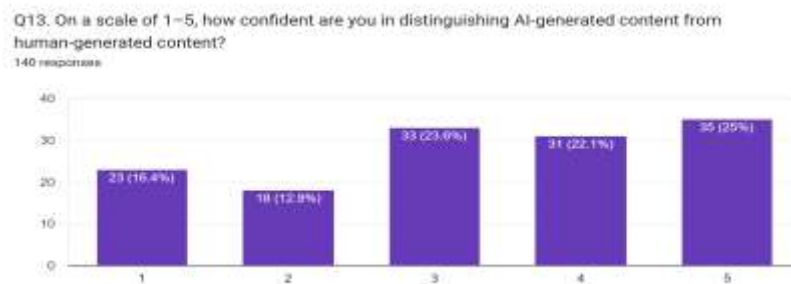


Fig. 6 Q13. On a scale of 1–5, how confident are you in distinguishing AI-generated content from human-generated content?

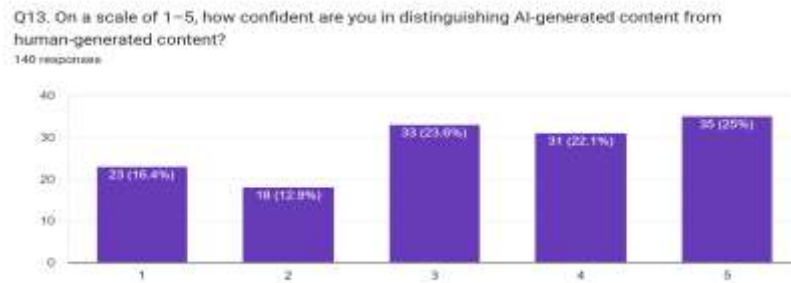


Fig. 7 Q13. Confidence in distinguishing AI-generated content (detailed view).

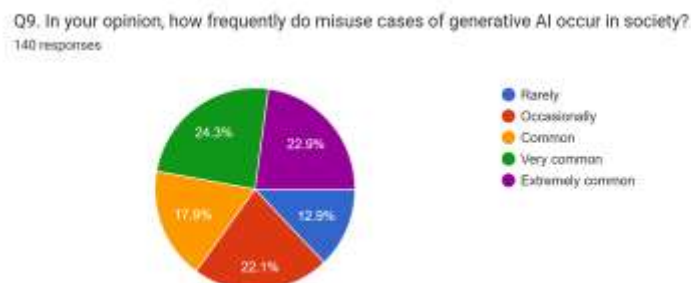


Fig. 8 Q9. In your opinion, how frequently do misuse cases of generative AI occur in society?

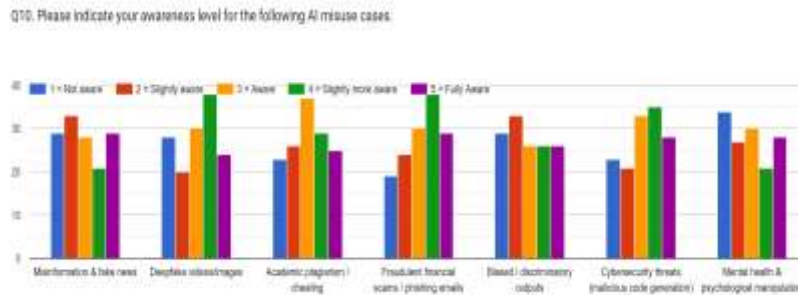


Fig. 9 Q10. Please indicate your awareness level for the following AI misuse cases.

Interpretation:

- Awareness exists among the user base but is not uniform. People are slightly more aware of Deepfakes, AI Scams and Malware generation, but lack awareness of Fake News and Biased Outputs.
- Some users may overestimate their understanding as even though higher percentage of users aren't familiar with Gen AI, users claim to be confident in identifying AI generated content.

D. Concern Regarding AI Misuse

A majority of respondents expressed concern regarding the misuse of generative AI, particularly in areas such as misinformation, deepfakes, and unethical content creation.

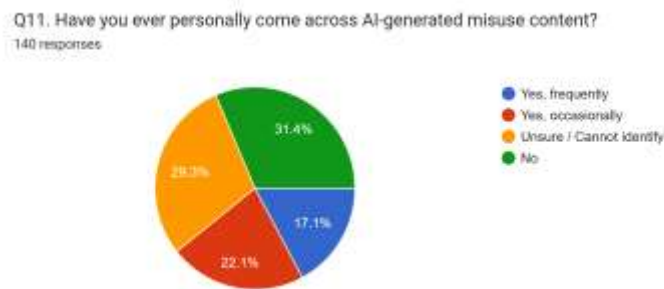


Fig. 10 Q11. Have you ever personally come across AI-generated misuse content?

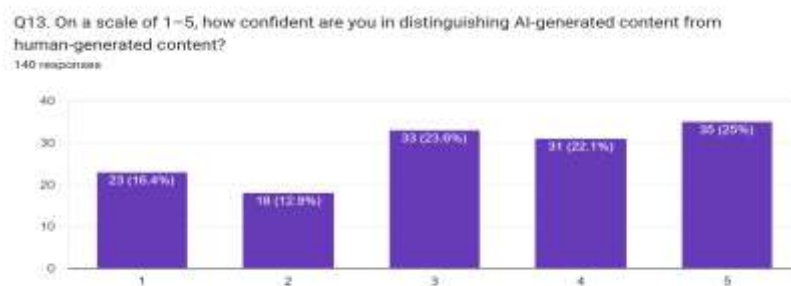


Fig. 11 Q13. On a scale of 1–5, how confident are you in distinguishing AI-generated content from human-generated content?

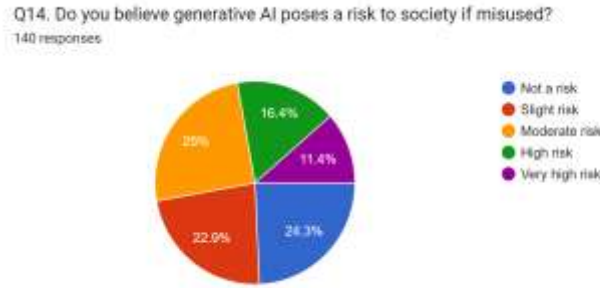


Fig. 12 Q14. Do you believe generative AI poses a risk to society if misused?

Interpretation:

- Concern is high across respondents as most users believe Gen AI poses risk to society if misused, 11.4% respondents stated it poses a very high risk.
- There is a lack of technical awareness in Users and claim to have come across AI content frequently.

E. Support for Ethical Regulation

The analysis shows that a strong majority of respondents support the implementation of stricter regulations and ethical guidelines for AI usage.

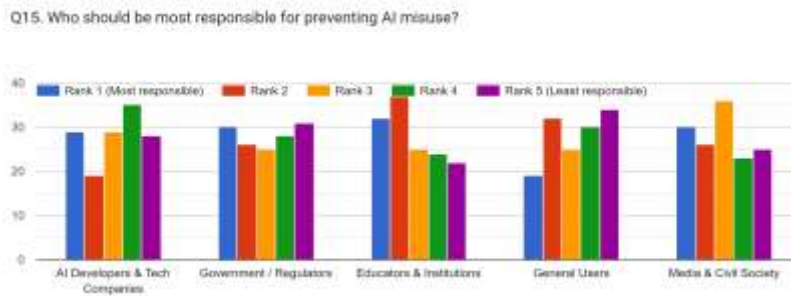


Fig. 13 Q15. Who should be most responsible for preventing AI misuse?

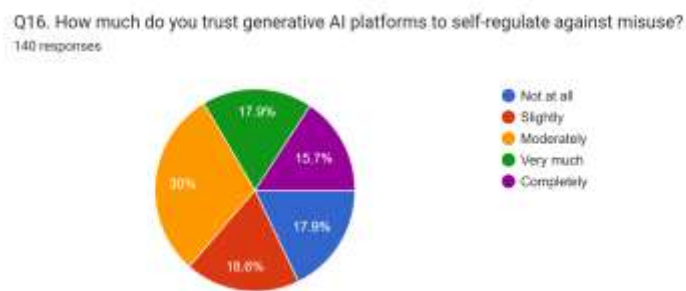


Fig. 14 Q16. How much do you trust generative AI platforms to self-regulate against misuse?

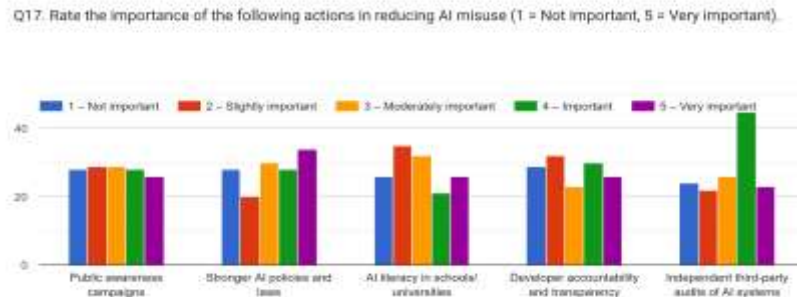


Fig. 15 Q17. Rate the importance of the following actions in reducing AI misuse (1 = Not important, 5 = Very important).

Interpretation:

- There is a Strong public demand for governance. Most users believe stronger AI policies and laws as well as Independent third party audits of AI systems are very important for regulation of AI.
- Overall, the global consensus around generative AI policies is confirmed by our findings indicating that most people surveyed do not trust generative AI platforms to self-Demonstrate how to regulate misuse.

F. Correlation Analysis

After analyzing relationships between variable correlation results were summarized as follows:

- Usage and Awareness: Usage and Awareness are positively correlated meaning that people who use AI technologies regularly are likely more aware of the technology.
- Awareness and Concern: Awareness and Concern are very strong positively correlated indicating greater levels of Awareness to cause greater Concern.
- Concern and Regulation Support: Concern and Regulation Support are strongly correlated indicating that individuals who are Concerned about generative AI will also support Regulatory Frameworks.

G. Hypothesis Testing

H1: More frequent users of AI will be more aware of AI misuse risks.

Users of Frequently Used AI tools create more Exposure and Increase their Awareness.

H2: When people become aware of generative AI technology they develop greater levels of Concern about potential misuse.

As shown in the analysis, High Awareness is directly related to increasing Respondent Concern.

H3: The majority of respondents who Support Stricter Regulations for generative AI.

Statistical results indicate that a majority of respondents agree, or strongly agree with regulatory frameworks.

H4: People who are less aware of generative AI will have a Lower Level of Ability to identify generative AI's misuse.

Less awareness results in Less Concern by Respondents, therefore, Lower Ability to identify the risks associated with misuse.

H. Key Findings

- Generative Artificial Intelligence (AI) has become a popular tool among consumers and has entered into people's daily lives.
- There is a lack of understanding about AI tools or generative tools among users based on the number of users and how often they use the tools.
- Generally speaking, users' awareness of AI tools is low; however, there is a greater degree of awareness regarding deepfakes, than there are regarding issues such as AI bias or AI-based news stories (fake news).
- People tend to overestimate their ability to detect whether a piece of content was produced by a human being or by a computer (AI).
- There are many concerns about the misuse of AI and the impact that it has on our society.
- There is a positive correlation between users' level of awareness and their level of concern regarding AI solutions. Overall, there exists a strong relationship between users' levels of knowledge about AI technologies and the perception of the risk of using AI technologies.



- A strong majority of users support a stricter regulation and or external oversight of AI technologies.

V. DISCUSSION

The findings from this study indicate a large gap between the amount of access to generative tools versus the amount of knowledge that users have regarding the functionality and risks related to generative tools. While a majority of participants reported using generative tools daily, the majority of those users lacked the foundational understanding necessary to make informed decisions regarding those tools (and/or the risks associated with using those tools). This indicates that there is likely to be a disconnect between the rate of adoption of AI tools and the rate at which users develop an understanding of generative technologies and their potential impacts.

While people are aware of certain types of threats that can be seen visually (for example, deepfake videos and scams using AI), most people seem to understand relatively little about certain other types of issues, including biased results and misinformation. Therefore, even if a user is aware that an issue can exist as a result of threat (even physically), they could potentially miss such types of nuance-type of threat. The second point of the findings indicates that most users have a great level of confidence in being able to identify with great accuracy AI generated content. Therefore, this confidence in their ability to identify these types of threats creates a higher degree of likelihood for the user to be vulnerable to some type of exploitation. Users also have a large amount of positive concern regarding misuse of AI generally speaking and recognise the potential impact that A.I. may create in our society.

The study's results indicate an inverse correlation between concerns regarding the abuse of AI and the amount of knowledge available to users regarding the technology itself. Consequently, a general lack of knowledge increases worry about AIs and subsequently leads the survey participants to advocate for more regulation over AIs. There appeared to be a consensus between survey respondents that they support stronger regulation and outside monitoring of AIs, as they do not trust AI systems to self-regulate itself. Overall, the research findings support that there is a need for increased user understanding and better defined regulatory policies governing the practice of AIs.

VI. CONCLUSION

A survey of 140 respondents was conducted on the opinions, knowledge, and fears of the individual responding to this research regarding their experiences with using generative AI to create initial data. Generative AIs allow those who have access and understand the application of these technologies to access large quantities of relevant data. The way users evaluate their experiences using generative AI and their understanding of how the technology works, and therefore why it might be misused, are not necessarily aligned.

Those who are aware of the potential for harm from these technologies may have different perceptions than those who are not aware of these potential harms. Generally, more aware respondents are more likely to be concerned about potential misuse, and as a result they have demonstrated more support for the regulation of ethics pertaining to the utilization of generative AI. A significant number of survey respondents expressed concern about potential misuse of generative AIs to produce false narratives and deepfakes, and thus regarding the ethical application of generative AIs to create content in general. This survey provides convincing evidence that generative AIs possess tremendous potential for causing harm within our society.

Some participants expressed an interest in stricter regulations for generative AI and a need for policies to be developed, accountability to ensure compliance and third-party oversight. Given that participants had low confidence in AI's self-regulation, there is clearly a need for some form of governance over the use of generative AI technologies. To summarize, generative AI technologies should be deployed safely, ethically and for the benefit of society through increased public awareness, responsible user actions and effective regulations.

VII. RECOMMENDATIONS

This Study suggests the following Recommendations:

- Enhance Public Awareness - Create Educational Programs & Public Awareness Initiatives That Increase the Public's Understanding Of Generative Artificial Intelligence, How Generative AI Can Benefit Society and The Dangers Of Using Generative AI Improperly.
- Establish Needed Regulatory Structures - There Should Be Stronger Regulatory Structures In Place At The State & Federal Levels To Help Regulatory Bodies (Like Federal Trade Commission (FTC) and the Federal



Communications Commission (FCC)) take Action Against People Who Are Misusing Generative AI Technologies - i.e. Giving Individuals False Information Or Creating DeepFakes.

- Increase Transparency of AI - Labels should indicate whether a particular piece of content was generated by or created by an AI system.
- Promote Responsible Use of AI - Develop guidelines for social responsibility that foster fairness in using Artificial Intelligence Technologies by creating ethical standards and providing for the responsible use of Artificial Intelligence by being accountable for the decision of Users.
- Conduct Independent Audits of AI Systems - There should be a requirement for third parties to perform audits of AI systems to certify that they are being developed in accordance with ethical standards and are not being misused.

VIII. LIMITATIONS

While interpreting the results of this study, it should be noted that there are limitations to consider:

- Sample size is limited, The research used 140 total respondents, which may not allow findings to be generalized to a larger population.
- Sample selection was done through convenience sampling, so there may be bias in the sample and limit how much you can generalize those results.
- Responses are self-reported so people may have varying personal biases or inaccuracies when reporting how they feel about their body image.

The study only focuses on user perceptions of whether they can detect content that has been produced using artificial intelligence, but does not attempt to determine if they possess the technical knowledge or skills needed to do so effectively.

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