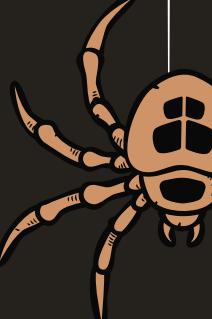


ADVENTURERS AND ALGORITHMS

AI AND THE EVOLUTION OF
TTRPG GAMEPLAY

Juliana Hirt & Wan-Chen Lee
University of Wisconsin- Milwaukee



Project Team



Juliana Hirt
PhD Candidate
University of Wisconsin-Milwaukee



Dr. Wan-Chen Lee
Assistant Professor
University of Wisconsin-Milwaukee



Session Agenda

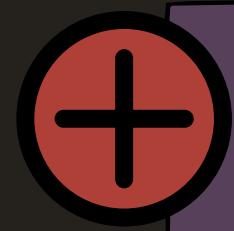


- 1 Study Background and Objectives
- 2 Methodology
- 3 Findings
- 4 Implications
- 5 Q&A

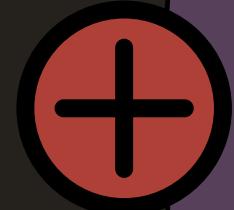
STUDY BACKGROUND AND OBJECTIVES



Study Background



Tabletop Games and Education



AI Ethics



Intersection of AI and Tabletop Games



Study Background



Tabletop Games and Education

Leveraged by librarians as **alternative literacy programs** (Ewalt, 2013)

Implemented in literature and creative writing courses to **encourage participation** and immersion (Glazer and Hergenrader, 2014)

Employed in technology courses to **explore interpersonal soft skills** (Veldthuis et al., 2022)

Study Background



AI Ethics

Fairness: An ethical feature built upon the principle of discriminatory non-harm
(Leslie, 2019)

Bias: Discrimination as a result of poor decision-making and data collection
(Modi, 2023)

Safety: The ability to mitigate harmful outcomes and degradation of trust
(Leslie, 2019)

Study Background



Intersection of AI and Tabletop Games

AI tools can be used to **simplify game play**, thus lowering the perceived barrier to entry (Zhu et al., 2023)

Domain-specific models can streamline combat encounters and **reduce GM's cognitive load** (Callison-Burch et al., 2022)

LLMs can summarize game transcriptions to **support narrative continuity** between sessions (Rameshkumar and Bailey, 2020)

Research Questions

RQ1

For GMs who have used AI for TTRPG sessions, what are their **experiences** and players' **perspectives** on AI as a tool for assisting creative worldbuilding?

RQ2

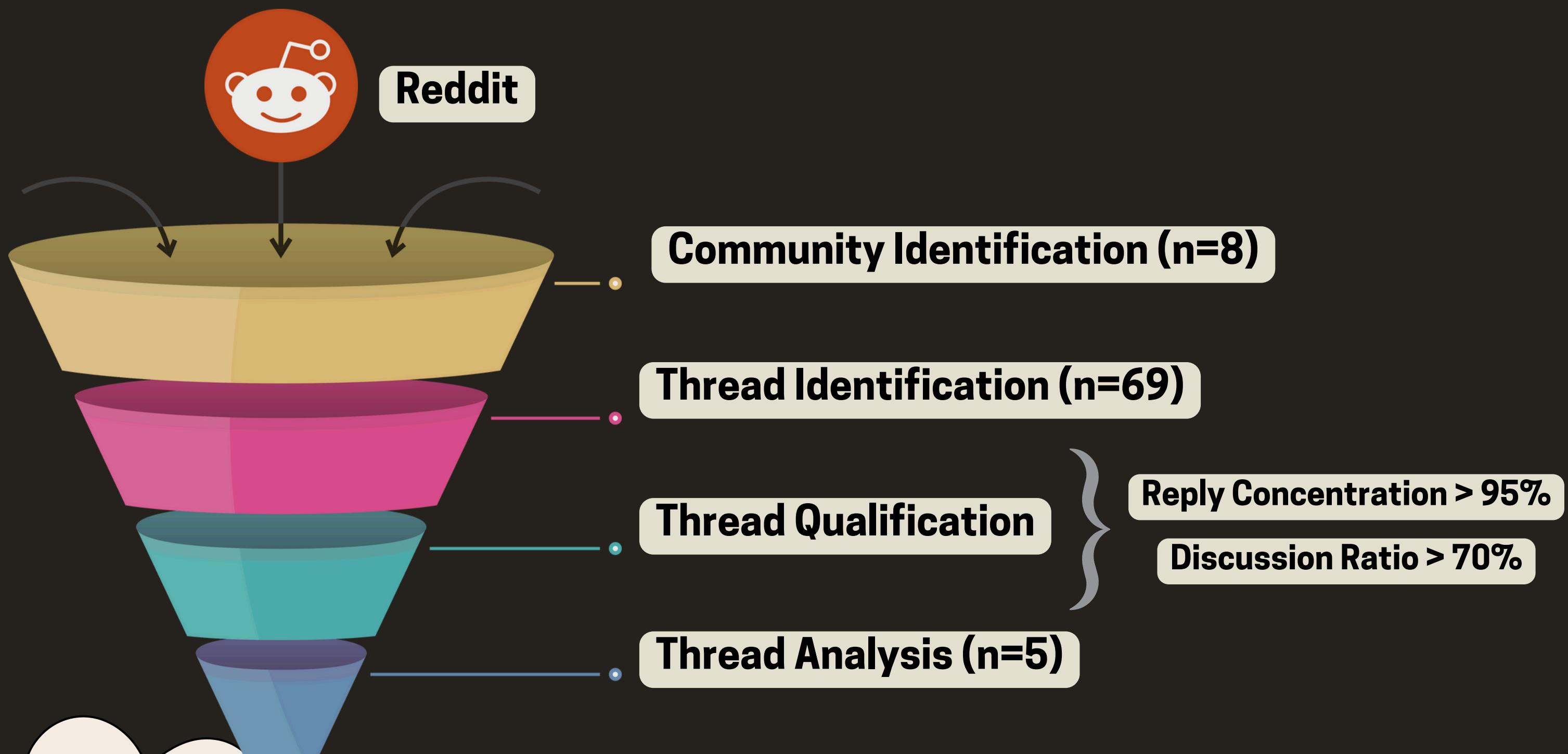
For GMs and players who have used AI for TTRPG sessions, what are their perspectives on ethics particularly regarding **fairness**, **bias** and **safety**?



METHODOLOGY

A cartoon illustration set against a dark gray background with white clouds at the top and bottom. In the center, the word "METHODOLOGY" is written in large, bold, yellow capital letters. The letter "M" is held by a character on the left wearing a blue polo shirt and a gray beanie, looking shocked. The letter "E" is held by a character on the right wearing a brown jacket over a black t-shirt with a red logo, a red Viking-style hat, and a mechanical arm, also looking shocked. Both characters have their mouths open as if shouting.

Data Collection



Data Collection

THREAD TITLE	SUBREDDIT	COMMENT COUNT	REPLY CONCENTRATION	DISCUSSION SCORE
Is it ethical to generate setting lore with AI, or is that not a good thing?	r/rpg	107	100%	73.4%
Letting AI Run a Town	r/rpg	75	100%	79.5%
The difference between random tables and LLM	r/rpg	69	100%	73.2%
Chat GPT as a DM tool	r/DungeonMasters	42	95.2%	78.8%
AI for making a world is crazy	r/DnD	33	100%	82.4%
TOTAL: 326				

Code Families

CODE FAMILY

DEFINITION

Bias

A code for comments addressing bias in AI tools. These comments may highlight aspects of design, development, or deployment, including mentions of **biased data, algorithmic bias, or systemic design features.**

Fairness

A code for comments addressing fairness in AI tools. These comments may include observations on user-centered aspects, such as **intellectual property (IP), equitable treatment, and discriminatory non-harm.**

Other

A code for comments addressing **emergent ethical factors of AI** outside of fairness, bias, and safety.

Safety

A code for comments addressing safety in AI tools. These comments may reflect on aspects of **player needs, such as mental health and triggering topics.**

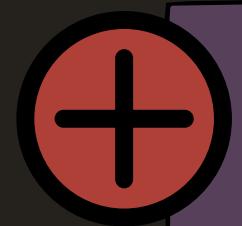
Tools

A code for comments addressing experiences related to **the use of AI tools.**

FINDINGS



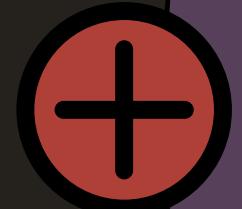
Findings



AI as a GM Assistant



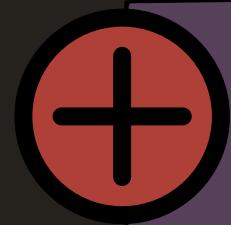
Ethical Concerns



Community Silencing



Findings



AI as a GM Assistant

POSITIVE

Reducing Toil: “I use AI to generate all of the stuff I don’t want to labor over. I’m too busy to spend hours building the minutiae of a world.”

Skill Compensation: “Not everyone is a writer or creative enough to describe a particular cave, forest, city or whatever”

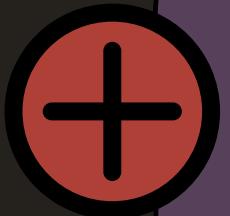
NEGATIVE

Dehumanization: “You’re taking a truly limitless and creative hobby for human expression and trying to optimize the humanity out of it because you can’t picture a forest in your head.”

Vapid Output: “It physically hurts to see human beings rally around this and praise it for being formatted in a pretty way when there’s nothing actually there.”

Findings

POSITIVE



Ethical Concerns – Fairness

Fair Use: “Fair Use lets us take content and transform it legally, creating something new.”

NEGATIVE

Job Impact: “...creative types that feel threatened by AI taking creative jobs. Which, to be fair, is absolutely a thing that is/will be happening.”

Findings

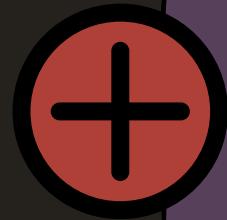


Ethical Concerns - Bias

NEGATIVE

Perpetuation and Normalizing Harmful Stereotypes: "I added a Kuei Jin character (a somewhat problematic Asian vampire from older editions) thinking it'll mix it up. Nope, leaned into full stereotyping again. ... "Diego 'Rattlesnake' Veracruz" from Hong Kong had a zen garden in his apartment and a magic katana and operated a sex trade out of a massage parlor."

Findings



Ethical Concerns – Safety

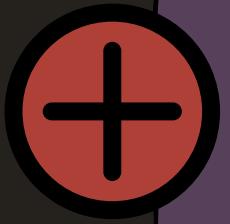
NEUTRAL

Disclosure: “I think the key element is: are your players okay with you using AI?”

NEGATIVE

Disappointment: “Finding out my GM had AI generated most of the session of her first homebrew oneshot was so disappointing.”

Findings

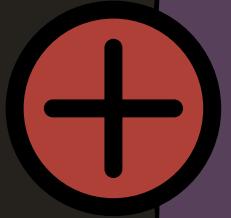


Ethical Concerns - Other

NEGATIVE

Sustainability: “The difference is I don’t offer a paid service that scrapes hundreds of thousands of data sets online and then use up tons of wattage hours of electricity so that someone can generate a list of elvish names.”

Findings



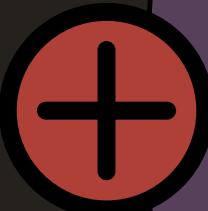
Community Silencing

Strict Moderation for AI Topics: "We do not allow AI generated content or AI tools to be posted to the sub[reddit]" (*r/DnD*)

IMPLICATIONS

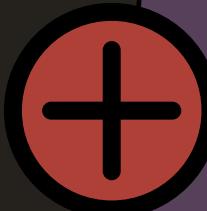


Implications



Fairness

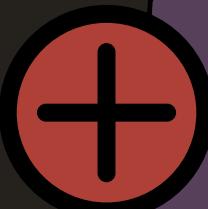
- Increase **transparency** about training data
- Establish **guidelines regarding IP** concerns in training data
- **Enforce legislation** and guidelines



Bias

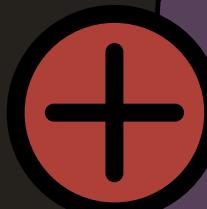
- Human-in-the-loop & customization
 - GMs should modify the outputs of AI tools to reflect desired identities
 - GMs should write prompts that explicitly include the identities they and their players wish to see

Implications



Safety

- **Discuss AI usage** openly and upfront with players
- **Disclose any AI tools** or outputs being used



Sustainability

- Require AI tool companies to **disclose their resource and energy usage**
- **Update regulations** to address these resource and energy concerns

Future Research



At the intersection of rapid AI adoption and the application of tabletop games for alternative experiential learning - **it is essential to thoroughly understand the ethical implications of AI integration.**

In light of the moderation practices on community subreddits, there is a pressing **need for additional mediated data collection** through interviews and focus groups.

The outcomes from this study can serve as a **groundwork for interview instruments.**

Presentation References

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Q&A

Thank you for your participation
in today's session!

