

Evaluating an AI Chatbot for Equine Reproductive Management Education

Undergraduate Student Perceptions and Use in an Animal Science Course

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AI

TAMU Horse Breeding Advisor

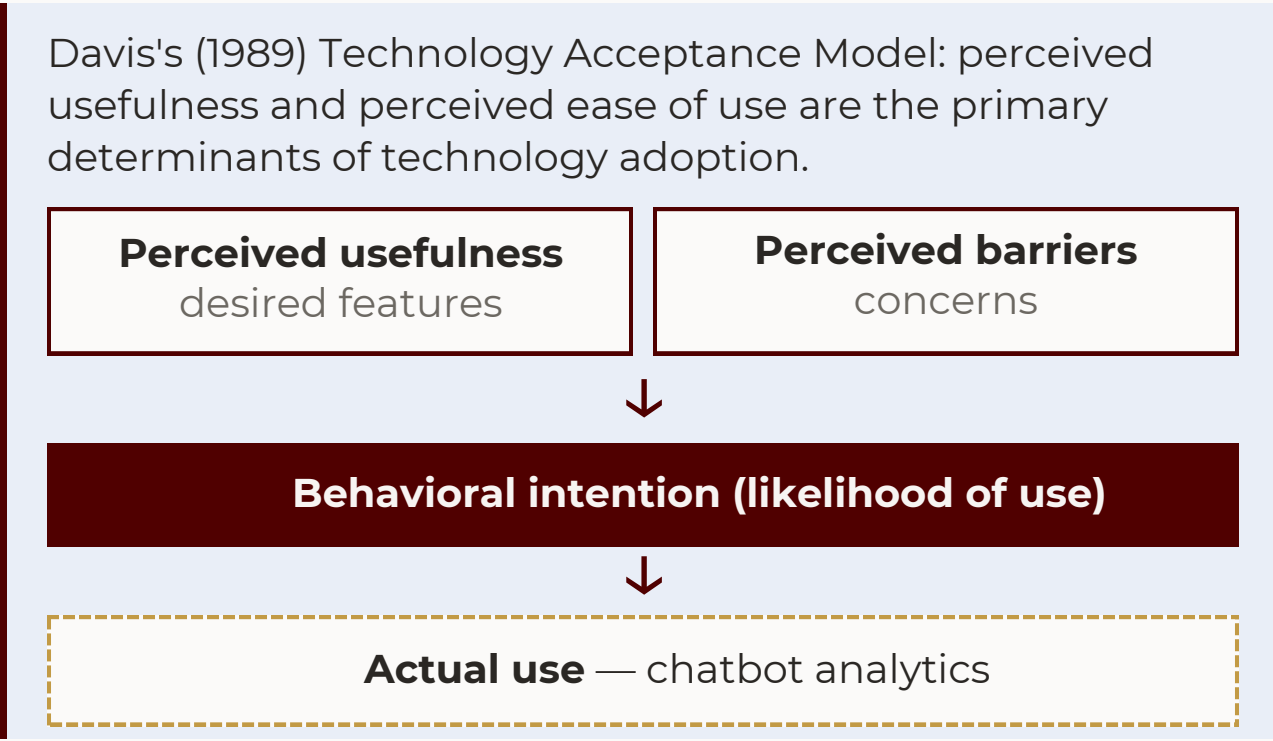
Online

Introduction

AI chatbots simulate human conversation and help learners work through complex topics. Most evaluations, however, come from general higher education settings; very few examine **custom-built chatbots designed for specific disciplinary content in agriculture**.

Equine reproductive management is technically demanding, covering semen evaluation, estrous detection, artificial insemination, and reproductive anatomy. A custom AI chatbot was built from ANSC 420 course content, hosted on CustomGPT.ai, and introduced as a supplemental study tool.

Conceptual Framework



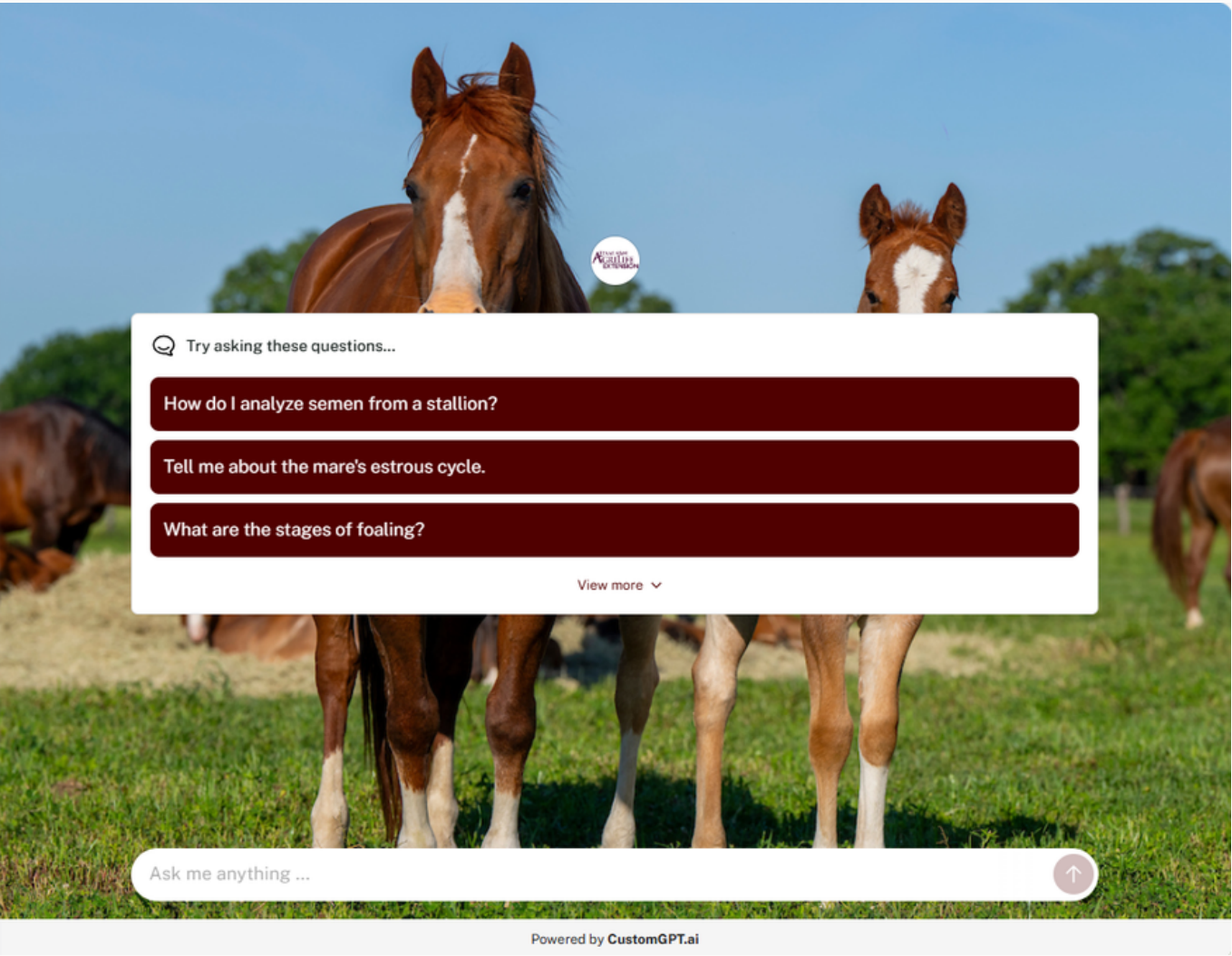
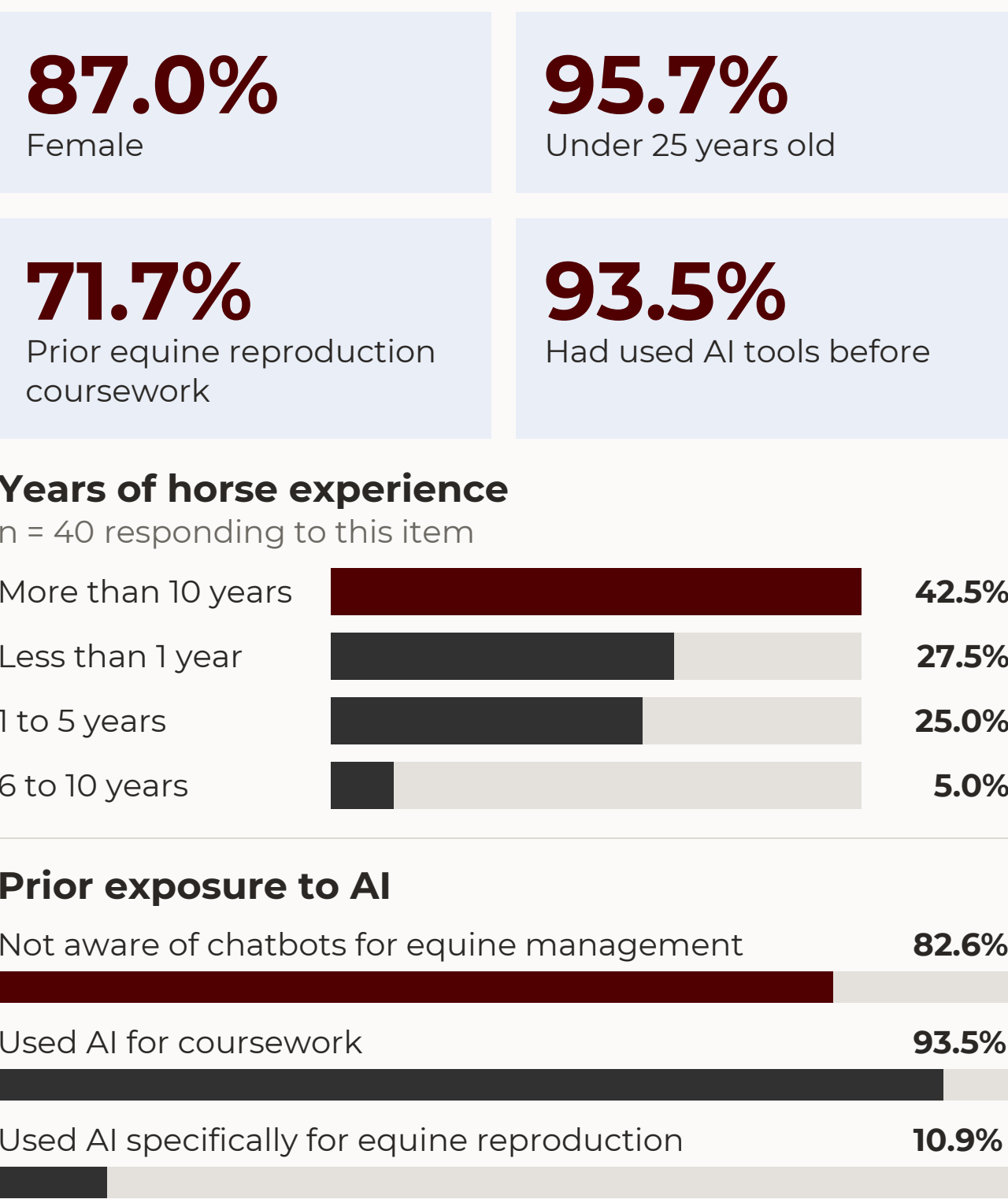
Methods

- Quantitative descriptive design combining two data sources in Equine Production and Management (ANSC 420) at Texas A&M University.
- Pre-survey** via Qualtrics® during class, March 2, 2026. 11 items: demographics, prior AI awareness and use, baseline likelihood of use, desired features, concerns, open-ended accuracy perceptions.
 - Usage analytics** from CustomGPT.ai, tracked March 2 – April 27, 2026. Each conversation was manually categorized by topic and coded for response type.

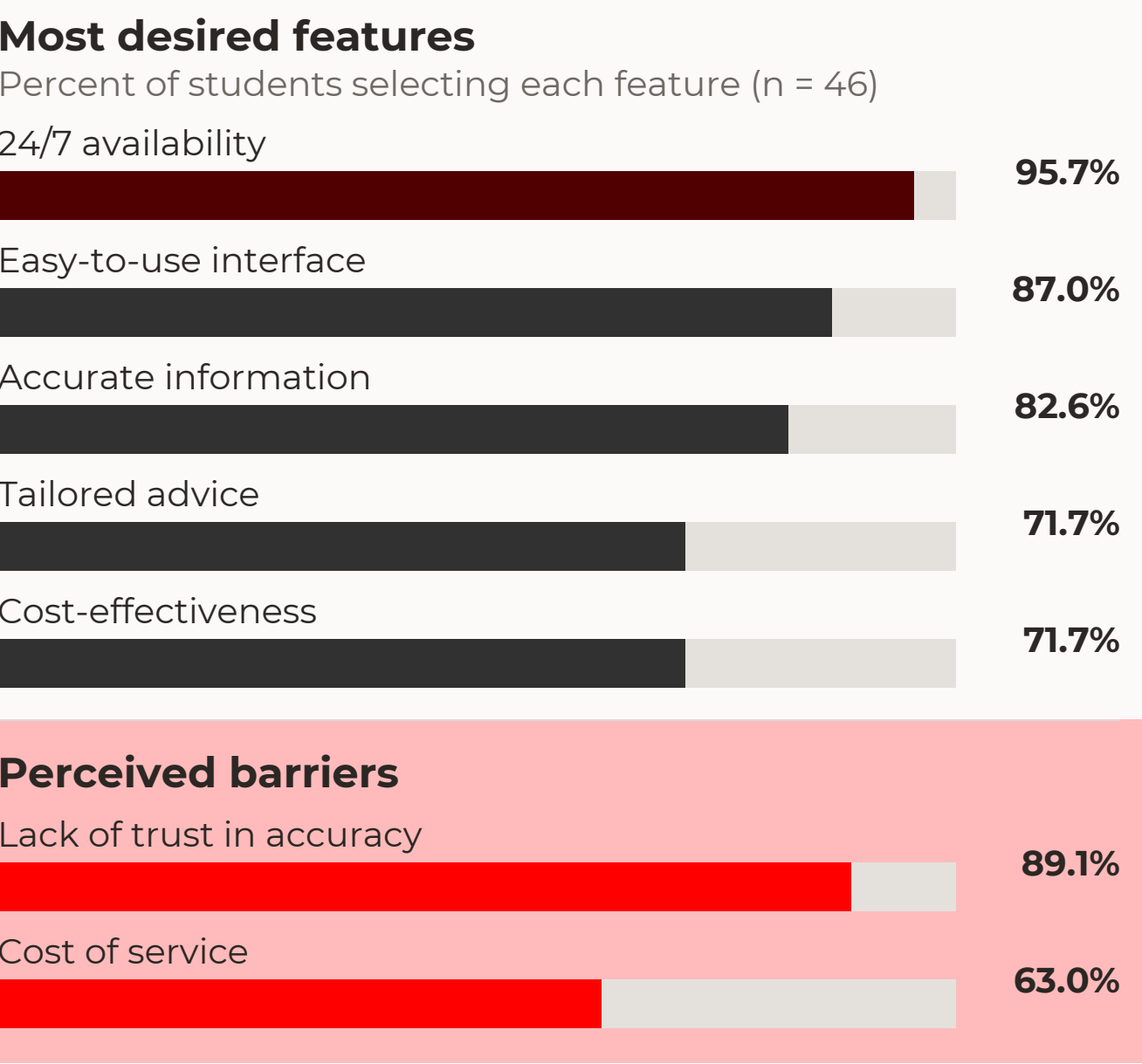
46

valid and complete responses of 55 total
(2 opted out, 6 incomplete, 1 test entry)

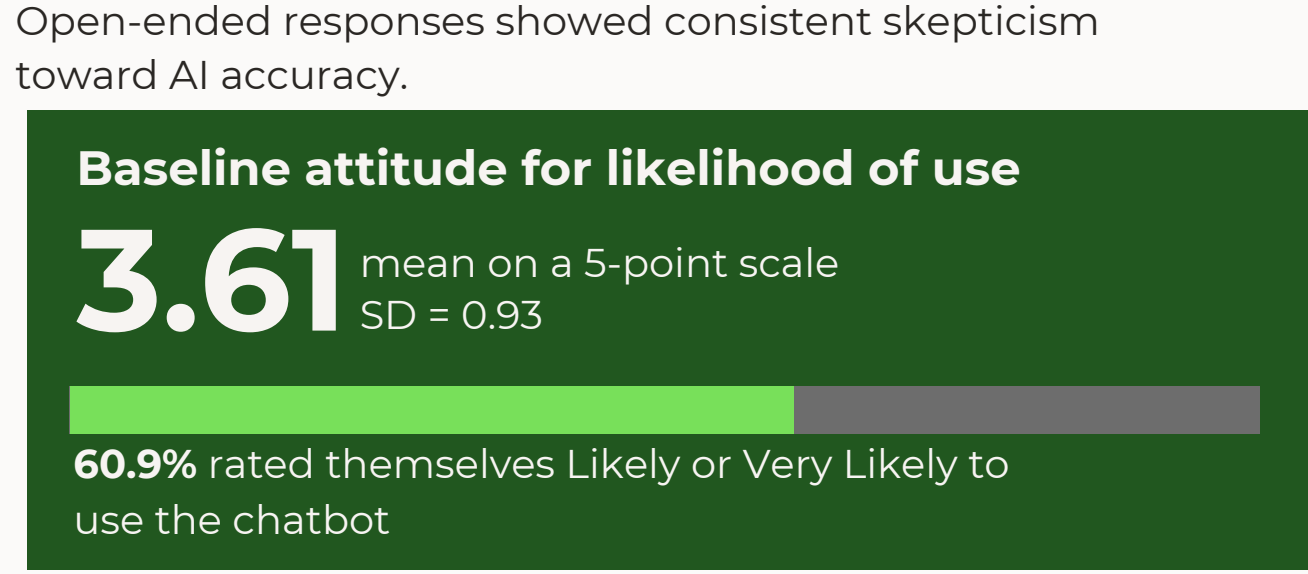
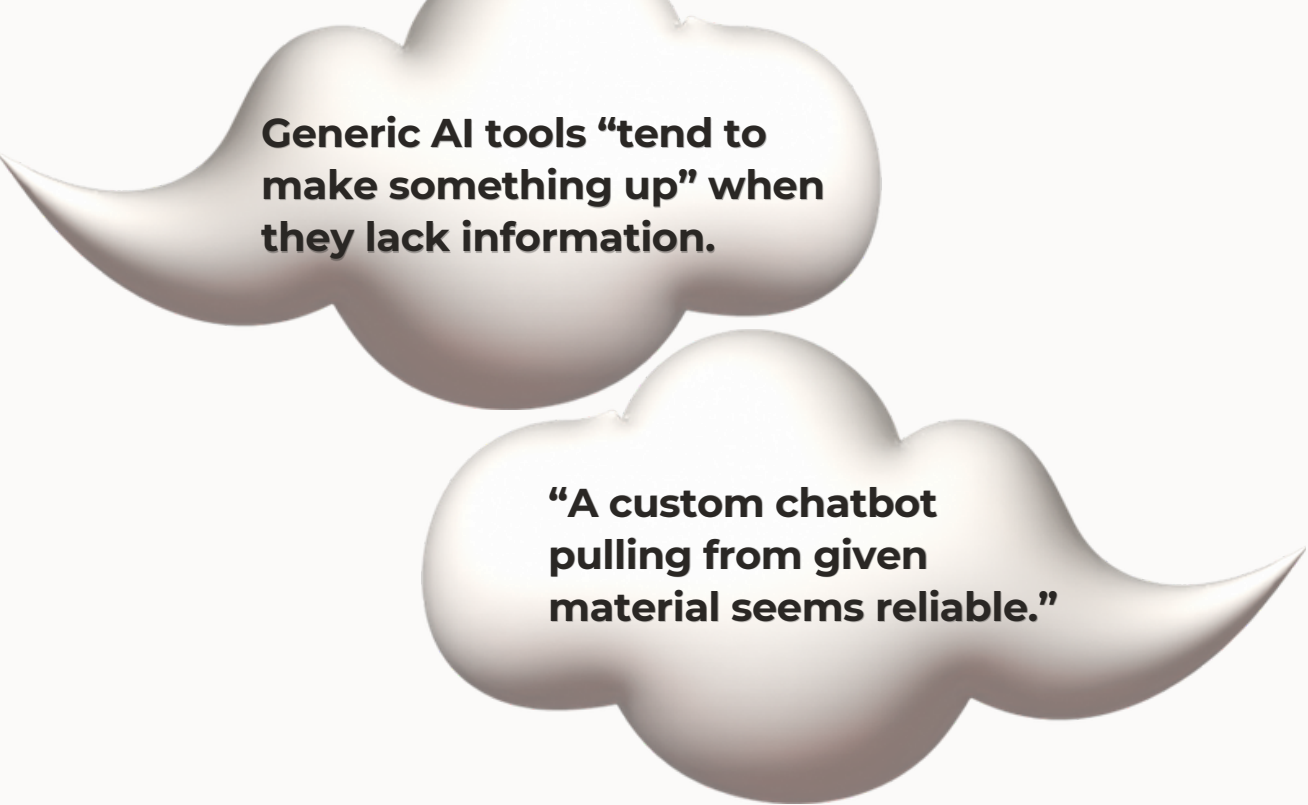
Who participated



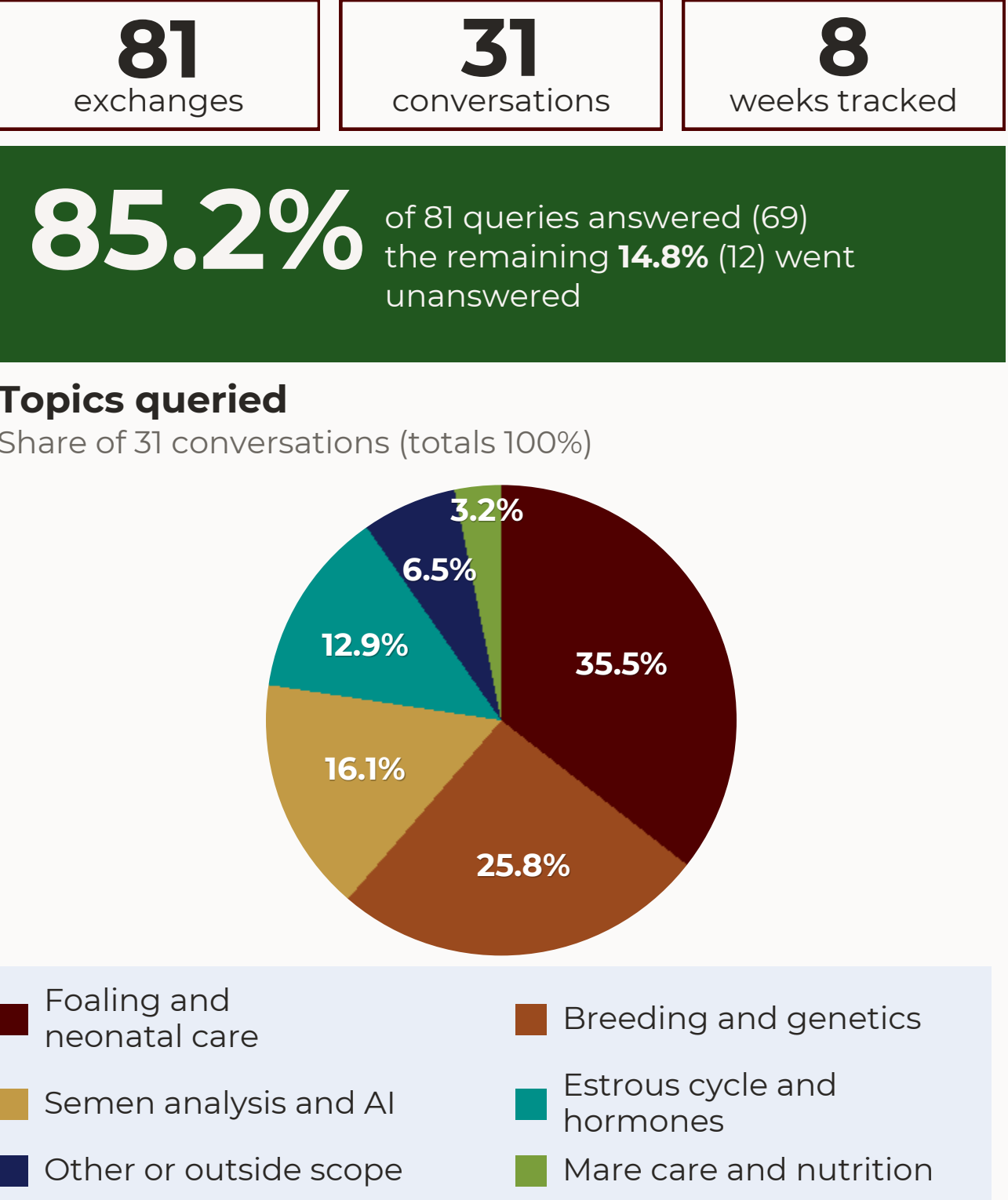
Expectations & Concerns



Students' words



Chatbot use in practice



Conclusions

- Students reported **moderate receptivity** (M = 3.61, SD = 0.93; 60.9% favorable).
 - The dominant concern was **accuracy (89.1%)**, indicating skepticism likely rooted in prior experience with generic AI.
 - The **85.2% success rate** shows the tool worked well as a supplemental resource, though the knowledge base needs expansion around pedigrees.
- Custom, content-specific chatbots may suit discipline-based courses better than general-purpose tools; skepticism may be eased by grounding chatbots in verified, instructor-provided content.
- Limitations & next steps

No qualitative data, no post-use measures, single course section. Expand the knowledge base and embed the chatbot in structured course activities. Future work should measure TAM constructs with validated post-use scales.

References

Scan for the full reference list and study details.