

Dual-Process Theory of Information Seeking Behavior

AUTHOR

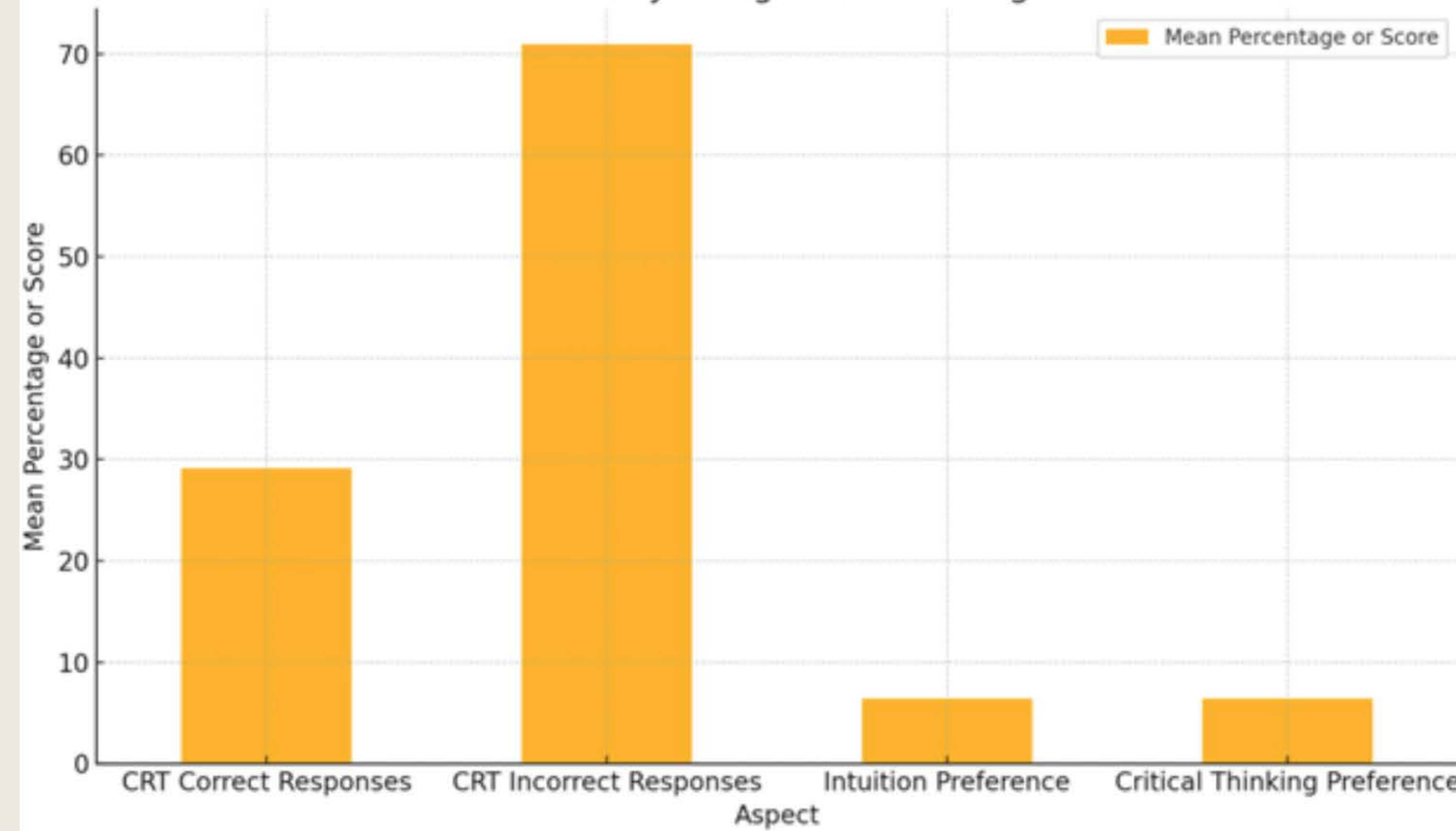
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Examining the roles of intuition (system 1) and critical reflection (system 2) in the information seeking of university students within an academic library environment

Summary of Significant Findings



Introduction

The pilot study presented here aims to integrate dual-process theory—a cognitive framework from neuroscience and psychology—into the examination of information-seeking behavior within the field of Library and Information Science (LIS). Currently, LIS research has a gap: intuition and critical thinking have been studied in isolation rather than through the unifying lens of dual-process theory, which recognizes the interdependent relationship between these two cognitive approaches.

Methodology

The researcher used a mixed-methods study with a survey and interviews to explore university students' preferences for intuition versus critical thinking in academic information-seeking. The survey included the Cognitive Reflection Test and an open-ended question for reflections. Six interviews were conducted for further feedback.

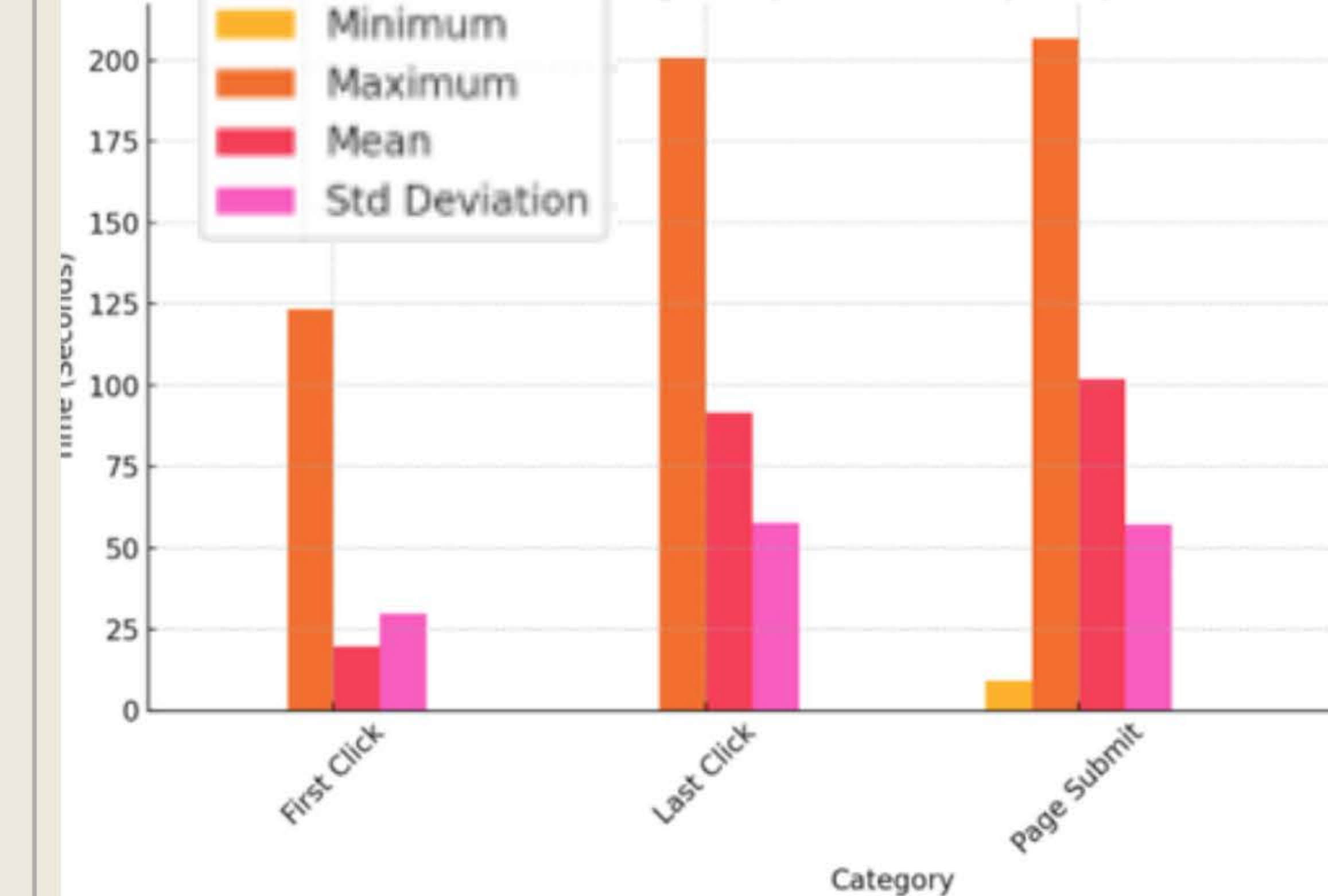
Results

Qualitative and quantitative results from a study on intuition and critical thinking in research:

- In-survey results show the balance between intuition and critical thinking.
- Interview findings suggest clarity and repetition improvements.
- Demographics varied in academic standings and majors.
- CRT findings indicate a tendency towards intuitive responses over reflective reasoning.
- Initial data sheds light on cognitive processes in information-seeking. Both intuition and critical thinking play a big role when finding information, but I tend to lean more towards my intuition first then as I find the research I lean towards critical thinking.

"Intuition is helpful to point you in the direction to find information and critical thinking helps with processing that information to know if it's useful/insignificant or if it can lead you in more research directions"--Student quote from interview.

Timing Analysis of Survey Responses



Analysis

Roles of Intuition and Critical Thinking

- Intuition:
 - Often serves as the initial motivator.
 - Predominant reliance on intuitive responses among participants.
 - General inclination towards quick, intuitive thinking over slower, more reflective reasoning.
- Critical Thinking:
 - Provides the necessary rigor for academic research.
 - Students may not fully engage in critical reflection as often as necessary for academic scholarship.

Insights from CRT Findings

- Nuanced Picture of Information-Seeking Behaviors:
 - Integrating CRT findings with qualitative and quantitative data reveals a nuanced picture of information-seeking behaviors.
- Gap Between Perception and Behavior:
 - Potential gap between students' self-perceived cognitive styles and their actual cognitive behaviors.
 - Cognitive dissonance between low CRT scores and the value placed on critical thinking could cause anxiety in information-seeking processes.

Key Observations from the Study

- Blend of Cognitive Processes:
 - Students articulate and demonstrate a blend of intuition and critical thinking in their research.
- Reliance on Intuition:
 - A significant majority selected intuitive but incorrect answers across various CRT questions.

Conclusion

- Integration of qualitative and quantitative data reveals complex information-seeking behaviors in university students.
- Students prefer a dynamic process starting with intuition and evolving to critical thinking.
- Emphasizes the need to foster both intuitive and critical thinking skills for effective information-seeking.

Study Implications

- Examines the interaction between intuition and critical thinking in academic information-seeking.
- Identifies correlation between CRT scores and students' research behavior.
- Analyzes time taken for CRT questions to support dual-process theory.



Preferences in Intuition and Critical Thinking

