# Experiential versus rational regret: Need for intuition determines regret intensity following switching and sticking decisions

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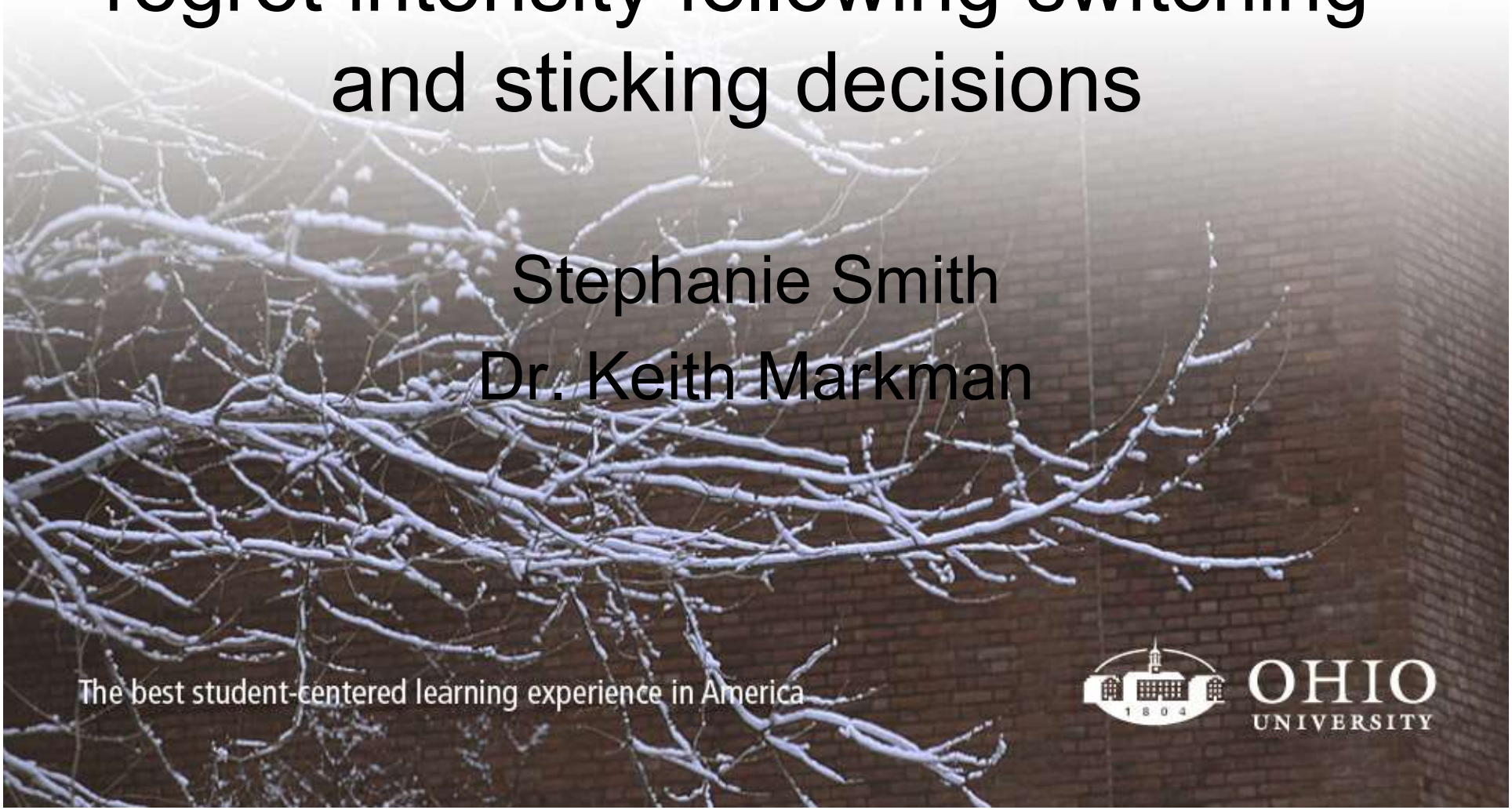


# Overview

- What is regret?
- Regret over action and inaction
- The first instinct fallacy
- Rational and experiential thinking styles
- The REI
- My current research
- Limitations and future directions

# What is regret?

- Regret is believed to be an emotion that is cognitively determined.
  - More than just a cognitive process though, because it is loaded with emotion and feeling.
- In order for someone to feel regret they have to think about their decisions and the possible outcomes of those decisions.
  - These imagined alternatives are called counterfactuals
    - (Gilovich & Medvec, 1995; Zeelenberg, 1999; Kahneman & Miller, 1986))

# Action and inaction

- Two types of decisions have been studied in the regret literature, those involving action or inaction
- Businessman problem
  - More regret is felt over the bad outcome when it involves action than when it involves inaction.
- Actions are more regrettable because it is easier to imagine alternatives
  - In the long run however, people's biggest regrets tend to involve inaction
    - (Kahneman & Tversky, 1982; Gilovich & Medvec, 1994)

# The First Instinct Fallacy (FIF)

- People falsely believe that sticking with their first instinct is the best course of action (the first instinct heuristic)
- This happens because action (switching) leads to more regret than inaction (sticking)
  - Actions are therefore more accessible in memory
    - (Brownstein, Wolf, & Green, 2000; Kruger, Wirtz & Miller, 2005)

# The First Instinct Fallacy

- Study 1
  - Looked at eraser marks on an exam
  - Answer changes from wrong to right outnumber right to wrong but people have the opposite intuition
- Study 2
  - Hypothetical test scenario
  - More regret from switching than sticking
- Study 3
  - Used SAT and GRE questions and asked participants to mark their first instinct and final answer
  - Sticking was remembered as a better strategy than it actually was

# The First Instinct Fallacy

- Study 4
  - Used a Who Want's to be a Millionaire set-up
  - Switching was more frustrating and more memorable than sticking
  - Proposed causal model was supported

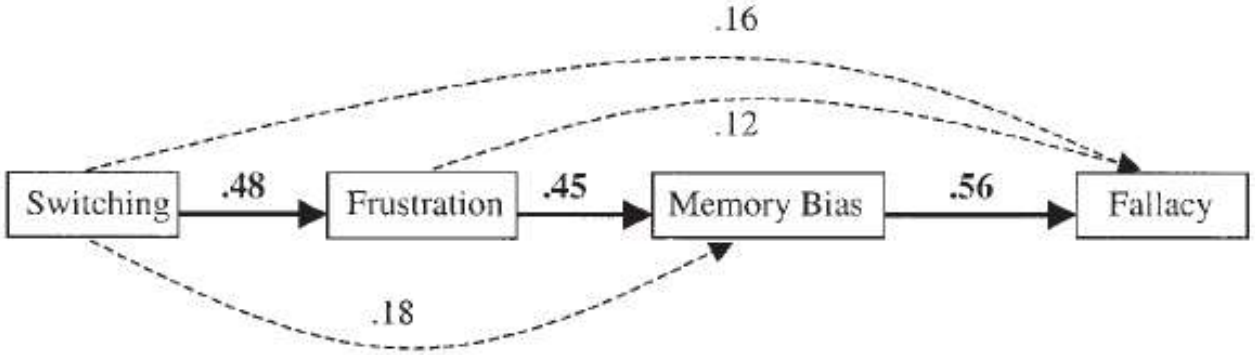



*Figure 2.* Path analysis among switching, frustration, memory, and the first instinct fallacy, Study 4.

# But why?

- So, actions are more accessible and therefore, lead to more regret
- But, why does it bother people to experience failed switching in the first place?
  - This could be due to an consistency violation
  - This should only be true for people who use their intuition to make decisions
  - There is an individual difference variable that measures this
    - (Festinger, 1957)

# Rational and experiential thinking styles

Table 1
*Comparison of the Experiential and Rational Systems*

| Experiential system | Rational system |
|---|---|
| 1. Holistic | 1. Analytic |
| 2. Automatic, effortless | 2. Intentional, effortful |
| 3. Affective: Pleasure–pain oriented (what feels good) | 3. Logical: Reason oriented (what is rational) |
| 4. Associationistic connections | 4. Logical connections |
| 5. Behavior mediated by "vibes" from past events | 5. Behavioral mediated by conscious appraisal of events |
| 6. Encodes reality in concrete images, metaphors, and narratives | 6. Encodes reality in abstract symbols, words, and numbers |
| 7. More rapid processing: oriented toward immediate action | 7. Slower processing: oriented toward delayed action |
| 8. Slower and more resistant to change: Change with repetitive or intense experience | 8. Changes more rapidly and easily: changes with strength of argument and new evidence |
| 9. More crudely differentiated: Broad generalization gradient; stereotypical thinking | 9. More highly differentiated |
| 10. More crudely integrated: Dissociative, emotional complexes; context-specific processing | 10. More highly integrated: Context-general principles |
| 11. Experienced passively and preconsciously: we are seized by our emotions | 11. Experienced actively and consciously: We are in control of our thoughts |
| 12. Self-evidently valid: "Experiencing is believing" | 12. Requires justification via logic and evidence |

*Note.* From "Cognitive–Experiential Self-Theory: An Integrative Theory of Personality" by S. Epstein, 1991, in R. C. Curtis, Editor, *The Relational Self: Theoretical Convergences in Psychoanalysis and Social Psychology,* New York: Guilford Press. Copyright 1991 by Guilford Press. Adapted by permission.

- 2 information-processing systems that work in parallel
- 1 system takes dominance over other for tasks/decisions
  - Dominance is determined by many factors
    - Individual differences in preference
    - Characteristics of the situation
    - Emotional involvement
    - Repeated amounts of experience
      - (Epstein, 1991; Epstein, 1994; Epstein et al., 1996)

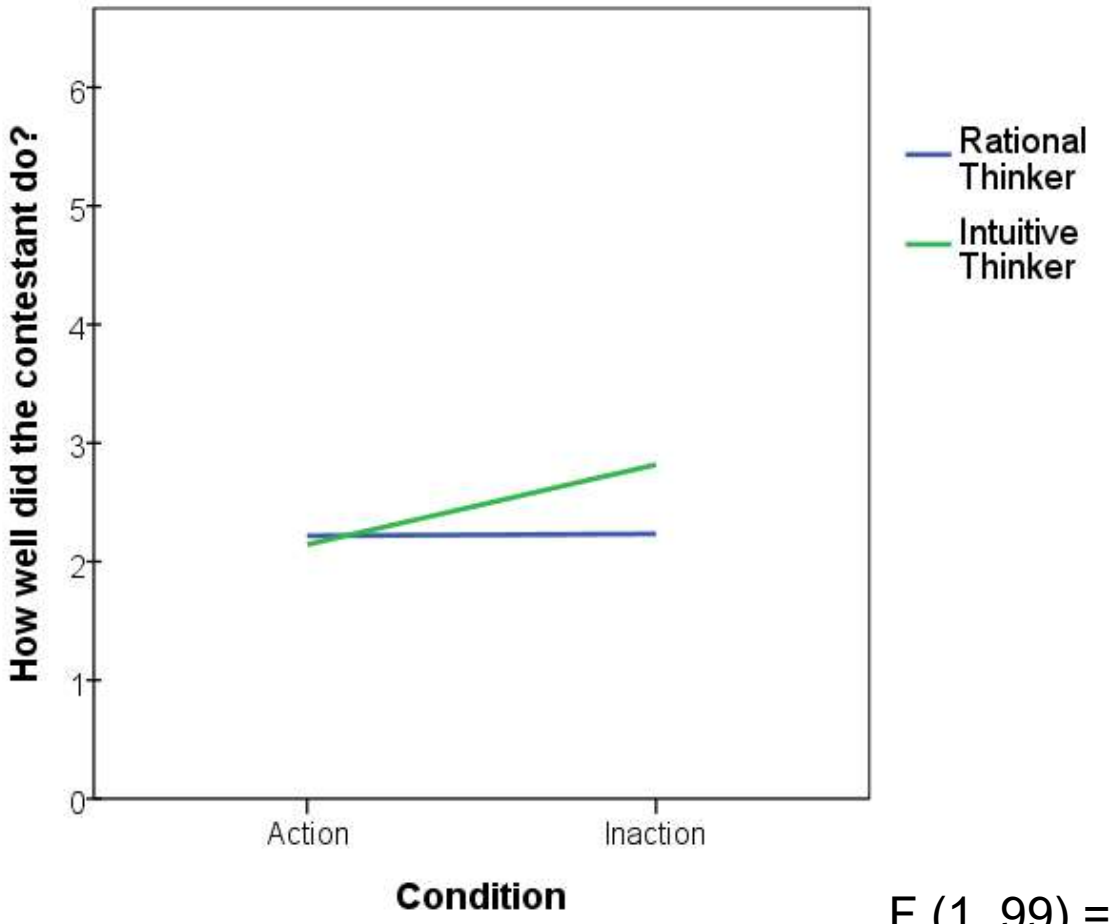
# Rational-Experiential Inventory (REI)

- An individual difference in people's preference to use one system over the other
  - Measured using the Rational-Experiential Inventory (REI)
  - 4 subscales
    - Rational Ability (i.e. "I have no problem thinking things through carefully)
    - Experiential Ability (i.e. "When it comes to trusting people, I can usually rely on my gut feelings")
    - Rational Engagement (i.e. "I enjoying thinking in abstract terms")
    - Experiential Engagement (i.e. "I like to rely on my intuitive impressions")
- Going against one's first instinct (switching) may cause more regret for those with a high belief in intuition
  - (Pacini & Epstein, 1999)

# Current Research: Study 1

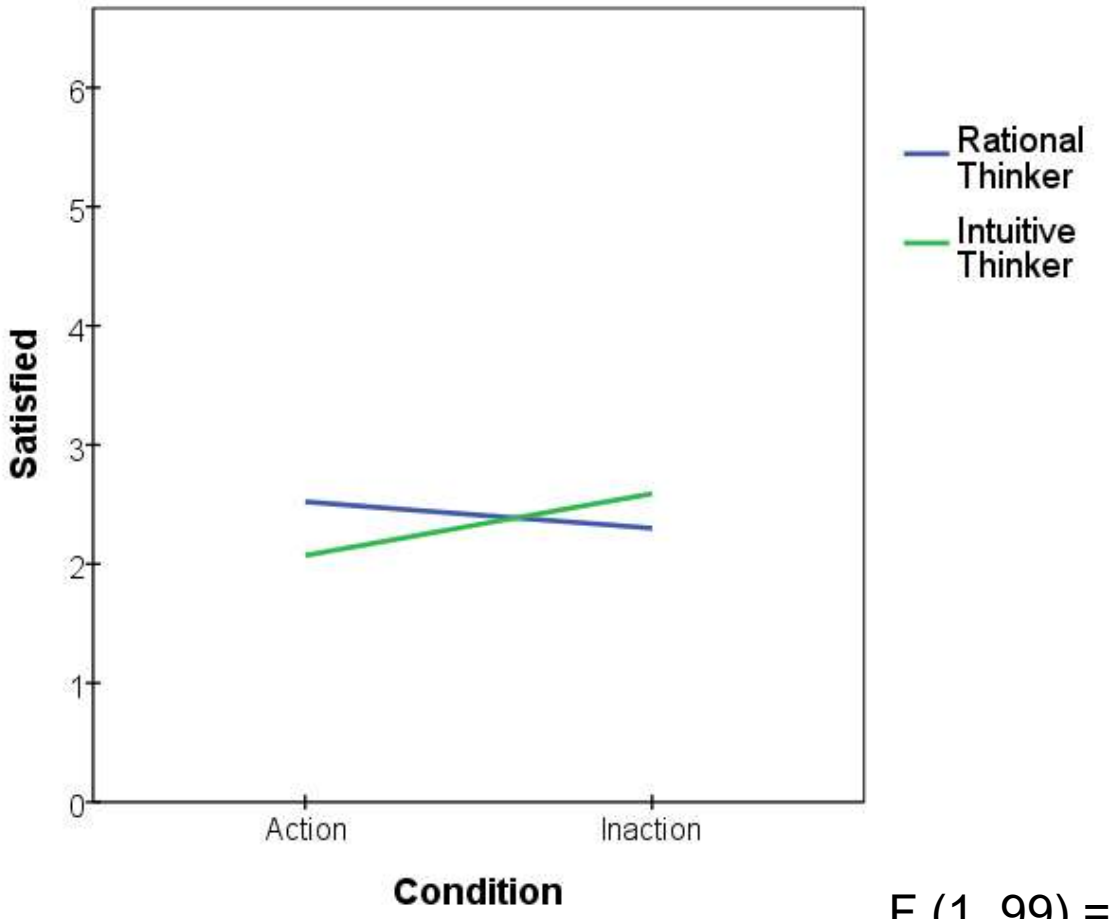
- Participants watch a video of a woman participating in a trivia game show (stimuli borrowed from Hirt and Karpen (2012))
- 2 (Decision Type: switch/action vs. stick/inaction) X 2 (Thinking Style: intuitive vs. rational) between-subjects design
- She answers a total of 9 trivia questions and in both conditions she ends up with the same total
- Hypothesis: intuitive thinkers should have more of a negative reaction to switching than sticking

# Results



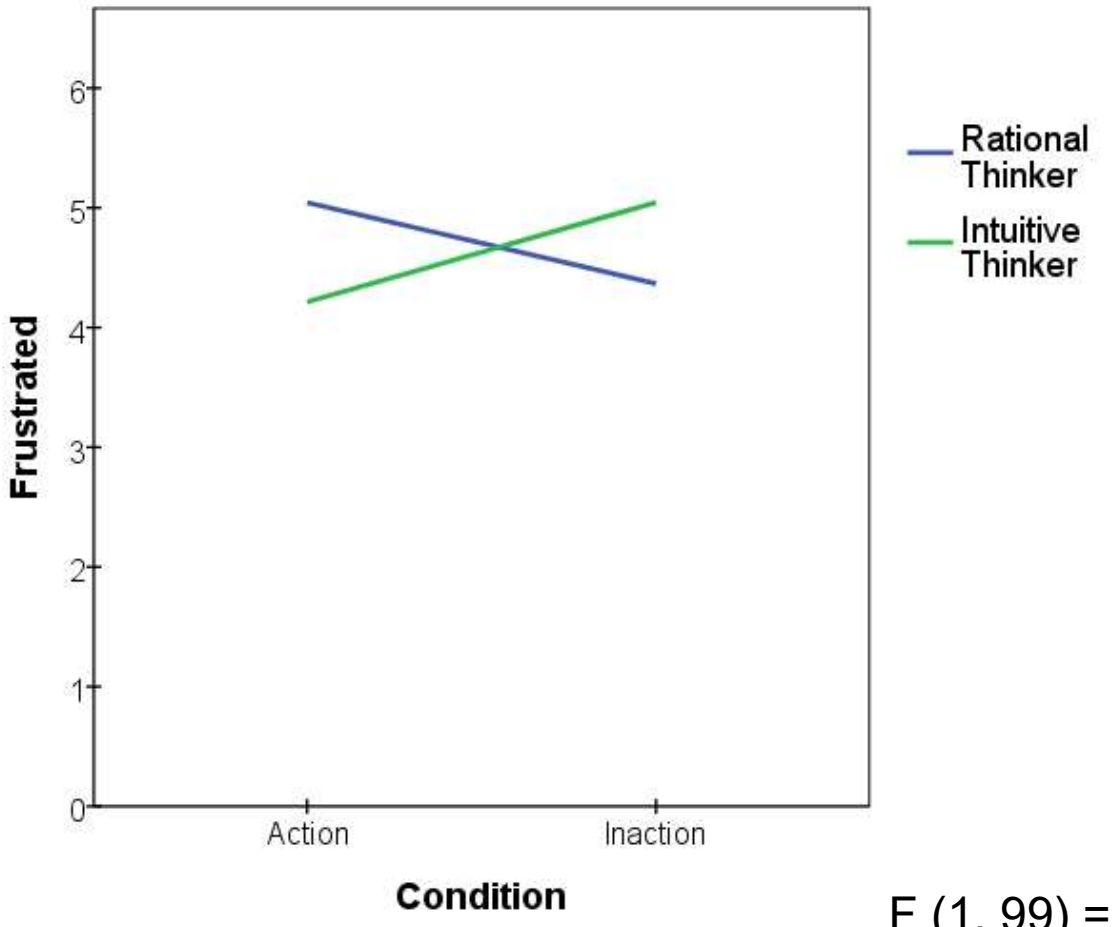

F (1, 99) = 3.32, p = .071

# Results



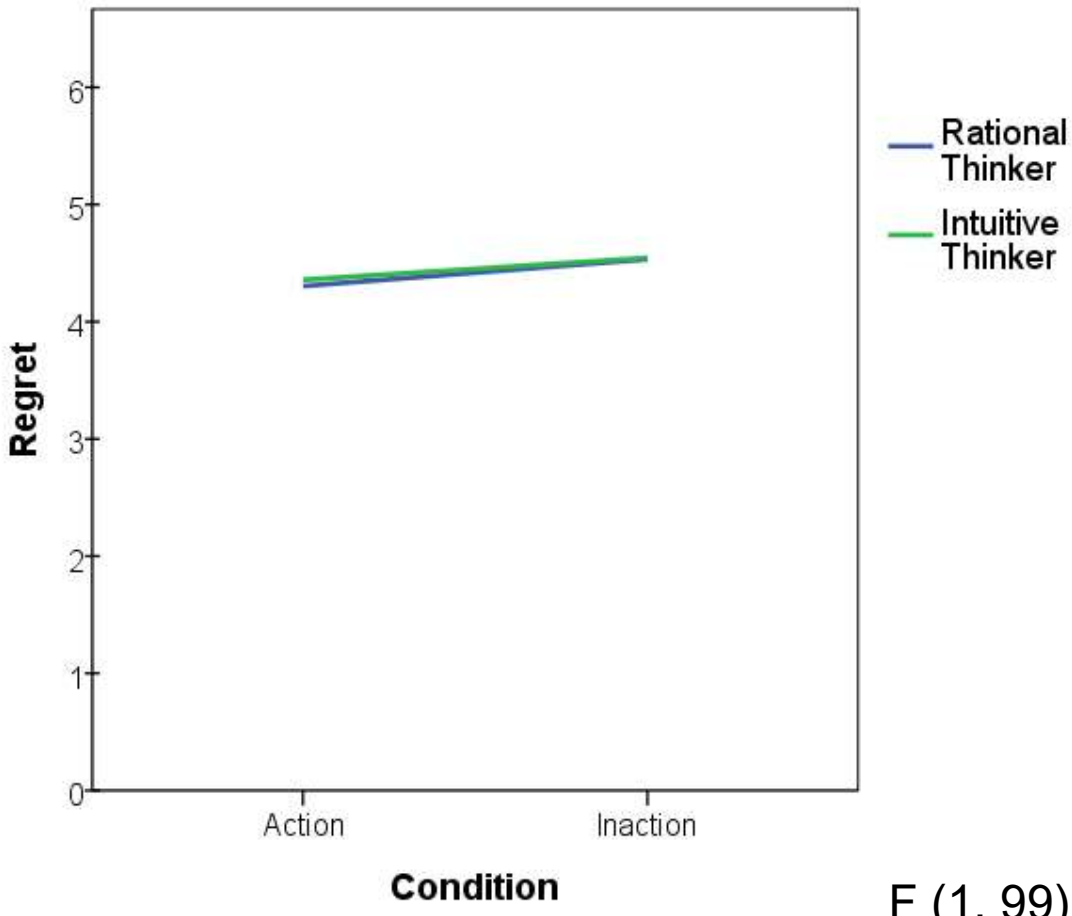

F (1, 99) = 2.84, p = .095

# Results




F (1, 99) = 4.03, p = .047

# Regret




F (1, 99) = .004, p = .947

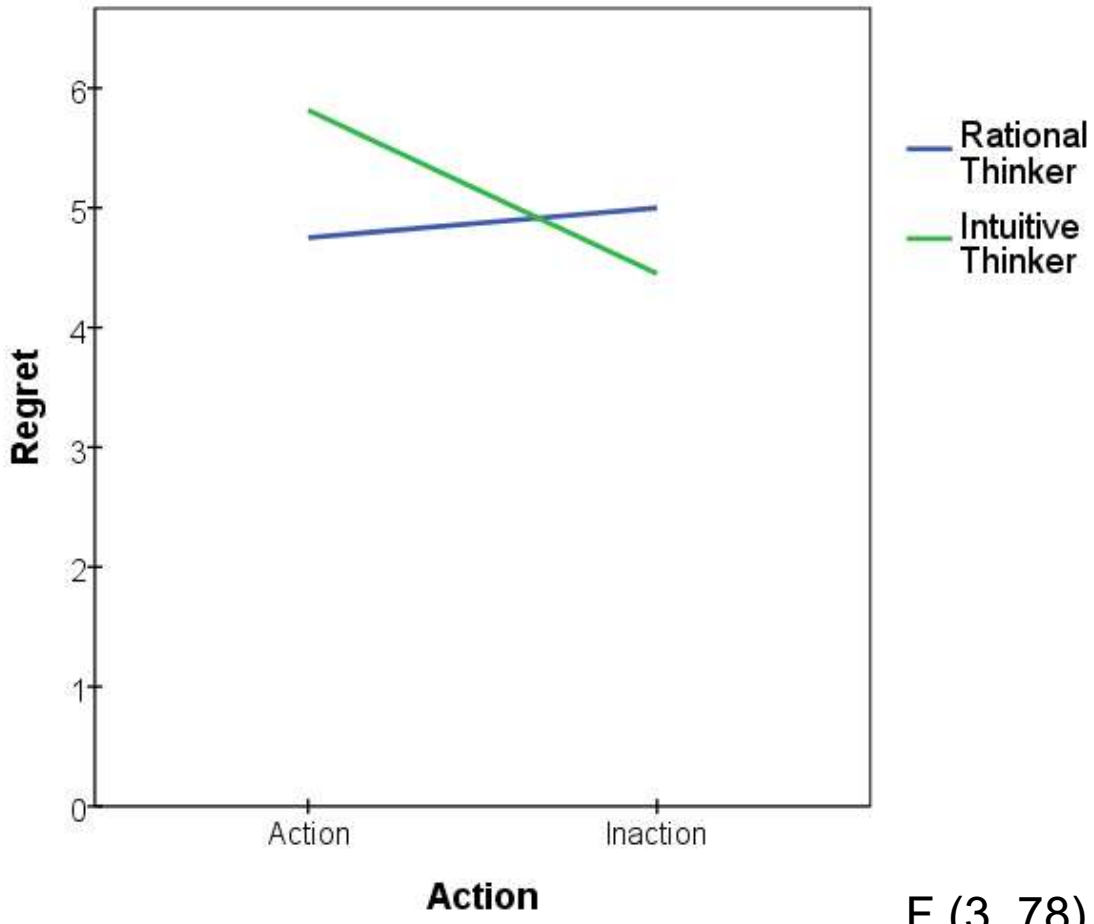
# Study 2

- Participants read hypothetical scenarios about taking an important multiple choice test
- 2 (Decision Type: switch/action vs. stick/inaction) X 2 (Thinking Process: intuition first vs. rational first) X 2 (Thinking Style: intuitive vs. rational) between-subjects design

# Example scenario

Imagine that you are taking an exam in one of your classes. For exam question # 9, you have a strong gut feeling that option B is correct and so you select B. After answering all of the exam questions, however, you return to question # 9 and, after thinking hard and rationally about all of the material you have studied, decide that option A may actually be correct. Nevertheless, you decide to stick with your intuition and make your final answer option B. When you get your test back a week later you find out that you got question # 9 wrong and that option A was actually the correct answer.

# Results




F (3, 78) = 7.45, p = .008

# Limitations and Future Directions

- There are some limitations with these 2 studies
  - The REI does not seem to be the most reliable measure
  - Study 2 used complex scenarios in which multiple aspects were varied
- For future research, we would like to use a paradigm where participants get to actually make choices of action or inaction and then report feelings of regret
  - Some issues with this though because it is correlational in nature

# Thank you!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