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Attributions Around Beliefs and Personality

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Introduction

- Correspondence bias**¹ occurs when behaviors are attributed to an **individual’s disposition** when contextual causal explanations are equally or more likely.
- Previous research² has shown that individuals are more likely to make dispositional attributions about women compared men. Additionally, other work³ has shown that attributions are prioritized and processed in a hierarchical fashion, with each attribution informing the next. Combined, such research indicates that attributions may differ between target gender, attribution type (level in hierarchy), and time.
- Our study extended prior work by examining **how** attributions are made about a target’s apparent gendered personality characteristics and beliefs and **if** confidence in these attributions change across temporal scales.
- We **hypothesized** that **1)** subjects would make stronger dispositional attributions about *women* on all question types and **2)** that personality trait attributions would be more resilient across time than belief attributions.

Materials & Methods

Materials

- Our **questionnaire** contained questions that were adapted from two existing and validated scales.
- For questions regarding sexist belief attributions The Modern Sexism Scale⁴ was adapted. For questions regarding trait attributions, the Personality Attributes Questionnaire⁵ scale was adapted.
- Three-part responses were required and called for attributions for three different times.

Methods

- All materials, questions, and procedures (randomization) were formatted into a questionnaire using **Qualtrics**.
- Participants ($N = 298$, 56.7% Female, 43.3% Male) were recruited via **Amazon Mechanical Turk** and paid \$0.50.
- After responding to basic demographic questions, participants read their **randomly assigned essay*** and answered comprehension questions to ensure understanding that the given essay was assigned as **homework**.
- Participants then answered questions that gauged attributions being made toward **vignette essay writer.***

- We utilized a **2x2 between-subject design**, modeled after the Attitude Attribution Paradigm⁶ **with target gender and essay point-of-view as independent variables (IVs)**. Target gender was indicated by name and essays contained clear arguments with cited sources.
- Adapted questions probed belief, feminine trait, and masculine trait attributions. Each question was further broken down by time at three scales, creating **nine dependent variables (DVs)**. (see *Results¹ for detail*)

	“Is a Problem”	“Is not a Problem”
“John”	$N = 73$	$N = 70$
“Jennifer”	$N = 78$	$N = 77$

Example Questions

How emotional is John?

	Please select ONE answer for each question				
	Not at all emotional		Cannot say		Very emotional
Currently?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How emotional will John be in one year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In five years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How independent is John?

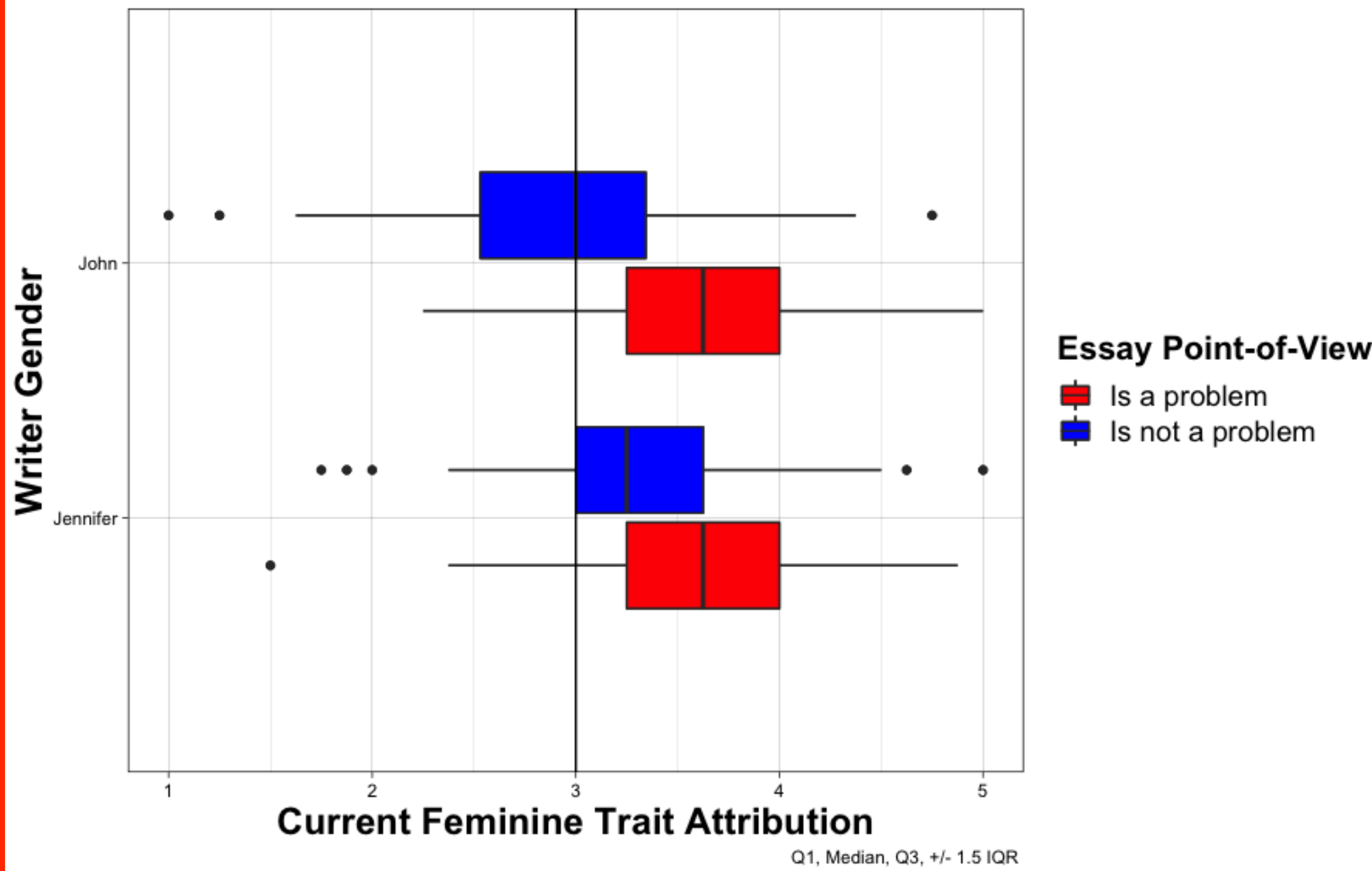
	Please select ONE answer for each question				
	Not at all independent		Cannot say		Very independent
Currently?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How independent will John be in one year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In five years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Questions probing feminine and masculine trait attributions when target-gender is male (student name as John)
- Attribution times (current to five-year) included simultaneously as matrix under single belief, feminine, or masculine trait
- Answers customized to trait, ranging from extremes (not at all to very much) with no attribution (cannot say) at center

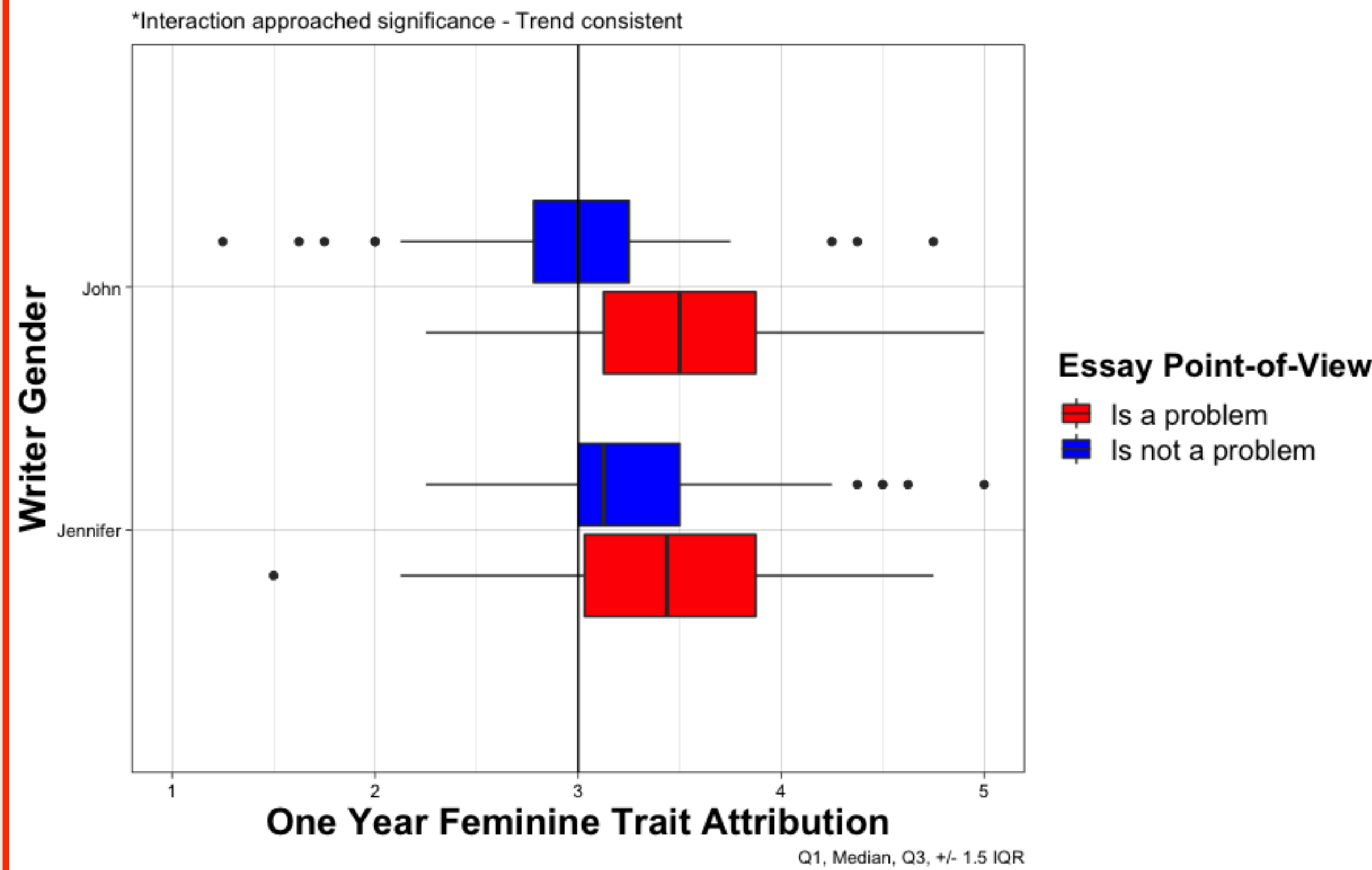
Results¹

- The initial overall **factorial MANOVA model** included target gender and essay point-of-view (POV) as **IVs** and the nine time/type attributions (*current belief, one-year belief, five-year belief : current feminine trait, one-year feminine trait, five-year feminine trait : current masculine trait, one-year masculine trait, five-year masculine trait*) as **DVs**. Using Pillai’s trace, there was a significant **interaction** between target gender and essay POV on the nine DV’s, $V = 0.07$, $F(9, 286) = 2.79$, $p = .004$. Using Pillai’s trace, there was also a strong **main effect** of essay POV on the nine DV’s, $V = 0.47$, $F(9, 286) = 28.09$, $p < .001$. **[Results Henceforth: 3 = No Attribution]**
- Separate **univariate ANOVA models** were used to follow-up the significant initial MANOVA. At the Bonferroni corrected significance level of $p < .0055$, there was a significant interaction on **current feminine trait attributions**, $F(1,294) = 12.72$, $p = .0004$. For **both target genders**, but especially for “John”, vignette students that wrote (assigned) essays arguing that gender inequality “is still a problem” received significantly **higher** feminine attribution scores (“John” - $M = 3.75$, $SD = 0.56$; “Jennifer” - $M = 3.61$, $SD = 0.64$) than those writing essays arguing that gender inequality “is no longer a problem” (“John” - $M = 2.92$, $SD = .70$; “Jennifer” - $M = 3.31$, $SD = 0.64$). The same effect approached significance ($p = .008$) and extended into **one year feminine trait attributions**.

Variable Interaction on Current Feminine Trait Attributions



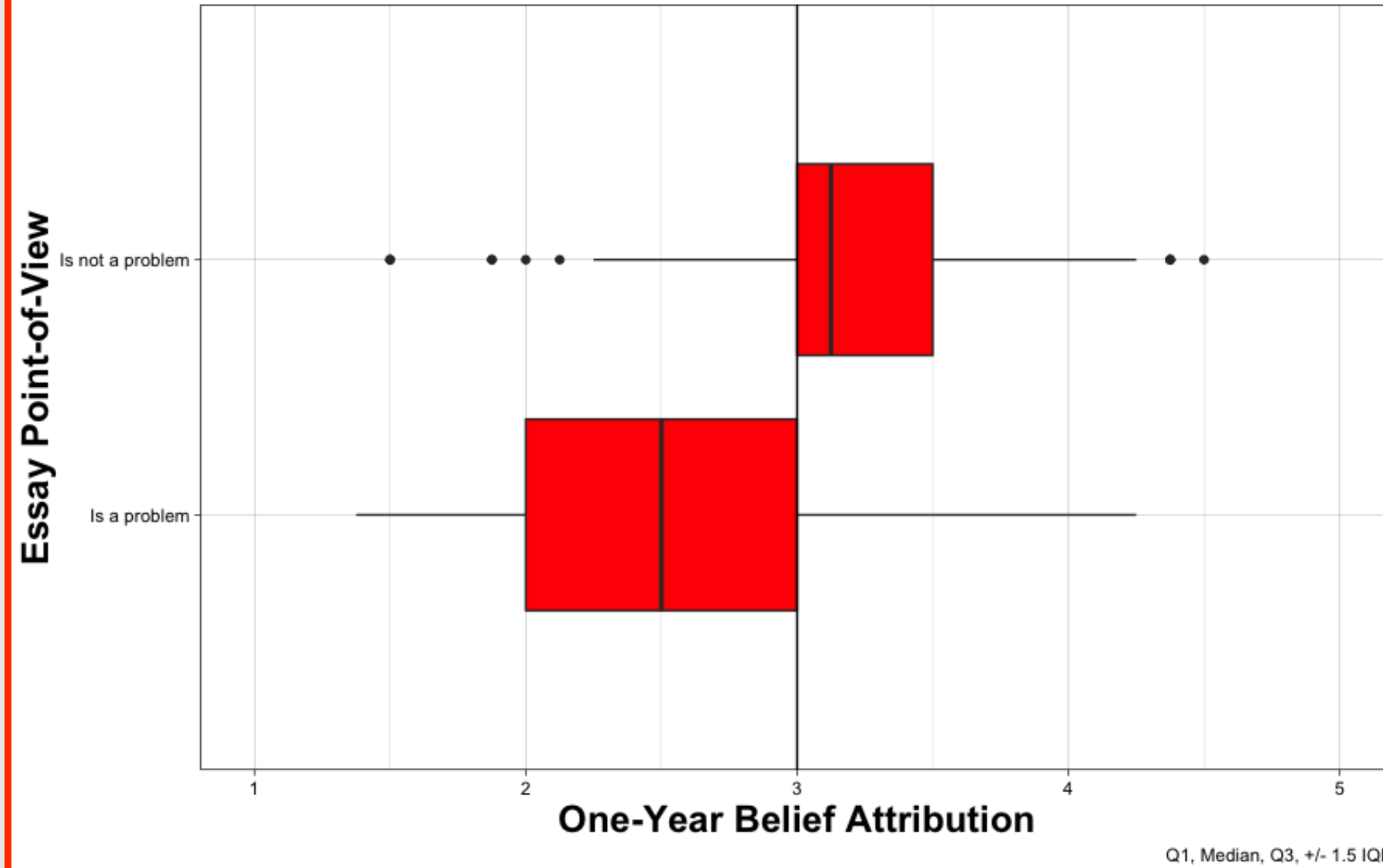
Variable Interaction on One Year Feminine Trait Attributions



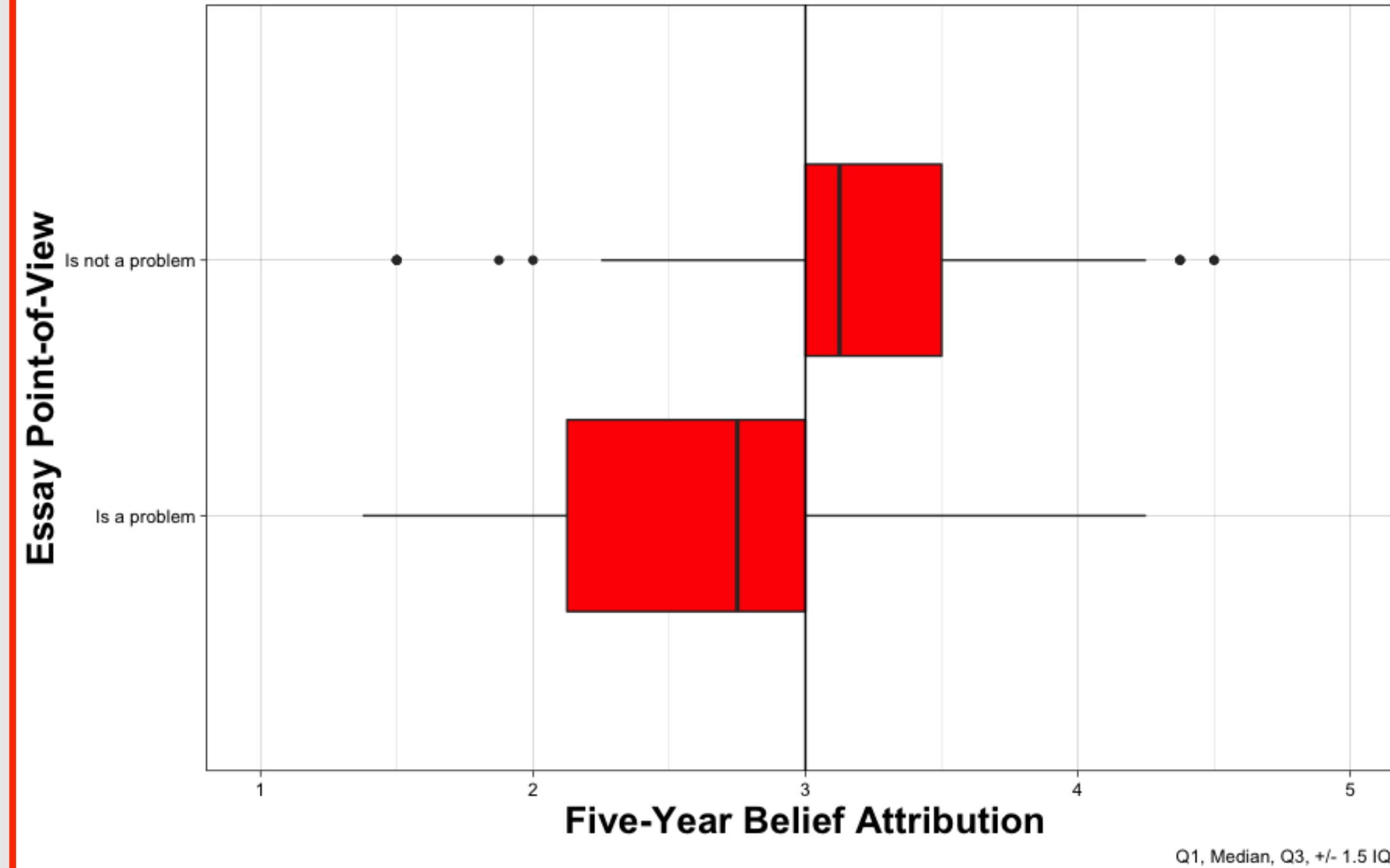
Results²

- Beyond the interaction, **essay point-of-view** had a highly significant and consistent effect across **all** belief and feminine trait attributions. Vignette students who wrote essays arguing that gender inequality “is still a problem” were rated as **less sexist** than students who wrote about how it was “still a problem.” The two graphs below illustrate this for one and five-year belief attributions.
- As an example, when probing current belief attributions, “Is a Problem” essay writers ($M = 2.34$, $SD = 0.59$) were rated as significantly less sexist than “Is not a problem” essay writers, $M = 3.29$, $SD = 0.59$, $F(1, 294) = 194.47$, $p < .001$
- There was also a more **general trend** observed when the attribution **types** (belief, feminine, masculine) were averaged across type, $F(1.68, 496.00) = 140.05$, $p < .001$. Participant’s **masculine attributions** ($M = 3.67$, $SD = 0.63$) were significantly higher than their feminine attributions ($M = 3.37$, $SD = 0.60$, $p < .001$) and their belief attributions ($M = 2.86$, $SD = 0.66$, $p < .001$).

Essay Point-of-View and One-Year Belief Attributions



Essay Point-of-View and Five-Year Belief Attributions



Special thank you to Dr. Russell for her advising on this project, the Winona State University Psychology Department for the use of space and resources, and Winona State’s Student Research Grant committee for financial support.

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*Electronically submit complete final report ten (10) days following completion of project to Grants & Sponsored Projects (grants@winona.edu).
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Student Major:	Graduated, Psychology		
Faculty Sponsor:	Elizabeth J. Russell Ph.D.	Faculty Sponsor Email:	erussell@winona.edu
Title of Project:	Correspondence bias: Gender effects across temporal scales		

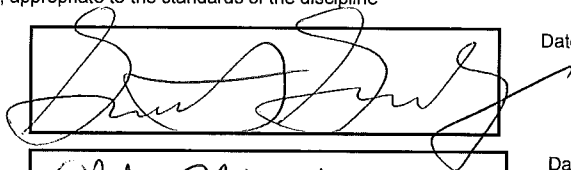
Project Abstract:

The tendency to attribute behavior to dispositional causes, even when other explanations are appropriate, is referred to as the correspondence bias (Gilbert & Malone, 1995). This bias is applied broadly and has robust empirical support (e.g., Bauman & Skitka, 2010; Stanley & Blanchard-Fields, 2011; Krull et al., 1999). The present study aimed to investigate the relationship between correspondence bias and gender. Additionally, we explored whether biased attributions are made regarding future predictions. Participants read one of four fictional essays written by either a male or female student that argues about the status of gender inequality in America, as required for an assignment. This breakdown yielded four conditions: male/inequality is a problem, female/inequality is a problem, male/inequality is not a problem, female/inequality is not a problem. After reading the essay, participants completed a survey that gauged their inferences about the beliefs and personality traits of the writer. Subjects were asked to make these inferences for the writer's current state, in addition to predicting how well these inferences would apply to the writer one year later and five years later. We collected data from 298 participants. This was analyzed using a 2 (stimulus gender) X 2 (essay point-of-view) MANOVA. Given prior research, we hypothesized that more dispositional attributions would be made for the female writer than the male writer. Additionally, we hypothesized that confidence in these attributions would decrease across time but ultimately remain as predictors of future beliefs and traits. Results showed an interaction between stimulus gender and essay point-of-view. There was also a main effect of essay point-of-view. These findings have implications for the domains of social and cognitive psychology and extend attribution theory research, in addition to being a powerful indicator of the current social climate regarding beliefs and attitudes toward gender.

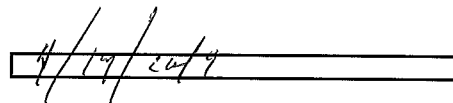
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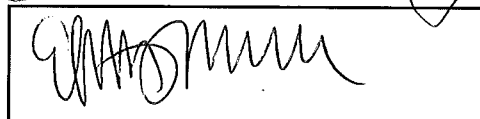
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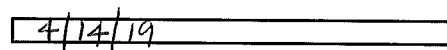
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