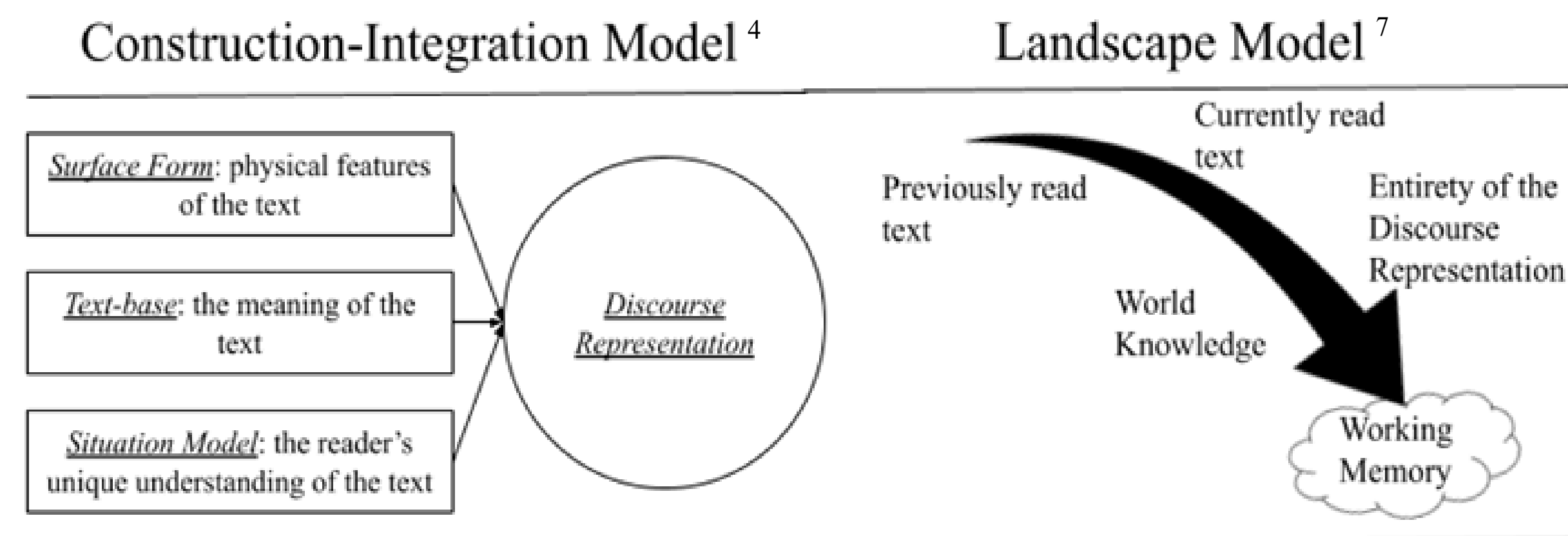


## Leading Models of Discourse:

### 1. Background



### Previous Literature:

- Albrecht & O'Brien (1993)<sup>1</sup>
  - Inconsistency Effect*
    - Inflated TRTs due to inconsistent information
- Rapp & Kendeou (2009)<sup>7</sup>
  - Inconsistency Effect* holds even when presented with explanatory information
- Meyer & Schvaneveldt (1971)<sup>6</sup>
  - Facilitated word recognition between semantically-related words

### Aims of the Current Study:

- Aim 1:** Examine Comprehension of Inconsistent Passages
- Aim 2:** Compare Potential Sources of *Inconsistency Effect*
- Aim 3:** Assess Size of *Inconsistency Effect* in L1 vs. L2

### 2. Research Questions

- Does the inconsistency effect extend from reading times into accuracy on explicit recall questions?
- Is the *Inconsistency Effect* a result of surface-form or textbase-level priming?
- Does the *Inconsistency Effect* disproportionately impact processing in the L1 or L2?

### 3. Hypotheses

- The *Inconsistency Effect* will impair comprehension accuracy for the single-character passages only.
- The *Inconsistency Effect* will disproportionately reduce comprehension accuracy in the L2.

## 4. Participants

Experiment 1 & 2 Demographics Summary		N = 97	Experiment 3 & 4 Demographics Summary		N = 125
Gender	(45 – Males, 51 – Females, 1 – Non-Binary)		(15 – Males, 109 – Females, & 1 – Non-Binary)		
Latino/Non-Latino	(59 – Hispanic/Latino, 38 – Non-Hispanic/Latino)		(All participants reported being Hispanic/Latino)		
Age	37.19 (11.44)		20.50 (3.46)		
English Age of Acquisition <sup>a</sup>	1.99 (2.39)		6.76 (4.94)		
Spanish Age of Acquisition <sup>a</sup>	6.63 (7.71)		4.95 (5.23)		
Reading <sup>b</sup>	9.47 (1.88)		9.04 (1.48)		
Writing	9.43 (1.87)		8.78 (1.68)		
Speaking	9.46 (1.85)		8.90 (1.58)		
Speech Comprehension	9.47 (1.87)		9.00 (1.65)		
Reading <sup>b</sup>	7.53 (1.94)		8.30 (2.13)		
Writing	7.01 (2.19)		7.89 (2.28)		
Speaking	7.50 (1.99)		8.31 (2.04)		
Speech Comprehension	7.90 (2.00)		8.49 (2.15)		

<sup>a</sup>in years  
<sup>b</sup>On a scale of 1-10

## 5. Materials and Procedures

- Language Proficiency**
  - Questions adapted from the LEAP-Q<sup>5</sup>
- Stimuli Passages**
  - Adapted from Albrecht & O'Brien (1993)<sup>1</sup>
- Comprehension Questions**
  - Choose all that apply questions
  - Accuracy Rates compared with ANOVAs

Choose all that apply:

- Mary recently graduated college
- Mary is vegan / Mary's friends are vegan
- Mary and her friends arrive to the restaurant
- Mary orders a hamburger
- Mary and her friends organize a protest

#### Consistent:

Mary is a recent college graduate. Through her college years she found herself becoming more concerned and dedicated to activism for good causes. For example, Mary is a devout supporter of farmers' rights and protection of cattle ranches. She even has a podcast on how to eat a plant-based diet. It is noon and Mary is just arriving at a new local restaurant. Soon after Mary's friends join her at the table. After a few minutes, the waiter comes to the table to take their order. Mary gives her order first, "I would like a hamburger and fries." Mary also adds a side of bacon and asks for cheese. Her friends order their food and then they discuss Mary's upcoming protest. The friends agree to join her efforts and they plan how to recruit even more people.

#### Inconsistent:

Mary is a recent college graduate. Through her college years she found herself becoming more concerned and dedicated to activism for good causes. For example, Mary is a strict vegan and attends animal rights' advocacy meetings and protests. She even has a podcast on how to eat a plant-based diet. It is noon and Mary is just arriving at a new local restaurant. Soon after Mary's friends join her at the table. After a few minutes, the waiter comes to the table to take their order. Mary gives her order first, "I would like a hamburger and fries." Mary also adds a side of bacon and asks for cheese. Her friends order their food and then they discuss Mary's upcoming protest. The friends agree to join her efforts and they plan how to recruit even more people.

#### Experiment 2:

Mary is a recent college graduate. Through her college years her friends found themselves becoming more concerned and dedicated to activism for good causes. For example, Mary's friends are devout supporters of farmers' rights and protection of cattle ranches. They know the importance of protecting the beef industry for those who depend on it. It is noon and Mary is just arriving at a new local restaurant. Soon after, Mary's friends join her at the table. After a few minutes, the waiter comes to the table to take their order. Mary gives her order first, "I would like a hamburger and fries." Mary also adds a side of bacon and asks for cheese. Her friends order their food and then they discuss Mary's upcoming protest. The friends agree to join her efforts and they plan how to recruit even more people.

## 7. Discussion

**Aim 1: Inconsistency Effect Evident in Comprehension Accuracy**

**Aim 2: Inconsistency Effect is a Result of Textbase-Level Priming**

**Aim 3: The Inconsistency Effect is the same across languages**

**H1: Supported** ✓

- Inconsistency Effect* observed in reduced comprehension of the Single-Character passages only

**H2: Not supported** ✗

- Inconsistency Effect* reduced comprehension accuracy in both languages

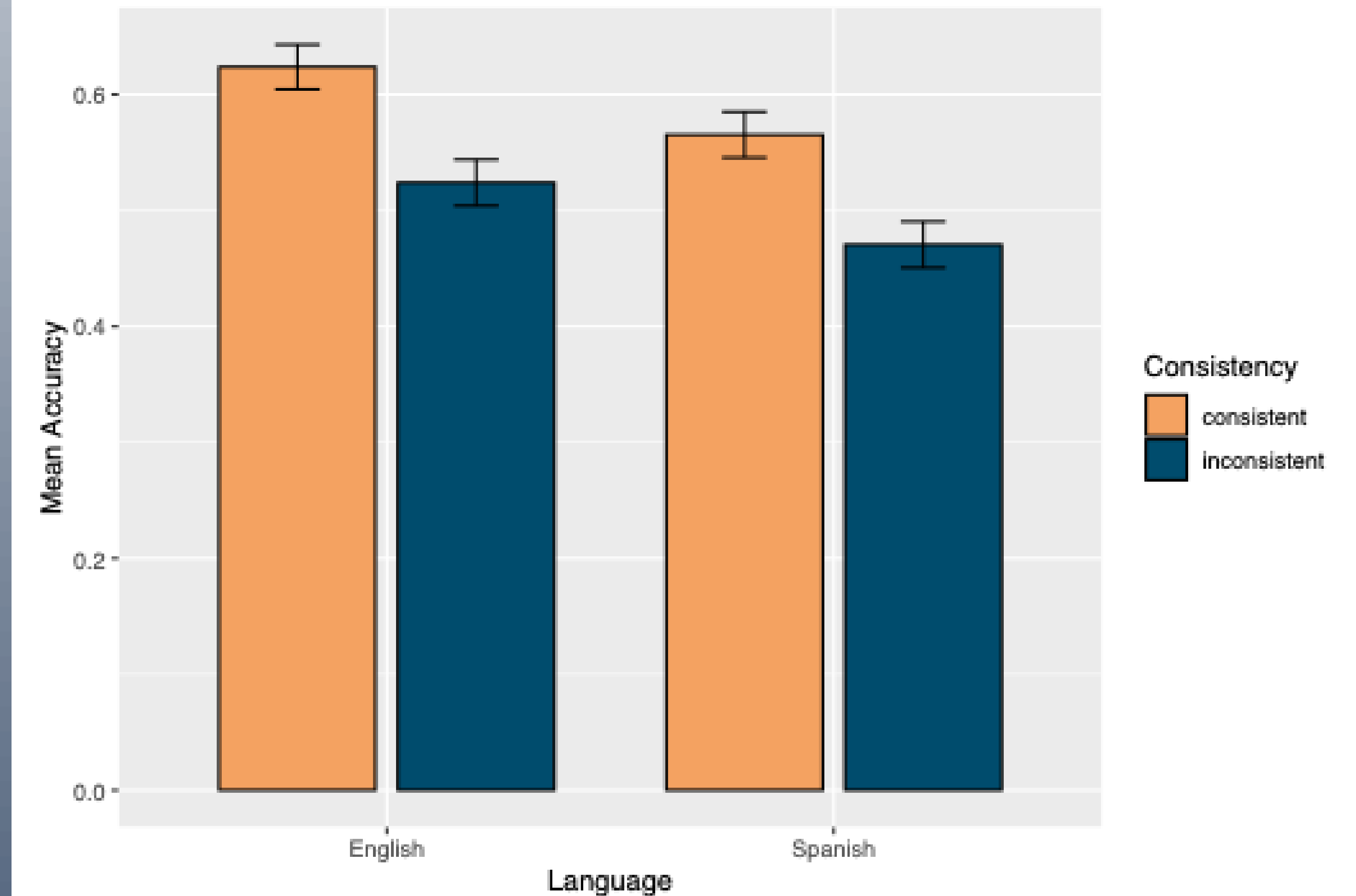
### Future Directions

- Analyze detection responses using Signal Detection Theory
- Analyze metacognitive ratings of confidence in the detection responses
- Obtain metrics on bilingual passages that are contain both English and Spanish

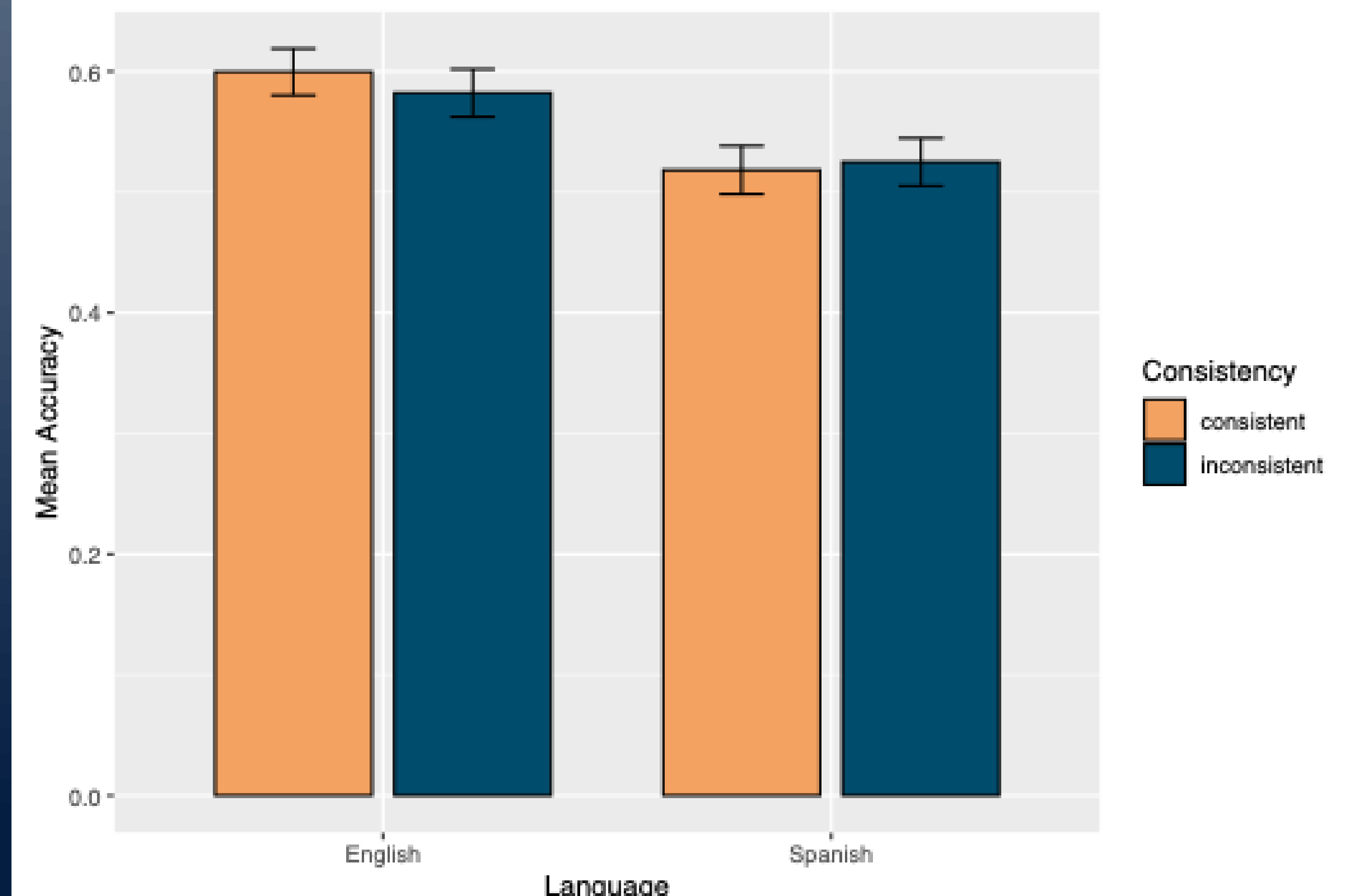
## 6. Results

	df	F	p-value	Partial η <sup>2</sup>
Experiment 1	1	9.76	.002	0.009
Experiment 2	1	0.09	.760	0.009
Experiment 3	1	3.94	.047	0.009
Experiment 4	1	2.27	.132	0.009

Mean Accuracy by Language and Consistency for Exps. 1 & 3



Mean Accuracy by Language and Consistency for Exps. 2 & 4



## References & Links

Citations



Master's Thesis



Lab Website

