

# Prediction isn't everything, but everything is prediction

## Abstract

Write an abstract

*Keywords:* prediction; explanation; OTHER KEYWORDS????

# 1 Introduction

## 2 Everything is prediction

### 2.1 Why is everything prediction?

- Strong claim: everything (or more or less everything) in inferential statistics can be re-framed through lens of prediction!
- Explanation via prediction
- Goal of Bayesian modeling should NOT be to find posterior, but rather to find posterior predictive distribution
- Parameters don't exist, must connect to observables
- Even model checking/development can be viewed as prediction exercises (prior pred checks, posterior pred checks)

### 2.2 Examples (especially including potential objections)

- Hypothesis testing (Billheimer 2019 example)
- Ability estimation (e.g., IRT)
- Treatment effect estimation
- Causal inference
- What else?

### **3 Prediction isn't everything**

- Don't worry statisticians, we don't only care about prediction
- We still care about understanding how a model works, not just predictive accuracy
- Etc.

### **4 Discussion**

Discuss

## **SUPPLEMENTARY MATERIAL**