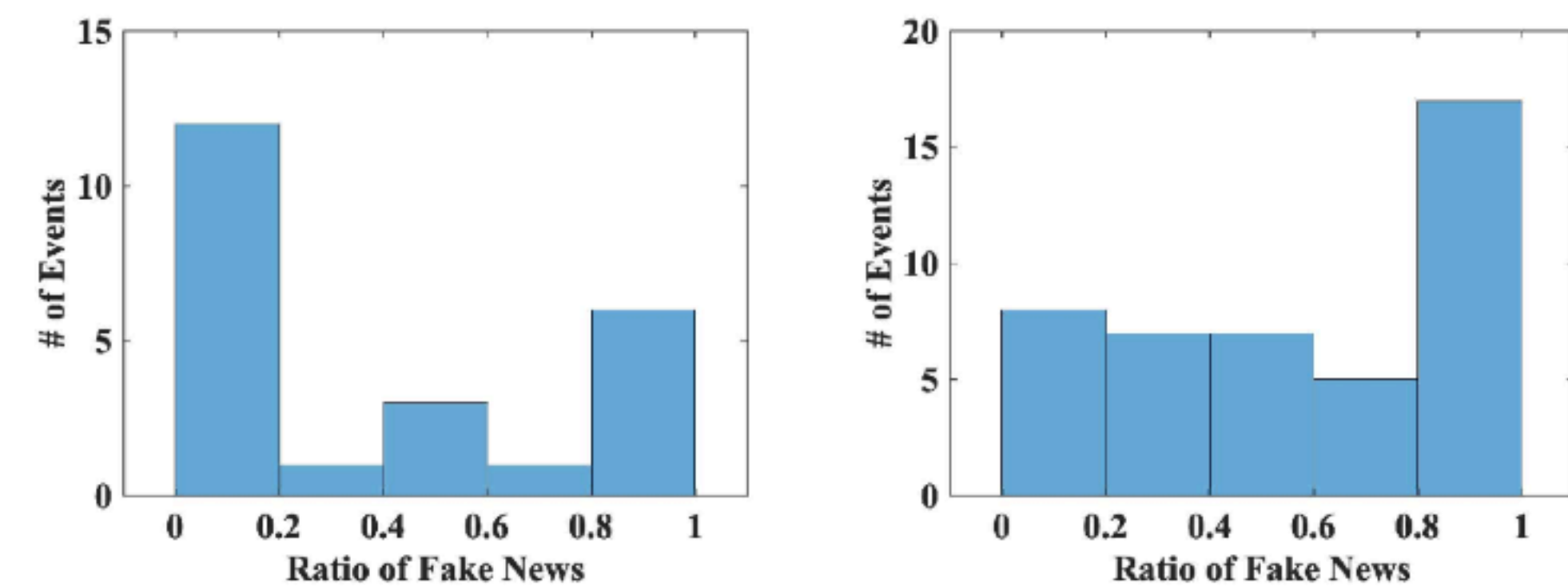


Introduction

Assumption of Meta-Learning Methods



The number of events with respect to different percentages of fake news.

- The assumption **usually doesn't hold in the fake news detection** problem as
 - the writing style, content, vocabularies, and even class distributions of news on different events usually tends to **differ**.
- Observed from the figure that the ratios of fake news on events are **significantly different**.
- The significant difference across events posts serious challenges on **event heterogeneity**, which cannot be simply handled by globally sharing knowledge.

Introduction

Neural process and its limitations

- Another research line of few-shot learning is **neural processes**, which conduct inference using a small set of data instances as conditioning.
- Even though neural processes show **better generalizability**,
 - they are based on a **fixed set of parameters** and usually suffer from the limitations like **under-fitting**,
 - thereby leading to unsatisfactory performance.