**Imputing Missing values in Relational Event History data:**

**A Framework for Social Network Research**

Kasper Hermanns (5211905)

Mahdi Shafiee Kamalabad

Gerko Vink

Applied Data Science, Master Thesis, Utrecht University

July 7th, 2024

### Contents

[**Abstract 3**](#_g2gxhjgzpci)

[**1. Introduction 4**](#_bdi63ky3l8w2)

[1.1 Networks 4](#_6xqdm0xfu7g)

[1.1.1 Relational Event History Data 4](#_hf882d4r0a2v)

[1.1.2 Relational Event Model 4](#_33oi0ltbq9jn)

[1.2 Missing Data 4](#_u3i1zbxi0hl)

[1.2.1 Simulating Missingness 4](#_z9tn0zwrasqf)

[1.2.2 Multiple Imputation 4](#_ltd6dfdmxkuu)

[**2. Data 5**](#_ifvundx1adzo)

[**3. Methods 6**](#_7gausetsf3rs)

[**4. Results 7**](#_w57lztmuxwch)

[**5. Discussion 8**](#_ekj5lqpjzbl)

[**6. Conclusion 9**](#_i1jsdspd3p5b)

[References 10](#_701cvms27mkk)

[Appendix 11](#_xfn648vz4yfn)

## Abstract

## 

## Introduction

### 1.1 Networks

#### 1.1.1 Relational Event History Data

#### 1.1.2 Relational Event Model

### 1.2 Missing Data

#### 1.2.1 Simulating Missingness

#### 1.2.2 Multiple Imputation

## Data

## Methods

## Results

## Discussion

## Conclusion

### References

### Appendix