

# Master Research Report: Multilevel Multivariate Imputation by Chained Equations through Bayesian Additive Regression Trees

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# **1 Introduction**

## **1.1 Introducing missing data, multiple imputation & multilevel data structure**

Incomplete data is a common challenge in many fields of research. A common approach for dealing with incomplete data is to remove all missing values from the data. However, this could possibly lead to biased results [van Buuren, 2018, Kang, 2013].

## **1.2 Literature review (difficulty of imputing multilevel data)**

## **1.3 Relevance of research**

## **1.4 Research question**

## **1.5 Hypotheses**

# **2 Method**

# **3 Results**

## References

- [Kang, 2013] Kang, H. (2013). The prevention and handling of the missing data. *Korean Journal of Anesthesiology*, 64(5):402.
- [van Buuren, 2018] van Buuren, S. (2018). *Flexible Imputation of Missing Data*. Chapman & Hall/CRC Interdisciplinary Statistics Series. CRC Press, Taylor & Francis Group, Boca Raton London New York, second edition edition.