Distance models for analysis of multivariate binary data

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Hailemichael Metiku Worku

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Distance Models for Analysis of Multivariate Binary Data

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit Leiden,

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volgens besluit van het College voor Promoties

te verdedigen op donderdag 20 december 2018

klokke 15.00 uur

door Hailemichael Metiku Worku

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Contents

Motto

7 Though your beginnings were modest, your latter days will be full of prosperity. (Job 8:7)

Research Articles

As presented below, the chapters of this dissertation are based on published (or to be submitted) articles.

- Chapter 3: Worku, H. M. & De Rooij, M. (2017). Properties of Ideal Point Classification Models for Bivariate Binary Data. *Psychometrika*, **82** (2), 308-328.

- Chapter 4: Worku, H. M. & De Rooij, M. (2018). A Multivariate Logistic Distance Model for the Analysis of Multiple Binary Responses. *Journal of Classification*, **35**, 1-23. `https://doi.org/10.1007/s00357-018-9251-4`

- Chapter 5: Worku, H. M. & De Rooij, M. **mldm**: An R package for Analyzing Multivariate Binary Data. The package can be retrieved from https://github.com/workuhm1/mldm-package-github.

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