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综述

缺失数据的识别与处理

沈琳¹, 陈千红², 谭红专¹

1. 中南大学公共卫生学院流行病与卫生统计学系, 长沙 410078;
2. 湖南邮电职业技术学院, 长沙 410015

摘要:

目的: 数据缺失在调查研究中是一个非常普遍的现象, 它的出现造成部分原始样本信息的损失, 在一定程度上危害研究结果的有效性, 需要引起研究者的重视。缺失数据产生的3类机制为完全随机缺失、随机缺失、非随机缺失。目前常见的缺失数据处理方法包括删除法、加权调整法、插补法、参数似然法, 其各有优缺点, 应针对缺失数据产生的机制选择相应的处理方法。

关键词: 缺失数据 缺失机制 调查研究

Identification and treatment of missing data

SHEN Lin¹, CHEN Qianhong², TAN Hongzhan¹

1. Department of Epidemiology and Health Statistics, Central South University, Changsha 410078;
2. Hunan Post and Telecommunication College, Changsha 410015, China

Abstract:

Missing data plagues almost all surveys and researches. The occurrence of missing data will cause losses of original sample information and undermine the validity of the research results to some extents, so researchers should attach great importance to this problem. In this article, we introduced 3 kinds of missingness mechanism, namely missing completely at random, missing at random, and not missing at random. We summarized some common approaches to deal with missing data, including deletion, weighting approach, imputation and parameter likelihood method. Since these methods had its pros and cons, we should carefully select the proper way to handle missing data according to the missingness mechanism.

Keywords: missing data missingness mechanism survey and research

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通讯作者: 谭红专, Email: tanhz99@qq.com

作者简介: 沈琳, 硕士研究生, 主要从事流行病与卫生统计学研究。

作者Email: tanhz99@qq.com

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