Title 1: Statistical disclosure methods for psychology: an application to a real dataset

Title 2: Statistical disclosure methods for open science in psychology

**Title 3: Anonymization of data for open science in psychology**

Title 4: Anonymization and synthetization of data from psychological studies

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There is great demand for making research data openly available. The replicability of findings in psychology has been questioned and more openly available data would make research more transparent and accessible. Unfortunately, many datasets cannot be made openly available due to privacy reasons. On the other hand, it is increasingly expected for researchers to share data with others for review, reanalysis, and reuse. To solve this issue, we suggest using methods of Statistical Disclosure Control. These methods either modify or synthetize data so that they can be disclosed without revealing confidential information that may be associated with specific respondents. In this presentation we review the work in this area and present different anonymisation approaches that can be used to protect data confidentiality. To prove the success of anonymising data, data utility is discussed as the main objective to be maximised while providing data with a disclosure risk below certain limits. The concepts are illustrated by means of a practical application example.

**Keywords**

open science, confidentiality, reproducibility, anonymization, synthetic data