Sample Size Calculations

Made Easy Using G*Power

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SAMPLE SIZE CALCULATIONS MADE EASY USING G*POWER

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Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

Sample Size Calculations Made Easy Using G*Power / Editors Wan Muhamad Amir W Ahmad, Mohamad Shafiq Mohd Ibrahim, Adam Husein, Mohd Fadhli Khamis
Includes index

ISBN 978-967-461-255-9

1. Sampling (Statistics) – Computer program. 2. Medical sciences – Research.
I. Mohamad Shafiq Mohd Ibrahim. II. Adam Husein. III. Mohd Fadhli Khamis.
005.55 QA277

Typeset in Cronos Pro

Copy Editor: Rosziana Radli
Cover Designer: Ahmad Fitri Ramli
Proofreader: Rosni Habib
Typesetter: Nur Syakirah Othman

Published by Penerbit Universiti Sains Malaysia, 11800 USM Pulau Pinang, Malaysia.
A member of the Malaysian Scholarly Publishing Council (MAPIM).

Printed by Sinaran Bros. Sdn. Bhd., 389 Lebuh Chulia, 10200 Pulau Pinang, Malaysia.

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Sample Size Calculations

Made Easy Using G*Power

G*power is a free software that helps researchers to calculate the sample size needed when conducting a research. The importance of sample size calculation is imperative for the knowledge of researchers. Sample size is very important in designing and planning a successful research as it involves time and financial planning. What is best about the G*power is that researchers can plan the real sample size according to their study design, such as minimum sample size for regression analysis with three predictor variables. This technique is commonly used when researchers need a quick decision on: "What is the sample size needed for an analysis?" This brief book illustrates how sample size is calculated based on specific statistical test. The step-by-step and simple discussions through simple presentation and easy-to-understand language used in this book help researchers to understand better about the sample size calculations.

Wan Muhamad Amir W Ahmad is a lecturer at the School of Dental Sciences, Universiti Sains Malaysia. He is a statistician by profession with PhD in Biostatistics. His core academic teaching includes biostatistics, statistical software application, statistics computing, statistical consultant, epidemiological research designs in health sciences research, research methodology, elementary statistics, time series forecasting, operational research, advanced statistics and design of experiment. He has vast experience in teaching undergraduate and postgraduate students. Dr. Wan Muhamad Amir is active in many aspects of biostatistics, having contributed to theoretical biostatistics in the areas of building statistical methodology, as well as conducting SPSS workshops. He also maintains active research interests in the theory and application of applied linear methods. His publications include more than 140 articles in local and international journals as well as more than 14 books on mathematics and statistics.

Mohamad Shafiq Mohd Ibrahim is currently pursuing his PhD in Biostatistics at the School of Dental Sciences, Universiti Sains Malaysia. He obtained his BSc in Financial Mathematics (2012) and MSc in Mathematics (2015) from Universiti Malaysia Terengganu. He has various experiences conducting SPSS workshops at the School of Informatics and Applied Mathemathics, Universiti Malaysia Terengganu. His research interest are in applied linear methods.

Adam Husein has been appointed as the Dean for the School of Dental Sciences, Universiti Sains Malaysia in April 2011. Graduated with BDS from University of Adelaide, Australia in 1996, he returned to work with the Ministry of Health Malaysia (1996–1999) before joining Universiti Sains Malaysia in 2000 as a trainee lecturer. From 2000 until 2004, he then continued his study at the University of Adelaide and successfully obtained Graduate Diploma in Clinical Dentistry, Doctor in Clinical Dentistry and Fellowship of the Royal Australasian College of Dental Surgeons (FRACDS). Previously, Professor Dr. Adam was appointed as Deputy Dean (Academic and Student Development) from 2005 till December 2009. He is also a senior lecturer at the Restorative Unit (Prosthodontics), School of Dental Sciences. His current research interests are dental biomaterials and stem cells.

Mohd Fadhli Khamis has been appointed as the Deputy Dean (Academic, Student and Alumni), School of Dental Sciences, Universiti Sains Malaysia since January 2013. He graduated from the University of Malaya in 1994 with a BDS. After working with the Ministry of Health for six years, he pursued postgraduate studies and obtained PhD (Dentistry) from the University of Adelaide in 2006. Currently, Dr. Mohd Fadhli is also coordinating forensic dentistry teaching at the School of Dental Sciences and School of Health Sciences. His research interests include dental anatomy and anthropology, and forensic odontology. He also serves as the member of USM Animal Ethics Committee providing statistical advice.

ISBN 978-967-461-255-9
9 789674 612559
RM37.00/USD12.00/GBP8.40

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