How Open Science Can Make Your Life Easier

Michael Mullarkey

Institute for Mental Health Research

Thank you!





WHAT THIS TALK IS NOT

Overview

- Get credit and find new ideas more quickly
- Test research questions without having to spend years collecting the data
- Save time by learning new methods more quickly and easily
- Catch potentially fatal (or just annoying) flaws in research design earlier

Overview

- Get credit and find new ideas more quickly
- Test research questions without having to spend years collecting the data
- Save time by learning new methods more quickly and easily
- Catch potentially fatal (or just annoying) flaws in research design earlier

SUBMITTING A PAPER IS A BIG DEAL, BUT IT CAN BE KIND OF ANTI-CLIMATIC



A free preprint service for the psychological sciences

Maintained by <u>The Society for the Improvement of Psychological Science</u>

<u>Powered by OSF Preprints</u>

Search preprints...

Search

or

Submit a preprint

See an example

Donate

Edit preprint

Using Network Analysis to Identify Central Symptoms of Adolescent Depression

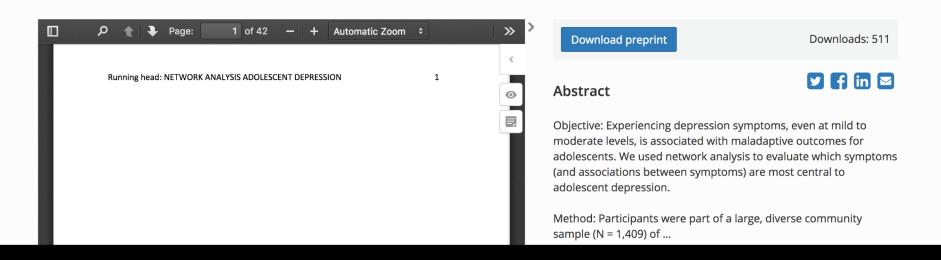
AUTHORS

Michael Mullarkey, Igor Marchetti, Christopher Beevers

CREATED ON July 20, 2017

LAST EDITED July 02, 2018 SUPPLEMENTAL MATERIALS osf.io/2hvfc/ ☑

⊘ Accepted: PsyArXiv uses post-moderation. This preprint has been accepted by a moderator and is publicly available and searchable.



CAN FIND OUT IMPORTANT INFO WAY EARLIER THAN NORMAL



PsyArXiv Preprints

My Preprints

Submit a Preprint

Search

Donate

Michael C Mullarkey -

The Replicability and Generalizability of Internalizing Symptom Networks Across Five Samples

AUTHORS
Carter Funkhouser, Kelly Correa

CREATED ON LAST EDITED
March 18, 2019 March 27, 2019

Overview

- Get credit and find new ideas more quickly
- Test research questions without having to spend years collecting data
- Save time by learning new methods more quickly and easily
- Catch potentially fatal (or just annoying) flaws in research design earlier

IT'S LUDICROUSLY HARD TO COLLECT ENOUGH DATA AS A STUDENT TO BE PROPERLY POWERED

NUMBER OF PEOPLE NEEDED FOR A MEDIUM EFFECT SIZE = 74

NUMBER OF PEOPLE NEEDED FOR A SMALL EFFECT SIZE = 543

OFTEN HAVE TO "BALANCE" RIGOR AND FEASIBILITY



ICPSR Fin

Find & Analyze Data

Log In/Create Account

FIND DATA SEARCH/COMPARE VARIABLES DATA-RELATED PUBLICATIONS RESOURCES FOR STUDENTS HELP

Find Data

GO view all

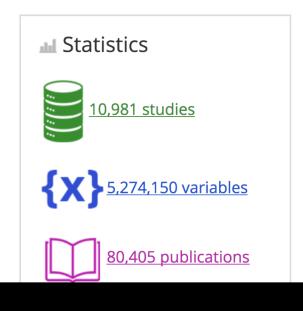
search tips ▼

<u>Topics</u> / <u>Series</u> / <u>Thematic data collections</u> / Global data

- List studies for which online analysis is available
- List replication datasets (more info)
- List studies with learning guides

New/Updated Data Releases:

- In the last week
- In the last month
- In the last quarter





Open Science Framework

A scholarly commons to connect the entire research cycle



FREE AND OPEN SOURCE. START NOW.



OSF**HOME** ▼

Full name

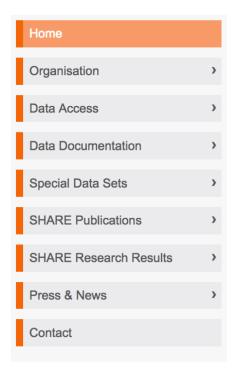


You are here: Home





Survey of Health, Ageing and Retirement in Europe



SHARE Blog



SHARE - Survey of Health, Ageing and Retirement in Europe

The Survey of Health, Ageing and Retirement in Europe (SHARE) is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of about 140,000 individuals aged 50 or older (around 380,000 interviews). SHARE covers 27 European countries and Israel.



The data are available to the entire research community free of charge. For a



SHARE Wave 7 data is now available!

We are very happy to announce SHARE Release 7.0.0!

Read more...

SHARE User Conference 2019 in Budapest, Hungary

Submit your paper now!

Read more...

Joint German & Dutch SHARE User Workshop

Submit your abstract until March 8th!

Read more...

Adolescent and School Health

CDC 24/7: Saving Lives, Protecting People™

Centers for Disease Control and Prevention

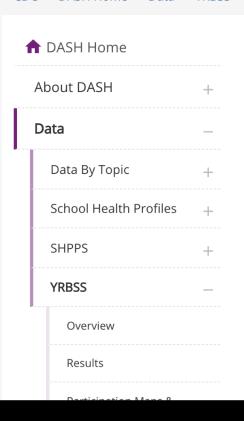
CDC > DASH Home > Data > YRBSS











YRBSS Data & Documentation

Youth Risk Behavior Survey (YRBS) data are available in two file formats: Access® and ASCII. The Access and ASCII data can be downloaded and used as is. Additionally, SAS® and SPSS® programs are provided to convert the ASCII data into SAS® and SPSS® datasets for use in those packages. Note: YRBS documentation files on this page are within the following file size ranges: pdfs: 45K-1M; dat files: 3M-5M; sas programs: 2K-15K; sps programs: 2K-25K; zip files: 2M-6M.

On This Page

Combined YRBS Datasets and Documentation

National YRBS Datasets and **Documentation**

YRBS Dataset File Formats

Combined YRBS Datasets and Documentation

ASCII

The combined YRBS dataset includes national, state and large urban school district data from selected

Access®

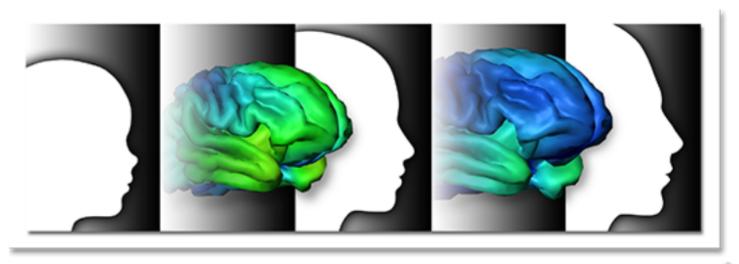
The combined YRBS dataset includes national, state and large urban school district data from selected



OpenNEURO

A free and open platform for analyzing and sharing neuroimaging data

ABCD Annual Release 2.0 Shared



Adolescent Brain Cognitive Development® Teen Brains. Today's Science. Brighter Future.

Overview

- Get credit and find new ideas more quickly
- Test research questions without having to spend years collecting data
- Save time by learning new methods more quickly and easily
- Catch potentially fatal (or just annoying) flaws in research design earlier

MY DISSERTATION HAS A LOT OF NETWORK ANALYSIS

WITHOUT OPEN CODE I WOULD HAVE NO IDEA HOW TO DO NETWORK ANALYSIS





→ Tutorials

Tutorials

New to psychological network analysis? Looking for an overview of the literature, or tutorials on how to estimate network models? This site contains a list of introduction and tutorial papers, articles, and blog posts. If you know of other good resources, please let me know so I can update the page.

Contents [hide]

- 1 Workshop materials
- 2 Psych-networks.com tutorials
- 3 Conceptual/theory papers and book chapters
- 4 R-tutorials
 - 4.1 Blogs
 - 4.2 Tutorial papers
 - 4.3 Other media
- 5 Limitations and criticism of the network approach

Open Science Framework

A scholarly commons to connect the entire research cycle



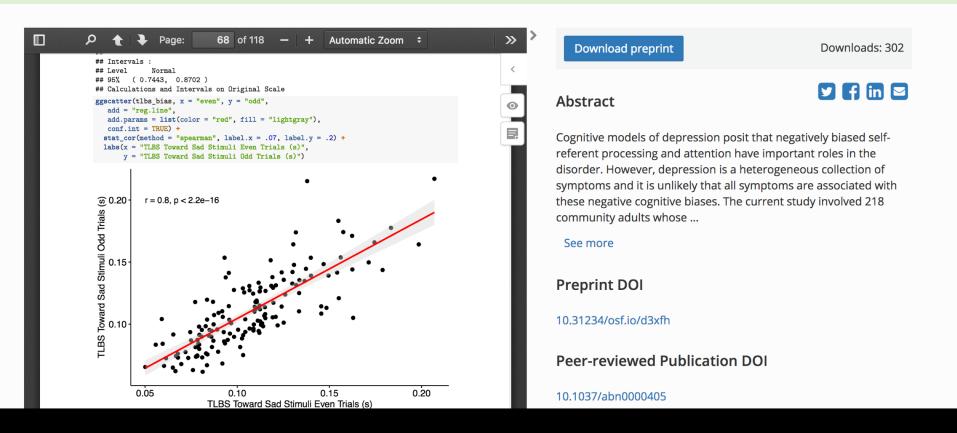
FREE AND OPEN SOURCE. START NOW.



OSF**HOME** ▼

Full name

② Accepted: PsyArXiv uses post-moderation. This preprint has been accepted by a moderator and is publicly available and searchable.



THIS IS SOMETHING THE OPEN SCIENCE COMMUNITY COULD DO A BETTER JOB OF ORGANIZING

Overview

- Get credit and find new ideas more quickly
- Test research questions without having to spend years collecting data
- Save time by learning new methods more quickly and easily
- Catch potentially fatal (or just annoying) flaws in research design earlier

WE ALL DON'T LIKE GETTING CAUGHT IN A NEVER-ENDING VORTEX OF ANALYSES

HARD TO KNOW WHEN TO STOP AND WHAT'S "REAL"

PLENTY OF TIMES WE'VE KICKED OURSELVES FOR STUDY DESIGN CHOICES AFTER THE FACT

PRE-REGISTRATION CAN HELP WITH BOTH PROBLEMS

Open Science Framework

A scholarly commons to connect the entire research cycle



FREE AND OPEN SOURCE. START NOW.



OSF**HOME** ▼

Full name

BUT WHAT IF YOU'RE WORRIED ABOUT PEOPLE NOT BEING COOL WITH NULL RESULTS?

FIRST, PRE-REG DOESN'T STOP YOU FROM DOING EXPLORATORY ANALYSES

Registered Reports: Peer review before results are known to align scientific values and practices.

Registered Reports

Participating Journals

Details & Workflow

Resources for Editors

For Funders

FAQ

Allied Initiatives

BUT ARE THOSE JUST FOR NOT SO GREAT JOURNALS?

NOPE!

JOURNAL OF THE AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

NATURE HUMAN BEHAVIOR

ALSO MIGHT BE WORTH THINKING HARD ABOUT WHAT OUR DEFINITION OF A "GOOD" JOURNAL IS

CONCLUSIONS

PREPRINTS CAN HELP YOU GET CREDIT AND LEARN NEW STUFF EARLIER

OPEN DATA CAN HELP YOU TEST YOUR RESEARCH QUESTIONS

SEEKING OUT OPEN CODE CAN HELP YOU LEARN NEW ANALYSES

PRE-REGISTRATION AND REGISTERED REPORTS CAN HELP FIX STUDY DESIGN PROBLEMS WHEN IT'S MORE HELPFUL

QUESTIONS?