

## Welcome to the easystats

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## Summary

The **easystats** project is a collection of R packages that provides a unified and intuitive framework for statistical analysis. The ecosystem is built around a “tidyverse-like” philosophy of consistency, user-friendliness, and interoperability between packages. It aims to simplify the process of preparing, conducting, interpreting, and reporting statistical analyses by offering tools for a wide range of common tasks. These tasks include, for instance, data wrangling (`{datawizard}`), model assessment (`{performance}`, Lüdecke, Ben-Shachar, Patil, Waggoner, & Makowski, 2021), understanding and describing model parameters (`{parameters}`, Lüdecke, Ben-Shachar, Patil, & Makowski, 2020), computation of effect sizes (`{effectsize}`, Ben-Shachar, Lüdecke, & Makowski, 2020), calculating and visualizing marginal effects (`{modelbased}`, Makowski et al., 2025), and generating publication-ready figures (`{see}`, Lüdecke, Patil, et al., 2021) or reports of statistical models (`{report}`). The easystats ecosystem is designed to be accessible to both novice and experienced R users, promoting reproducible research and a more seamless workflow from data exploration to result communication.

## Statement of Need

The R programming language is a powerful and dominant tool for statistical computing in academic research. However, its power is distributed across a vast and fragmented ecosystem of packages. For a researcher to conduct a comprehensive statistical analysis—from fitting a model to checking its assumptions, interpreting its parameters, and visualizing the results—they often need to learn and combine numerous packages, each with its own unique syntax, design principles, and output structures. This fragmentation presents a significant barrier to entry for new users and creates an inefficient and often confusing workflow for even experienced analysts.

The easystats ecosystem was developed to address this challenge by providing a unified, consistent, and intuitive framework for data wrangling, data exploration, statistical summaries and modeling, visualization, and reporting in R. Its primary goal is to make a robust and transparent statistical analysis more accessible to a broad range of users, from students to seasoned researchers. easystats achieves this through a suite of lightweight, interoperable, and modular packages, each designed to handle a specific stage of the statistical workflow. Because these packages share a consistent syntax and work seamlessly

together, they dramatically lower the cognitive load required to conduct such analytical workflows.

While other software toolkits exist, they often serve different purposes. The `{tidyverse}` (Wickham et al., 2019), for example, provides a world-class environment for data manipulation and general-purpose plotting but does not focus on the intricacies of statistical model interpretation and reporting. Specialist packages like `{lme4}` (Bates, Mächler, Bolker, & Walker, 2015) for mixed-effects models or `{marginaleffects}` (Arel-Bundock, Greifer, & Heiss, 2024) for marginal means are essential tools, but `easystats` serves as a complementary “meta-layer” that provides a single, easy-to-learn interface for interacting with the outputs from these and many other modeling packages. This allows researchers to focus on their scientific questions rather than on the technical idiosyncrasies of different software implementations.

Ultimately, `easystats` fills a critical need in the R ecosystem for a user-friendly and cohesive suite of tools dedicated to the statistical modeling pipeline. By simplifying complex tasks and promoting best practices, it empowers researchers to conduct more rigorous, reproducible, and transparent data analysis.

## Licensing and Availability

`{easystats}` is licensed under the MIT-License, with all source code stored at GitHub (<https://github.com/easystats/easystats>), and with a corresponding issue tracker for bug reporting and feature enhancements. In the spirit of honest and open science, we encourage requests, tips for fixes, feature updates, as well as general questions and concerns via direct interaction with contributors and developers.

## Acknowledgments

`{easystats}` is part of the collaborative [easystats](#) ecosystem. Thus, we thank the [members of easystats](#) as well as the users.

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