

# Package ‘essentialstools’

May 8, 2026

**Title** Datasets and Utilities for Essentials of Statistics for the Behavioral Sciences

**Version** 0.1.2

**Description** Provides instructional datasets and simple wrapper functions for selected analyses used in 'Essentials of Statistics for the Behavioral Sciences'. The package is intended to support textbook examples by distributing data in a form that is easy for students and instructors to access within R. Current functionality includes packaged datasets and convenience wrappers for functions from 'ez', 'pwr', and 'WebPower' for analysis of variance and statistical power calculations. The package is designed as a companion resource for teaching and learning in introductory and intermediate statistics courses.

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.3

**Depends** R (>= 3.5)

**LazyData** true

**Imports** ez, WebPower, pwr

**NeedsCompilation** no

**Author** James Witnauer [aut, cre]

**Maintainer** James Witnauer <jwitnaue@brockport.edu>

**Repository** CRAN

**Date/Publication** 2026-03-16 16:40:16 UTC

## Contents

birdRT . . . . .	2
run_ez_anova . . . . .	2
run_pwr_t_test . . . . .	3
run_wp_ttest . . . . .	3

<b>Index</b>	<b>5</b>
--------------	----------

---

birdRT	<i>Bird reaction time dataset</i>
--------	-----------------------------------

---

**Description**

A dataset used in the Essentials stats book chapter 3.

**Usage**

```
birdRT
```

**Format**

A data frame with the following columns:

**Subject** Participant identifier (character).

**Condition** Experimental condition (factor).

**ReactionTime** Reaction time (numeric).

**Source**

Imported from D:/data.CSV (original file location on author's machine).

**Examples**

```
head(birdRT)
```

---

run_ez_anova	<i>ezANOVA wrapper for Essentials tools</i>
--------------	---

---

**Description**

Convenience wrapper around `ez::ezANOVA()` used in the book.

**Usage**

```
run_ez_anova(...)
```

**Arguments**

... Passed to `ez::ezANOVA()`.

**Value**

The result from `ez::ezANOVA()`.

---

run_pwr_t_test	<i>pwr.t.test wrapper for Essentials tools</i>
----------------	--

---

**Description**

Convenience wrapper around `pwr::pwr.t.test()`.

**Usage**

```
run_pwr_t_test(...)
```

**Arguments**

... Passed to `pwr::pwr.t.test()`.

**Value**

The result from `pwr::pwr.t.test()`.

**Examples**

```
run_pwr_t_test(n = NULL,  
              d = 0.5,  
              sig.level = 0.05,  
              power = 0.8,  
              type = "one.sample")
```

---

run_wp_ttest	<i>webpower t-test wrapper for Essentials tools</i>
--------------	---

---

**Description**

Convenience wrapper around `WebPower::wp.t()` used in the book.

**Usage**

```
run_wp_ttest(...)
```

**Arguments**

... Passed to `WebPower::wp.t()`.

**Value**

The result from `WebPower::wp.t()`.

**Examples**

```
run_wp_ttest(n1 = 50,  
             d = 0.5,  
             alpha = 0.05,  
             power = NULL,  
             type = "one.sample")
```

# Index

## \* datasets

birdRT, 2

birdRT, 2

run\_ez\_anova, 2

run\_pwr\_t\_test, 3

run\_wp\_ttest, 3

WebPower::wp.t(), 3