

# Package ‘warmthcompetence’

May 11, 2026

**Type** Package

**Title** Warmth and Competence Detectors

**Version** 0.1.5

**Description**

Detects perceptions of warmth and competence in American English self-presentation language. Using trained elastic net regression models, this package provides a numerical representation of warmth and competence perceptions. Methods are described here:<<https://github.com/bushraguenoun/warmthcompetence/tree/master/paper>>.

**License** AGPL (>= 3)

**Encoding** UTF-8

**URL** <https://github.com/bushraguenoun/warmthcompetence>,  
<https://bushraguenoun.github.io/warmthcompetence/>

**BugReports** <https://github.com/bushraguenoun/warmthcompetence/issues>

**RoxygenNote** 7.3.3

**Imports** spacyr, caret, dplyr (>= 1.2.0), lexicon, ngram, qdap, politeness, qdapDictionaries, quanteda (>= 4.0.2), sentimentr, stats, tidyr, tidytext, tm, quanteda.textstats

**Depends** R (>= 4.1.0)

**Suggests** rmarkdown, knitr

**LazyData** true

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2026-05-11 18:40:02 UTC

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competence	<i>Competence Detector</i>
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### Description

Assesses warmth and competence perceptions in self-presentational natural language. These functions each take an N-length vector of self-presentational text documents and N-length vector of document IDs and return a warmth/competence perception score that represents how much warmth/competence others attribute the individual who wrote the self-presentational text. The function also contains a metrics argument that enables users to also return the raw features used to assess warmth and competence perceptions. Methods are described here: <https://github.com/bushraguenoun/warmthcompetence/tree/master/paper>.

### Usage

```
competence(text, ID = NULL, metrics = "scores")
```

```
warmth(text, ID = NULL, metrics = "scores")
```

### Arguments

text	character; a vector of texts, each of which will be assessed for warmth/competence.
ID	character; a vector of IDs that will be used to identify the warmth/competence scores.
metrics	character; an argument that allows users to decide what metrics to return. Users can return the warmth/competence scores ( <code>metrics = "scores"</code> ), the features that underlie the warmth/competence scores ( <code>metrics = "features"</code> ), or both the warmth/competence scores and the features ( <code>metrics = "all"</code> ). The default is to return the warmth/competence scores.

### Details

Some features depend on Spacyr which must be installed separately in Python.

### Value

The default is to return a data frame with each row containing the document identifier and the warmth/competence score. Users can also customize what is returned through the metrics argument. If `metrics = "features"`, then a data frame of warmth/competence features will be returned where each document is represented by a row. If `metrics = "all"`, then both the warmth/competence scores and features will be returned in a data frame.

## References

- Benoit, K., Watanabe, K., Wang, H., Nulty, P., Obeng, A., Müller, S., & Matsuo, A. (2018). quanteda: An R package for the quantitative analysis of textual data. *Journal of Open Source Software*, 3(30), 774. doi:10.21105/joss.00774
- Buchanan, E. M., Valentine, K. D., & Maxwell, N. (2018). The LAB: Linguistic Annotated Bibliography.
- Rinker, T. W. (2018). lexicon: Lexicon Data version 1.2.1.
- Rinker, T. W. (2021). sentimentr: Calculate Text Polarity Sentiment version 2.9.0.
- Yeomans, M., Kantor, A., & Tingley, D. (2019). The politeness Package: Detecting Politeness in Natural Language. *The R Journal*, 10(2), 489. doi:10.32614/RJ2018079

## Examples

```
data("example_data")

warmth_scores <- warmth(example_data$bio, metrics = "all")

example_data$warmth_predictions <- warmth_scores$warmth_predictions
warmth_model1 <- lm(RA_warm_AVG ~ warmth_predictions, data = example_data)
summary(warmth_model1)

competence_scores <- competence(example_data$bio, metrics = "all")

example_data$competence_predictions <- competence_scores$competence_predictions
competence_model1 <- lm(RA_comp_AVG ~ competence_predictions, data = example_data)
summary(competence_model1)
```

---

example\_data

*Example Data*

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## Description

40 random bios from the vignette data. 20 bios were randomly selected from the competence condition and 20 bios were randomly selected from the warmth condition.

## Usage

```
example_data
```

## Format

A dataframe with 40 rows and 11 columns

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`vignette_data`*Vignette Data*

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**Description**

Sample data from a study that can be used to test and explore the package. In this study, participants were asked to present themselves in either a warm or competent manner. Then, three judges blind to participant condition coded the introductions for warmth and competence.

**Usage**`vignette_data`**Format**

A dataframe with 393 rows and 11 columns

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