

Author Attribute Importance Analysis

September 26, 2025

Table 1: Women vs. All Other Attributes (excluding Racial Minorities)

Attribute	Women Mean (SD)	Other Mean (SD)	Difference	t	p-value	sig	Cohen's d
wrote at least one book that sold over 1 million copies.	3.81 (1.52)	4 (1.83)	-0.19	-0.41	0.685		-0.11
published their first book in last 5 years.	3.81 (1.52)	3.44 (1.83)	0.37	0.78	0.440		0.22
wrote one of the 500 most commonly taught books in US colleges.	3.81 (1.52)	4.16 (1.57)	-0.35	-0.81	0.421		-0.23
were born in the United States.	3.81 (1.52)	3.4 (2)	0.41	0.82	0.419		0.23
wrote at least one book that remained in continuous print for over 50 years.	3.81 (1.52)	4.23 (1.5)	-0.42	-1.01	0.319		-0.28
had their work translated into at least 20 languages.	3.81 (1.52)	3.28 (1.97)	0.53	1.07	0.291		0.30
ever wrote poetry.	3.81 (1.52)	3.24 (2.09)	0.57	1.11	0.275		0.31
wrote books, poems or essays spanning multiple genres.	3.81 (1.52)	4.33 (1.74)	-0.53	-1.13	0.263		-0.32
ever had their work adapted into a major motion picture.	3.81 (1.52)	3.29 (1.65)	0.52	1.14	0.258		0.33
wrote at least one book that appears on the American Library Association's banned books list.	3.81 (1.52)	3.24 (1.83)	0.57	1.20	0.236		0.34
ever wrote fiction.	3.81 (1.52)	4.4 (1.94)	-0.59	-1.21	0.232		-0.34
ever had their work included in a major literary anthology (e.g. Norton, Oxford).	3.81 (1.52)	3.16 (2.01)	0.65	1.29	0.203		0.36
won a Pulitzer Prize, Nobel Prize or National Book Award.	3.81 (1.52)	4.44 (1.76)	-0.63	-1.37	0.177		-0.38
wrote an autobiography.	3.81 (1.52)	3.12 (1.76)	0.69	1.49	0.143		0.42
wrote primarily about war and civil unrest.	3.81 (1.52)	3.12 (1.67)	0.69	1.54	0.131		0.43
have been writing professionally for over 30 years.	3.81 (1.52)	2.92 (1.61)	0.89	2.02	0.048	*	0.57
are still alive.	3.81 (1.52)	2.8 (1.76)	1.01	2.19	0.034	*	0.61
wrote more than 10 books.	3.81 (1.52)	2.84 (1.6)	0.97	2.21	0.032	*	0.62
died in the last century.	3.81 (1.52)	2.72 (1.79)	1.09	2.33	0.024	*	0.66
were born in the 1800s.	3.81 (1.52)	2.38 (1.38)	1.43	3.49	0.001	**	0.98
published their first book before the age of 25.	3.81 (1.52)	1.84 (1.31)	1.97	4.95	0.000	***	1.38

Table 2: Racial Minorities vs. All Other Attributes (excluding Women)

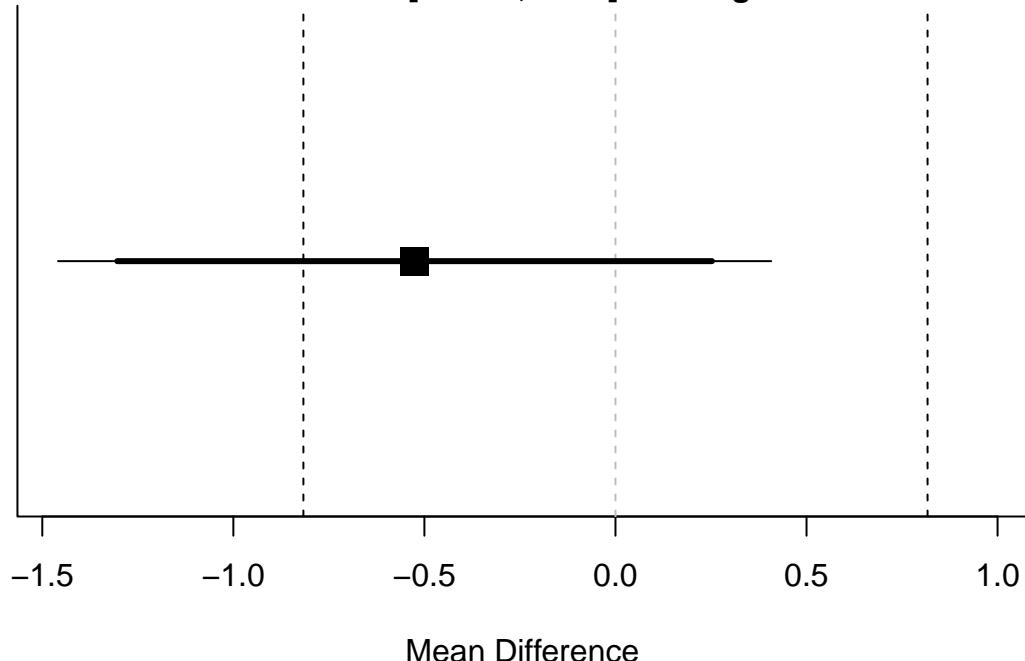
Attribute	Race Mean (SD)	Other Mean (SD)	Difference	t	p-value	sig	Cohen's d
published their first book in last 5 years.	3.67 (1.74)	3.44 (1.83)	0.23	0.45	0.658		0.13
were born in the United States.	3.67 (1.74)	3.4 (2)	0.27	0.50	0.620		0.14
wrote at least one book that sold over 1 million copies.	3.67 (1.74)	4 (1.83)	-0.33	-0.66	0.516		-0.19
had their work translated into at least 20 languages.	3.67 (1.74)	3.28 (1.97)	0.39	0.73	0.469		0.21
ever had their work adapted into a major motion picture.	3.67 (1.74)	3.29 (1.65)	0.38	0.77	0.448		0.22
ever wrote poetry.	3.67 (1.74)	3.24 (2.09)	0.43	0.78	0.440		0.22
wrote at least one book that appears on the American Library Association's banned books list.	3.67 (1.74)	3.24 (1.83)	0.43	0.84	0.407		0.24
ever had their work included in a major literary anthology (e.g. Norton, Oxford).	3.67 (1.74)	3.16 (2.01)	0.51	0.94	0.350		0.27
wrote one of the 500 most commonly taught books in US colleges.	3.67 (1.74)	4.16 (1.57)	-0.49	-1.04	0.303		-0.30
wrote an autobiography.	3.67 (1.74)	3.12 (1.76)	0.55	1.09	0.280		0.31
wrote primarily about war and civil unrest.	3.67 (1.74)	3.12 (1.67)	0.55	1.12	0.267		0.32
wrote at least one book that remained in continuous print for over 50 years.	3.67 (1.74)	4.23 (1.5)	-0.56	-1.22	0.228		-0.35
wrote books, poems or essays spanning multiple genres.	3.67 (1.74)	4.33 (1.74)	-0.67	-1.33	0.190		-0.38
ever wrote fiction.	3.67 (1.74)	4.4 (1.94)	-0.73	-1.40	0.169		-0.40
won a Pulitzer Prize, Nobel Prize or National Book Award.	3.67 (1.74)	4.44 (1.76)	-0.77	-1.55	0.128		-0.44
have been writing professionally for over 30 years.	3.67 (1.74)	2.92 (1.61)	0.75	1.56	0.125		0.45
wrote more than 10 books.	3.67 (1.74)	2.84 (1.6)	0.83	1.73	0.090		0.50
are still alive.	3.67 (1.74)	2.8 (1.76)	0.87	1.74	0.089		0.50
died in the last century.	3.67 (1.74)	2.72 (1.79)	0.95	1.88	0.067		0.54
were born in the 1800s.	3.67 (1.74)	2.38 (1.38)	1.29	2.86	0.007	**	0.82
published their first book before the age of 25.	3.67 (1.74)	1.84 (1.31)	1.83	4.14	0.000	***	1.19

Equivalence Tests for Key Attributes

Lack of a significant difference does not constitute evidence of equivalence. To test whether attributes are truly equivalent in importance to gender, we conduct Two One-Sided Tests (TOST) for equivalence. We use an equivalence bound of Cohen's $d = \pm 0.5$, a commonly accepted margin for establishing practical equivalence.

Interpretation: If both TOST p-values are < 0.05 , we can conclude that the difference falls within our equivalence bounds, providing evidence that the attributes are practically equivalent in importance.

Equivalence bounds -0.817 and 0.817
Mean difference = -0.526
TOST: 90% CI $[-1.304; 0.253]$ non-significant
NHST: 95% CI $[-1.459; 0.407]$ non-significant



```
## TOST results:  
## t-value lower bound: 0.628    p-value lower bound: 0.267  
## t-value upper bound: -2.90   p-value upper bound: 0.003  
## degrees of freedom : 45.96  
##  
## Equivalence bounds (Cohen's d):  
## low eqbound: -0.5  
## high eqbound: 0.5  
##  
## Equivalence bounds (raw scores):  
## low eqbound: -0.8167  
## high eqbound: 0.8167  
##  
## TOST confidence interval:  
## lower bound 90% CI: -1.304  
## upper bound 90% CI:  0.253
```

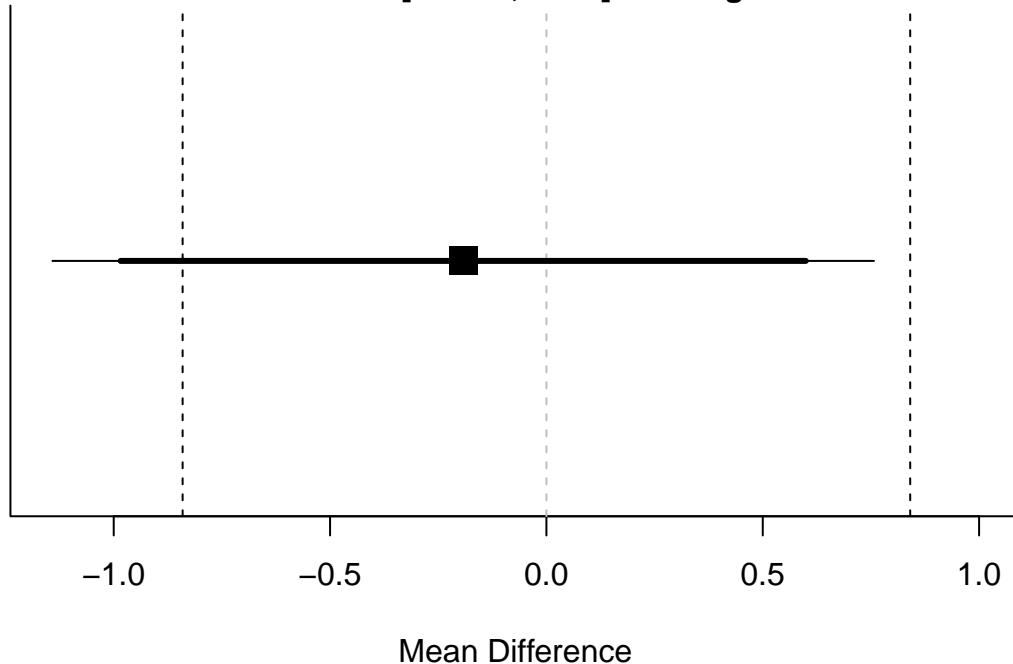
```

## 
## NHST confidence interval:
## lower bound 95% CI: -1.459
## upper bound 95% CI:  0.407
## 
## Equivalence Test Result:
## The equivalence test was non-significant, t(45.96) = 0.628, p = 0.267, given equivalence bounds of -0.841 and 0.841

## 
## Null Hypothesis Test Result:
## The null hypothesis test was non-significant, t(45.96) = -1.134, p = 0.263, given an alpha of 0.05.

```

Equivalence bounds -0.841 and 0.841
Mean difference = -0.192
TOST: 90% CI $[-0.984; 0.599]$ non-significant
NHST: 95% CI $[-1.142; 0.757]$ non-significant



```

## TOST results:
## t-value lower bound: 1.37      p-value lower bound: 0.088
## t-value upper bound: -2.19     p-value upper bound: 0.017
## degrees of freedom : 46.77
## 
## Equivalence bounds (Cohen's d):
## low eqbound: -0.5
## high eqbound: 0.5
## 
## Equivalence bounds (raw scores):
## low eqbound: -0.8407
## high eqbound: 0.8407
## 

```

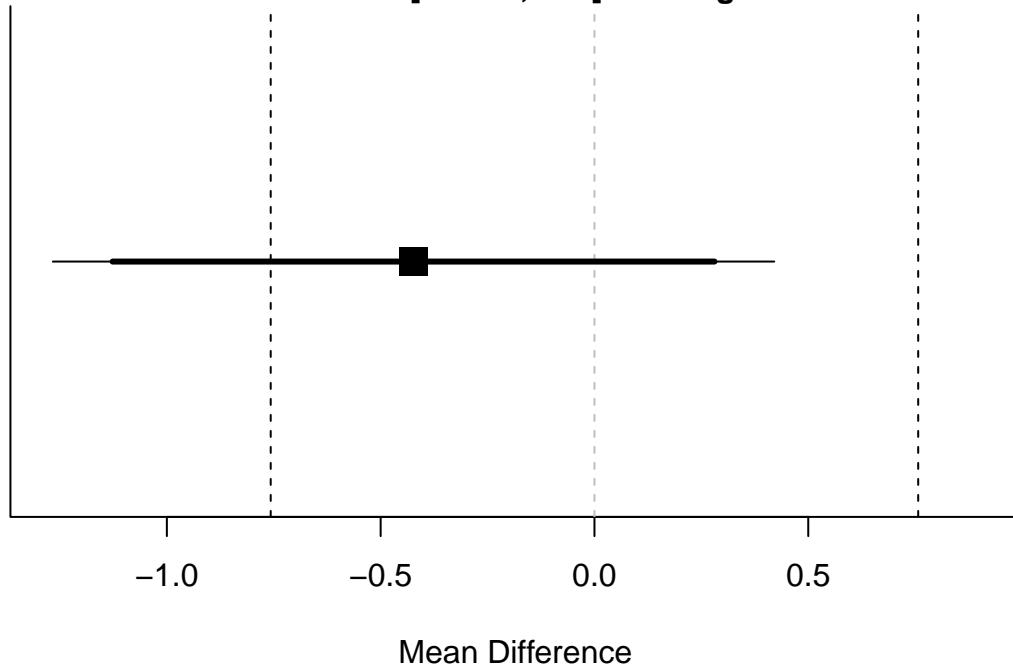
```

## TOST confidence interval:
## lower bound 90% CI: -0.984
## upper bound 90% CI:  0.599
##
## NHST confidence interval:
## lower bound 95% CI: -1.142
## upper bound 95% CI:  0.757
##
## Equivalence Test Result:
## The equivalence test was non-significant, t(46.77) = 1.374, p = 0.0879, given equivalence bounds of -0.757 and 0.757

## Null Hypothesis Test Result:
## The null hypothesis test was non-significant, t(46.77) = -0.408, p = 0.685, given an alpha of 0.05.

```

Equivalence bounds -0.757 and 0.757
Mean difference = -0.423
TOST: 90% CI [-1.127;0.281] non-significant
NHST: 95% CI [-1.267;0.42] non-significant



```

## TOST results:
## t-value lower bound: 0.795   p-value lower bound: 0.215
## t-value upper bound: -2.81   p-value upper bound: 0.004
## degrees of freedom : 49.99
##
## Equivalence bounds (Cohen's d):
## low eqbound: -0.5
## high eqbound: 0.5
##
## Equivalence bounds (raw scores):

```

```

## low eqbound: -0.7571
## high eqbound: 0.7571
##
## TOST confidence interval:
## lower bound 90% CI: -1.127
## upper bound 90% CI: 0.281
##
## NHST confidence interval:
## lower bound 95% CI: -1.267
## upper bound 95% CI: 0.42
##
## Equivalence Test Result:
## The equivalence test was non-significant, t(49.99) = 0.795, p = 0.215, given equivalence bounds of -0.7571 to 0.7571

##
## Null Hypothesis Test Result:
## The null hypothesis test was non-significant, t(49.99) = -1.007, p = 0.319, given an alpha of 0.05.

```

Table 3: Equivalence Tests: Gender vs. Key Attributes (equivalence bound $d = \pm 0.5$)

Attribute	Cohen's d	TOST p (lower)	TOST p (upper)	TOST p (max)	Equivalence
wrote books, poems or essays spanning multiple genres.	-0.526	0.2666	0.0029	0.2666	
wrote at least one book that sold over 1 million copies.	-0.192	0.0879	0.0168	0.0879	
wrote at least one book that remained in continuous print for over 50 years.	-0.423	0.2151	0.0035	0.2151	

Summary Statistics

```
## Total valid responses: 573  
  
## Number of unique attributes: 23  
  
## Sample sizes per attribute:
```

Attribute	N
were women.	26
wrote at least one book that remained in continuous print for over 50 years.	26
are still alive.	25
died in the last century.	25
ever had their work included in a major literary anthology (e.g. Norton, Oxford).	25
ever wrote fiction.	25
ever wrote poetry.	25
had their work translated into at least 20 languages.	25
have been writing professionally for over 30 years.	25
published their first book before the age of 25.	25
published their first book in last 5 years.	25
were born in the United States.	25
won a Pulitzer Prize, Nobel Prize or National Book Award.	25
wrote an autobiography.	25
wrote at least one book that appears on the American Library Association's banned books list.	25
wrote at least one book that sold over 1 million copies.	25
wrote more than 10 books.	25
wrote one of the 500 most commonly taught books in US colleges.	25
wrote primarily about war and civil unrest.	25
ever had their work adapted into a major motion picture.	24
were born in the 1800s.	24
were racial minorities.	24
wrote books, poems or essays spanning multiple genres.	24

Methods Note

This analysis uses:

1. **Independent samples t-tests** to compare mean importance ratings between attributes (between-subjects design)
2. **Cohen's d** as the effect size measure (using pooled standard deviation)
3. **TOST (Two One-Sided Tests)** procedure for equivalence testing with bounds of $d = \pm 0.5$
4. **Welch's correction** for unequal variances in t-tests

Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$