

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-statistic	p-value	sig	0
t17	wrote at least one book that sold over 1 million copies.	3.81 (1.52)	4 (1.83)	-0.19	-0.41	0.685		
t9	published their first book in last 5 years.	3.81 (1.52)	3.44 (1.83)	0.37	0.78	0.440		
t19	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		
t11	were born in the United States.	3.81 (1.52)	3.4 (2)	0.41	0.82	0.419		
t16	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		
t6	had their work translated into at least 20 languages.	3.81 (1.52)	3.28 (1.97)	0.53	1.07	0.291		
t5	ever wrote poetry.	3.81 (1.52)	3.24 (2.09)	0.57	1.11	0.275		

(continued)

	attribute	Women Mean (SD)	Other Mean (SD)	Difference	t- statistic	p-value	sig	0
t13	wrote books, poems or essays spanning multiple genres.	3.81 (1.52)	4.33 (1.74)	-0.53	-1.13	0.263		
t2	ever had their work adapted into a major motion picture.	3.81 (1.52)	3.29 (1.65)	0.52	1.14	0.258		
t15	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		
t4	ever wrote fiction.	3.81 (1.52)	4.4 (1.94)	-0.59	-1.21	0.232		
t3	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		
t12	won a Pulitzer Prize, Nobel Prize or National Book Award.	3.81 (1.52)	4.44 (1.76)	-0.63	-1.37	0.177		
t14	wrote an autobiography.	3.81 (1.52)	3.12 (1.76)	0.69	1.49	0.143		
t20	wrote primarily about war and civil unrest.	3.81 (1.52)	3.12 (1.67)	0.69	1.54	0.131		

(continued)

	attribute	Women Mean (SD)	Other Mean (SD)	Difference	t- statistic	p-value	sig	0
t7	have been writing professionally for over 30 years.	3.81 (1.52)	2.92 (1.61)	0.89	2.02	0.048	*	
t	are still alive.	3.81 (1.52)	2.8 (1.76)	1.01	2.19	0.034	*	
t18	wrote more than 10 books.	3.81 (1.52)	2.84 (1.6)	0.97	2.21	0.032	*	
t1	died in the last century.	3.81 (1.52)	2.72 (1.79)	1.09	2.33	0.024	*	
t10	were born in the 1800s.	3.81 (1.52)	2.38 (1.38)	1.43	3.49	0.001	**	
t8	published their first book before the age of 25.	3.81 (1.52)	1.84 (1.31)	1.97	4.95	0.000	***	

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

	attribute	Race Mean (SD)	Other Mean (SD)	Difference	t- statistic	p-value	sig	0
t9	published their first book in last 5 years.	3.67 (1.74)	3.44 (1.83)	0.23	0.45	0.658		
t11	were born in the United States.	3.67 (1.74)	3.4 (2)	0.27	0.50	0.620		
t17	wrote at least one book that sold over 1 million copies.	3.67 (1.74)	4 (1.83)	-0.33	-0.66	0.516		
t6	had their work trans- lated into at least 20 lan- guages.	3.67 (1.74)	3.28 (1.97)	0.39	0.73	0.469		
t2	ever had their work adapted into a major motion picture.	3.67 (1.74)	3.29 (1.65)	0.37	0.77	0.448		
t5	ever wrote poetry.	3.67 (1.74)	3.24 (2.09)	0.43	0.78	0.440		
t15	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		

(continued)

	attribute	Race Mean (SD)	Other Mean (SD)	Difference	t- statistic	p-value	sig	0
t3	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		
t19	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		
t14	wrote an autobiography.	3.67 (1.74)	3.12 (1.76)	0.55	1.09	0.280		
t20	wrote primarily about war and civil unrest.	3.67 (1.74)	3.12 (1.67)	0.55	1.12	0.267		
t16	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		
t13	wrote books, poems or essays spanning multiple genres.	3.67 (1.74)	4.33 (1.74)	-0.67	-1.33	0.190		
t4	ever wrote fiction.	3.67 (1.74)	4.4 (1.94)	-0.73	-1.40	0.169		
t12	won a Pulitzer Prize, Nobel Prize or National Book Award.	3.67 (1.74)	4.44 (1.76)	-0.77	-1.55	0.128		

(continued)

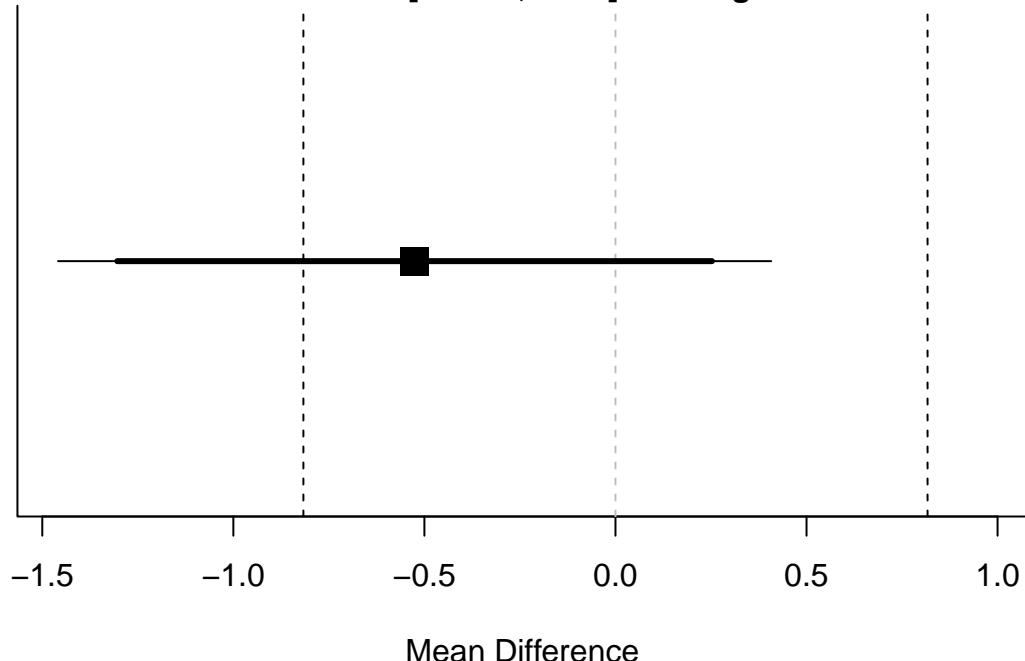
	attribute	Race Mean (SD)	Other Mean (SD)	Difference	t- statistic	p-value	sig	0
t7	have been writing professionally for over 30 years.	3.67 (1.74)	2.92 (1.61)	0.75	1.56	0.125		
t18	wrote more than 10 books.	3.67 (1.74)	2.84 (1.6)	0.83	1.73	0.090		
t	are still alive.	3.67 (1.74)	2.8 (1.76)	0.87	1.74	0.089		
t1	died in the last century.	3.67 (1.74)	2.72 (1.79)	0.95	1.88	0.067		
t10	were born in the 1800s.	3.67 (1.74)	2.38 (1.38)	1.29	2.86	0.007	**	
t8	published their first book before the age of 25.	3.67 (1.74)	1.84 (1.31)	1.83	4.14	0.000	***	

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
```

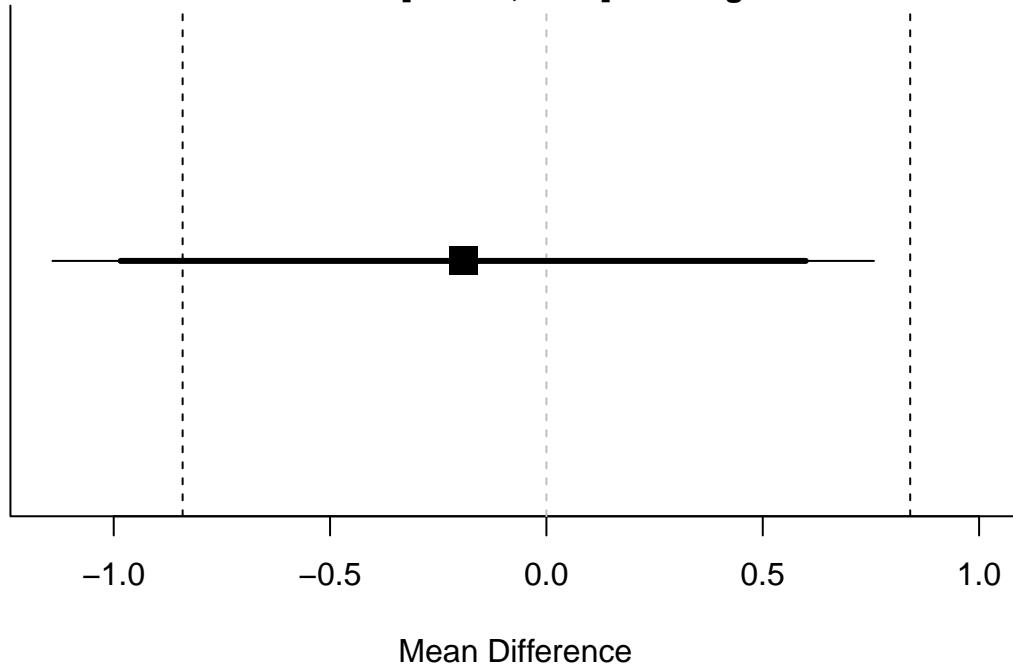
```

## 
## 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
## 

```

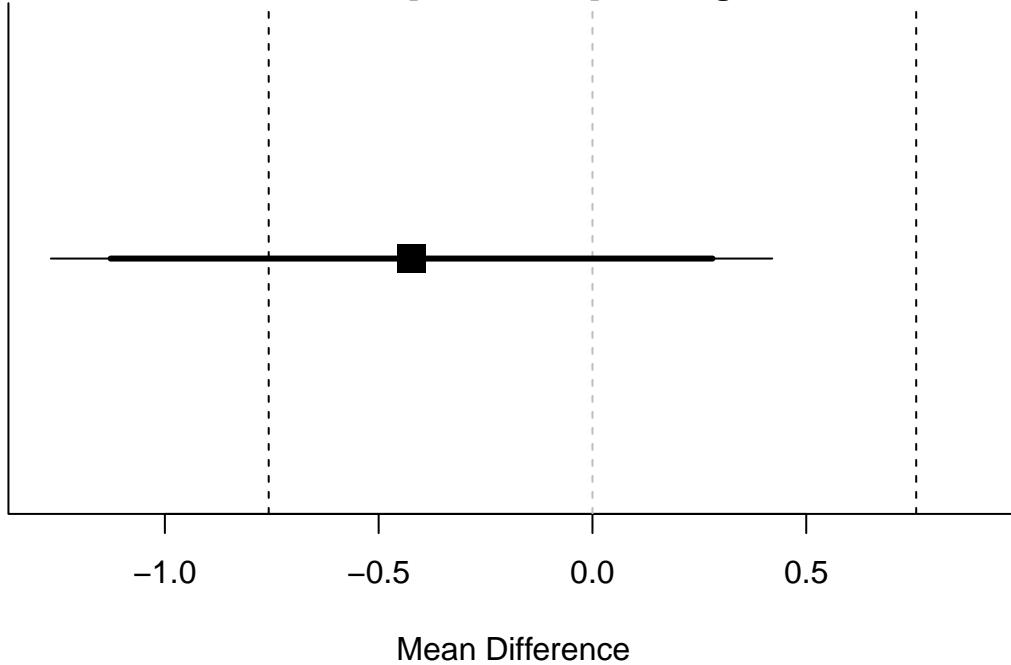
```

## 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 $d = <U+00B1>0.5$)

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	

Interpretation

- ** spanning multiple genres **: NOT EQUIVALENT to gender (TOST p = 0.2666). We cannot conclude equivalence within $d = <U+00B1>0.5$ bounds.
- ** sold over 1 million copies **: NOT EQUIVALENT to gender (TOST p = 0.0879). We cannot conclude equivalence within $d = <U+00B1>0.5$ bounds.
- ** remained in continuous print for over 50 years **: NOT EQUIVALENT to gender (TOST p = 0.2151). We cannot conclude equivalence within $d = <U+00B1>0.5$ bounds.

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