```
Last login: Mon Dec 19 17:24:37 on ttys000
(base) jinyanxiang@MacBook-Pro ~ % cd /Users/jinyanxiang/Desktop/In
equality_sharing_economy_og/experiments
(base) jinyanxiang@MacBook-Pro experiments % python3 inequality_SE_
experiments_analysis.py

:::ALL METHODS:::

['chi_squared_test', 'compute_measure_mean', 'get_bar_plot', 'get_c
ondition_level', 'get_correlation_matrix', 'get_design_info', 'get_
sample_info', 'get_var_distribution', 'get_var_info', 'median_test'
, 'meta_data', 'moderation_mediation_analysis', 'n_way_anova', 'one
_way_ancova', 'one_way_anova', 'reliability_check', 'two_sample_t_t
est']
...
...

:::ANALYSIS FOR EXPRIMENT 1:::

...Getting design information of experiment 1 - manipulation pretes
t...

Experiment Information is:  one-factor between-subject design facto
r - inequality (high(1) vs. low(0)), manipulation pretest

...Getting sample information of experiment 1 - manipulation pretes
t...

Sample Size = 122
inequality
0    62
1    60
dtype: int64

...Getting variable information of experiment 1 - manipulation pret
est...

Variables are:
 focal condition: inequality
 moderation condition: NA
 manipulation measure(s): ['check_1', 'check_2', 'check_3']
 mediator measure(s): []
 dv measure(s): []
```

...Checking the reliability of the manipulation check measures...

Crohnbach Alpha = 0.9 (3 items, manipulation check pretest for E1)

...Checking the manipulation in E1 pretest...

Manipulation Check Results (independent t-test, two-sided)

```
             count      mean       std       min       25%       50%
       75%       max
inequality

0             62.0  2.655914  1.319557  1.000000  1.666667  2.333333
  3.666667  6.333333
1             60.0  6.105556  1.081416  3.666667  5.333333  6.666667
  7.000000  7.000000
              T      dof alternative  p-val       CI95%  cohen-d       BF10  power
T-test  15.815  116.858   two-sided    0.0  [3.02, 3.88]    2.855  4.702e+27    1.0
...
...
```

...Getting design information of experiment 1...

Experiment Information is: one-factor between-subject design factor - inequality (high(1) vs. low(0)), lodge-sharing, main

...Getting sample information of experiment 1...

```
Sample Size = 202
inequality
0    100
1    102
dtype: int64
```

...Getting variable information of experiment 1...

```
Variables are:
 focal condition: inequality
 moderation condition: NA
 manipulation measure(s): []
```

```
 mediator measure(s): []
 dv measure(s): ['dv_willingness']
```

...Checking the group difference by condition on DV (willingness) in experiment 1 (ANOVA)...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of transform-like apply. In the future, the group keys will be included in the index, regardless of whether the applied function returns a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Willingness to choose the lodge-sharing service (vs. a comparable hotel) (DV) Results (one-way ANOVA)

             count      mean       std  min   25%  50%  75%  max
inequality
0            100.0  4.700000  1.839521  1.0  3.75  5.0  6.0  7.0
1            102.0  4.088235  1.829911  1.0  3.00  4.0  6.0  7.0
    Source       SS   DF      MS      F  p-unc     n2
0  inequality   18.898    1  18.898  5.614  0.019  0.027
1      Within  673.206  200   3.366    NaN    NaN    NaN
...
...
```

:::ANALYSIS FOR EXPRIMENT 2:::

...Getting design information of experiment 2...

```
Experiment Information is: one-factor between-subject design factor - inequality (high(1) vs low(0)), p2p (mock listing), mediation
```

...Getting sample information of experiment 2...

```
Sample Size = 160
```

```
inequality
0    78
1    82
dtype: int64
```

...Getting variable information of experiment 2...

```
Variables are:
 focal condition: inequality
 moderation condition: NA
 manipulation measure(s): ['check_1', 'check_2', 'check_3']
 mediator measure(s): ['med_trust', 'med_trustworthy']
 dv measure(s): ['dv_lending_amount', 'dv_willingness']
```

...Checking the reliability of the manipulation check in experiment 2...

```
Crohnbach Alpha = 0.894 (3 items, manipulation check: perceived ine
quality)
```

...Checking the manipulation in experiment 2...

```
Manipulation Check Results (independent t-test, two-sided)

             count      mean       std       min       25%       50%
       75%  max
inequality

0            78.0  3.931624  1.245319  1.333333  3.000000  3.666667
  4.333333  7.0
1            82.0  6.227642  0.829626  3.333333  5.666667  6.333333
  7.000000  7.0              T      dof alternative  p-val
  CI95%  cohen-d      BF10  power
T-test -13.654  133.174   two-sided    0.0  [-2.63, -1.96]    2.181
  1.42e+25    1.0
```

...Checking the reliability of the mediator in experiment 2...

```
Pearson Correlation = 0.909 (2 items, mediatior_interpersonal_trust
)
```

...Checking the group difference by condition on mediator (interper

sonal trust) in experiment 2...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of transform-like apply. In the future, the group keys will be included in the index, regardless of whether the applied function returns a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Mediator Results (one-way ANOVA)

             count      mean       std  min  25%  50%    75%  max
inequality
0             78.0  4.705128  1.302933  1.0  4.0  4.5  5.875  7.0
1             82.0  4.140244  1.434311  1.0  3.5  4.0  5.000  7.0
     Source        SS   DF      MS      F  p-unc     n2
0  inequality   12.756    1  12.756  6.778   0.01  0.041
1      Within  297.355  158   1.882    NaN    NaN    NaN
```

...Plotting the distribution of the first DV lending amount...

...Checking the group difference by condition on DV (lending amount) in experiment 2 (Median Test due to irregular distribution of the lending amount)...

```
Lending Amount in USD (DV1) Results (median test)

the contigency table is
                     low inequality  high inequality
equal_below_median               37               53
above_median                     41               29

Chi-square(df = 1) = 4.805, p = 0.028
Chi-square (with Yates Correction)(df = 1) = 4.131, p = 0.042
Fisher exact test p = 0.038
```

...Checking the group difference by condition on DV (willingness) in experiment 2 (ANOVA)...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of transform-like apply. In the future, the group keys will be included in the index, regardless of whether the applied function returns a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Willingness to lend (DV2) Results (one-way ANOVA)

             count      mean       std  min   25%  50%  75%  max
inequality
0             78.0  4.371795  1.698808  1.0  3.00  4.0  6.0  7.0
1             82.0  3.743902  1.698300  1.0  2.25  4.0  5.0  7.0
    Source      SS   DF      MS      F  p-unc     n2
0  inequality   15.76    1  15.760  5.463  0.021  0.033
1      Within  455.84  158   2.885    NaN    NaN    NaN
```

...Mediation Analysis experiment 2...

```
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:33: DeprecationWarning: the `interpolation=` argument to percentile was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:34: DeprecationWarning: the `interpolation=` argument to percentile was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher")
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
```

om)

```
************************** SPECIFICATION ************************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = median_coded
    m1 = mediatior_interpersonal_trust

Sample size:
160

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

************************** OUTCOME MODELS ************************
******

Outcome = median_coded
OLS Regression Summary

     R²  Adj. R²    MSE       F  df1  df2  p-value
 0.2886   0.2749 0.1784 31.8464    2  157   0.0000

Coefficients

                                coeff     se       t      p    LLCI
    ULCI
Cons                          -0.3450 0.1248 -2.7648 0.0064 -0.5896
 -0.1004
inequality                    -0.0675 0.0682 -0.9887 0.3243 -0.2012
  0.0663
mediatior_interpersonal_trust  0.1850 0.0245  7.5542 0.0000  0.1370
  0.2330

------------------------------------------------------------------
------
```

```
Outcome = mediatior_interpersonal_trust
OLS Regression Summary

     R²  Adj. R²    MSE      F  df1  df2  p-value
 0.0411   0.0289 1.8820 6.7778    1  158   0.0101

Coefficients

             coeff     se       t      p    LLCI    ULCI
Cons        4.7051 0.1553 30.2907 0.0000  4.4007  5.0096
inequality −0.5649 0.2170 −2.6034 0.0101 −0.9902 −0.1396

------------------------------------------------------------------
------

********** DIRECT AND INDIRECT EFFECTS **********
******

Direct effect of inequality on median_coded:

  Effect     SE       t      p    LLCI   ULCI
 −0.0675 0.0682 −0.9887 0.3243 −0.2012 0.0663

Indirect effect of inequality on median_coded:

                                Effect  Boot SE  BootLLCI  BootULC
I
  mediatior_interpersonal_trust −0.1045   0.0390   −0.1808   −0.028
0



...
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
34: DeprecationWarning: the `interpolation=` argument to percentile
```

```
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)


*************************** SPECIFICATION ************************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = dv_willingness
    m1 = mediatior_interpersonal_trust

Sample size:
160

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

*************************** OUTCOME MODELS ************************
******

Outcome = dv_willingness
OLS Regression Summary

     R²  Adj. R²    MSE        F  df1  df2  p-value
 0.5192   0.5099 1.4443 84.7615    2  157   0.0000

Coefficients

                                coeff     se       t      p    LLCI
   ULCI
Cons                           0.2420 0.3550  0.6816 0.4965 −0.4539
 0.9378
```

```
inequality                   -0.1321 0.1941 -0.6804 0.4972 -0.5125
 0.2484
mediatior_interpersonal_trust  0.8777 0.0697 12.5941 0.0000  0.7411
 1.0143

------------------------------------------------------------------
------

Outcome = mediatior_interpersonal_trust
OLS Regression Summary

     R²  Adj. R²    MSE      F  df1  df2  p-value
 0.0411   0.0289 1.8820 6.7778    1  158   0.0101

Coefficients

             coeff     se       t      p    LLCI    ULCI
Cons        4.7051 0.1553 30.2907 0.0000  4.4007  5.0096
inequality -0.5649 0.2170 -2.6034 0.0101 -0.9902 -0.1396

------------------------------------------------------------------
------


********************** DIRECT AND INDIRECT EFFECTS ****************
******

Direct effect of inequality on dv_willingness:

  Effect     SE       t      p    LLCI   ULCI
 -0.1321 0.1941 -0.6804 0.4972 -0.5125 0.2484

Indirect effect of inequality on dv_willingness:

                               Effect  Boot SE  BootLLCI  BootULC
I
  mediatior_interpersonal_trust -0.4958   0.1861   -0.8567   -0.127
7



...
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
```

```
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
34: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)


***************************** SPECIFICATION ************************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = dv_willingness
    m1 = mediatior_interpersonal_trust

Sample size:
160

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

**************************** OUTCOME MODELS ************************
******

Outcome = dv_willingness
OLS Regression Summary

     R²  Adj. R²    MSE        F  df1  df2  p-value
 0.5192   0.5099 1.4443 84.7615    2  157   0.0000
```

Coefficients

	coeff	se	t	p	LLCI	ULCI
Cons	0.2420	0.3550	0.6816	0.4965	−0.4539	0.9378
inequality	−0.1321	0.1941	−0.6804	0.4972	−0.5125	0.2484
mediatior_interpersonal_trust	0.8777	0.0697	12.5941	0.0000	0.7411	1.0143

Outcome = mediatior_interpersonal_trust
OLS Regression Summary

R^2	Adj. R^2	MSE	F	df1	df2	p−value
0.0411	0.0289	1.8820	6.7778	1	158	0.0101

Coefficients

	coeff	se	t	p	LLCI	ULCI
Cons	4.7051	0.1553	30.2907	0.0000	4.4007	5.0096
inequality	−0.5649	0.2170	−2.6034	0.0101	−0.9902	−0.1396

********** DIRECT AND INDIRECT EFFECTS **********

Direct effect of inequality on dv_willingness:

Effect	SE	t	p	LLCI	ULCI
−0.1321	0.1941	−0.6804	0.4972	−0.5125	0.2484

Indirect effect of inequality on dv_willingness:

	Effect	Boot SE	BootLLCI	BootULCI

```
  mediatior_interpersonal_trust -0.4958   0.1861   -0.8567   -0.127
7



...
...
```

:::ANALYSIS FOR EXPRIMENT 3a:::

...Getting design information of experiment 3a...

```
Experiment Information is: one-factor between-subject design factor
 - inequality (high(1) vs low(0)), ride-sharing (income distributio
n manipulation), mediation
```

...Getting sample information of experiment 3a...

```
Sample Size = 160
inequality
0    81
1    79
dtype: int64
```

...Getting variable information of experiment 3a...

```
Variables are:
 focal condition: inequality
 moderation condition: NA
 manipulation measure(s): ['check_inequality']
 mediator measure(s): ['med_trust', 'med_trustworthy', 'med_safe']
 dv measure(s): ['dv_willingness']
```

...Checking the reliability of the manipulation check in experiment 3a...

```
Single item & reliability check is not applicable
```

...Checking the manipulation in experiment 3a...

```
Manipulation Check Results (independent t-test, two-sided)

            count      mean       std  min  25%  50%  75%  max
```

```
inequality
0            81.0  3.098765  1.554067  1.0  2.0  3.0  4.0  7.0
1            79.0  5.291139  1.784203  1.0  4.0  6.0  7.0  7.0
              T      dof alternative  p-val           CI95%  cohen-d
 BF10  power
T-test -8.28  153.953   two-sided    0.0  [-2.72, -1.67]    1.312
1.147e+11    1.0
```

...Checking the reliability of the mediator in experiment 3a...

Single item & reliability check is not applicable

...Checking the group difference by condition on mediator (interpersonal trust) in experiment 3a...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of transform-like apply. In the future, the group keys will be included in the index, regardless of whether the applied function returns a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Mediator Results (one-way ANOVA)

            count      mean       std  min  25%  50%  75%  max
inequality
0            81.0  4.938272  1.258428  1.0  4.0  5.0  6.0  7.0
1            79.0  4.443038  1.346856  1.0  4.0  4.0  5.0  7.0
   Source       SS   DF     MS      F  p-unc     n2
0  inequality    9.809    1  9.809  5.779  0.017  0.035
1      Within  268.185  158  1.697    NaN    NaN    NaN
```

...Checking the group difference by condition on DV (willingness) in experiment 3a...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of
```

```
 transform-like apply. In the future, the group keys will be includ
ed in the index, regardless of whether the applied function returns
 a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Willingness to choose the ride-sharing service over other available
 transportation (DV) Results (one-way ANOVA)

            count      mean       std  min  25%  50%  75%  max
inequality
0            81.0  5.000000  1.396424  1.0  4.0  5.0  6.0  7.0
1            79.0  4.860759  1.499865  1.0  4.0  5.0  6.0  7.0
   Source        SS   DF     MS     F  p-unc     n2
0  inequality    0.775    1  0.775  0.37  0.544  0.002
1      Within  331.468  158  2.098   NaN    NaN    NaN

...Mediation Analysis for experiment 3a (interpersonal trust only).
..

/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
34: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)
```

```
****************************** SPECIFICATION ************************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = dv_willingness
    m1 = mediatior_interpersonal_trust

Sample size:
160

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

****************************** OUTCOME MODELS ************************
******

Outcome = dv_willingness
OLS Regression Summary

     R²  Adj. R²    MSE        F  df1  df2  p-value
 0.3074   0.2941 1.4657 34.8429    2  157   0.0000

Coefficients

                                coeff     se      t      p    LLCI
 ULCI
Cons                           1.9641 0.3891 5.0482 0.0000  1.2015 2
.7266
inequality                     0.1652 0.1949 0.8477 0.3979 -0.2168 0
.5472
mediatior_interpersonal_trust 0.6148 0.0739 8.3160 0.0000  0.4699 0
.7597

------------------------------------------------------------------
------

Outcome = mediatior_interpersonal_trust
OLS Regression Summary
```

```
     R²  Adj. R²    MSE      F  df1  df2  p-value
 0.0353   0.0230 1.6974 5.7788    1  158   0.0174

Coefficients

             coeff     se       t      p    LLCI    ULCI
Cons        4.9383 0.1448 34.1137 0.0000  4.6545  5.2220
inequality -0.4952 0.2060 -2.4039 0.0174 -0.8990 -0.0915

------------------------------------------------------------------
------

********** DIRECT AND INDIRECT EFFECTS **********
******

Direct effect of inequality on dv_willingness:

  Effect     SE      t      p    LLCI   ULCI
  0.1652 0.1949 0.8477 0.3979 -0.2168 0.5472

Indirect effect of inequality on dv_willingness:

                                Effect  Boot SE  BootLLCI  BootULC
I
  mediatior_interpersonal_trust -0.3045   0.1352   -0.5973   -0.062
7
```

...Mediation Analysis for experiment 3a (test the alternative mecha nism -- perceived safety)...

```
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
34: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
```

```
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)


*************************** SPECIFICATION ***********************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = dv_willingness
    m1 = mediatior_interpersonal_trust
    m2 = med_safe

Sample size:
160

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

**************************** OUTCOME MODELS *********************
******

Outcome = dv_willingness
OLS Regression Summary

     R²  Adj. R²    MSE        F  df1  df2  p-value
 0.3096   0.2918 1.4704 23.3194    3  156   0.0000

Coefficients

                               coeff     se      t      p    LLCI
 ULCI
Cons                          1.8589 0.4173 4.4541 0.0000  1.0409 2
.6768
```

```
inequality                    0.2043 0.2030 1.0067 0.3156 −0.1935 0
.6021
mediatior_interpersonal_trust 0.5450 0.1237 4.4068 0.0000  0.3026 0
.7874
med_safe                      0.0861 0.1223 0.7044 0.4823 −0.1535 0
.3258

------------------------------------------------------------------
------

Outcome = mediatior_interpersonal_trust
OLS Regression Summary

     R²  Adj. R²    MSE      F  df1  df2  p−value
 0.0353   0.0230 1.6974 5.7788    1  158   0.0174

Coefficients

             coeff     se       t      p    LLCI    ULCI
Cons        4.9383 0.1448 34.1137 0.0000  4.6545  5.2220
inequality −0.4952 0.2060 −2.4039 0.0174 −0.8990 −0.0915

------------------------------------------------------------------
------

Outcome = med_safe
OLS Regression Summary

     R²  Adj. R²    MSE       F  df1  df2  p−value
 0.0963   0.0848 1.7364 16.8424    1  158   0.0001

Coefficients

             coeff     se       t      p    LLCI    ULCI
Cons        5.2222 0.1464 35.6673 0.0000  4.9353  5.5092
inequality −0.8551 0.2084 −4.1040 0.0001 −1.2635 −0.4467

------------------------------------------------------------------
------


********************** DIRECT AND INDIRECT EFFECTS ****************
******
```

```
Direct effect of inequality on dv_willingness:

  Effect     SE      t      p    LLCI   ULCI
  0.2043 0.2030 1.0067 0.3156 -0.1935 0.6021

Indirect effect of inequality on dv_willingness:

                                 Effect  Boot SE  BootLLCI  BootULC
I
  mediatior_interpersonal_trust -0.2699   0.1352   -0.5875   -0.052
3
                       med_safe -0.0737   0.1025   -0.3070    0.098
8



...
...
```

:::ANALYSIS FOR EXPRIMENT 3b:::

...Getting design information of experiment 3b...

```
Experiment Information is: one-factor between-subject design factor
 - inequality (high(1) vs low(0)), ride-sharing (street image manip
ulation), mediation
```

...Getting sample information of experiment 3b...

```
Sample Size = 196
inequality
0    98
1    98
dtype: int64
```

...Getting variable information of experiment 3b...

```
Variables are:
 focal condition: inequality
 moderation condition: NA
 manipulation measure(s): ['check_1', 'check_2', 'check_3']
 mediator measure(s): ['med_trust', 'med_trustworthy', 'med_safe']
 dv measure(s): ['dv_willingness']
```

...Checking the reliability of the manipulation check in experiment 3b...

Crohnbach Alpha = 0.915 (3 items, manipulation check: perceived inequality)

...Checking the manipulation in experiment 3b...

Manipulation Check Results (independent t-test, two-sided)

	count	mean	std	min	25%	50%	75%	max
inequality								
0	98.0	3.765306	1.125778	1.0	3.0	3.666667	4.333333	7.0
1	98.0	5.200680	1.515661	1.0	4.0	5.333333	6.666667	7.0

	T	dof	alternative	p-val	CI95%	cohen-d	BF10	power
T-test	7.526	194	two-sided	0.0	[1.06, 1.81]	1.075	3.504e+09	1.0

...Checking the reliability of the mediator in experiment 3b...

Crohnbach Alpha = 0.857 (3 items, mediatior_interpersonal_trust)

...Checking the group difference by condition on mediator (interpersonal trust) in experiment 3b...

```
/opt/anaconda3/lib/python3.8/site-packages/pingouin/parametric.py:992: FutureWarning: Not prepending group keys to the result index of transform-like apply. In the future, the group keys will be included in the index, regardless of whether the applied function returns a like-indexed object.
To preserve the previous behavior, use

        >>> .groupby(..., group_keys=False)

To adopt the future behavior and silence this warning, use

        >>> .groupby(..., group_keys=True)
```

```
  sserror = grp.apply(lambda x: (x - x.mean()) ** 2).sum()
Mediator Results (one-way ANOVA)

             count      mean       std       min       25%       50%
       75%       max
inequality

0            98.0  4.959184  0.880312  2.666667  4.333333  5.000000
  5.666667  6.666667
1            98.0  4.523810  0.946447  2.333333  4.000000  4.333333
  5.000000  7.000000        Source       SS   DF     MS       F  p-
unc     n2
0  inequality    9.288    1  9.288  11.119  0.001  0.054
1      Within  162.059  194  0.835     NaN    NaN    NaN
```

**...Checking the group difference by condition on DV (willingness) i
n experiment 3b
(controlling for the econ knowledge, which siginificantly varies ac
ross condition due a possible failure in randomization - replicatio
n study will be conducted to resolve the issues)...**

```
Willingness to choose the ride-sharing service over other available
 transportation (DV) Results (one-way ANCOVA)
             count      mean       std  min  25%  50%  75%  max
inequality
0            98.0  4.867347  1.537422  1.0  4.0  5.0  6.0  7.0
1            98.0  4.653061  1.540532  1.0  4.0  5.0  6.0  7.0
       Source           SS   DF           F     p-unc       np2
0      inequality    6.174261    1   2.841239  0.093489  0.014508
1  econ_knowledge   40.073719    1  18.440914  0.000028  0.087215
2        Residual  419.405873  193        NaN       NaN       NaN
```

**...Mediation Analysis for experiment 3b (re-test the alternative me
chanism -- perceived safety and control fro the econ_knowledge acco
ridngly)...**

```
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
```

```
34: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)


***************************** SPECIFICATION **********************
******

Model = 4

Variables:
    Cons = Cons
    x = inequality
    y = dv_willingness
    m1 = mediatior_interpersonal_trust
    m2 = med_safe
Statistical Controls:
 econ_knowledge



Sample size:
196

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

***************************** OUTCOME MODELS **********************
******

Outcome = dv_willingness
OLS Regression Summary

     R²  Adj. R²    MSE       F  df1  df2  p-value
 0.1883   0.1669 1.9623 11.0762    4  191   0.0000
```

Coefficients

	coeff	se	t	p	LLCI	ULCI
Cons	1.0543	0.6024	1.7502	0.0817	−0.1264	2.2350
inequality	−0.0722	0.2114	−0.3417	0.7330	−0.4867	0.3422
econ_knowledge	0.3624	0.1281	2.8289	0.0052	0.1113	0.6135
mediatior_interpersonal_trust	0.5034	0.1810	2.7808	0.0060	0.1486	0.8583
med_safe	0.0517	0.1613	0.3208	0.7487	−0.2644	0.3679

Outcome = mediatior_interpersonal_trust
OLS Regression Summary

R^2	Adj. R^2	MSE	F	df1	df2	p−value
0.1377	0.1242	0.7656	15.4043	2	193	0.0000

Coefficients

	coeff	se	t	p	LLCI	ULCI
Cons	4.0082	0.2371	16.9028	0.0000	3.5434	4.4730
inequality	−0.5221	0.1266	−4.1243	0.0001	−0.7703	−0.2740
econ_knowledge	0.3270	0.0757	4.3217	0.0000	0.1787	0.4753

Outcome = med_safe
OLS Regression Summary

R^2	Adj. R^2	MSE	F	df1	df2	p−value
0.1281	0.1145	0.9646	14.1819	2	193	0.0000

Coefficients

	coeff	se	t	p	LLCI	ULCI

```
Cons             3.9259 0.2662 14.7493 0.0000  3.4042  4.4476
inequality      -0.4718 0.1421 -3.3204 0.0011 -0.7504 -0.1933
econ_knowledge   0.3939 0.0849  4.6378 0.0000  0.2274  0.5604

------------------------------------------------------------------
------

********************** DIRECT AND INDIRECT EFFECTS ****************
******

Direct effect of inequality on dv_willingness:

  Effect     SE       t      p    LLCI   ULCI
 -0.0722 0.2114 -0.3417 0.7330 -0.4867 0.3422

Indirect effect of inequality on dv_willingness:

                                 Effect  Boot SE  BootLLCI  BootULC
I
  mediatior_interpersonal_trust -0.2629   0.1146   -0.5354   -0.076
6
                       med_safe -0.0244   0.0750   -0.1871    0.120
2
```

::: 3a and 3b suggest full mediation from economic inequality on willingness to use ridesharing service (consumers engagement in the sharinge economy), and also evidence that interpersonal trust is the mechanism after controlling for perceived safety, which is an alternative explanation :::

...
...

:::ANALYSIS FOR EXPRIMENT 4:::

...Getting design information of experiment 4...

Experiment Information is: two-factor between-subject design factor - inequality (high(1) vs. low(0)) & familiarity(high(1) vs. low(0)), lodge-sharing, moderation

...Getting sample information of experiment 4...

```
Sample Size = 174
inequality  familiarity
0           0              36
            1              41
1           0              36
            1              61
dtype: int64
```

...Getting variable information of experiment 4...

```
Variables are:
 focal condition: inequality
 moderation condition: familiarity
 manipulation measure(s): ['check_inequality', 'check_familiarity']
 mediator measure(s): ['med_trust', 'med_trustworthy']
 dv measure(s): ['dv_host', 'dv_accept']
```

...Checking the manipulation in experiment 4...

```
Single item & reliability check is not applicable
Single item & reliability check is not applicable
Manipulation Check (inequality) Results (independent t-test, two-si
ded)

             count      mean       std  min  25%  50%  75%  max
inequality
0             77.0  1.662338  0.940470  1.0  1.0  1.0  2.0  4.0
1             97.0  6.051546  1.317914  2.0  5.0  7.0  7.0  7.0
          T      dof alternative  p-val           CI95%  cohen-d
   BF10  power
T-test -25.601  170.201   two-sided    0.0  [-4.73, -4.05]    3.763
  5.651e+56    1.0
Manipulation Check (familiarity) Results (independent t-test, two-s
ided)

              count      mean       std  min  25%  50%  75%  max
familiarity
0              72.0  1.250000  0.644587  1.0  1.0  1.0  1.0  4.0
1             102.0  5.392157  1.236066  1.0  5.0  6.0  6.0  7.0
```

```
          T      dof alternative  p-val         CI95%  cohen-d
  BF10  power
T-test  28.755  160.025   two-sided    0.0  [3.86, 4.43]    4.007
5.297e+63    1.0
```

...Checking the reliability of the mediator in experiment 4...

Pearson Correlation = 0.866 (2 items, Meidator)

...Checking the group difference by condition on mediator (interper sonal trust) in experiment 4...

Mediator Results (2-way ANOVA)

```
                        count      mean       std  min    25%   50%
  75%  max
inequality familiarity

0          0             36.0  5.486111  1.024598  4.0  4.875  5.75
  6.0  7.0
           1             41.0  5.780488  1.204413  2.5  5.000  6.00
  7.0  7.0
1          0             36.0  4.333333  1.062342  2.5  4.000  4.00
  5.0  7.0
           1             61.0  5.442623  1.092010  2.0  5.000  5.50
  6.0  7.0                      Source       SS     DF       MS
  F  p-unc     n2
0               inequality   23.064    1.0  23.064  19.051  0.000
 0.090
1              familiarity   20.451    1.0  20.451  16.892  0.000
 0.080
2  inequality * familiarity    6.893    1.0   6.893   5.694  0.018
 0.027
3                 Residual  205.817  170.0   1.211     NaN    NaN
   NaN
```

...Checking the reliability of the DV (willingness) in experiment 4 ...

Pearson Correlation = 0.872 (2 items, Willingness to serve to host (DV))

...Checking the group difference by condition on DV (willingness) i

n experiment 4...

```
Willingness to serve the guest (DV) Results (2-way ANOVA)

                         count      mean       std  min    25%  50%
 75%  max
inequality familiarity

0          0             36.0  6.541667  0.565370  5.0  6.000  7.0
 7.0  7.0
           1             41.0  6.317073  1.127808  1.0  6.000  7.0
 7.0  7.0
1          0             36.0  5.291667  1.261377  2.5  4.875  5.5
 6.0  7.0
           1             61.0  6.180328  0.811546  4.0  5.500  6.0
 7.0  7.0                      Source       SS     DF      MS
 F  p-unc     n2
0                 inequality   19.961    1.0  19.961  21.577  0.000
 0.103
1               familiarity    4.577    1.0   4.577   4.948  0.027
 0.024
2  inequality * familiarity   12.864    1.0  12.864  13.906  0.000
 0.066
3                   Residual  157.269  170.0   0.925     NaN    NaN
   NaN
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
33: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:
34: DeprecationWarning: the `interpolation=` argument to percentile
 was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are
encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher"
)
Process successfully initialized.
Based on the Process Macro by Andrew F. Hayes, Ph.D. (www.afhayes.c
om)
```

```
***************************** SPECIFICATION ************************
******

Model = 7

Variables:
    Cons = Cons
    x = inequality
    y = dv_host
    m1 = mediatior_interpersonal_trust
    w = familiarity

Sample size:
174

Bootstrapping information for indirect effects:
Final number of bootstrap samples: 5000
Number of samples discarded due to convergence issues: 0

***************************** OUTCOME MODELS ************************
******

Outcome = dv_host
OLS Regression Summary

     R²  Adj. R²    MSE        F  df1  df2  p-value
 0.3159   0.3038 0.7975 39.4756    2  171   0.0000

Coefficients

                                 coeff     se       t      p    LLCI
    ULCI
Cons                            3.8405 0.3439 11.1678 0.0000  3.1665
  4.5146
inequality                     -0.2910 0.1409 -2.0654 0.0404 -0.5671
 -0.0149
mediatior_interpersonal_trust  0.4563 0.0582  7.8390 0.0000  0.3422
  0.5704

------------------------------------------------------------------
------

Outcome = mediatior_interpersonal_trust
```

OLS Regression Summary

R^2	Adj. R^2	MSE	F	df1	df2	p-value
0.1813	0.1620	1.2107	12.5529	3	170	0.0000

Coefficients

	coeff	se	t	p	LLCI	ULCI
Cons	5.4861	0.1834	29.9158	0.0000	5.1267	5.8455
inequality	−1.1528	0.2593	−4.4449	0.0000	−1.6611	−0.6445
familiarity	0.2944	0.2513	1.1713	0.2431	−0.1982	0.7869
inequality*familiarity	0.8149	0.3415	2.3861	0.0181	0.1455	1.4843

********** DIRECT AND INDIRECT EFFECTS **********

Direct effect of inequality on dv_host:

Effect	SE	t	p	LLCI	ULCI
−0.2910	0.1409	−2.0654	0.0404	−0.5671	−0.0149

/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:33: DeprecationWarning: the `interpolation=` argument to percentile was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are encouraged to review the method they used. (Deprecated NumPy 1.22)
  llci = np.percentile(samples, plow * 100, interpolation="lower")
/opt/anaconda3/lib/python3.8/site-packages/pyprocessmacro/utils.py:34: DeprecationWarning: the `interpolation=` argument to percentile was renamed to `method=`, which has additional options.
Users of the modes 'nearest', 'lower', 'higher', or 'midpoint' are encouraged to review the method they used. (Deprecated NumPy 1.22)
  ulci = np.percentile(samples, phigh * 100, interpolation="higher")