Results

Demographic

Descriptive Statistics

	Age
Valid	200
Missing	0
Median	35.000
Mean	36.040
Std. Deviation	10.762
Minimum	18.000
Maximum	62.000

Boxplots

Age

Total
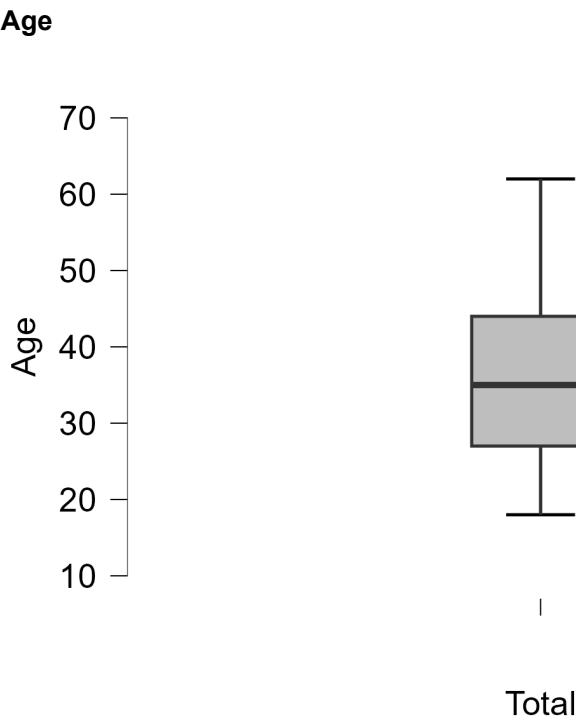
Job Performance - Descriptive

Descriptive Statistics

	z_Job performance rating		
	female	male	non-binary
Valid	96	75	8
Missing	16	4	1
Median	0.054	−0.006	0.375
Mean	0.005	−0.065	0.550
Std. Deviation	0.950	1.078	0.709
Minimum	−2.497	−2.774	−0.292
Maximum	2.226	2.679	1.572

Boxplots

z_Job performance rating
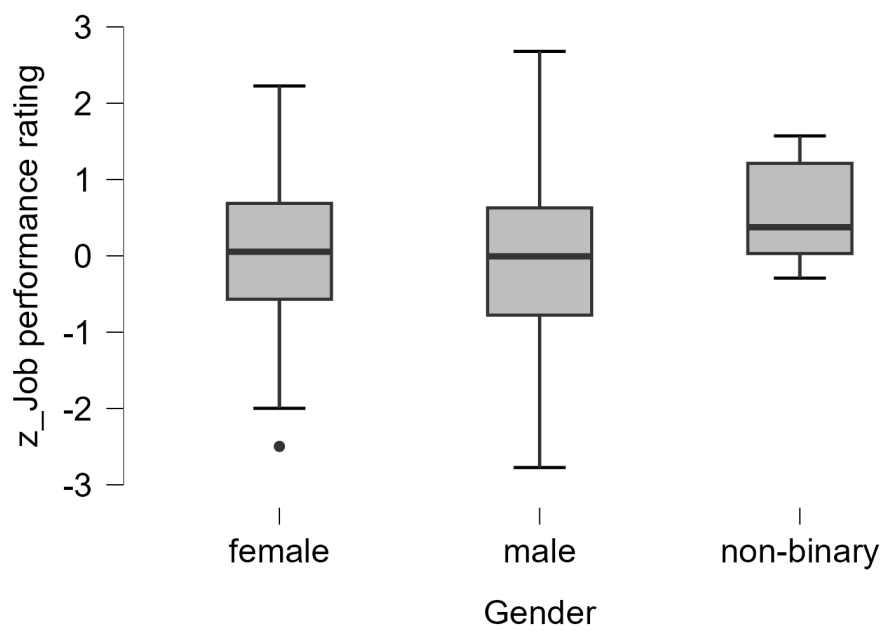
Job Performance (Gender) - ANOVA

ANOVA - z_Job performance rating

Cases	Sum of Squares	df	Mean Square	F	p	ω^2_p
Gender	2.732	2	1.366	1.372	0.256	0.004
Residuals	175.268	176	0.996			

Note. Type III Sum of Squares

Descriptives

Descriptives - z_Job performance rating

Gender	N	Mean	SD	SE	Coefficient of variation
female	96	0.005	0.950	0.097	203.588
male	75	−0.065	1.078	0.125	−16.695
non-binary	8	0.550	0.709	0.251	1.289

Assumption Checks

Test for Equality of Variances (Levene's)

F	df1	df2	p
0.605	2.000	176.000	0.547

Q-Q Plot
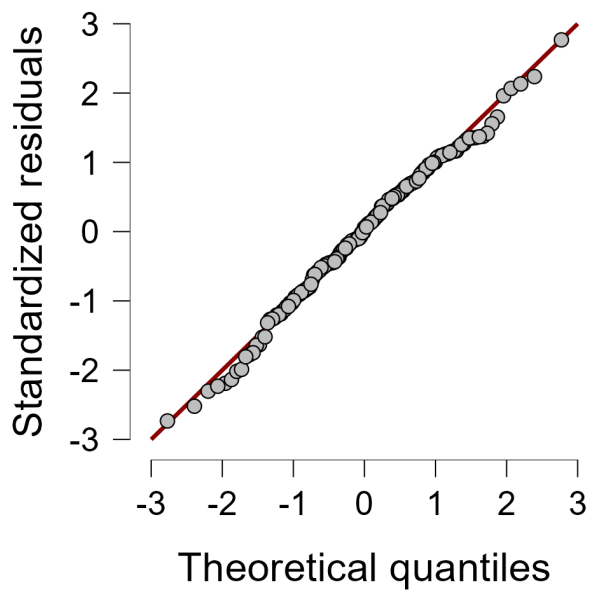
Post Hoc Tests

Standard (LSD)

Post Hoc Comparisons - Gender

		Mean Difference	SE	t	Cohen's d	p_{tukey}
female	male	0.069	0.154	0.450	0.069	0.894
	(non-binary)	−0.545	0.367	−1.484	−0.546	0.301
male	(non-binary)	−0.614	0.371	−1.655	−0.616	0.226

Note. P-value adjusted for comparing a family of 3

Job Performance - Linear Regression

Model Summary - z_Job performance rating

Model	R	R²	Adjusted R²	RMSE	R² Change	df1	df2	p	Durbin-Watson Autocorrelation	Durbin-Watson Statistic	Durbin-Watson p
M_0	0.000	0.000	0.000	1.017	0.000	0	143		−0.124	2.242	0.143
M_1	0.506	0.256	0.250	0.881	0.256	1	142	< .001	−0.160	2.319	0.054
M_2	0.587	0.344	0.330	0.832	0.089	2	140	< .001	−0.082	2.164	0.324
M_3	0.616	0.380	0.353	0.819	0.035	3	137	0.055	−0.062	2.123	0.446
M_4	0.654	0.428	0.385	0.798	0.048	4	133	0.028	−0.069	2.137	0.397

Note. M_1 includes z_education attainment

Note. M_2 includes z_education attainment, z_income, z_income:z_education attainment

Note. M_3 includes z_education attainment, z_income, z_age, z_income:z_education attainment, z_income:z_age, z_education attainment:z_age

Note. M_4 includes z_education attainment, z_income, z_age, z_income:z_education attainment, z_income:z_age, z_education attainment:z_age, z_income:Gender, Gender

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M_1	Regression	37.848	1	37.848	48.788	< .001
	Residual	110.157	142	0.776		
	Total	148.005	143			
M_2	Regression	50.980	3	16.993	24.520	< .001
	Residual	97.025	140	0.693		
	Total	148.005	143			
M_3	Regression	56.210	6	9.368	13.982	< .001
	Residual	91.795	137	0.670		
	Total	148.005	143			
M_4	Regression	63.385	10	6.338	9.962	< .001
	Residual	84.620	133	0.636		
	Total	148.005	143			

Note. M_1 includes z_education attainment

Note. M_2 includes z_education attainment, z_income, z_income:z_education attainment

Note. M_3 includes z_education attainment, z_income, z_age, z_income:z_education attainment, z_income:z_age, z_education attainment:z_age

Note. M_4 includes z_education attainment, z_income, z_age, z_income:z_education attainment, z_income:z_age, z_education attainment:z_age, z_income:Gender, Gender

Note. The intercept model is omitted, as no meaningful information can be shown.

Coefficients

Model		Unstandardized	Standard Error	Standardized [a]	t	p	95% CI Lower	95% CI Upper	Collinearity Statistics Tolerance	VIF
M_0	(Intercept)	−0.003	0.085		−0.041	0.968	−0.171	0.164		
M_1	(Intercept)	−0.004	0.073		−0.056	0.956	−0.149	0.141		
	z_education attainment	0.499	0.071	0.506	6.985	< .001	0.358	0.640	1.000	1.000
M_2	(Intercept)	0.094	0.077		1.222	0.224	−0.058	0.247		
	z_education attainment	0.358	0.078	0.363	4.614	< .001	0.205	0.512	0.756	1.323
	z_income	0.250	0.077	0.255	3.229	0.002	0.097	0.403	0.753	1.328
	z_education attainment * z_income	−0.173	0.065	−0.184	−2.662	0.009	−0.301	−0.044	0.985	1.015
M_3	(Intercept)	0.122	0.077		1.590	0.114	−0.030	0.273		
	z_education attainment	0.368	0.078	0.373	4.714	< .001	0.213	0.522	0.725	1.380
	z_income	0.234	0.077	0.238	3.049	0.003	0.082	0.385	0.742	1.348
	z_age	−0.049	0.070	−0.048	−0.703	0.483	−0.187	0.089	0.953	1.050
	z_education attainment * z_income	−0.194	0.065	−0.206	−3.000	0.003	−0.322	−0.066	0.964	1.038
	z_income * z_age	−0.227	0.082	−0.227	−2.767	0.006	−0.389	−0.065	0.672	1.488
	z_education attainment * z_age	0.148	0.084	0.145	1.763	0.080	−0.018	0.314	0.666	1.502
M_4	(Intercept)	0.175	0.097		1.799	0.074	−0.017	0.367		
	z_education attainment	0.374	0.077	0.379	4.881	< .001	0.222	0.525	0.844	1.184
	z_income	0.281	0.096	0.286	2.935	0.004	0.091	0.470	0.673	1.486
	z_age	−0.061	0.069	−0.060	−0.886	0.377	−0.197	0.075	0.967	1.034
	Gender (male)	−0.185	0.141		−1.313	0.192	−0.465	0.094	0.969	1.032
	Gender (non-binary)	0.881	0.349		2.526	0.013	0.191	1.570		
	z_education attainment * z_income	−0.203	0.064	−0.216	−3.169	0.002	−0.330	−0.076	0.963	1.039
	z_income * z_age	−0.260	0.081	−0.260	−3.205	0.002	−0.420	−0.099	0.807	1.239
	z_education attainment * z_age	0.146	0.082	0.143	1.777	0.078	−0.017	0.309	0.813	1.230
	z_income * Gender (male)	−0.043	0.141		−0.308	0.758	−0.322	0.235	0.821	1.219
	z_income * Gender (non-binary)	−0.241	0.316		−0.761	0.448	−0.865	0.384		

[a] Standardized coefficients can only be computed for continuous predictors.

Case Number	Std. Residual	z_Job performance rating	Predicted Value	Residual	Cook's Distance
.	.	.	.	.	.

Note. No influential cases found.

Standardized Residuals Histogram
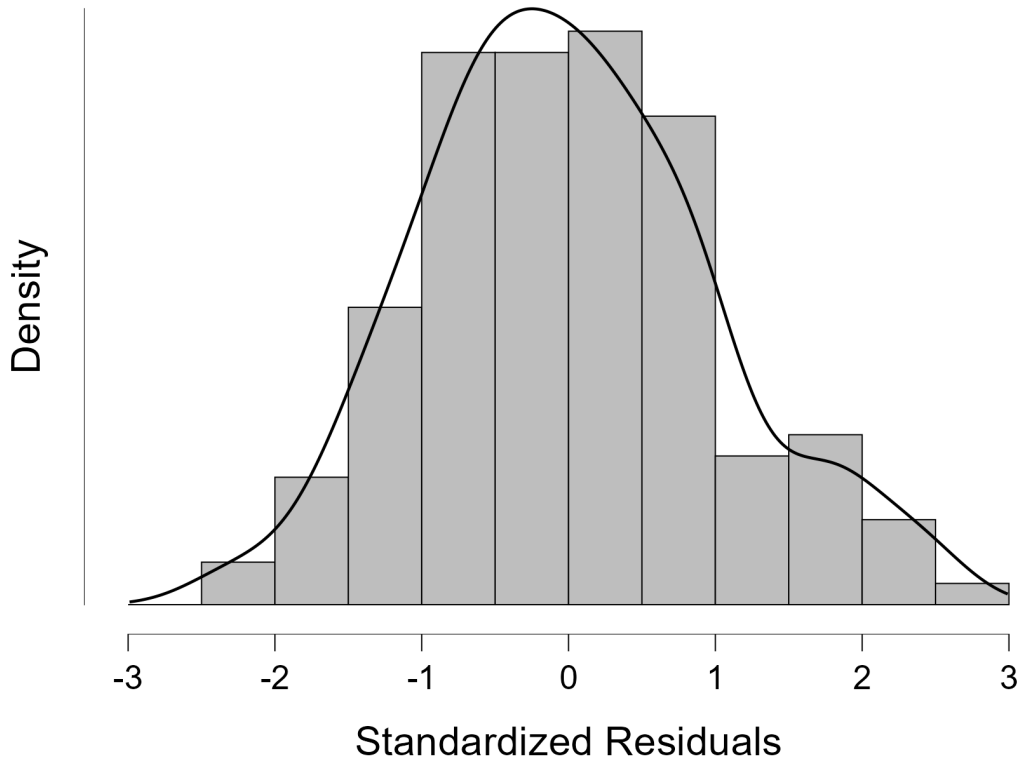
Job Performance - Mediation Analysis

Parameter estimates

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_education attainment	→	z_Job performance rating	0.370	0.076	4.878	< .001	0.221	0.519

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Indirect effects

				Estimate	Std. Error	z-value	p	95% Confidence Interval	
								Lower	Upper
z_education→ attainment	z_income	→	z_Job performance rating	0.127	0.042	3.060	0.002	0.046	0.209

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

				Estimate	Std. Error	z-value	p	95% Confidence Interval	
								Lower	Upper
z_education→ attainment	z_income	→	z_Job performance rating	0.127	0.042	3.060	0.002	0.046	0.209

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Indirect effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Total effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_education attainment	→	z_Job performance rating	0.498	0.068	7.334	< .001	0.365	0.630

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Path coefficients

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_income	→	z_Job performance rating	0.264	0.077	3.431	< .001	0.113	0.415
z_education attainment	→	z_Job performance rating	0.370	0.076	4.878	< .001	0.221	0.519
z_education attainment	→	z_income	0.482	0.071	6.804	< .001	0.343	0.621

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

R-Squared

	R²
z_Job performance rating	0.301
z_income	0.222
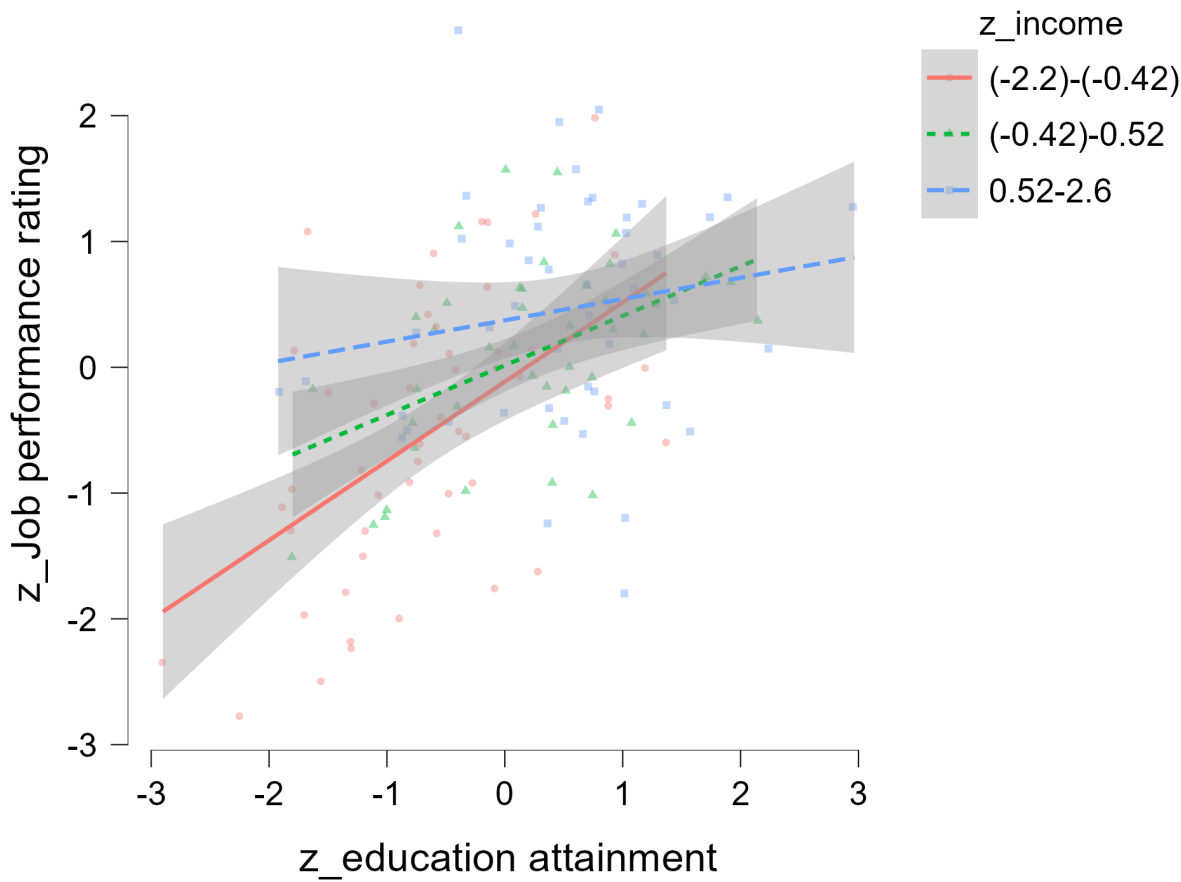
One-rep max - Descriptive Statistics

Descriptive Statistics

	z_One-rep max		
	female	male	non-binary
Valid	104	69	9
Missing	8	10	0
Median	−0.009	−0.032	−0.239
Mean	0.037	−0.044	−0.089
Std. Deviation	0.982	1.078	0.527
Minimum	−2.295	−2.135	−0.721
Maximum	2.720	3.286	0.887

Boxplots

z_One-rep max
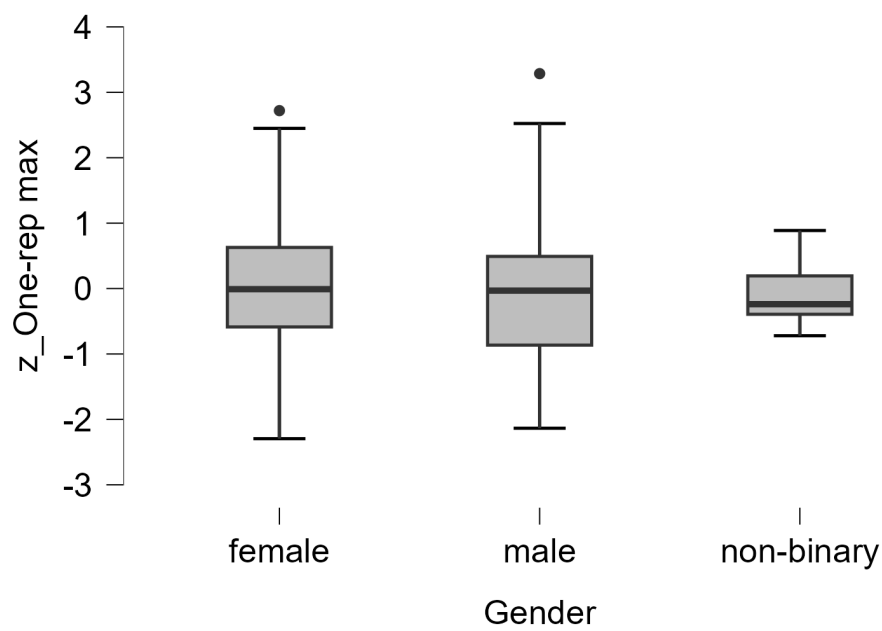
One-rep max gender ANOVA

ANOVA - z_One-rep max

Cases	Sum of Squares	df	Mean Square	F	p	ω²	ω²$_p$
Gender	0.341	2	0.171	0.169	0.845	0.000	0.000
Residuals	180.659	179	1.009				

Note. Type III Sum of Squares

Assumption Checks

Test for Equality of Variances (Levene's)

F	df1	df2	p
1.452	2.000	179.000	0.237

Q-Q Plot
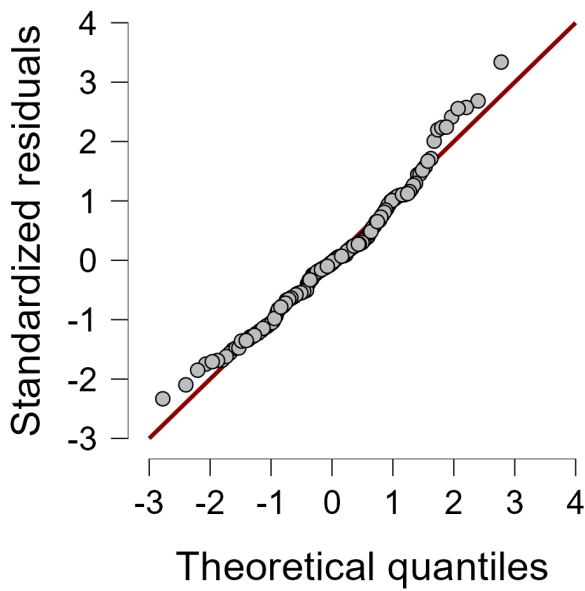
Post Hoc Tests

Standard (LSD)

Post Hoc Comparisons - Gender

		Mean Difference	SE	t	Cohen's d	p_{tukey}
female	male	0.080	0.156	0.514	0.080	0.865
	(non-binary)	0.125	0.349	0.359	0.125	0.931
male	(non-binary)	0.045	0.356	0.127	0.045	0.991

Note. P-value adjusted for comparing a family of 3

One-rep max - Correlation

Pearson's Correlations

Variable		z_Self-efficacy rating	z_Hours of strength training	z_One-rep max
1. z_Self-efficacy rating	Pearson's r	—		
	p-value	—		
2. z_Hours of strength training	Pearson's r	−0.303	—	
	p-value	< .001	—	
3. z_One-rep max	Pearson's r	0.665	0.433	—
	p-value	< .001	< .001	—

One-rep max - Linear Regression

Model Summary - z_One-rep max

Model	R	R²	Adjusted R²	RMSE	R² Change	df1	df2	p	Durbin-Watson Autocorrelation	Durbin-Watson Statistic	Durbin-Watson p
M_0	0.000	0.000	0.000	1.003	0.000	0	144		0.032	1.933	0.683
M_1	0.926	0.857	0.855	0.382	0.857	2	142	< .001	−0.029	2.051	0.764
M_2	0.933	0.871	0.868	0.364	0.014	1	141	< .001	−0.028	2.053	0.747

Note. M_1 includes z_Hours of strength training, z_Self-efficacy rating

Note. M_2 includes z_Hours of strength training, z_Self-efficacy rating, z_Self-efficacy rating:z_Hours of strength training

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M_1	Regression	124.053	2	62.026	424.996	< .001
	Residual	20.724	142	0.146		
	Total	144.777	144			
M_2	Regression	126.060	3	42.020	316.549	< .001
	Residual	18.717	141	0.133		
	Total	144.777	144			

Note. M_1 includes z_Hours of strength training, z_Self-efficacy rating

Note. M_2 includes z_Hours of strength training, z_Self-efficacy rating, z_Self-efficacy rating:z_Hours of strength training

Note. The intercept model is omitted, as no meaningful information can be shown.

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p	Collinearity Statistics	
							Tolerance	VIF
M_0	(Intercept)	−0.035	0.083		−0.420	0.675		
M_1	(Intercept)	0.009	0.032		0.298	0.766		
	z_Hours of strength training	0.660	0.033	0.666	20.006	< .001	0.911	1.098
	z_Self-efficacy rating	0.865	0.033	0.872	26.219	< .001	0.911	1.098
M_2	(Intercept)	0.049	0.032		1.531	0.128		
	z_Hours of strength training	0.656	0.032	0.661	20.810	< .001	0.909	1.100
	z_Self-efficacy rating	0.861	0.031	0.868	27.348	< .001	0.910	1.099
	z_Hours of strength training ∗ z_Self-efficacy rating	0.131	0.034	0.118	3.889	< .001	0.998	1.002

Coefficients

| Model | Unstandardized | Standard Error | Standardized | t | p | Collinearity Statistics | |
						Tolerance	VIF

Influential Cases

Case Number	Std. Residual	z_One-rep max	Predicted Value	Residual	Cook's Distance
.	.	.	.	.	.

Note. No influential cases found.

Standardized Residuals Histogram

One-rep max - Mediation Analysis
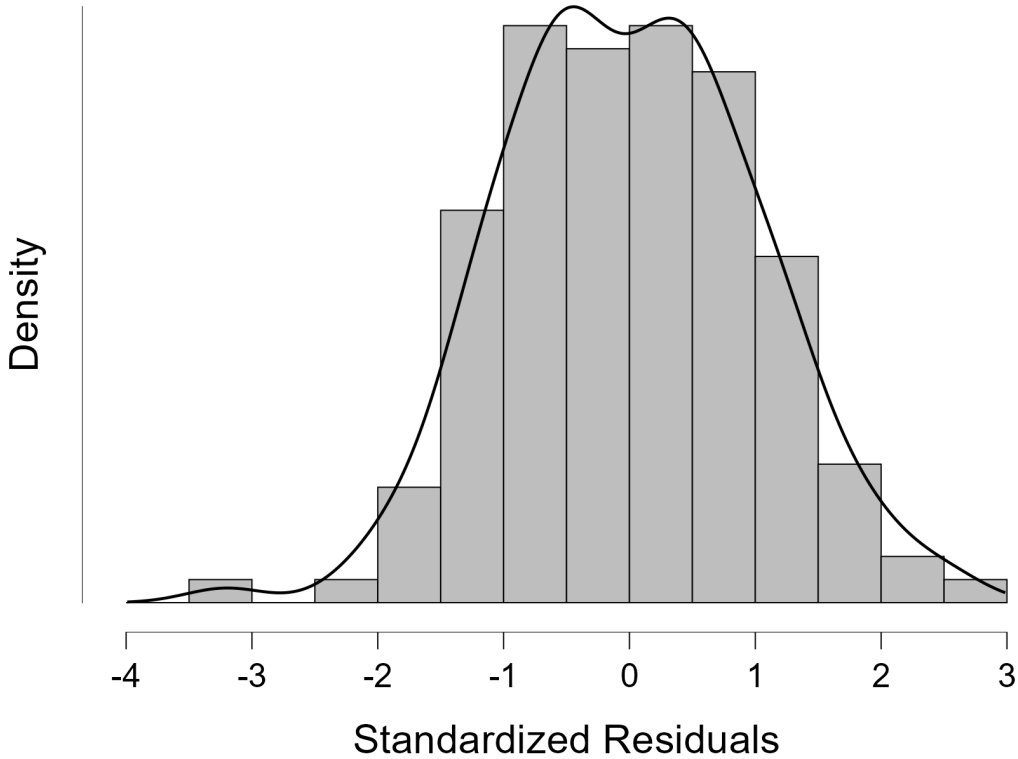
Parameter estimates

Direct effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_Hours of strength training	→	z_One-rep max	0.664	0.032	20.617	< .001	0.601	0.728

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Indirect effects

					Estimate	Std. Error	z-value	p	95% Confidence Interval	
									Lower	Upper
z_Hours of strength training	→	z_Self-efficacy rating	→	z_One-rep max	−0.243	0.063	−3.828	< .001	−0.367	−0.119

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Total effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_Hours of strength training	→	z_One-rep max	0.422	0.069	6.136	< .001	0.287	0.556

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Path coefficients

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
z_Self-efficacy rating	→	z_One-rep max	0.862	0.032	26.746	< .001	0.799	0.925
z_Hours of strength training	→	z_One-rep max	0.664	0.032	20.617	< .001	0.601	0.728
z_Hours of strength training	→	z_Self-efficacy rating	−0.282	0.073	−3.873	< .001	−0.424	−0.139

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

R-Squared

	R^2
z_One-rep max	0.858
z_Self-efficacy rating	0.079

One-rep - Flexplot

Flexplot
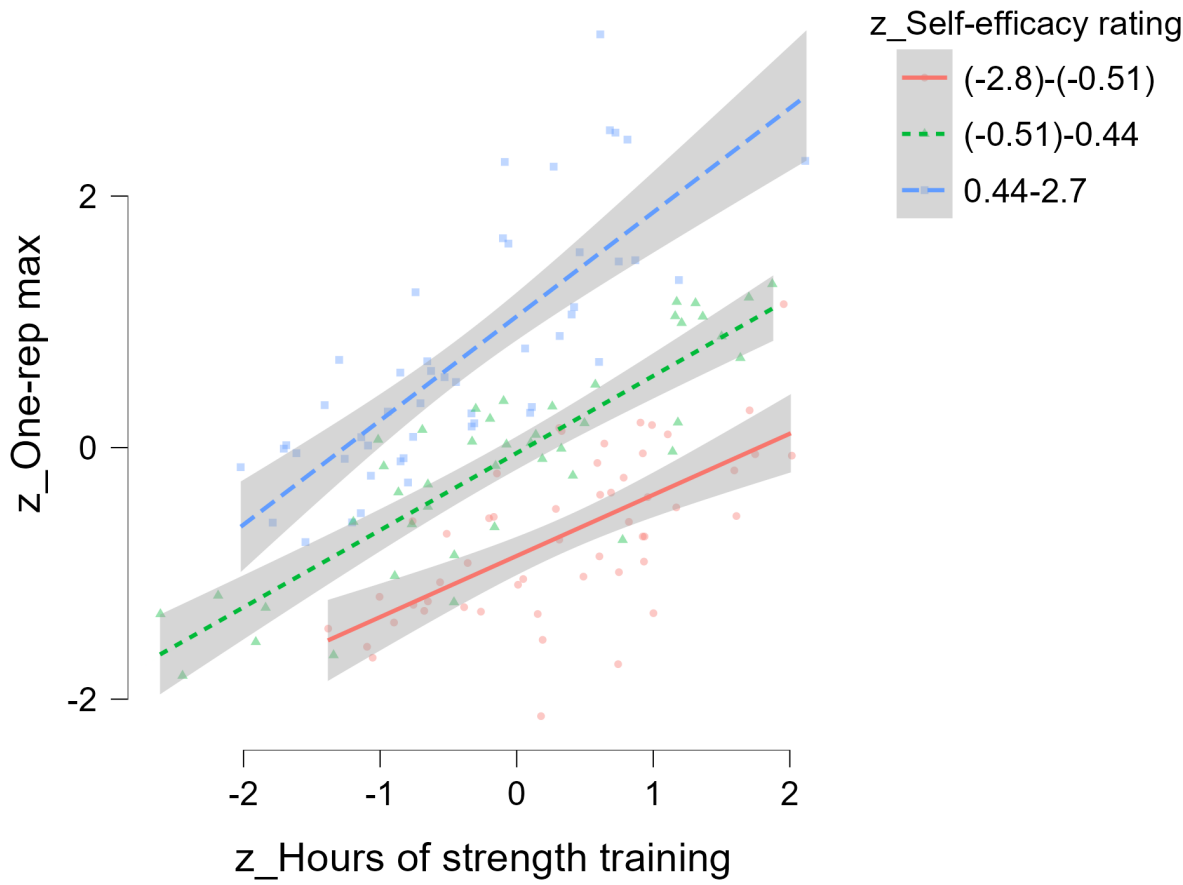
Loneliness - Descriptive Statistics

Descriptive Statistics

	Loneliness 1 month prior		Loneliness at the time		Loneliness 1 month after		Loneliness 2 months after	
	1	2	1	2	1	2	1	2
Valid	85	82	86	77	84	79	83	80
Missing	8	4	7	9	9	7	10	6
Mean	31.605	30.745	29.418	32.161	30.511	25.866	29.046	18.914
Std. Deviation	9.898	9.345	9.718	9.775	9.760	10.209	10.906	9.473
Minimum	8.969	12.301	6.914	13.126	6.025	2.150	1.570	−9.148
Maximum	51.247	49.406	60.866	49.508	55.396	50.367	50.608	41.296

Note. Excluded 21 rows from the analysis that correspond to the missing values of the split-by variable Intervention (1 = placebo, 2 = treatment)
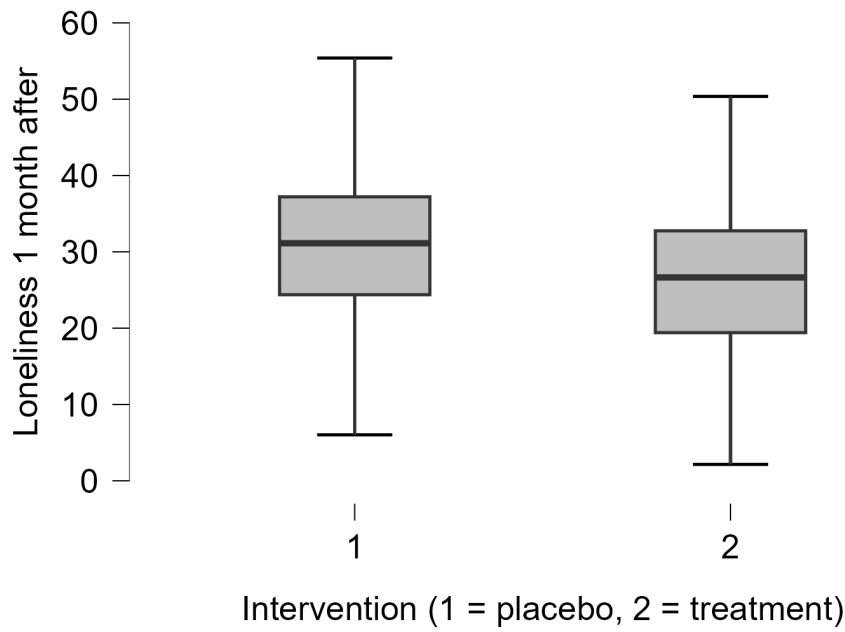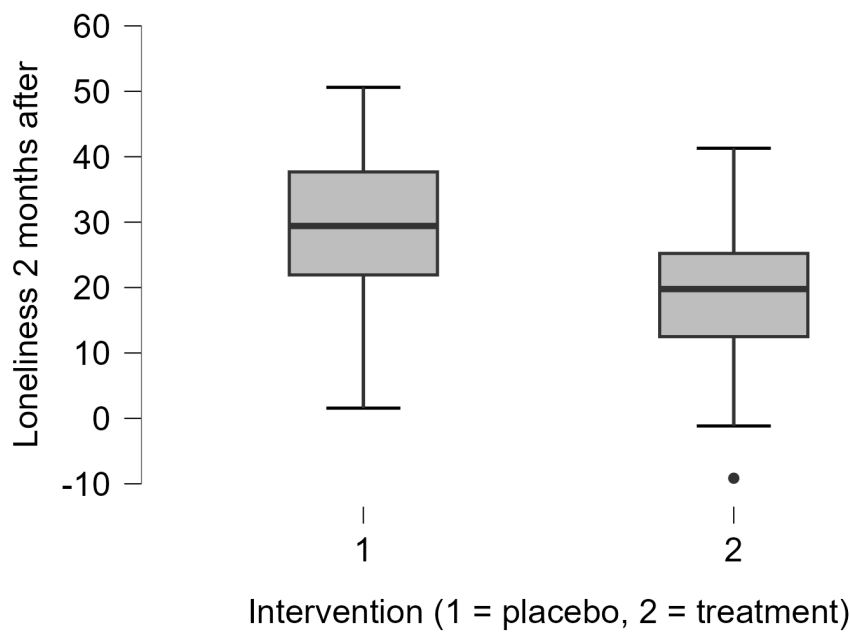
Boxplots

Loneliness 1 month prior
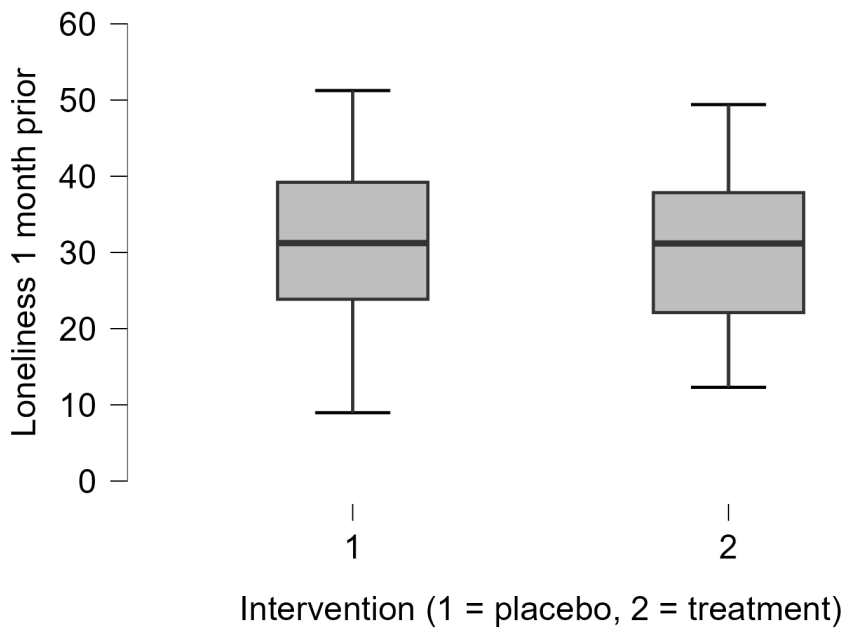
Loneliness at the time
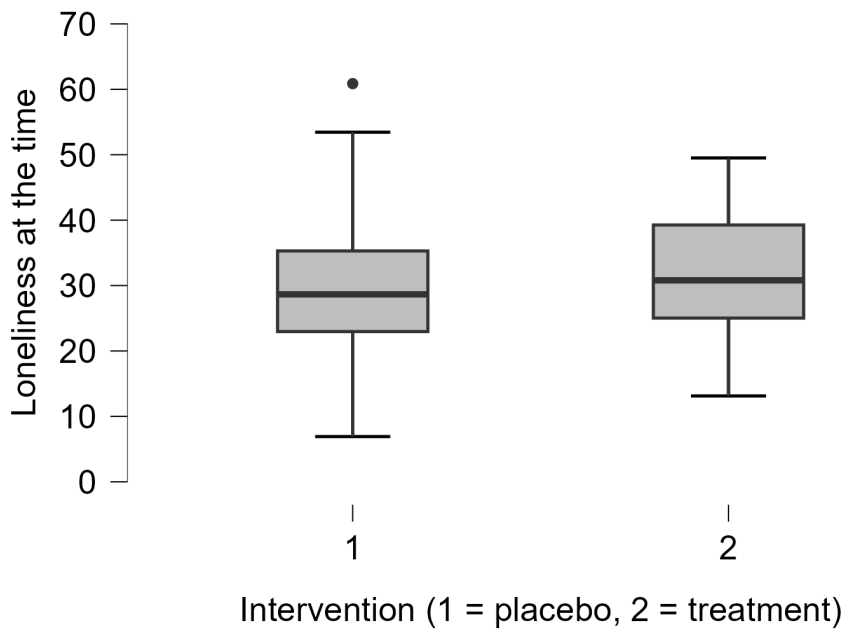
Loneliness 1 month after

Loneliness 2 months after

Loneliness - Independent Samples T-Test

Independent Samples T-Test

	t	df	p	VS-MPR*	Cohen's d	SE Cohen's d	95% CI for Cohen's d	
							Lower	Upper
Loneliness 1 month prior	0.577	165	0.565	1.000	0.089	0.155	−0.214	0.393
Loneliness at the time	−1.794	161	0.075	1.899	−0.281	0.158	−0.590	0.028
Loneliness 1 month after	2.970	161	0.003	18.870	0.465	0.161	0.153	0.776
Loneliness 2 months after	6.323	161	< .001	$7.648 \times 10^{+6}$	0.991	0.175	0.664	1.315

Note. Student's t-test.

* Vovk-Sellke Maximum *p*-Ratio: Based on a two-sided *p*-value,the maximum possible odds in favor of H_1 over H_0 equals 1/(-e *p* log(*p*)) for *p* ≤ .37 (Sellke, Bayarri, & Berger, 2001).

Assumption Checks

Test of Normality (Shapiro-Wilk)

		W	p
Loneliness 1 month prior	1	0.984	0.358
	2	0.967	0.032
Loneliness at the time	1	0.982	0.261
	2	0.966	0.037
Loneliness 1 month after	1	0.986	0.511
	2	0.991	0.869
Loneliness 2 months after	1	0.984	0.412
	2	0.990	0.820

Note. Significant results suggest a deviation from normality.

Test of Equality of Variances (Levene's)

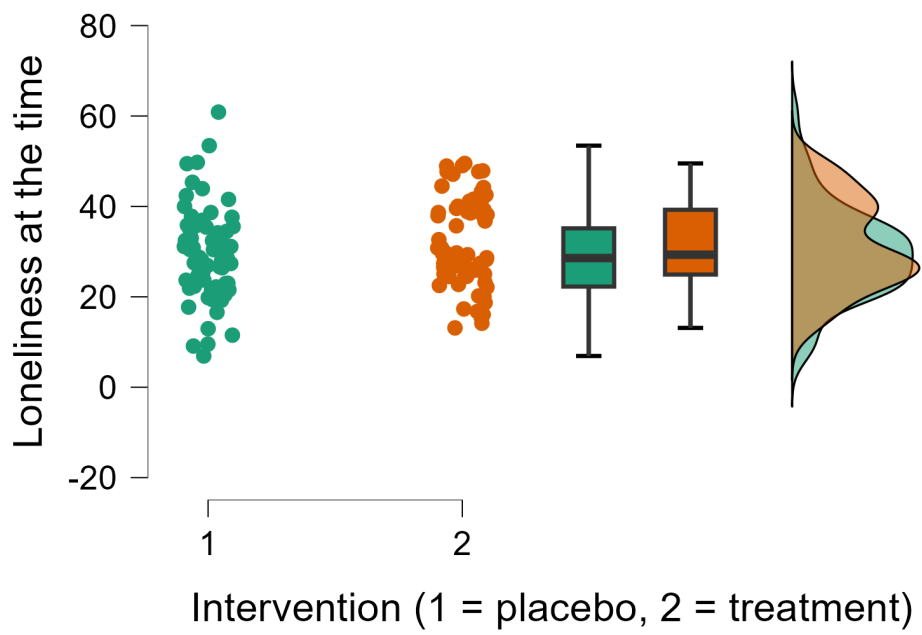|	F	df_1	df_2	p
Loneliness 1 month prior	0.003	1	165	0.958
Loneliness at the time	1.151	1	161	0.285
Loneliness 1 month after	0.081	1	161	0.777
Loneliness 2 months after	1.709	1	161	0.193

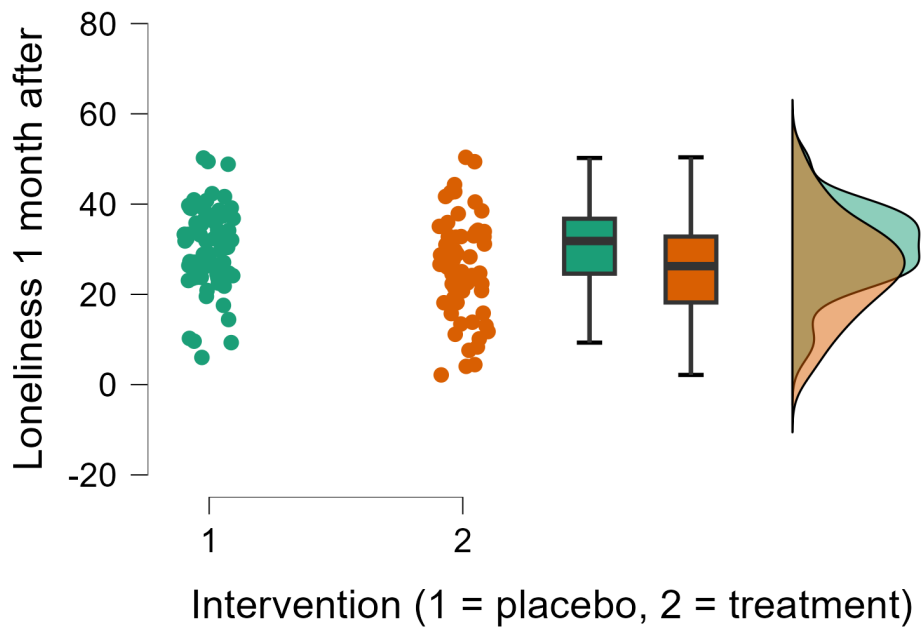**Descriptives**

Raincloud Plots

Loneliness 1 month prior

Loneliness at the time

Loneliness 1 month after

Loneliness 1 month after

Intervention (1 = placebo, 2 = treatment)

Loneliness 2 months after

Loneliness 2 months after

Intervention (1 = placebo, 2 = treatment)