

Supplement 1: Systematic search for acute resistance exercise-Stroop task studies

1. Method

1.1 Eligibility criteria

1.1.1 Inclusion Criteria

1. Studies that included an arm where acute resistance exercise was the only intervention.
2. Studies that measured cognitive performance using the Stroop task within an hour after acute resistance exercise.

1.1.2 Exclusion Criteria

Studies that were not published in peer-reviewed journals (e.g., conference papers) or not published in English were excluded.

1.2 Information source and search strategy

Searches (September 9, 2023) of PubMed (covers Medline) and Scopus (covers Medline, Embase, Compendex, World textile index, Fluidex, Geobase, and Biobase (Falagas et al., 2008, Table 1) and includes most journals in Web of Science (Mongeon & Paul-Hus, 2016, Figure 2)) were conducted using the following keywords:

Scopus

TITLE-ABS (“resistance exercise*” OR “resistance train*” OR “weight* exercise*” OR “weight* train*” OR weightlift* OR “weight* lift*” OR “strength train*” OR “strength exercise*” OR “power train*” OR “power exercise*” OR “explosive exercise*” OR “explosive train*”) AND TITLE-ABS (Stroop)

PubMed

(“resistance exercise*” [Title/Abstract] OR “resistance train*” [Title/Abstract] OR “weight* exercise*” [Title/Abstract] OR “weight* train*” [Title/Abstract] OR weightlift* [Title/Abstract] OR weight lift* [Title/Abstract] OR “strength train*” [Title/Abstract] OR “strength exercise*” [Title/Abstract] OR “power train*” [Title/Abstract] OR “power exercise*” [Title/Abstract] OR “explosive exercise*” [Title/Abstract] OR “explosive train*” [Title/Abstract]) AND (Stroop [Title/Abstract])

Date restrictions: None

Language restrictions: English

1.3 Data selection and collection process

The titles and abstracts retrieved from different databases were loaded into Endnote 20 to remove duplicates. The first author then screened all titles and abstracts against the selection criteria. The full-text screening was performed if the titles and abstracts indicated that the studies met the criteria or there was any uncertainty. Citations of articles that were full-text screened were managed by the same software. Multiple reports were checked by searching the first author's name in Endnote 20 and registration ID. If multiple reports were found, the most detailed one was included.

2 Results

2.1 Study selection

The database search retrieved 154 records. After duplicate removal, the titles and abstracts of the remaining 87 records were manually screened, leading to further removal of 56 records. The first author reviewed the remaining 31 full-text articles and found 30 studies that met our criteria. See Figure 1 in the main text for the PRISMA 2020 flow diagram.

2.2 Study characteristics

The characteristics and methodological features of studies investigating the impact of resistance exercise on Stroop task performance were summarized in Table 1 in the main text.

2.3 Results of individual studies

See the main manuscript for the discussion.

3 Reference

Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2008). Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses. *The FASEB Journal*, 22(2), 338-342. <https://doi.org/https://doi.org/10.1096/fj.07-9492LSF>

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106(1), 213-228. <https://doi.org/10.1007/s11192-015-1765-5>

Supplement 2: R code

```
#packages library
library("rmcorr")
library("ggplot2")
library("cowplot")
library("RColorBrewer")
library("corrplot")
library("circlize")
library("export")
library("dplyr")

##Stroop rmcorr analysis
#data input
Stroopdata <- read.delim2("R/data/Stroop.csv",
                          header = TRUE,
                          sep = ',',
                          quote = "",
                          check.names = TRUE,
                          dec = '.')

n <- length(unique(Stroopdata$Subject))

#Calculate rmcorr with "Time" and "Change in Congruent RT"
my.rmc <- rmcorr(participant = Subject,
                  measure1 = Time,
                  measure2 = Cong_Ac_Adjusted,
                  dataset = Stroopdata,
                  CI.level = 0.95,
                  CIs = "analytic",
                  nreps = 100,
                  bstrap.out = FALSE)

#Save the plot
getwd()
tiff(filename = "cong.tiff", width = 8000, height = 6000, res = 1200)
#Generated a plot from the data
```

```

plotData <- Stroopdata
plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",
"Cong_Ac_Adjusted"))))
ggplot(plotData, aes(x = Time, y = Cong_Ac_Adjusted, group = factor(Subject))) +
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =
2) +
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =
0.75) +
  ggtitle("") +
  ylab("Change in Congruent RT (ms)") +
  xlab("Time") +
  theme_cowplot() +
  scale_shape_manual(values = c(21,24,23))+
  theme(legend.position = "none",
        plot.title = element_text(size = 20, hjust = 0.5),
        axis.title = element_text(size = 18, face = "bold"),
        axis.text = element_text(size = 15, face = "bold"),
        axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),
        axis.ticks = element_line(size = 1.5),
        axis.ticks.length = unit(0.3, "cm"),
        axis.title.x = element_text(margin = margin(t = 20)),
        axis.title.y = element_text(margin = margin(r = 20)),
        axis.line = element_line(linewidth = 1.5))+
  scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =
"#8a0407" ))+
  xlim(0.75, 4.25)+
  ylim(-250, 150)
dev.off()

```

#Calculate rmcrr with "Time" and "Change in Incongruent RT"

```

my.rmc <- rmcrr(participant = Subject,
                measure1 = Time,
                measure2 = Inco_Ac_Adjusted,
                dataset = Stroopdata,
                CI.level = 0.95,
                CIs = "analytic",

```

```
nreps = 100,  
bstrap.out = FALSE)
```

```
#Save the plot  
getwd()  
tiff(filename = "incog.tiff", width = 8000, height = 6000, res = 1200)  
#Generated a plot from the data  
plotData <- Stroopdata  
plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",  
"Inco_Ac_Adjusted"))))  
ggplot(plotData, aes(x = Time, y = Inco_Ac_Adjusted, group = factor(Subject))) +  
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =  
2) +  
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =  
0.75) +  
  ggtitle("") +  
  ylab("Change in Incongruent (ms)") +  
  xlab("Time") +  
  theme_cowplot() +  
  scale_shape_manual(values = c(21,24,23))+  
  theme(legend.position = "none",  
        plot.title = element_text(size = 20, hjust = 0.5),  
        axis.title = element_text(size = 18, face = "bold"),  
        axis.text = element_text(size = 15, face = "bold"),  
        axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),  
        axis.ticks = element_line(size = 1.5),  
        axis.ticks.length = unit(0.3, "cm"),  
        axis.title.x = element_text(margin = margin(t = 20)),  
        axis.title.y = element_text(margin = margin(r = 20)),  
        axis.line = element_line(linewidth = 1.5))+  
  scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =  
"#8a0407" ))+  
  xlim(0.75, 4.25)+  
  ylim(-800, 500)  
dev.off()
```

```
#Calculate rmcrr with "Time" and "Change in Stroop effects RT"
```

```

my.rmc <- rmcorr(participant = Subject,
                measure1 = Time,
                measure2 = Stroop.effect_Ac_Adjusted,
                dataset = Stroopdata,
                CI.level = 0.95,
                CIs = "analytic",
                nreps = 100,
                bstrap.out = FALSE)

#Save the plot
getwd()
tiff(filename = "Stroop effect.tiff", width = 8000, height = 6000, res = 1200)
#Generated a plot from the data
plotData <- Stroopdata
plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",
"Stroop.effect_Ac_Adjusted"))))
ggplot(plotData, aes(x = Time, y = Stroop.effect_Ac_Adjusted, group =
factor(Subject))) +
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =
2) +
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =
0.75) +
  ggtitle("") +
  ylab("Change in Stroop effects (ms)") +
  xlab("Time") +
  theme_cowplot() +
  scale_shape_manual(values = c(21,24,23))+
  theme(legend.position = "none",
        plot.title = element_text(size = 20, hjust = 0.5),
        axis.title = element_text(size = 18, face = "bold"),
        axis.text = element_text(size = 15, face = "bold"),
        axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),
        axis.ticks = element_line(size = 1.5),
        axis.ticks.length = unit(0.3, "cm"),
        axis.title.x = element_text(margin = margin(t = 20)),
        axis.title.y = element_text(margin = margin(r = 20)),
        axis.line = element_line(linewidth = 1.5))+
  scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =

```

```
"#8a0407" ))+  
  xlim(0.75, 4.25)+  
  ylim(-600, 400)  
dev.off()
```

```
#Calculate rmcrr with "Intensity" and "Change in Congruent RT"
```

```
my.rmc <- rmcrr(participant = Subject,  
               measure1 = Intensity,  
               measure2 = Cong_Ac_Adjusted,  
               dataset = Stroopdata,  
               CI.level = 0.95,  
               CIs = "analytic",  
               nreps = 100,  
               bstrap.out = FALSE)
```

```
#Save the plot
```

```
getwd()  
tiff(filename = "Intensity cong.tiff", width = 8000, height = 6000, res = 1200)  
#Generated a plot from the data  
plotData <- Stroopdata  
plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",  
"Cong_Ac_Adjusted"))))  
ggplot(plotData, aes(x = Intensity, y = Cong_Ac_Adjusted, group =  
factor(Subject))) +  
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =  
2) +  
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =  
0.75) +  
  ggtitle("") +  
  ylab("Change in Congruent RT (ms)") +  
  xlab("Intensity") +  
  theme_cowplot() +  
  scale_shape_manual(values = c(21,24,23))+  
  theme(legend.position = "none",  
        plot.title = element_text(size = 20, hjust = 0.5),  
        axis.title = element_text(size = 18, face = "bold"),
```

```

axis.text = element_text(size = 15, face = "bold"),
axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),
axis.ticks = element_line(size = 1.5),
axis.ticks.length = unit(0.3, "cm"),
axis.title.x = element_text(margin = margin(t = 20)),
axis.title.y = element_text(margin = margin(r = 20)),
axis.line = element_line(linewidth = 1.5))+
scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =
"#8a0407" ))+
xlim(0.75, 3.25)
ylim(-250, 150)
dev.off()

```

#Calculate rmcrr with "Intensity" and "Change in Incongruent RT"

```

my.rmc <- rmcrr(participant = Subject,
               measure1 = Intensity,
               measure2 = Inco_Ac_Adjusted,
               dataset = Stroopdata,
               CI.level = 0.95,
               CIs = "analytic",
               nreps = 100,
               bstrap.out = FALSE)

```

#Save the plot

```

getwd()
tiff(filename = "Intensity incog.tiff", width = 8000, height = 6000, res = 1200)
#Generated a plot from the data
plotData <- Stroopdata
plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",
"Inco_Ac_Adjusted"))))
ggplot(plotData, aes(x = Intensity, y = Inco_Ac_Adjusted, group = factor(Subject)))
+
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =
2) +
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =
0.75) +

```



```

ggtitle("") +
ylab("Change in Incongruent (ms)") +
xlab("Intensity") +
theme_cowplot() +
scale_shape_manual(values = c(21,24,23))+
theme(legend.position = "none",
      plot.title = element_text(size = 20, hjust = 0.5),
      axis.title = element_text(size = 18, face = "bold"),
      axis.text = element_text(size = 15, face = "bold"),
      axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),
      axis.ticks = element_line(size = 1.5),
      axis.ticks.length = unit(0.3, "cm"),
      axis.title.x = element_text(margin = margin(t = 20)),
      axis.title.y = element_text(margin = margin(r = 20)),
      axis.line = element_line(linewidth = 1.5))+
scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =
"#8a0407" ))+
xlim(0.75, 3.25)+
ylim(-800, 500)
dev.off()

```

```

#Calculate rmcrr with "Intensity" and "Change in Stroop effects RT"

```

```

my.rmc <- rmcrr(participant = Subject,
                measure1 = Intensity,
                measure2 = Stroop.effect_Ac_Adjusted,
                dataset = Stroopdata,
                CI.level = 0.95,
                CIs = "analytic",
                nreps = 100,
                bstrap.out = FALSE)

```

```

#Save the plot

```

```

getwd()
tiff(filename = "Intensity Stroop effects.tiff", width = 8000, height = 6000, res =
1200)

```

```

#Generated a plot from the data

```

```

plotData <- Stroopdata

```

```

plotData <- na.omit(select(plotData,all_of(c("Subject","Time", "Intensity",
"Stroop.effect_Ac_Adjusted"))))
ggplot(plotData, aes(x = Intensity, y = Stroop.effect_Ac_Adjusted, group =
factor(Subject))) +
  geom_point(aes(fill = factor(Intensity), shape = factor(Intensity)), size = 4, stroke =
2) +
  geom_line(aes(y = my.rmc$model$fitted.values), linetype = 1, size = 1.1, alpha =
0.75) +
  ggtitle("") +
  ylab("Change in Stroop effects (ms)") +
  xlab("Intensity") +
  theme_cowplot() +
  scale_shape_manual(values = c(21,24,23))+
  theme(legend.position = "none",
        plot.title = element_text(size = 20, hjust = 0.5),
        axis.title = element_text(size = 18, face = "bold"),
        axis.text = element_text(size = 15, face = "bold"),
        axis.text.x = element_text(angle = 0, hjust = 0.5, vjust = 0),
        axis.ticks = element_line(size = 1.5),
        axis.ticks.length = unit(0.3, "cm"),
        axis.title.x = element_text(margin = margin(t = 20)),
        axis.title.y = element_text(margin = margin(r = 20)),
        axis.line = element_line(linewidth = 1.5))+
  scale_fill_manual(values = c("1" = "#ffe0e1", "2" = "#f28186", "3" =
"#8a0407" ))+
  xlim(0.75, 3.25)+
  ylim(-600, 400)
dev.off()

```

Supplement 3: Manipulation check

Congruent	Pre	Post 1	Post 2	Post 3	Post 4	Con	Low	Moderate	High
Reaction time (RT)	457.5	447.2	451.7	453.5	456.6	461.6	453.1	451.5	447.0
Standard deviation (SD)	42.6	41.1	41.4	42.5	44.3	42.9	44.1	38.3	43.1
Accuracy	0.9625	0.9557	0.9569	0.9557	0.9600	0.9591	0.9588	0.9566	0.9582
SD	0.0356	0.0392	0.0383	0.0407	0.0385	0.0390	0.0399	0.0396	0.0355
Accuracy adjusted-RT	475.6	468.1	472.4	475.1	476.3	481.7	472.8	472.4	467.0
SD	45.0	40.3	43.6	47.5	50.0	45.7	45.3	41.6	47.7
Incongruent	Pre	Post 1	Post 2	Post 3	Post 4	Con	Low	Moderate	High
RT	520.4	506.7	513.2	515.3	519.5	520.7	519.0	510.9	509.4
SD	78.3	78.5	72.1	70.9	74.5	75.0	79.0	66.4	78.3
Accuracy	0.8789	0.8801	0.8667	0.8643	0.8588	0.8730	0.8640	0.8736	0.8685
SD	0.0871	0.0724	0.0843	0.0865	0.0808	0.0804	0.0854	0.0811	0.0838
Accuracy adjusted-RT	600.5	580.5	598.6	603.8	613.1	602.5	608.1	591.5	595.2
SD	126.4	107.7	110.9	116.3	127.7	111.0	121.6	108.7	130.5

Supplement 4: Supplementary statistical analysis

Repeated Correlation Analyses of Intensity and Temporal Effects on Accuracy-Stroop Congruent Reaction Time									
Intensity effect									
Repeated measures correlation coefficient (rmc)	t value (Df = 307)	p value	z value from Fisher's transformation of the correlation coefficient	Standard deviation (SD) of the transformed correlation (z) = 1/(df - 1) ^{0.5}	Confidence interval (CI): Z1- α /2 * SD = Z0.975 * SD	95% CI upper (z)	95% CI lower (z)	95% CI upper transformed back to the repeated measures correlation coefficient	95% CI lower transformed back to the repeated measures correlation coefficient
0.061396	1.077784	0.281976	0.061474	0.057166	0.112046	0.173519	-0.05057	0.171799	-0.05053
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d _{matched} (from t value)	d _{matched} 95% CI upper (from upper t value)	d _{matched} 95% CI lower (from lower t value)	Slope				
3.040305	-0.88609	0.058760905	0.031345	-0.04834	2.32545				
Temporal effect									

Repeated measures correlation coefficient (rmc)	t value (Df = 307)	p value	z value from Fisher's transformation of the correlation coefficient	Standard deviation (SD) of the transformed correlation (z) = $1/(df - 1)^{0.5}$	Confidence interval (CI): $Z_{1-\alpha/2} * SD = Z_{0.975} * SD$	95% CI upper (z)	95% CI lower (z)	95% CI upper transformed back to the repeated measures correlation coefficient	95% CI lower transformed back to the repeated measures correlation coefficient
0.113921	2.009141	0.045397	0.114418	0.057166	0.112046	0.226464	0.002372	0.22267	0.002372
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d_{matched} (from t value)	d_{matched} 95% CI upper (from upper t value)	d_{matched} 95% CI lower (from lower t value)	Slope				
3.967964	0.041564	0.109368863	0.040909	0.002268	4.31488				

Effects of Overall Resistance Exercise, Individual Intensity, Specific Time Points, and Each Post-Test on Accuracy-Adjusted Stroop Congruent Reaction Time (Cong).

	Mean	SD	SE	T value	Df	p value	CI	95% CI upper	95% CI lower	d_{matched}
Cong_RT_post1	-19.1	45.9	5.0	-3.806	83	<0.001	10.0	-9.0	-29.1	-0.415
Cong_RT_post2	-11.6	49.7	5.4	-2.141	83	0.035	10.9	-0.8	-22.5	-0.234
Cong_RT_post3	-8.7	51.9	5.7	-1.539	83	0.128	11.3	2.6	-20.1	-0.168
Cong_RT_post4	-9.5	43.5	4.8	-2.003	83	0.048	9.5	0.0	-19.0	-0.219
Cong_RT_Low	-14.7	47.3	4.5	-3.295	111	0.001	8.9	-5.8	-23.6	-0.311
Cong_RT_Moderate	-11.8	49.8	4.7	-2.519	111	0.013	9.4	-2.5	-21.2	-0.238
Cong_RT_High	-10.1	46.7	4.4	-2.287	111	0.024	8.8	-1.3	-18.9	-0.216
Cong_RT_Low_post1	-15.9	47.5	9.0	-1.773	27	0.088	18.4	2.5	-34.4	-0.335
Cong_RT_Low_post2	-15.9	50.1	9.5	-1.679	27	0.105	19.4	3.5	-35.3	-0.317
Cong_RT_Low_post3	-12.2	50.6	9.6	-1.279	27	0.212	19.6	7.4	-31.9	-0.242
Cong_RT_Low_post4	-14.9	43.3	8.2	-1.823	27	0.079	16.8	1.9	-31.7	-0.345
Cong_RT_Mod_post1	-17.3	41.7	7.9	-2.196	27	0.037	16.2	-1.1	-33.5	-0.415
Cong_RT_Mod_post2	-10.2	52.8	10.0	-1.019	27	0.317	20.5	10.3	-30.6	-0.192
Cong_RT_Mod_post3	-7.9	56.4	10.7	-0.737	27	0.467	21.9	14.0	-29.7	-0.139
Cong_RT_Mod_post4	-12.1	49.2	9.3	-1.297	27	0.205	19.1	7.0	-31.1	-0.245
Cong_RT_High_post1	-23.9	49.3	9.3	-2.567	27	0.016	19.1	-4.8	-43.1	-0.485
Cong_RT_High_post2	-8.8	47.8	9.0	-0.975	27	0.338	18.5	9.7	-27.3	-0.184
Cong_RT_High_post3	-6.1	50.2	9.5	-0.638	27	0.529	19.5	13.4	-25.5	-0.121

Effects of Overall Resistance Exercise, Individual Intensity, Specific Time Points, and Each Post-Test on Accuracy-Stroop Incongruent Reaction Time.

Intensity effect

Repeated measures correlation coefficient (r _{mc})	t value (Df = 307)	p value	z value from Fisher's transformation of the correlation coefficient	Standard deviation (SD) of the transformed correlation (z) = 1/(df - 1) ^{0.5}	Confidence interval (CI): Z1- α /2 * SD = Z0.975 * SD	95% CI upper (z)	95% CI lower (z)	95% CI upper transformed back to the repeated measures correlation coefficient	95% CI lower transformed back to the repeated measures correlation coefficient
0.039014	0.684105	0.494425	0.039034	0.057166	0.112046	0.15108	-0.07301	0.149941	-0.07288
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d _{matched} (from t value)	d _{matched} 95% CI upper (from upper t value)	d _{matched} 95% CI lower (from lower t value)	Slope				
2.647131	-1.27927	0.037311509	0.027291	-0.06979	5.01237				

Temporal effect

Repeated measures correlation coefficient (rmc)	t value (Df = 307)	p value	z value from Fisher's transformation of the correlation coefficient	Standard deviation (SD) of the transformed correlation (z) = 1/(df - 1)^0.5	Confidence interval (CI): Z1- α /2 * SD = Z0.975 * SD	95% CI upper (z)	95% CI lower (z)	95% CI upper transformed back to the repeated measures correlation coefficient	95% CI lower transformed back to the repeated measures correlation coefficient
0.05811	1.019892	0.308582	0.058176	0.057166	0.112046	0.170221	-0.05387	0.168596	-0.05382
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d _{matched} (from t value)	d _{matched} 95% CI upper (from upper t value)	d _{matched} 95% CI lower (from lower t value)	Slope				
2.982517	-0.94388	0.055608323	0.030749	-0.05149	7.46570				

Effects of Overall Resistance Exercise, Individual Intensity, Specific Time Points, and Each Post-Test on Accuracy-Adjusted Incongruent Reaction Time (Incon).

	Mean	SD	SE	T value	Df	p value	CI	95% CI upper	95% CI lower	d_{matched}
Incon_RT_Overall	-20.3	150.6	8.2	-2.4666	335	0.014	16.2	-4.1	-36.4	-0.135
Inco_RT_post1	-39.3	145.2	15.8	-2.479	83	0.015	31.7	-7.6	-71.0	-0.270
Inco_RT_post2	-15.1	164.3	17.9	-0.841	83	0.403	35.9	20.8	-50.9	-0.092
Inco_RT_post3	-0.9	160.3	17.5	-0.051	83	0.959	35.0	34.1	-35.9	-0.006
Inco_RT_post4	-25.8	130.3	14.2	-1.816	83	0.073	28.4	2.6	-54.3	-0.198
Inco_RT_Low	-24.2	133.9	12.6	-1.914	111	0.058	25.2	1.0	-49.4	-0.181
Inco_RT_Moderate	-22.4	188.7	17.8	-1.256	111	0.212	35.5	13.1	-57.9	-0.119
Inco_RT_High	-14.2	121.9	11.5	-1.232	111	0.221	22.9	8.7	-37.1	-0.116
Inco_RT_Low_post1	-37.4	145.0	27.4	-1.365	27	0.183	56.2	18.8	-93.7	-0.258
Inco_RT_Low_post2	-1.2	146.9	27.8	-0.044	27	0.965	57.0	55.7	-58.2	-0.008
Inco_RT_Low_post3	-18.1	132.3	25.0	-0.722	27	0.476	51.3	33.2	-69.4	-0.136
Inco_RT_Low_post4	-40.1	111.8	21.1	-1.900	27	0.068	43.4	3.2	-83.5	-0.359
Inco_RT_Mod_post1	-34.3	179.4	33.9	-1.011	27	0.321	69.6	35.3	-103.8	-0.191
Inco_RT_Mod_post2	-32.8	202.7	38.3	-0.855	27	0.400	78.6	45.8	-111.3	-0.162
Inco_RT_Mod_post3	-10.0	214.9	40.6	-0.245	27	0.808	83.3	73.4	-93.3	-0.046
Inco_RT_Mod_post4	-12.6	162.6	30.7	-0.409	27	0.686	63.1	50.5	-75.6	-0.077
Inco_RT_High_post1	-46.1	107.3	20.3	-2.274	27	0.031	41.6	-4.5	-87.7	-0.430
Inco_RT_High_post2	-11.2	140.6	26.6	-0.423	27	0.676	54.5	43.3	-65.7	-0.080

Repeated Correlation Analyses of Intensity and Temporal Effects on Accuracy-Stroop Effect.

Intensity effect

Repeated measures correlation coefficient (r _{mc})	t value (Df = 307)	p value	z value from Fisher's transformation of the correlation coefficient	Standard deviation (SD) of the transformed correlation (z) = 1/(df - 1) ^{0.5}	Confidence interval (CI): Z1- α /2 * SD = Z0.975 * SD	95% CI upper (z)	95% CI lower (z)	95% CI upper transformed back to the repeated measures correlation coefficient	95% CI lower transformed back to the repeated measures correlation coefficient
0.022898	0.401304	0.688476	0.022902	0.057166	0.112046	0.134947	-0.08914	0.134134	-0.08891
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d _{matched} (from t value)	d _{matched} 95% CI upper (from upper t value)	d _{matched} 95% CI lower (from lower t value)	Slope				
2.364469	-1.56193	0.021890999	0.024377	-0.08521	2.68768				

Temporal effect

Repeated measures correlation coefficient (r _{mc})	t value (Df =	p value	z value from Fisher's	Standard deviation	Confidence interval	95% CI upper (z)	95% CI lower	95% CI upper	95% CI lower
--	---------------	---------	-----------------------	--------------------	---------------------	------------------	--------------	--------------	--------------

	307)		transformation of the correlation coefficient	(SD) of the transformed correlation (z) = 1/(df - 1)^0.5	(CI): Z1- α /2 * SD = Z0.975 * SD		(z)	transformed back to the repeated measures correlation coefficient	transformed back to the repeated measures correlation coefficient
0.026852	0.470657	0.63822	0.026859	0.057166	0.112046	0.138904	- 0.08519	0.138018	-0.08498
t value 95% CI upper transform from z value	t value 95% CI lower transform from z value	d _{matched} (from t value)	d _{matched} 95% CI upper (from upper t value)	d _{matched} 95% CI lower (from lower t value)	Slope				
2.4338	-1.4926	0.025673334	0.025092	-0.08143	3.15185				

Effects of Overall Resistance Exercise, Individual Intensity, Specific Time Points, and Each Post-Test on Accuracy-Adjusted Stroop Effect (SE).

	Mean	SD	SE	T value	Df	p value	CI	95% CI upper	95% CI lower	d_{matched}
SE_RT_Overall	-8.0	128.8	7.0	-1.1442	335	0.253	13.8	5.8	-21.9	-0.062
SE_RT_post1	-20.2	125.4	13.7	-1.478	83	0.143	27.4	7.2	-47.6	-0.161
SE_RT_post2	-3.5	132.1	14.4	-0.239	83	0.811	28.8	25.4	-32.3	-0.026
SE_RT_post3	7.8	138.0	15.1	0.520	83	0.605	30.1	37.9	-22.3	0.057
SE_RT_post4	-16.3	119.2	13.0	-1.253	83	0.214	26.0	9.7	-42.3	-0.137
SE_RT_Low	-9.5	114.3	10.8	-0.877	111	0.383	21.5	12.0	-31.0	-0.083
SE_RT_Moderate	-10.5	161.4	15.3	-0.691	111	0.491	30.4	19.8	-40.9	-0.065
SE_RT_High	-4.1	104.3	9.9	-0.415	111	0.679	19.6	15.5	-23.7	-0.039
SE_RT_Low_post1	-21.5	124.1	23.5	-0.917	27	0.368	48.1	26.6	-69.6	-0.173
SE_RT_Low_post2	14.7	111.7	21.1	0.695	27	0.493	43.3	58.0	-28.6	0.131
SE_RT_Low_post3	-5.8	110.6	20.9	-0.278	27	0.783	42.9	37.1	-48.7	-0.053
SE_RT_Low_post4	-25.2	112.3	21.2	-1.189	27	0.245	43.5	18.3	-68.8	-0.225
SE_RT_Mod_post1	-17.0	158.4	29.9	-0.567	27	0.575	61.4	44.4	-78.4	-0.107
SE_RT_Mod_post2	-22.6	166.5	31.5	-0.718	27	0.479	64.6	42.0	-87.2	-0.136
SE_RT_Mod_post3	-2.1	182.9	34.6	-0.061	27	0.952	70.9	68.8	-73.0	-0.012
SE_RT_Mod_post4	-0.5	143.1	27.0	-0.019	27	0.985	55.5	55.0	-56.0	-0.004
SE_RT_High_post1	-22.2	88.5	16.7	-1.326	27	0.196	34.3	12.1	-56.5	-0.251
SE_RT_High_post2	-2.4	112.7	21.3	-0.114	27	0.910	43.7	41.3	-46.1	-0.022

