

[DataSet0] D:\Work\\_University\Thesis\tese\RESULTS\Agreeance.sav

## == SAD ==

### Notes

Output Created		21-JUL-2022 16:53:25
Comments		
Input	Data	D: \Work\_University\Thesis\tese\RESULTS\Agreeance.sav
	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for all tests are based on cases with no missing data for any variables used.
Syntax		NPAR TESTS /FRIEDMAN=sad_mocap sad_kin_direct sad_kin_auto sad_phys_direct sad_phys_auto /STATISTICS QUARTILES /MISSING LISTWISE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Number of Cases Allowed <sup>a</sup>	314572

a. Based on availability of workspace memory.

### Friedman Test

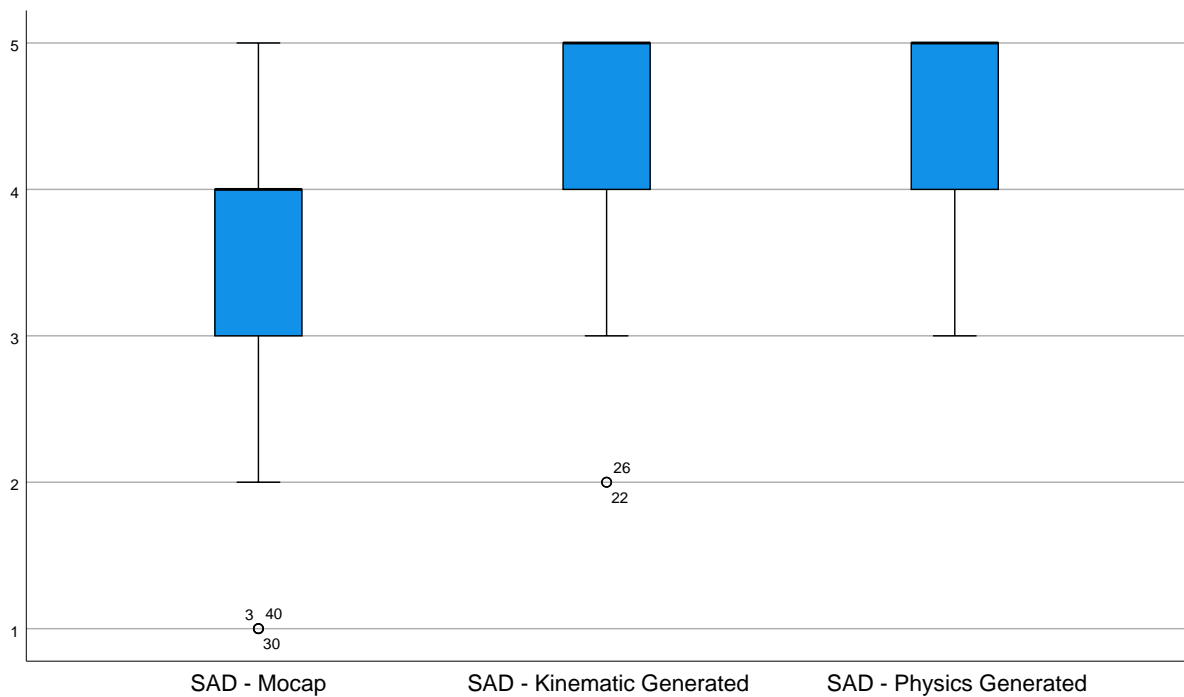
## Ranks

	Mean Rank
SAD - Mocap	2.10
SAD - Kinematic Direct Gen.	3.14
SAD - Kinematic AutoEncoder Gen.	3.38
SAD - Physics Direct Gen.	3.04
SAD - Physics AutoEncoder Gen.	3.35

## Test Statistics<sup>a</sup>

N	40
Chi-Square	27.660
df	4
Asymp. Sig.	<.001

a. Friedman Test



## Notes

Output Created		21-JUL-2022 17:28:40
Comments		
Input	Data	D: \\Work\_University\Thesis\tese\RESULTS\Agreement.sav
	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS  /WILCOXON=sad_mocap sad_mocap sad_mocap sad_mocap sad_kin_direct sad_kin_direct sad_kin_auto sad_phys_direct WITH sad_kin_direct sad_kin_auto sad_phys_direct sad_phys_auto sad_kin_auto sad_phys_direct sad_phys_auto sad_phys_auto (PAIRED) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01
	Number of Cases Allowed <sup>a</sup>	314572

a. Based on availability of workspace memory.

## Wilcoxon Signed Ranks Test

## Ranks

		N	Mean Rank	Sum of Ranks
SAD - Kinematic Direct Gen. - SAD - Mocap	Negative Ranks	6 <sup>a</sup>	13.33	80.00
	Positive Ranks	25 <sup>b</sup>	16.64	416.00
	Ties	9 <sup>c</sup>		
	Total	40		
SAD - Kinematic AutoEncoder Gen. - SAD - Mocap	Negative Ranks	6 <sup>d</sup>	10.50	63.00
	Positive Ranks	25 <sup>e</sup>	17.32	433.00
	Ties	9 <sup>f</sup>		
	Total	40		
SAD - Physics Direct Gen. - SAD - Mocap	Negative Ranks	3 <sup>g</sup>	5.50	16.50
	Positive Ranks	18 <sup>h</sup>	11.92	214.50
	Ties	19 <sup>i</sup>		
	Total	40		
SAD - Physics AutoEncoder Gen. - SAD - Mocap	Negative Ranks	3 <sup>j</sup>	7.50	22.50
	Positive Ranks	22 <sup>k</sup>	13.75	302.50
	Ties	15 <sup>l</sup>		
	Total	40		
SAD - Kinematic AutoEncoder Gen. - SAD - Kinematic Direct Gen.	Negative Ranks	6 <sup>m</sup>	11.50	69.00
	Positive Ranks	12 <sup>n</sup>	8.50	102.00
	Ties	22 <sup>o</sup>		
	Total	40		
SAD - Physics Direct Gen. - SAD - Kinematic Direct Gen.	Negative Ranks	12 <sup>p</sup>	12.42	149.00
	Positive Ranks	11 <sup>q</sup>	11.55	127.00
	Ties	17 <sup>r</sup>		
	Total	40		
SAD - Physics AutoEncoder Gen. - SAD - Kinematic AutoEncoder Gen.	Negative Ranks	8 <sup>s</sup>	8.50	68.00
	Positive Ranks	8 <sup>t</sup>	8.50	68.00
	Ties	24 <sup>u</sup>		
	Total	40		
SAD - Physics AutoEncoder Gen. - SAD - Physics Direct Gen.	Negative Ranks	5 <sup>v</sup>	9.00	45.00
	Positive Ranks	11 <sup>w</sup>	8.27	91.00
	Ties	24 <sup>x</sup>		
	Total	40		

a. SAD - Kinematic Direct Gen. < SAD - Mocap

b. SAD - Kinematic Direct Gen. > SAD - Mocap

c. SAD - Kinematic Direct Gen. = SAD - Mocap

d. SAD - Kinematic AutoEncoder Gen. < SAD - Mocap

- d. SAD - Kinematic AutoEncoder Gen. < SAD - Mocap
- e. SAD - Kinematic AutoEncoder Gen. > SAD - Mocap
- f. SAD - Kinematic AutoEncoder Gen. = SAD - Mocap
- g. SAD - Physics Direct Gen. < SAD - Mocap
- h. SAD - Physics Direct Gen. > SAD - Mocap
- i. SAD - Physics Direct Gen. = SAD - Mocap
- j. SAD - Physics AutoEncoder Gen. < SAD - Mocap
- k. SAD - Physics AutoEncoder Gen. > SAD - Mocap
- l. SAD - Physics AutoEncoder Gen. = SAD - Mocap
- m. SAD - Kinematic AutoEncoder Gen. < SAD - Kinematic Direct Gen.
- n. SAD - Kinematic AutoEncoder Gen. > SAD - Kinematic Direct Gen.
- o. SAD - Kinematic AutoEncoder Gen. = SAD - Kinematic Direct Gen.
- p. SAD - Physics Direct Gen. < SAD - Kinematic Direct Gen.
- q. SAD - Physics Direct Gen. > SAD - Kinematic Direct Gen.
- r. SAD - Physics Direct Gen. = SAD - Kinematic Direct Gen.
- s. SAD - Physics AutoEncoder Gen. < SAD - Kinematic AutoEncoder Gen.
- t. SAD - Physics AutoEncoder Gen. > SAD - Kinematic AutoEncoder Gen.
- u. SAD - Physics AutoEncoder Gen. = SAD - Kinematic AutoEncoder Gen.
- v. SAD - Physics AutoEncoder Gen. < SAD - Physics Direct Gen.
- w. SAD - Physics AutoEncoder Gen. > SAD - Physics Direct Gen.
- x. SAD - Physics AutoEncoder Gen. = SAD - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	SAD - Kinematic Direct Gen. - SAD - Mocap	SAD - Kinematic AutoEncoder Gen. - SAD - Mocap	SAD - Physics Direct Gen. - SAD - Mocap
Z	-3.369 <sup>b</sup>	-3.696 <sup>b</sup>	-3.497 <sup>b</sup>
Asymp. Sig. (2-tailed)	<.001	<.001	<.001

### Test Statistics<sup>a</sup>

	SAD - Physics AutoEncoder Gen. - SAD - Mocap	SAD - Kinematic AutoEncoder Gen. - SAD - Kinematic Direct Gen.	SAD - Physics Direct Gen. - SAD - Kinematic Direct Gen.
Z	-3.858 <sup>b</sup>	-.754 <sup>b</sup>	-.364 <sup>c</sup>
Asymp. Sig. (2-tailed)	<.001	.451	.716

Test Statistics <sup>a</sup>		
	SAD - Physics AutoEncoder Gen. -	SAD - Physics AutoEncoder Gen. -
	SAD - Kinematic AutoEncoder Gen.	SAD - Physics Direct Gen.
Z	.000 <sup>d</sup>	-1.292 <sup>b</sup>
Asymp. Sig. (2-tailed)	1.000	.197

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

d. The sum of negative ranks equals the sum of positive ranks.

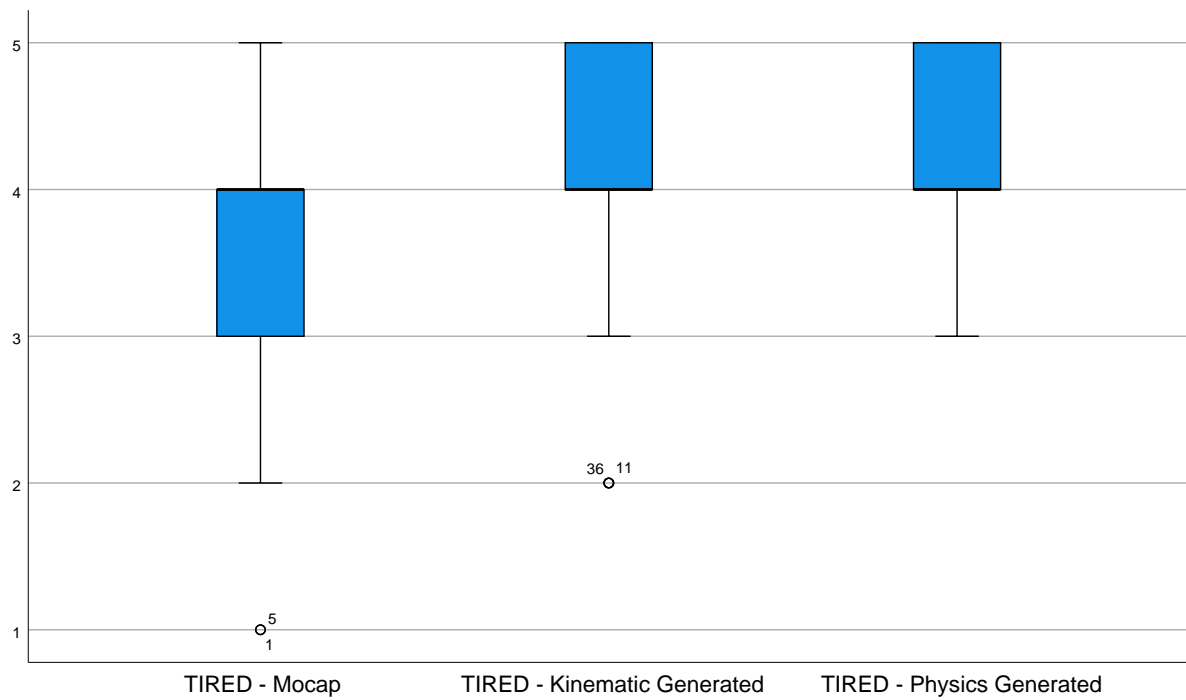
# == Tired ==

## Friedman Test

Ranks	
	Mean Rank
TIRED - Mocap	2.63
TIRED - Kinematic Direct Gen.	2.45
TIRED - Kinematic AutoEncoder Gen.	3.33
TIRED - Physics Direct Gen.	3.28
TIRED - Physics AutoEncoder Gen.	3.33

Test Statistics <sup>a</sup>	
N	40
Chi-Square	17.368
df	4
Asymp. Sig.	.002

a. Friedman Test



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
TIRED - Kinematic Direct Gen. - TIRED - Mocap	Negative Ranks	14 <sup>a</sup>	13.46	188.50
	Positive Ranks	11 <sup>b</sup>	12.41	136.50
	Ties	15 <sup>c</sup>		
	Total	40		
TIRED - Kinematic AutoEncoder Gen. - TIRED - Mocap	Negative Ranks	5 <sup>d</sup>	10.90	54.50
	Positive Ranks	16 <sup>e</sup>	11.03	176.50
	Ties	19 <sup>f</sup>		
	Total	40		
TIRED - Physics Direct Gen. - TIRED - Mocap	Negative Ranks	6 <sup>g</sup>	11.08	66.50
	Positive Ranks	15 <sup>h</sup>	10.97	164.50
	Ties	19 <sup>i</sup>		
	Total	40		
TIRED - Physics AutoEncoder Gen. - TIRED - Mocap	Negative Ranks	4 <sup>j</sup>	9.00	36.00
	Positive Ranks	17 <sup>k</sup>	11.47	195.00
	Ties	19 <sup>l</sup>		
	Total	40		
TIRED - Kinematic AutoEncoder Gen. - TIRED - Kinematic Direct Gen.	Negative Ranks	4 <sup>m</sup>	9.00	36.00
	Positive Ranks	19 <sup>n</sup>	12.63	240.00

## Ranks

		N	Mean Rank	Sum of Ranks
	Ties	17 <sup>o</sup>		
	Total	40		
TIRED - Physics Direct Gen. - TIRED - Kinematic Direct Gen.	Negative Ranks	8 <sup>p</sup>	11.63	93.00
	Positive Ranks	20 <sup>q</sup>	15.65	313.00
	Ties	12 <sup>r</sup>		
	Total	40		
TIRED - Physics AutoEncoder Gen. - TIRED - Kinematic AutoEncoder Gen.	Negative Ranks	10 <sup>s</sup>	8.00	80.00
	Positive Ranks	8 <sup>t</sup>	11.38	91.00
	Ties	22 <sup>u</sup>		
	Total	40		
TIRED - Physics AutoEncoder Gen. - TIRED - Physics Direct Gen.	Negative Ranks	10 <sup>v</sup>	9.40	94.00
	Positive Ranks	11 <sup>w</sup>	12.45	137.00
	Ties	19 <sup>x</sup>		
	Total	40		

- a. TIRED - Kinematic Direct Gen. < TIRED - Mocap
- b. TIRED - Kinematic Direct Gen. > TIRED - Mocap
- c. TIRED - Kinematic Direct Gen. = TIRED - Mocap
- d. TIRED - Kinematic AutoEncoder Gen. < TIRED - Mocap
- e. TIRED - Kinematic AutoEncoder Gen. > TIRED - Mocap
- f. TIRED - Kinematic AutoEncoder Gen. = TIRED - Mocap



- e. TIRED - Kinematic AutoEncoder Gen. > TIRED - Mocap
- f. TIRED - Kinematic AutoEncoder Gen. = TIRED - Mocap
- g. TIRED - Physics Direct Gen. < TIRED - Mocap
- h. TIRED - Physics Direct Gen. > TIRED - Mocap
- i. TIRED - Physics Direct Gen. = TIRED - Mocap
- j. TIRED - Physics AutoEncoder Gen. < TIRED - Mocap
- k. TIRED - Physics AutoEncoder Gen. > TIRED - Mocap
- l. TIRED - Physics AutoEncoder Gen. = TIRED - Mocap
- m. TIRED - Kinematic AutoEncoder Gen. < TIRED - Kinematic Direct Gen.
- n. TIRED - Kinematic AutoEncoder Gen. > TIRED - Kinematic Direct Gen.
- o. TIRED - Kinematic AutoEncoder Gen. = TIRED - Kinematic Direct Gen.
- p. TIRED - Physics Direct Gen. < TIRED - Kinematic Direct Gen.
- q. TIRED - Physics Direct Gen. > TIRED - Kinematic Direct Gen.
- r. TIRED - Physics Direct Gen. = TIRED - Kinematic Direct Gen.
- s. TIRED - Physics AutoEncoder Gen. < TIRED - Kinematic AutoEncoder Gen.
- t. TIRED - Physics AutoEncoder Gen. > TIRED - Kinematic AutoEncoder Gen.
- u. TIRED - Physics AutoEncoder Gen. = TIRED - Kinematic AutoEncoder Gen.
- v. TIRED - Physics AutoEncoder Gen. < TIRED - Physics Direct Gen.
- w. TIRED - Physics AutoEncoder Gen. > TIRED - Physics Direct Gen.
- x. TIRED - Physics AutoEncoder Gen. = TIRED - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	TIRED - Kinematic Direct Gen. - TIRED - Mocap	TIRED - Kinematic AutoEncoder Gen. - TIRED - Mocap	TIRED - Physics Direct Gen. - TIRED - Mocap
Z	-.720 <sup>b</sup>	-2.200 <sup>c</sup>	-1.753 <sup>c</sup>
Asymp. Sig. (2-tailed)	.472	.028	.080

### Test Statistics<sup>a</sup>

	TIRED - Physics AutoEncoder Gen. - TIRED - Mocap	TIRED - Kinematic AutoEncoder Gen. - TIRED - Kinematic Direct Gen.	TIRED - Physics Direct Gen. - TIRED - Kinematic Direct Gen.
Z	-2.951 <sup>c</sup>	-3.261 <sup>c</sup>	-2.608 <sup>c</sup>
Asymp. Sig. (2-tailed)	.003	.001	.009

### Test Statistics<sup>a</sup>

	TIRED - Physics AutoEncoder Gen. -	TIRED - Physics AutoEncoder Gen. -
	TIRED - Kinematic AutoEncoder Gen.	TIRED - Physics Direct Gen.
Z	-.257 <sup>c</sup>	-.776 <sup>c</sup>
Asymp. Sig. (2-tailed)	.797	.438

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

# == Afraid ==

### Friedman Test

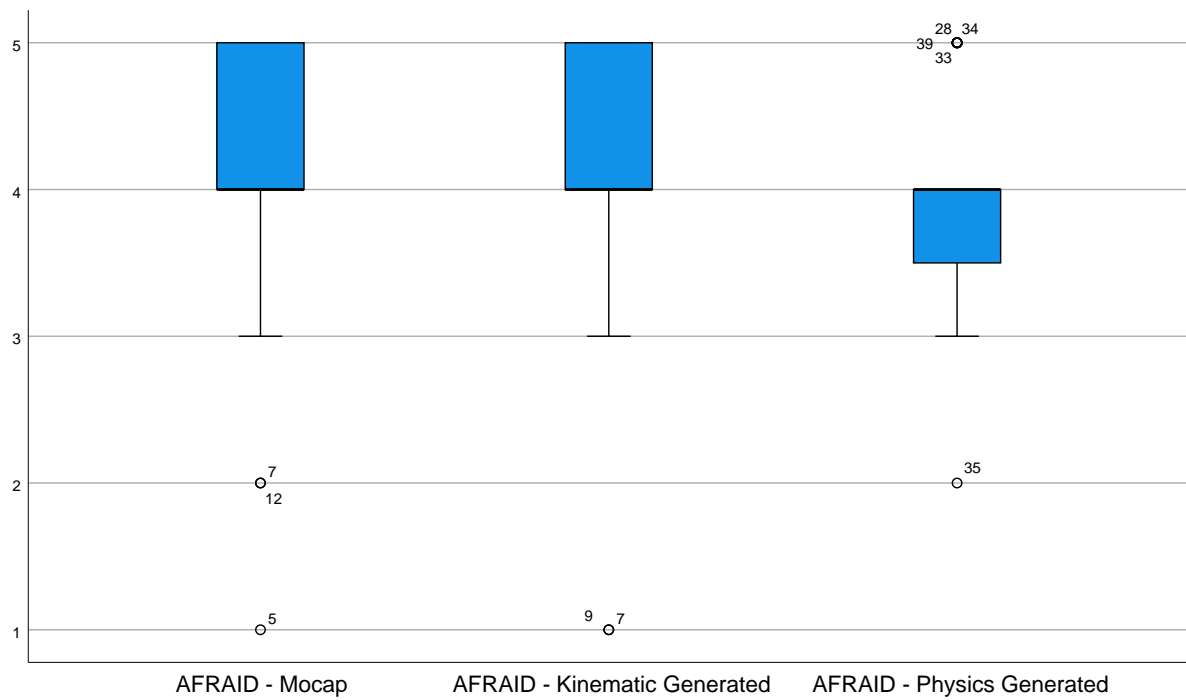
#### Ranks

	Mean Rank
AFRAID - Mocap	3.24
AFRAID - Kinematic Direct Gen.	3.03
AFRAID - Kinematic AutoEncoder Gen.	3.08
AFRAID - Physics Direct Gen.	2.75
AFRAID - Physics AutoEncoder Gen.	2.91

### Test Statistics<sup>a</sup>

N	40
Chi-Square	3.400
df	4
Asymp. Sig.	.493

a. Friedman Test



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
AFRAID - Kinematic Direct Gen. - AFRAID - Mocap	Negative Ranks	14 <sup>a</sup>	11.07	155.00
	Positive Ranks	9 <sup>b</sup>	13.44	121.00
	Ties	17 <sup>c</sup>		
	Total	40		
AFRAID - Kinematic AutoEncoder Gen. - AFRAID - Mocap	Negative Ranks	13 <sup>d</sup>	10.88	141.50
	Positive Ranks	9 <sup>e</sup>	12.39	111.50
	Ties	18 <sup>f</sup>		
	Total	40		
AFRAID - Physics Direct Gen. - AFRAID - Mocap	Negative Ranks	16 <sup>g</sup>	13.25	212.00
	Positive Ranks	9 <sup>h</sup>	12.56	113.00
	Ties	15 <sup>i</sup>		
	Total	40		
AFRAID - Physics AutoEncoder Gen. - AFRAID - Mocap	Negative Ranks	12 <sup>j</sup>	11.50	138.00
	Positive Ranks	9 <sup>k</sup>	10.33	93.00
	Ties	19 <sup>l</sup>		
	Total	40		
AFRAID - Kinematic AutoEncoder Gen. - AFRAID - Kinematic Direct	Negative Ranks	8 <sup>m</sup>	8.50	68.00
	Positive Ranks	8 <sup>n</sup>	8.50	68.00

## Ranks

		N	Mean Rank	Sum of Ranks
Gen.	Ties	24 <sup>o</sup>		
	Total	40		
AFRAID - Physics Direct Gen. - AFRAID - Kinematic Direct Gen.	Negative Ranks	14 <sup>p</sup>	12.14	170.00
	Positive Ranks	9 <sup>q</sup>	11.78	106.00
	Ties	17 <sup>r</sup>		
	Total	40		
AFRAID - Physics AutoEncoder Gen. - AFRAID - Kinematic AutoEncoder Gen.	Negative Ranks	11 <sup>s</sup>	7.73	85.00
	Positive Ranks	6 <sup>t</sup>	11.33	68.00
	Ties	23 <sup>u</sup>		
	Total	40		
AFRAID - Physics AutoEncoder Gen. - AFRAID - Physics Direct Gen.	Negative Ranks	11 <sup>v</sup>	12.91	142.00
	Positive Ranks	14 <sup>w</sup>	13.07	183.00
	Ties	15 <sup>x</sup>		
	Total	40		

- a. AFRAID - Kinematic Direct Gen. < AFRAID - Mocap
- b. AFRAID - Kinematic Direct Gen. > AFRAID - Mocap
- c. AFRAID - Kinematic Direct Gen. = AFRAID - Mocap
- d. AFRAID - Kinematic AutoEncoder Gen. < AFRAID - Mocap
- e. AFRAID - Kinematic AutoEncoder Gen. > AFRAID - Mocap
- f. AFRAID - Kinematic AutoEncoder Gen. = AFRAID - Mocap

- e. AFRAID - Kinematic AutoEncoder Gen. > AFRAID - Mocap
- f. AFRAID - Kinematic AutoEncoder Gen. = AFRAID - Mocap
- g. AFRAID - Physics Direct Gen. < AFRAID - Mocap
- h. AFRAID - Physics Direct Gen. > AFRAID - Mocap
- i. AFRAID - Physics Direct Gen. = AFRAID - Mocap
- j. AFRAID - Physics AutoEncoder Gen. < AFRAID - Mocap
- k. AFRAID - Physics AutoEncoder Gen. > AFRAID - Mocap
- l. AFRAID - Physics AutoEncoder Gen. = AFRAID - Mocap
- m. AFRAID - Kinematic AutoEncoder Gen. < AFRAID - Kinematic Direct Gen.
- n. AFRAID - Kinematic AutoEncoder Gen. > AFRAID - Kinematic Direct Gen.
- o. AFRAID - Kinematic AutoEncoder Gen. = AFRAID - Kinematic Direct Gen.
- p. AFRAID - Physics Direct Gen. < AFRAID - Kinematic Direct Gen.
- q. AFRAID - Physics Direct Gen. > AFRAID - Kinematic Direct Gen.
- r. AFRAID - Physics Direct Gen. = AFRAID - Kinematic Direct Gen.
- s. AFRAID - Physics AutoEncoder Gen. < AFRAID - Kinematic AutoEncoder Gen.
- t. AFRAID - Physics AutoEncoder Gen. > AFRAID - Kinematic AutoEncoder Gen.
- u. AFRAID - Physics AutoEncoder Gen. = AFRAID - Kinematic AutoEncoder Gen.
- v. AFRAID - Physics AutoEncoder Gen. < AFRAID - Physics Direct Gen.
- w. AFRAID - Physics AutoEncoder Gen. > AFRAID - Physics Direct Gen.
- x. AFRAID - Physics AutoEncoder Gen. = AFRAID - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	AFRAID - Kinematic Direct Gen. - AFRAID - Mocap	AFRAID - Kinematic AutoEncoder Gen. - AFRAID - Mocap	AFRAID - Physics Direct Gen. - AFRAID - Mocap
Z	-.549 <sup>b</sup>	-.528 <sup>b</sup>	-1.397 <sup>b</sup>
Asymp. Sig. (2-tailed)	.583	.597	.162

### Test Statistics<sup>a</sup>

	AFRAID - Physics AutoEncoder Gen. - AFRAID - Mocap	AFRAID - Kinematic AutoEncoder Gen. - AFRAID - Kinematic Direct Gen.	AFRAID - Physics Direct Gen. - AFRAID - Kinematic Direct Gen.
Z	-.820 <sup>b</sup>	.000 <sup>c</sup>	-1.058 <sup>b</sup>
Asymp. Sig. (2-tailed)	.412	1.000	.290

Test Statistics <sup>a</sup>		
	AFRAID - Physics AutoEncoder Gen. -	AFRAID - Physics AutoEncoder Gen. -
	AFRAID - Kinematic AutoEncoder Gen.	AFRAID - Physics Direct Gen.
Z	-.425 <sup>b</sup>	-.579 <sup>d</sup>
Asymp. Sig. (2-tailed)	.671	.563

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. The sum of negative ranks equals the sum of positive ranks.

d. Based on negative ranks.

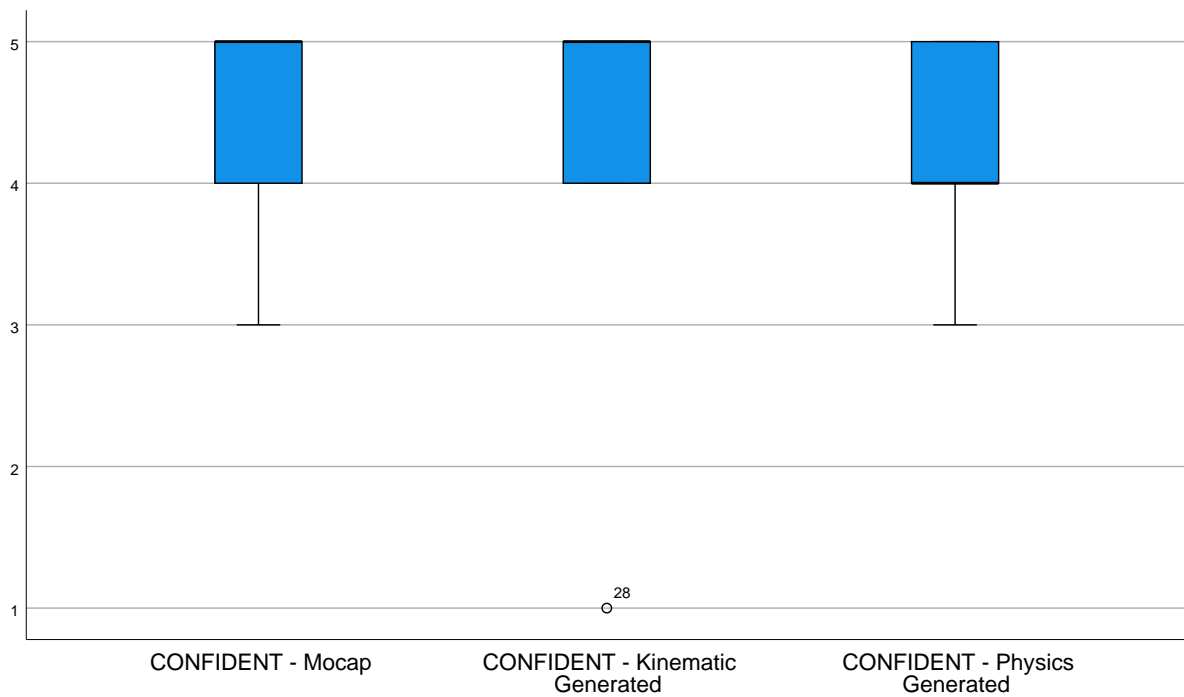
## == Confident ==

### Friedman Test

Ranks	
	Mean Rank
CONFIDENT - Mocap	3.30
CONFIDENT - Kinematic Direct Gen.	2.21
CONFIDENT - Kinematic AutoEncoder Gen.	3.66
CONFIDENT - Physics Direct Gen.	2.59
CONFIDENT - Physics AutoEncoder Gen.	3.24

Test Statistics <sup>a</sup>	
N	40
Chi-Square	33.223
df	4
Asymp. Sig.	<.001

a. Friedman Test



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
CONFIDENT - Kinematic Direct Gen. - CONFIDENT - Mocap	Negative Ranks	23 <sup>a</sup>	15.80	363.50
	Positive Ranks	5 <sup>b</sup>	8.50	42.50
	Ties	12 <sup>c</sup>		
	Total	40		
CONFIDENT - Kinematic AutoEncoder Gen. - CONFIDENT - Mocap	Negative Ranks	6 <sup>d</sup>	9.67	58.00
	Positive Ranks	12 <sup>e</sup>	9.42	113.00
	Ties	22 <sup>f</sup>		
	Total	40		
CONFIDENT - Physics Direct Gen. - CONFIDENT - Mocap	Negative Ranks	20 <sup>g</sup>	15.60	312.00
	Positive Ranks	8 <sup>h</sup>	11.75	94.00
	Ties	12 <sup>i</sup>		
	Total	40		
CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Mocap	Negative Ranks	10 <sup>j</sup>	11.00	110.00
	Positive Ranks	10 <sup>k</sup>	10.00	100.00
	Ties	20 <sup>l</sup>		
	Total	40		
CONFIDENT - Kinematic AutoEncoder Gen. - CONFIDENT - Kinematic	Negative Ranks	3 <sup>m</sup>	12.83	38.50
	Positive Ranks	24 <sup>n</sup>	14.15	339.50

## Ranks

		N	Mean Rank	Sum of Ranks
Direct Gen.	Ties	13 <sup>o</sup>		
	Total	40		
CONFIDENT - Physics Direct Gen. - CONFIDENT - Kinematic Direct Gen.	Negative Ranks	7 <sup>p</sup>	11.07	77.50
	Positive Ranks	15 <sup>q</sup>	11.70	175.50
	Ties	18 <sup>r</sup>		
	Total	40		
CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Kinematic AutoEncoder Gen.	Negative Ranks	13 <sup>s</sup>	8.50	110.50
	Positive Ranks	4 <sup>t</sup>	10.63	42.50
	Ties	23 <sup>u</sup>		
	Total	40		
CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Physics Direct Gen.	Negative Ranks	4 <sup>v</sup>	6.50	26.00
	Positive Ranks	16 <sup>w</sup>	11.50	184.00
	Ties	20 <sup>x</sup>		
	Total	40		

- a. CONFIDENT - Kinematic Direct Gen. < CONFIDENT - Mocap
- b. CONFIDENT - Kinematic Direct Gen. > CONFIDENT - Mocap
- c. CONFIDENT - Kinematic Direct Gen. = CONFIDENT - Mocap
- d. CONFIDENT - Kinematic AutoEncoder Gen. < CONFIDENT - Mocap
- e. CONFIDENT - Kinematic AutoEncoder Gen. > CONFIDENT - Mocap



- f. CONFIDENT - Kinematic AutoEncoder Gen. = CONFIDENT - Mocap
- g. CONFIDENT - Physics Direct Gen. < CONFIDENT - Mocap
- h. CONFIDENT - Physics Direct Gen. > CONFIDENT - Mocap
- i. CONFIDENT - Physics Direct Gen. = CONFIDENT - Mocap
- j. CONFIDENT - Physics AutoEncoder Gen. < CONFIDENT - Mocap
- k. CONFIDENT - Physics AutoEncoder Gen. > CONFIDENT - Mocap
- l. CONFIDENT - Physics AutoEncoder Gen. = CONFIDENT - Mocap
- m. CONFIDENT - Kinematic AutoEncoder Gen. < CONFIDENT - Kinematic Direct Gen.
- n. CONFIDENT - Kinematic AutoEncoder Gen. > CONFIDENT - Kinematic Direct Gen.
- o. CONFIDENT - Kinematic AutoEncoder Gen. = CONFIDENT - Kinematic Direct Gen.
- p. CONFIDENT - Physics Direct Gen. < CONFIDENT - Kinematic Direct Gen.
- q. CONFIDENT - Physics Direct Gen. > CONFIDENT - Kinematic Direct Gen.
- r. CONFIDENT - Physics Direct Gen. = CONFIDENT - Kinematic Direct Gen.
- s. CONFIDENT - Physics AutoEncoder Gen. < CONFIDENT - Kinematic AutoEncoder Gen.
- t. CONFIDENT - Physics AutoEncoder Gen. > CONFIDENT - Kinematic AutoEncoder Gen.
- u. CONFIDENT - Physics AutoEncoder Gen. = CONFIDENT - Kinematic AutoEncoder Gen.
- v. CONFIDENT - Physics AutoEncoder Gen. < CONFIDENT - Physics Direct Gen.
- w. CONFIDENT - Physics AutoEncoder Gen. > CONFIDENT - Physics Direct Gen.
- x. CONFIDENT - Physics AutoEncoder Gen. = CONFIDENT - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	CONFIDENT - Kinematic Direct Gen. - CONFIDENT - Mocap	CONFIDENT - Kinematic AutoEncoder Gen. - CONFIDENT - Mocap	CONFIDENT - Physics Direct Gen. - CONFIDENT - Mocap
Z	-3.747 <sup>b</sup>	-1.286 <sup>c</sup>	-2.553 <sup>b</sup>
Asymp. Sig. (2-tailed)	<.001	.198	.011

### Test Statistics<sup>a</sup>

	CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Mocap	CONFIDENT - Kinematic AutoEncoder Gen. - CONFIDENT - Kinematic Direct Gen.	CONFIDENT - Physics Direct Gen. - CONFIDENT - Kinematic Direct Gen.
Z	-.209 <sup>b</sup>	-3.661 <sup>c</sup>	-1.627 <sup>c</sup>
Asymp. Sig. (2-tailed)	.835	<.001	.104

### Test Statistics<sup>a</sup>

	CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Kinematic AutoEncoder Gen.	CONFIDENT - Physics AutoEncoder Gen. - CONFIDENT - Physics Direct Gen.
Z	-1.789 <sup>b</sup>	-3.041 <sup>c</sup>
Asymp. Sig. (2-tailed)	.074	.002

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

# == ANGRY ==

### Friedman Test

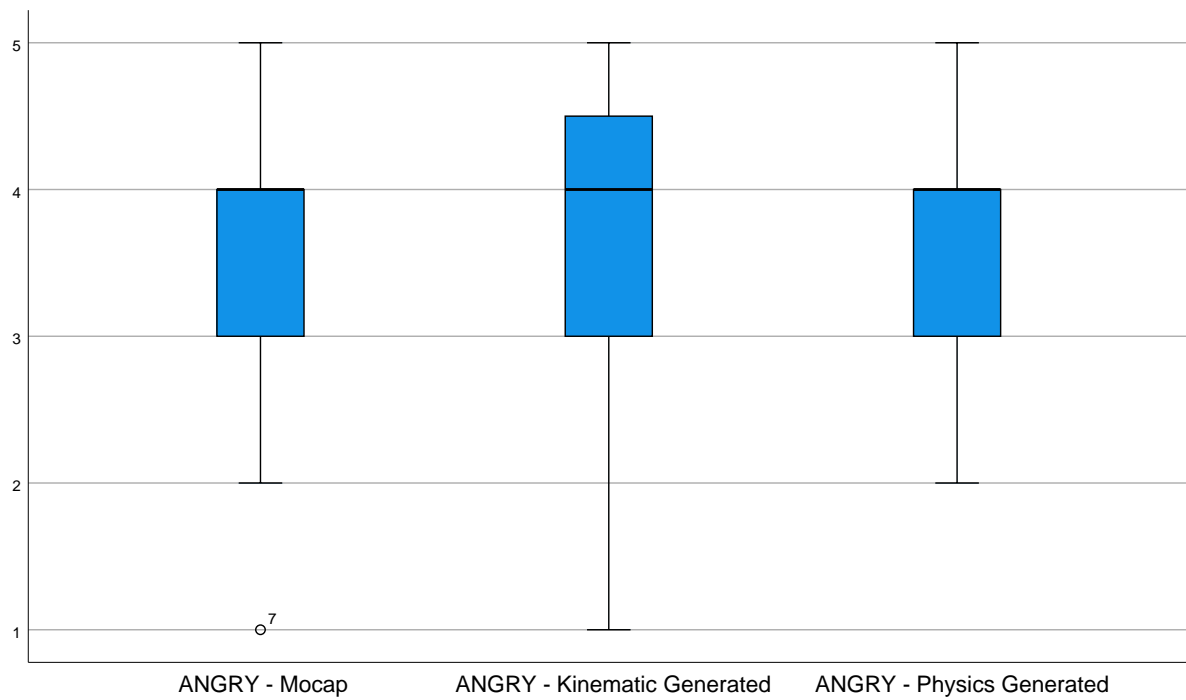
#### Ranks

	Mean Rank
ANGRY - Mocap	3.35
ANGRY - Kinematic Direct Gen.	2.35
ANGRY - Kinematic AutoEncoder Gen.	3.06
ANGRY - Physics Direct Gen.	2.89
ANGRY - Physics AutoEncoder Gen.	3.35

### Test Statistics<sup>a</sup>

N	40
Chi-Square	16.066
df	4
Asymp. Sig.	.003

a. Friedman Test



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
ANGRY - Kinematic Direct Gen. - ANGRY - Mocap	Negative Ranks	21 <sup>a</sup>	13.05	274.00
	Positive Ranks	3 <sup>b</sup>	8.67	26.00
	Ties	16 <sup>c</sup>		
	Total	40		
ANGRY - Kinematic AutoEncoder Gen. - ANGRY - Mocap	Negative Ranks	13 <sup>d</sup>	13.15	171.00
	Positive Ranks	11 <sup>e</sup>	11.73	129.00
	Ties	16 <sup>f</sup>		
	Total	40		
ANGRY - Physics Direct Gen. - ANGRY - Mocap	Negative Ranks	16 <sup>g</sup>	12.88	206.00
	Positive Ranks	9 <sup>h</sup>	13.22	119.00
	Ties	15 <sup>i</sup>		
	Total	40		
ANGRY - Physics AutoEncoder Gen. - ANGRY - Mocap	Negative Ranks	10 <sup>j</sup>	8.30	83.00
	Positive Ranks	9 <sup>k</sup>	11.89	107.00
	Ties	21 <sup>l</sup>		
	Total	40		
ANGRY - Kinematic AutoEncoder Gen. - ANGRY - Kinematic Direct	Negative Ranks	8 <sup>m</sup>	8.06	64.50
	Positive Ranks	17 <sup>n</sup>	15.32	260.50

## Ranks

		N	Mean Rank	Sum of Ranks
Gen.	Ties	15 <sup>o</sup>		
	Total	40		
ANGRY - Physics Direct Gen. - ANGRY - Kinematic Direct Gen.	Negative Ranks	8 <sup>p</sup>	10.75	86.00
	Positive Ranks	17 <sup>q</sup>	14.06	239.00
	Ties	15 <sup>r</sup>		
	Total	40		
ANGRY - Physics AutoEncoder Gen. - ANGRY - Kinematic AutoEncoder Gen.	Negative Ranks	6 <sup>s</sup>	8.33	50.00
	Positive Ranks	11 <sup>t</sup>	9.36	103.00
	Ties	23 <sup>u</sup>		
	Total	40		
ANGRY - Physics AutoEncoder Gen. - ANGRY - Physics Direct Gen.	Negative Ranks	8 <sup>v</sup>	10.50	84.00
	Positive Ranks	16 <sup>w</sup>	13.50	216.00
	Ties	16 <sup>x</sup>		
	Total	40		

- a. ANGRY - Kinematic Direct Gen. < ANGRY - Mocap
- b. ANGRY - Kinematic Direct Gen. > ANGRY - Mocap
- c. ANGRY - Kinematic Direct Gen. = ANGRY - Mocap
- d. ANGRY - Kinematic AutoEncoder Gen. < ANGRY - Mocap
- e. ANGRY - Kinematic AutoEncoder Gen. > ANGRY - Mocap
- f. ANGRY - Kinematic AutoEncoder Gen. = ANGRY - Mocap

- e. ANGRY - Kinematic AutoEncoder Gen. > ANGRY - Mocap
- f. ANGRY - Kinematic AutoEncoder Gen. = ANGRY - Mocap
- g. ANGRY - Physics Direct Gen. < ANGRY - Mocap
- h. ANGRY - Physics Direct Gen. > ANGRY - Mocap
- i. ANGRY - Physics Direct Gen. = ANGRY - Mocap
- j. ANGRY - Physics AutoEncoder Gen. < ANGRY - Mocap
- k. ANGRY - Physics AutoEncoder Gen. > ANGRY - Mocap
- l. ANGRY - Physics AutoEncoder Gen. = ANGRY - Mocap
- m. ANGRY - Kinematic AutoEncoder Gen. < ANGRY - Kinematic Direct Gen.
- n. ANGRY - Kinematic AutoEncoder Gen. > ANGRY - Kinematic Direct Gen.
- o. ANGRY - Kinematic AutoEncoder Gen. = ANGRY - Kinematic Direct Gen.
- p. ANGRY - Physics Direct Gen. < ANGRY - Kinematic Direct Gen.
- q. ANGRY - Physics Direct Gen. > ANGRY - Kinematic Direct Gen.
- r. ANGRY - Physics Direct Gen. = ANGRY - Kinematic Direct Gen.
- s. ANGRY - Physics AutoEncoder Gen. < ANGRY - Kinematic AutoEncoder Gen.
- t. ANGRY - Physics AutoEncoder Gen. > ANGRY - Kinematic AutoEncoder Gen.
- u. ANGRY - Physics AutoEncoder Gen. = ANGRY - Kinematic AutoEncoder Gen.
- v. ANGRY - Physics AutoEncoder Gen. < ANGRY - Physics Direct Gen.
- w. ANGRY - Physics AutoEncoder Gen. > ANGRY - Physics Direct Gen.
- x. ANGRY - Physics AutoEncoder Gen. = ANGRY - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	ANGRY - Kinematic Direct Gen. - ANGRY - Mocap	ANGRY - Kinematic AutoEncoder Gen. - ANGRY - Mocap	ANGRY - Physics Direct Gen. - ANGRY - Mocap
Z	-3.634 <sup>b</sup>	-.623 <sup>b</sup>	-1.198 <sup>b</sup>
Asymp. Sig. (2-tailed)	<.001	.533	.231

### Test Statistics<sup>a</sup>

	ANGRY - Physics AutoEncoder Gen. - ANGRY - Mocap	ANGRY - Kinematic AutoEncoder Gen. - ANGRY - Kinematic Direct Gen.	ANGRY - Physics Direct Gen. - ANGRY - Kinematic Direct Gen.
Z	-.499 <sup>c</sup>	-2.668 <sup>c</sup>	-2.099 <sup>c</sup>
Asymp. Sig. (2-tailed)	.617	.008	.036

### Test Statistics<sup>a</sup>

	ANGRY - Physics AutoEncoder Gen.	ANGRY - Physics AutoEncoder Gen.
	-	-
	ANGRY - Kinematic AutoEncoder Gen.	ANGRY - Physics Direct Gen.
Z	-1.325 <sup>c</sup>	-1.976 <sup>c</sup>
Asymp. Sig. (2-tailed)	.185	.048

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

# == Happy ==

### Friedman Test

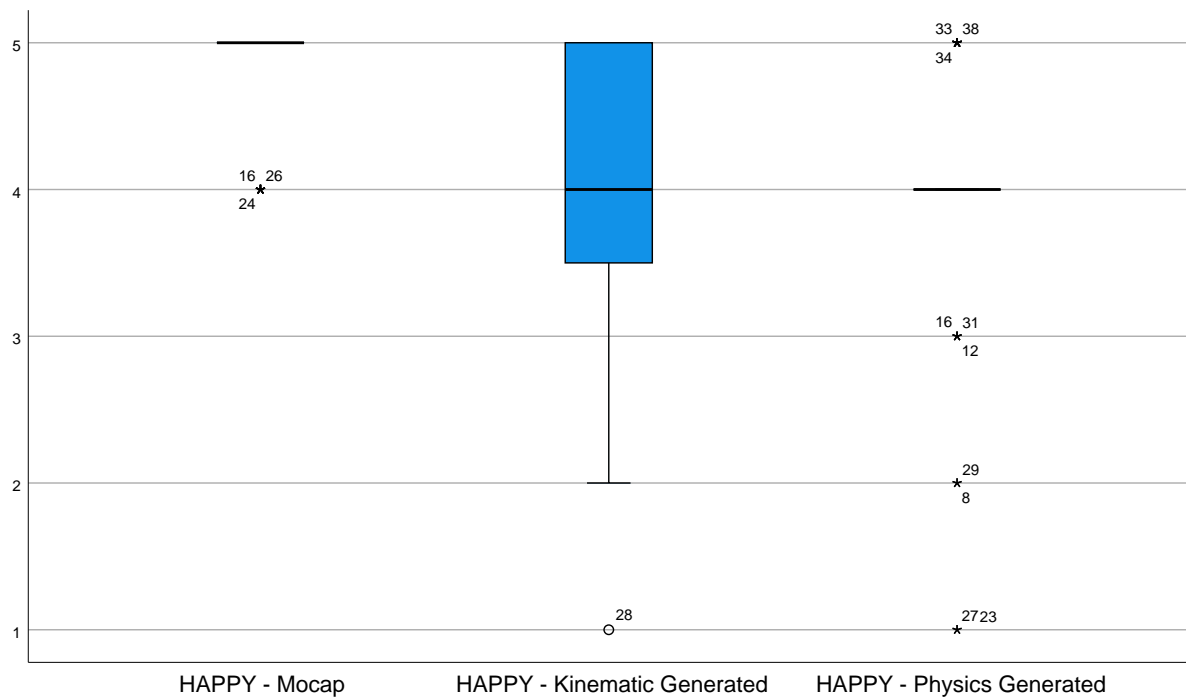
#### Ranks

	Mean Rank
HAPPY - Mocap	4.35
HAPPY - Kinematic Direct Gen.	2.83
HAPPY - Kinematic AutoEncoder Gen.	3.09
HAPPY - Physics Direct Gen.	1.65
HAPPY - Physics AutoEncoder Gen.	3.09

### Test Statistics<sup>a</sup>

N	40
Chi-Square	76.571
df	4
Asymp. Sig.	<.001

a. Friedman Test



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
HAPPY - Kinematic Direct Gen. - HAPPY - Mocap	Negative Ranks	26 <sup>a</sup>	14.19	369.00
	Positive Ranks	1 <sup>b</sup>	9.00	9.00
	Ties	13 <sup>c</sup>		
	Total	40		
HAPPY - Kinematic AutoEncoder Gen. - HAPPY - Mocap	Negative Ranks	23 <sup>d</sup>	12.70	292.00
	Positive Ranks	1 <sup>e</sup>	8.00	8.00
	Ties	16 <sup>f</sup>		
	Total	40		
HAPPY - Physics Direct Gen. - HAPPY - Mocap	Negative Ranks	37 <sup>g</sup>	19.00	703.00
	Positive Ranks	0 <sup>h</sup>	.00	.00
	Ties	3 <sup>i</sup>		
	Total	40		
HAPPY - Physics AutoEncoder Gen. - HAPPY - Mocap	Negative Ranks	24 <sup>j</sup>	12.50	300.00
	Positive Ranks	0 <sup>k</sup>	.00	.00
	Ties	16 <sup>l</sup>		
	Total	40		
HAPPY - Kinematic AutoEncoder Gen. - HAPPY - Kinematic Direct	Negative Ranks	10 <sup>m</sup>	13.55	135.50
	Positive Ranks	15 <sup>n</sup>	12.63	189.50

## Ranks

		N	Mean Rank	Sum of Ranks
Gen.	Ties	15 <sup>o</sup>		
	Total	40		
HAPPY - Physics Direct Gen. - HAPPY - Kinematic Direct Gen.	Negative Ranks	23 <sup>p</sup>	13.07	300.50
	Positive Ranks	2 <sup>q</sup>	12.25	24.50
	Ties	15 <sup>r</sup>		
	Total	40		
HAPPY - Physics AutoEncoder Gen. - HAPPY - Kinematic AutoEncoder Gen.	Negative Ranks	10 <sup>s</sup>	12.25	122.50
	Positive Ranks	11 <sup>t</sup>	9.86	108.50
	Ties	19 <sup>u</sup>		
	Total	40		
HAPPY - Physics AutoEncoder Gen. - HAPPY - Physics Direct Gen.	Negative Ranks	4 <sup>v</sup>	16.25	65.00
	Positive Ranks	29 <sup>w</sup>	17.10	496.00
	Ties	7 <sup>x</sup>		
	Total	40		

- a. HAPPY - Kinematic Direct Gen. < HAPPY - Mocap
- b. HAPPY - Kinematic Direct Gen. > HAPPY - Mocap
- c. HAPPY - Kinematic Direct Gen. = HAPPY - Mocap
- d. HAPPY - Kinematic AutoEncoder Gen. < HAPPY - Mocap
- e. HAPPY - Kinematic AutoEncoder Gen. > HAPPY - Mocap
- f. HAPPY - Kinematic AutoEncoder Gen. = HAPPY - Mocap



- e. HAPPY - Kinematic AutoEncoder Gen. > HAPPY - Mocap
- f. HAPPY - Kinematic AutoEncoder Gen. = HAPPY - Mocap
- g. HAPPY - Physics Direct Gen. < HAPPY - Mocap
- h. HAPPY - Physics Direct Gen. > HAPPY - Mocap
- i. HAPPY - Physics Direct Gen. = HAPPY - Mocap
- j. HAPPY - Physics AutoEncoder Gen. < HAPPY - Mocap
- k. HAPPY - Physics AutoEncoder Gen. > HAPPY - Mocap
- l. HAPPY - Physics AutoEncoder Gen. = HAPPY - Mocap
- m. HAPPY - Kinematic AutoEncoder Gen. < HAPPY - Kinematic Direct Gen.
- n. HAPPY - Kinematic AutoEncoder Gen. > HAPPY - Kinematic Direct Gen.
- o. HAPPY - Kinematic AutoEncoder Gen. = HAPPY - Kinematic Direct Gen.
- p. HAPPY - Physics Direct Gen. < HAPPY - Kinematic Direct Gen.
- q. HAPPY - Physics Direct Gen. > HAPPY - Kinematic Direct Gen.
- r. HAPPY - Physics Direct Gen. = HAPPY - Kinematic Direct Gen.
- s. HAPPY - Physics AutoEncoder Gen. < HAPPY - Kinematic AutoEncoder Gen.
- t. HAPPY - Physics AutoEncoder Gen. > HAPPY - Kinematic AutoEncoder Gen.
- u. HAPPY - Physics AutoEncoder Gen. = HAPPY - Kinematic AutoEncoder Gen.
- v. HAPPY - Physics AutoEncoder Gen. < HAPPY - Physics Direct Gen.
- w. HAPPY - Physics AutoEncoder Gen. > HAPPY - Physics Direct Gen.
- x. HAPPY - Physics AutoEncoder Gen. = HAPPY - Physics Direct Gen.

### Test Statistics<sup>a</sup>

	HAPPY - Kinematic Direct Gen. - HAPPY - Mocap	HAPPY - Kinematic AutoEncoder Gen. - HAPPY - Mocap	HAPPY - Physics Direct Gen. - HAPPY - Mocap
Z	-4.468 <sup>b</sup>	-4.191 <sup>b</sup>	-5.386 <sup>b</sup>
Asymp. Sig. (2-tailed)	<.001	<.001	<.001

### Test Statistics<sup>a</sup>

	HAPPY - Physics AutoEncoder Gen. - HAPPY - Mocap	HAPPY - Kinematic AutoEncoder Gen. - HAPPY - Kinematic Direct Gen.	HAPPY - Physics Direct Gen. - HAPPY - Kinematic Direct Gen.
Z	-4.515 <sup>b</sup>	-.783 <sup>c</sup>	-3.798 <sup>b</sup>
Asymp. Sig. (2-tailed)	<.001	.434	<.001

### Test Statistics<sup>a</sup>

	HAPPY - Physics AutoEncoder Gen. - HAPPY - Kinematic AutoEncoder Gen.	HAPPY - Physics AutoEncoder Gen. - HAPPY - Physics Direct Gen.
Z	-.251 <sup>b</sup>	-3.938 <sup>c</sup>
Asymp. Sig. (2-tailed)	.802	<.001

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.