Program Summary - APH306 Final Report.sas

Execution Environment

Author:	u63515878
File:	/home/u63515878/APH306 Final Report.sas
SAS Platform:	Linux LIN X64 5.14.0-284.30.1.el9_2.x86_64
SAS Host:	ODAWS02-APSE1.ODA.SAS.COM
SAS Version:	9.04.01M7P08062020
SAS Locale:	en_US
Submission Time:	12/20/2024, 3:52:52 PM
Browser Host:	103.172.183.78
User Agent:	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.0.0 Safari/537.36 Edg/131.0.0.0
Application Server:	ODAMID00-APSE1.ODA.SAS.COM

Code: APH306 Final Report.sas

```
/* APH306 Final Report */

/* Import the data */
proc import datafile="/home/u63515878/Database.xlsx"
    out=health_data
    dbms=xlsx
    replace;
    getnames=yes;
run;

/* Data Processing */
data health;
    set health_data;
    MWDPree = input(MWDPre, best32.);
run;

/* Check for missing values */
proc means data=health nmiss n;
    var _numeric_;
run;

proc freq data=health;
    tables _character_ / missing;
run;

/* Descriptive Statistics */
proc freq data=health;
    tables Sex*group Smoking*group Alcholdrinking*group / chisq;
run;

proc means data=health n mean std min max;
    class group; /* group: 1 = intervention, 0 = control */
    var Age Height Bodyweight BMI Sedentarytime
        TUGTPre TUGTPost KEMSPre KEMSPost MWDPree MWDPost;
run;


proc sgpanel data=health;
    panelby group;
    vbox TUGTPre / category=group;
    vbox TUGTPost / category=group;
    rowaxis label="Timed Up-and-Go Test (seconds)";
    colaxis label="Group";
    title "Timed Up-and-Go Test (TUGT) Comparison by Group";
run;

proc sgpanel data=health;
```

```
    panelby group;
    vbox KEMSPre / category=group;
    vbox KEMSPost / category=group;
    rowaxis label="Knee Extensor Muscle Strength (kilogram)";
    colaxis label="Group";
    title "Knee Extensor Muscle Strength (KEMS) Comparison by Group";
run;

proc sgpanel data=health;
    panelby group;
    vbox MWDPree / category=group;
    vbox MWDPost / category=group;
    rowaxis label="6-min Walk Distance (meter)";
    colaxis label="Group";
    title "6-min Walk Distance (6MWD) Comparison by Group";
run;


/* Correlation Analysis */
proc corr data=health nosimple;
    var TUGTPre KEMSPre MWDPree;
    with Sex Age Height Bodyweight BMI Smoking Alcholdrinking;
run;

proc corr data=health nosimple;
    var TUGTPost KEMSPost MWDPost;
    with Sex Age Height Bodyweight BMI Smoking Alcholdrinking;
run;


/* Multivariate Regression Analysis with Baseline Adjustment */
proc glm data=health;
    class group;
    model TUGTPost = TUGTPre Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
run;

proc glm data=health;
    class group;
    model KEMSPost = KEMSPre Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
run;

proc glm data=health;
    class group;
    model MWDPost = MWDPree Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
run;
```

Log: APH306 Final Report.sas

Warnings (6)

Notes (27)

```
1          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69         proc import datafile="/home/u63515878/Database.xlsx"
70             out=health_data
71             dbms=xlsx
72             replace;
73             getnames=yes;
74         run;

NOTE: One or more variables were converted because the data type is not supported by the V9 engine. For more details, run with
      options MSGLEVEL=I.
NOTE: The import data set has 74 observations and 17 variables.
NOTE: WORK.HEALTH_DATA data set was successfully created.
NOTE: PROCEDURE IMPORT used (Total process time):
      real time           0.02 seconds
      user cpu time       0.02 seconds
      system cpu time     0.00 seconds
      memory              3374.59k
      OS Memory           28928.00k
      Timestamp           12/20/2024 07:52:52 AM
```

```
      Step Count                        106  Switch Count  4
      Page Faults                       0
      Page Reclaims                     696
      Page Swaps                        0
      Voluntary Context Switches        29
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           264


75
76         /* Data Processing */
77         data health;
78             set health_data;
79             MWDPree = input(MWDPre, best32.);
80         run;

NOTE: Invalid argument to function INPUT at line 79 column 15.
Group=CG No.=5 Sex=2 Age=71 Height=1.52 Bodyweight=49.4 BMI=21.38 Smoking=2 Alcholdrinking=1  Habit=2 Sedentarytime=2 TUGTPre=9.90
TUGTPost=8.84 KEMSPre=15.10 KEMSPost=15.10 MWDPre=NA MWDPost=369.00 MWDPree=. _ERROR_=1 _N_=44
NOTE: Mathematical operations could not be performed at the following places. The results of the operations have been set to
      missing values.
      Each place is given by: (Number of times) at (Line):(Column).
      1 at 79:15
NOTE: There were 74 observations read from the data set WORK.HEALTH_DATA.
NOTE: The data set WORK.HEALTH has 74 observations and 18 variables.
NOTE: DATA statement used (Total process time):
      real time           0.00 seconds
      user cpu time       0.00 seconds
      system cpu time     0.00 seconds
      memory              964.18k
      OS Memory           26800.00k
      Timestamp           12/20/2024 07:52:52 AM
      Step Count                        107  Switch Count  2
      Page Faults                       0
      Page Reclaims                     118
      Page Swaps                        0
      Voluntary Context Switches        12
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           272


81
82         /* Check for missing values */
83         proc means data=health nmiss n;
84             var _numeric_;
85         run;

NOTE: There were 74 observations read from the data set WORK.HEALTH.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.03 seconds
      user cpu time       0.03 seconds
      system cpu time     0.01 seconds
      memory              6836.68k
      OS Memory           31680.00k
      Timestamp           12/20/2024 07:52:52 AM
      Step Count                        108  Switch Count  1
      Page Faults                       0
      Page Reclaims                     1346
      Page Swaps                        0
      Voluntary Context Switches        21
      Involuntary Context Switches      2
      Block Input Operations            0
      Block Output Operations           8


86
87         proc freq data=health;
88             tables _character_ / missing;
89         run;

NOTE: There were 74 observations read from the data set WORK.HEALTH.
NOTE: PROCEDURE FREQ used (Total process time):
      real time           0.04 seconds
      user cpu time       0.05 seconds
      system cpu time     0.00 seconds
      memory              1008.93k
      OS Memory           26800.00k
      Timestamp           12/20/2024 07:52:52 AM
      Step Count                        109  Switch Count  2
      Page Faults                       0
      Page Reclaims                     119
      Page Swaps                        0
```

```
      Voluntary Context Switches        15
      Involuntary Context Switches      2
      Block Input Operations            0
      Block Output Operations           280


90
91          /* Descriptive Statistics */
92          proc freq data=health;
93              tables Sex*group Smoking*group Alcholdrinking*group / chisq;
94          run;

NOTE: There were 74 observations read from the data set WORK.HEALTH.
NOTE: PROCEDURE FREQ used (Total process time):
      real time           0.07 seconds
      user cpu time       0.07 seconds
      system cpu time     0.00 seconds
      memory              1481.90k
      OS Memory           27060.00k
      Timestamp           12/20/2024 07:52:52 AM
      Step Count                        110  Switch Count  5
      Page Faults                       0
      Page Reclaims                     202
      Page Swaps                        0
      Voluntary Context Switches        32
      Involuntary Context Switches      3
      Block Input Operations            0
      Block Output Operations           576


95
96          proc means data=health n mean std min max;
97              class group; /* group: 1 = intervention, 0 = control */
98              var Age Height Bodyweight BMI Sedentarytime
99                  TUGTPre TUGTPost KEMSPre KEMSPost MWDPree MWDPost;
100         run;

NOTE: There were 74 observations read from the data set WORK.HEALTH.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.04 seconds
      user cpu time       0.04 seconds
      system cpu time     0.01 seconds
      memory              6765.71k
      OS Memory           31680.00k
      Timestamp           12/20/2024 07:52:52 AM
      Step Count                        111  Switch Count  1
      Page Faults                       0
      Page Reclaims                     1361
      Page Swaps                        0
      Voluntary Context Switches        22
      Involuntary Context Switches      3
      Block Input Operations            0
      Block Output Operations           8


101
102
103         proc sgpanel data=health;
104             panelby group;
105             vbox TUGTPre / category=group;
106             vbox TUGTPost / category=group;
107             rowaxis label="Timed Up-and-Go Test (seconds)";
108             colaxis label="Group";
109             title "Timed Up-and-Go Test (TUGT) Comparison by Group";
110         run;

NOTE: PROCEDURE SGPANEL used (Total process time):
      real time           0.20 seconds
      user cpu time       0.06 seconds
      system cpu time     0.00 seconds
      memory              9329.81k
      OS Memory           32060.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        112  Switch Count  33
      Page Faults                       1
      Page Reclaims                     2143
      Page Swaps                        0
      Voluntary Context Switches        751
      Involuntary Context Switches      6
      Block Input Operations            24
      Block Output Operations           2392

WARNING: There are insufficient nonmissing observations to create a boxplot.
WARNING: There are insufficient nonmissing observations to create a boxplot.
```

```
NOTE: There were 74 observations read from the data set WORK.HEALTH.

111
112         proc sgpanel data=health;
113             panelby group;
114             vbox KEMSPre / category=group;
115             vbox KEMSPost / category=group;
116             rowaxis label="Knee Extensor Muscle Strength (kilogram)";
117             colaxis label="Group";
118             title "Knee Extensor Muscle Strength (KEMS) Comparison by Group";
119         run;

NOTE: PROCEDURE SGPANEL used (Total process time):
      real time           0.15 seconds
      user cpu time       0.06 seconds
      system cpu time     0.01 seconds
      memory              3218.43k
      OS Memory           32444.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        113  Switch Count  33
      Page Faults                       0
      Page Reclaims                     1114
      Page Swaps                        0
      Voluntary Context Switches        684
      Involuntary Context Switches      6
      Block Input Operations            0
      Block Output Operations           2096

WARNING: There are insufficient nonmissing observations to create a boxplot.
WARNING: There are insufficient nonmissing observations to create a boxplot.
NOTE: There were 74 observations read from the data set WORK.HEALTH.

120
121         proc sgpanel data=health;
122             panelby group;
123             vbox MWDPree / category=group;
124             vbox MWDPost / category=group;
125             rowaxis label="6-min Walk Distance (meter)";
126             colaxis label="Group";
127             title "6-min Walk Distance (6MWD) Comparison by Group";
128         run;

NOTE: PROCEDURE SGPANEL used (Total process time):
      real time           0.14 seconds
      user cpu time       0.06 seconds
      system cpu time     0.01 seconds
      memory              3395.87k
      OS Memory           32444.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        114  Switch Count  32
      Page Faults                       0
      Page Reclaims                     1000
      Page Swaps                        0
      Voluntary Context Switches        678
      Involuntary Context Switches      6
      Block Input Operations            0
      Block Output Operations           2088

WARNING: There are insufficient nonmissing observations to create a boxplot.
WARNING: There are insufficient nonmissing observations to create a boxplot.
NOTE: There were 74 observations read from the data set WORK.HEALTH.

129
130
131         /* Correlation Analysis */
132         proc corr data=health nosimple;
133             var TUGTPre KEMSPre MWDPree;
134             with Sex Age Height Bodyweight BMI Smoking Alcholdrinking;
135         run;

NOTE: PROCEDURE CORR used (Total process time):
      real time           0.03 seconds
      user cpu time       0.04 seconds
      system cpu time     0.00 seconds
      memory              1254.09k
      OS Memory           30636.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        115  Switch Count  0
      Page Faults                       0
      Page Reclaims                     70
      Page Swaps                        0
      Voluntary Context Switches        4
      Involuntary Context Switches      2
      Block Input Operations            16
```

```
      Block Output Operations           0


136
137         proc corr data=health nosimple;
138             var TUGTPost KEMSPost MWDPost;
139             with Sex Age Height Bodyweight BMI Smoking Alcholdrinking;
140         run;

NOTE: PROCEDURE CORR used (Total process time):
      real time           0.02 seconds
      user cpu time       0.03 seconds
      system cpu time     0.00 seconds
      memory              816.46k
      OS Memory           30636.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        116  Switch Count  0
      Page Faults                       0
      Page Reclaims                     52
      Page Swaps                        0
      Voluntary Context Switches        3
      Involuntary Context Switches      2
      Block Input Operations            0
      Block Output Operations           16


141
142
143         /* Multivariate Regression Analysis with Baseline Adjustment */
144         proc glm data=health;
145             class group;
146             model TUGTPost = TUGTPre Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
147         run;

148

NOTE: PROCEDURE GLM used (Total process time):
      real time           0.04 seconds
      user cpu time       0.04 seconds
      system cpu time     0.00 seconds
      memory              1966.03k
      OS Memory           31676.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        117  Switch Count  2
      Page Faults                       0
      Page Reclaims                     220
      Page Swaps                        0
      Voluntary Context Switches        17
      Involuntary Context Switches      2
      Block Input Operations            0
      Block Output Operations           304


149         proc glm data=health;
150             class group;
151             model KEMSPost = KEMSPre Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
152         run;

153

NOTE: PROCEDURE GLM used (Total process time):
      real time           0.04 seconds
      user cpu time       0.04 seconds
      system cpu time     0.00 seconds
      memory              1843.15k
      OS Memory           31676.00k
      Timestamp           12/20/2024 07:52:53 AM
      Step Count                        118  Switch Count  2
      Page Faults                       0
      Page Reclaims                     222
      Page Swaps                        0
      Voluntary Context Switches        15
      Involuntary Context Switches      2
      Block Input Operations            0
      Block Output Operations           304


154         proc glm data=health;
155             class group;
156             model MWDPost = MWDPree Sex Age Height Bodyweight BMI Sedentarytime Smoking Alcholdrinking;
157         run;

158
159
```

```
160         OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
170
```

Results: APH306 Final Report.sas

The MEANS Procedure

Variable	Label	N Miss	N
No.	No.	1	73
Sex	Sex	1	73
Age	Age	1	73
Height	Height	1	73
Bodyweight	Bodyweight	1	73
BMI	BMI	1	73
Smoking	Smoking	1	73
Alcholdrinking	Alcholdrinking	1	73
Habit	Habit	1	73
Sedentarytime	Sedentarytime	2	72
TUGTPre	TUGTPre	1	73
TUGTPost	TUGTPost	1	73
KEMSPre	KEMSPre	1	73
KEMSPost	KEMSPost	1	73
MWDPost	MWDPost	1	73
MWDPree		2	72

The FREQ Procedure

Group				
Group	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	1	1.35	1	1.35
CG	35	47.30	36	48.65
IG	38	51.35	74	100.00

MWDPre				
MWDPre	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	1	1.35	1	1.35
240	1	1.35	2	2.70
273	1	1.35	3	4.05
309	1	1.35	4	5.41
315	1	1.35	5	6.76
321	1	1.35	6	8.11
334	1	1.35	7	9.46
340	1	1.35	8	10.81
342.4	1	1.35	9	12.16
343.6	1	1.35	10	13.51
351	1	1.35	11	14.86
361	1	1.35	12	16.22
368	1	1.35	13	17.57
369.5	1	1.35	14	18.92
386	1	1.35	15	20.27
390	1	1.35	16	21.62
393	1	1.35	17	22.97
394	1	1.35	18	24.32
398	1	1.35	19	25.68
401.9	1	1.35	20	27.03
404.7	1	1.35	21	28.38
408.4	1	1.35	22	29.73
411	1	1.35	23	31.08
414	1	1.35	24	32.43
415	1	1.35	25	33.78
417	1	1.35	26	35.14
418	1	1.35	27	36.49
420	1	1.35	28	37.84
421.3	1	1.35	29	39.19
426	1	1.35	30	40.54
431	1	1.35	31	41.89
432	1	1.35	32	43.24

MWDPre				
MWDPre	Frequency	Percent	Cumulative Frequency	Cumulative Percent
435	1	1.35	33	44.59
437	1	1.35	34	45.95
438.6	1	1.35	35	47.30
440	1	1.35	36	48.65
442	1	1.35	37	50.00
444	2	2.70	39	52.70
447	1	1.35	40	54.05
459	2	2.70	42	56.76
460	1	1.35	43	58.11
466	1	1.35	44	59.46
467	1	1.35	45	60.81
467.4	1	1.35	46	62.16
467.5	1	1.35	47	63.51
476.9	1	1.35	48	64.86
477	1	1.35	49	66.22
480	1	1.35	50	67.57
483	2	2.70	52	70.27
484	1	1.35	53	71.62
486	1	1.35	54	72.97
486.5	1	1.35	55	74.32
487	1	1.35	56	75.68
495	1	1.35	57	77.03
508	1	1.35	58	78.38
510.4	1	1.35	59	79.73
515	1	1.35	60	81.08
516	1	1.35	61	82.43
517.3	1	1.35	62	83.78
522	1	1.35	63	85.14
523	2	2.70	65	87.84
526	2	2.70	67	90.54
540	1	1.35	68	91.89
543	1	1.35	69	93.24
546.7	1	1.35	70	94.59
562	1	1.35	71	95.95
567	1	1.35	72	97.30
569	1	1.35	73	98.65
NA	1	1.35	74	100.00

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of Sex by Group		
	Group(Group)		
Sex(Sex)	CG	IG	Total
1	16 21.92 59.26 45.71	11 15.07 40.74 28.95	27 36.99
2	19 26.03 41.30 54.29	27 36.99 58.70 71.05	46 63.01
Total	35 47.95	38 52.05	73 100.00
Frequency Missing = 1			

Statistics for Table of Sex by Group

Statistic	DF	Value	Prob
Chi-Square	1	2.1977	0.1382
Likelihood Ratio Chi-Square	1	2.2064	0.1374
Continuity Adj. Chi-Square	1	1.5371	0.2150
Mantel-Haenszel Chi-Square	1	2.1675	0.1410

Statistic	DF	Value	Prob
Phi Coefficient		0.1735	
Contingency Coefficient		0.1710	
Cramer's V		0.1735	

Fisher's Exact Test	
Cell (1,1) Frequency (F)	16
Left-sided Pr <= F	0.9580
Right-sided Pr >= F	0.1075
Table Probability (P)	0.0655
Two-sided Pr <= P	0.1541

Sample Size = 73
Frequency Missing = 1

Frequency
Percent
Row Pct
Col Pct

Table of Smoking by Group			
	Group(Group)		
Smoking(Smoking)	CG	IG	Total
1	5 6.85 50.00 14.29	5 6.85 50.00 13.16	10 13.70
2	30 41.10 47.62 85.71	33 45.21 52.38 86.84	63 86.30
Total	35 47.95	38 52.05	73 100.00
Frequency Missing = 1			

Statistics for Table of Smoking by Group

Statistic	DF	Value	Prob
Chi-Square	1	0.0196	0.8887
Likelihood Ratio Chi-Square	1	0.0196	0.8887
Continuity Adj. Chi-Square	1	0.0000	1.0000
Mantel-Haenszel Chi-Square	1	0.0193	0.8894
Phi Coefficient		0.0164	
Contingency Coefficient		0.0164	
Cramer's V		0.0164	
WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Fisher's Exact Test	
Cell (1,1) Frequency (F)	5
Left-sided Pr <= F	0.6846
Right-sided Pr >= F	0.5776
Table Probability (P)	0.2623
Two-sided Pr <= P	1.0000

Sample Size = 73
Frequency Missing = 1

Frequency
Percent
Row Pct
Col Pct

Table of Alcholdrinking by Group			
	Group(Group)		
Alcholdrinking(Alcholdrinking)	CG	IG	Total
1	30 41.10 50.00 85.71	30 41.10 50.00 78.95	60 82.19
2	3 4.11 30.00 8.57	7 9.59 70.00 18.42	10 13.70
3	2 2.74 66.67	1 1.37 33.33	3 4.11

Table of Alcholdrinking by Group			
	Group(Group)		
Alcholdrinking(Alcholdrinking)	CG	IG	Total
	5.71	2.63	
Total	35 47.95	38 52.05	73 100.00
Frequency Missing = 1			

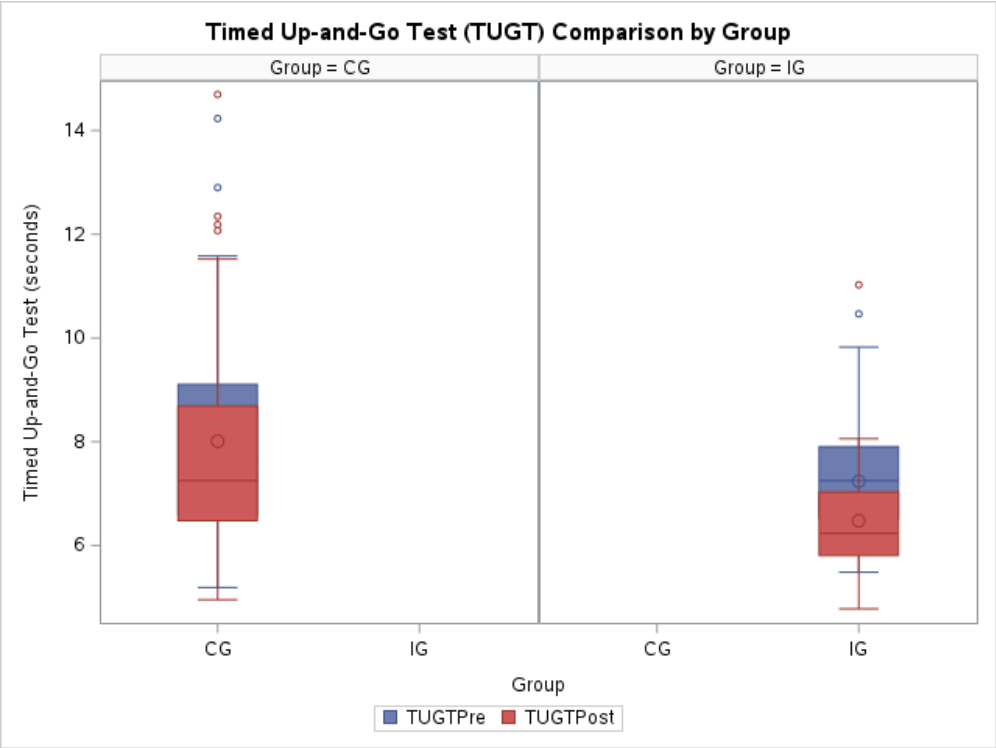
Statistics for Table of Alcholdrinking by Group

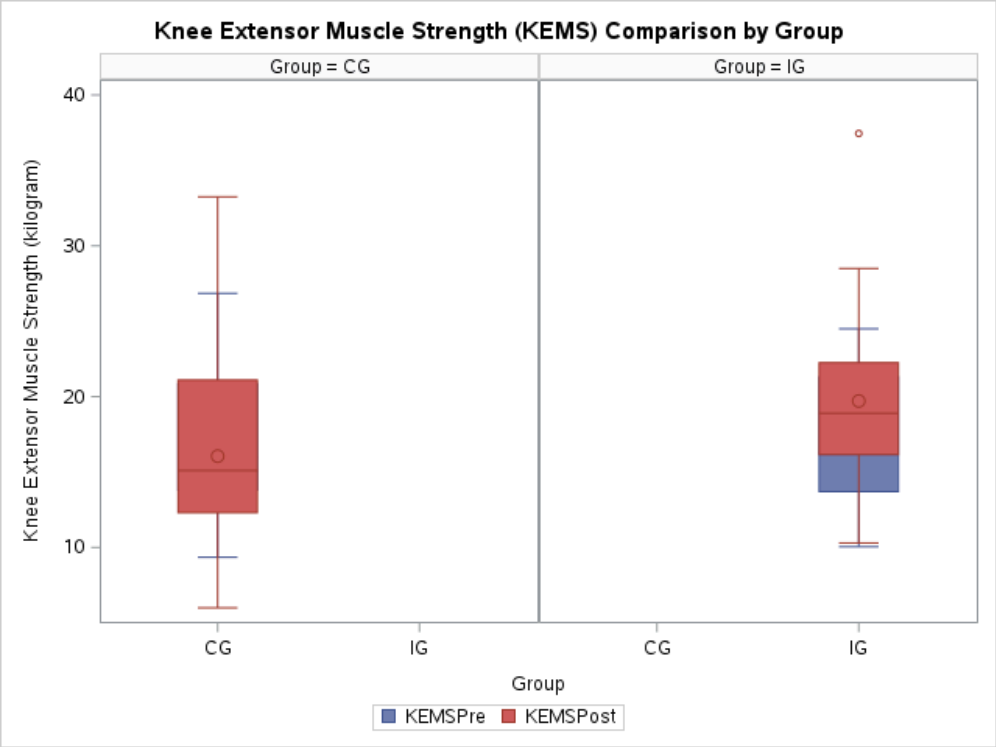
Statistic	DF	Value	Prob
Chi-Square	2	1.8131	0.4039
Likelihood Ratio Chi-Square	2	1.8621	0.3941
Mantel-Haenszel Chi-Square	1	0.0963	0.7563
Phi Coefficient		0.1576	
Contingency Coefficient		0.1557	
Cramer's V		0.1576	
WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

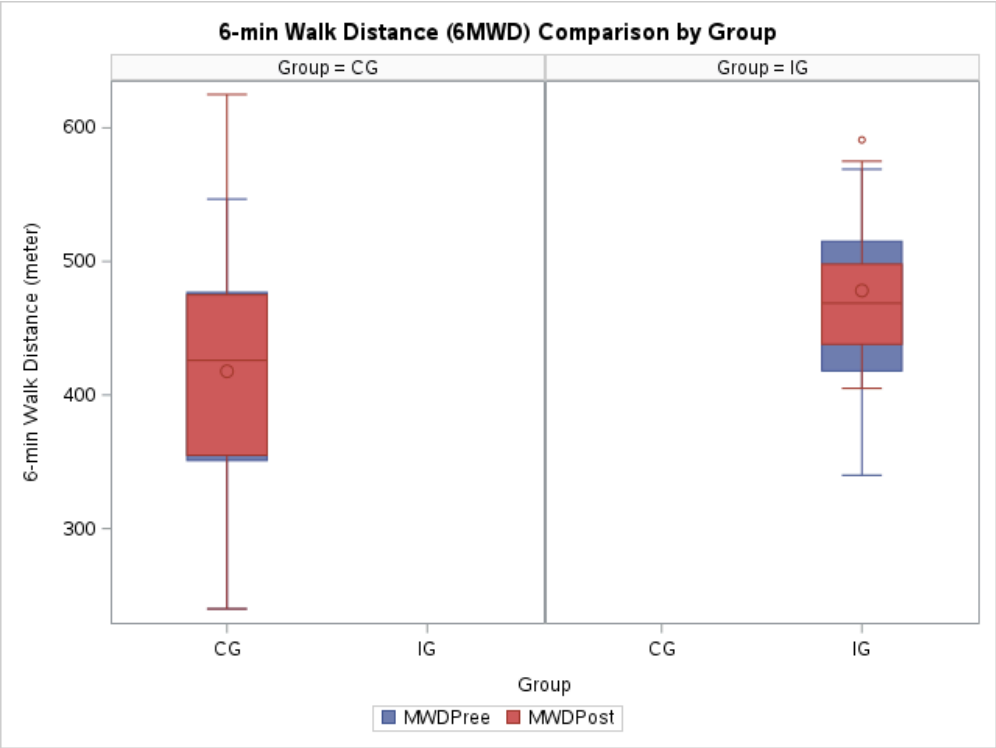
Sample Size = 73
Frequency Missing = 1

The MEANS Procedure

Group	N Obs	Variable	Label	N	Mean	Std Dev	Minimum	Maximum
CG	35	Age	Age	35	76.2000000	6.5295707	65.0000000	89.0000000
		Height	Height	35	1.5664000	0.0812144	1.4400000	1.7300000
		Bodyweight	Bodyweight	35	50.5857143	6.7930822	37.0000000	62.3000000
		BMI	BMI	35	20.5702772	1.8930614	16.1064996	23.9945522
		Sedentarytime	Sedentarytime	35	4.1428571	2.2640783	0.5000000	8.5000000
		TUGTPre	TUGTPre	35	8.1390000	1.9808090	5.1900000	14.2300000
		TUGTPost	TUGTPost	35	8.0102857	2.2386698	4.9550000	14.6950000
		KEMSPre	KEMSPre	35	17.1685714	4.6130742	9.3500000	26.8500000
		KEMSPost	KEMSPost	35	16.0542857	5.9261431	6.0000000	33.2500000
		MWDPree		34	412.3323529	76.6973617	240.0000000	546.7000000
		MWDPost	MWDPost	35	417.7857143	86.0083175	240.0000000	625.0000000
IG	38	Age	Age	38	72.3421053	4.7092566	65.0000000	81.0000000
		Height	Height	38	1.5758684	0.0869772	1.4480000	1.7700000
		Bodyweight	Bodyweight	38	50.6368421	8.1685429	37.2000000	74.2000000
		BMI	BMI	38	20.3343396	2.3419262	14.6708621	25.9262465
		Sedentarytime	Sedentarytime	37	3.7702703	1.7183430	0	7.0000000
		TUGTPre	TUGTPre	38	7.2368421	1.2236081	5.4850000	10.4650000
		TUGTPost	TUGTPost	38	6.4748684	1.1306650	4.7800000	11.0250000
		KEMSPre	KEMSPre	38	17.1157895	4.2296429	10.0500000	24.5000000
		KEMSPost	KEMSPost	38	19.7118421	5.7616795	10.3000000	37.4500000
		MWDPree		38	467.2578947	55.9443238	340.0000000	569.0000000
		MWDPost	MWDPost	38	478.1789474	50.4726105	405.0000000	591.0000000


Timed Up-and-Go Test (TUGT) Comparison by Group
Group = CG
Group = IG
Timed Up-and-Go Test (seconds)
14
12
10
8
6
CG
IG
CG
IG
Group
TUGTPre
TUGTPost


Knee Extensor Muscle Strength (KEMS) Comparison by Group
Group = CG
Group = IG
Knee Extensor Muscle Strength (kilogram)
40
30
20
10
CG
IG
CG
IG
Group
KEMSPre
KEMSPost



6-min Walk Distance (6MWD) Comparison by Group

The CORR Procedure

7 With Variables:	Sex Age Height Bodyweight BMI Smoking Alcholdrinking
3 Variables:	TUGTPre KEMSPre MWDPree

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	TUGTPre	KEMSPre	MWDPree
Sex	0.14048	-0.32136	-0.05876
Sex	0.2359	0.0056	0.6239
	73	73	72
Age	0.18200	-0.03463	-0.35501
Age	0.1233	0.7712	0.0022
	73	73	72
Height	-0.24949	0.37091	0.18187
Height	0.0333	0.0012	0.1263
	73	73	72
Bodyweight	-0.01939	0.25764	0.02264
Bodyweight	0.8707	0.0278	0.8503
	73	73	72
BMI	0.22067	-0.02608	-0.15574
BMI	0.0607	0.8266	0.1914
	73	73	72
Smoking	0.03432	-0.27699	-0.13645
Smoking	0.7731	0.0177	0.2531
	73	73	72
Alcholdrinking	-0.11774	0.31107	0.14818
Alcholdrinking	0.3212	0.0074	0.2142
	73	73	72

6-min Walk Distance (6MWD) Comparison by Group

The CORR Procedure

7 With Variables:	Sex Age Height Bodyweight BMI Smoking Alcholdrinking
3 Variables:	TUGTPost KEMSPost MWDPost

Pearson Correlation Coefficients, N = 73
Prob > |r| under H0: Rho=0

	TUGTPost	KEMSPost	MWDPost
Sex	0.08751	-0.41520	-0.14008
Sex	0.4616	0.0003	0.2372
Age	0.27774	-0.13214	-0.18354

Pearson Correlation Coefficients, N = 73 Prob > |r| under H0: Rho=0			
	TUGTPost	KEMSPost	MWDPost
Age	0.0174	0.2651	0.1201
Height Height	-0.17598 0.1364	0.49625 <.0001	0.14801 0.2114
Bodyweight Bodyweight	0.01266 0.9153	0.38251 0.0008	-0.02971 0.8029
BMI BMI	0.19001 0.1074	0.02663 0.8230	-0.18668 0.1138
Smoking Smoking	0.03891 0.7438	-0.24998 0.0329	-0.09531 0.4225
Alcholdrinking Alcholdrinking	-0.11388 0.3374	0.28786 0.0135	0.21384 0.0693

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Class Level Information		
Class	Levels	Values
Group	2	CG IG

Number of Observations Read	74
Number of Observations Used	72

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Dependent Variable: TUGTPost TUGTPost

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	169.6846488	18.8538499	13.24	<.0001
Error	62	88.2832623	1.4239236		
Corrected Total	71	257.9679111			

R-Square	Coeff Var	Root MSE	TUGTPost Mean
0.657774	16.49636	1.193283	7.233611

Source	DF	Type I SS	Mean Square	F Value	Pr > F
TUGTPre	1	163.0634790	163.0634790	114.52	<.0001
Sex	1	0.1107805	0.1107805	0.08	0.7812
Age	1	4.3859606	4.3859606	3.08	0.0842
Height	1	0.2413144	0.2413144	0.17	0.6820
Bodyweight	1	0.0404745	0.0404745	0.03	0.8667
BMI	1	0.1167352	0.1167352	0.08	0.7756
Sedentarytime	1	1.1859247	1.1859247	0.83	0.3650
Smoking	1	0.0129981	0.0129981	0.01	0.9242
Alcholdrinking	1	0.5269817	0.5269817	0.37	0.5452

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TUGTPre	1	125.3967897	125.3967897	88.06	<.0001
Sex	1	0.2093070	0.2093070	0.15	0.7027
Age	1	5.0930647	5.0930647	3.58	0.0633
Height	1	0.0984846	0.0984846	0.07	0.7934
Bodyweight	1	0.1601170	0.1601170	0.11	0.7385
BMI	1	0.1375264	0.1375264	0.10	0.7570
Sedentarytime	1	1.5271093	1.5271093	1.07	0.3044
Smoking	1	0.0693472	0.0693472	0.05	0.8261
Alcholdrinking	1	0.5269817	0.5269817	0.37	0.5452

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Class Level Information		
Class	Levels	Values
Group	2	CG IG

Number of Observations Read	74
Number of Observations Used	72

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Dependent Variable: KEMSPost KEMSPost

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	1419.598028	157.733114	7.85	<.0001
Error	62	1246.471972	20.104387		
Corrected Total	71	2666.070000			

R-Square	Coeff Var	Root MSE	KEMSPost Mean
0.532468	24.96775	4.483792	17.95833

Source	DF	Type I SS	Mean Square	F Value	Pr > F
KEMSPre	1	1080.716500	1080.716500	53.76	<.0001
Sex	1	138.482208	138.482208	6.89	0.0109
Age	1	67.727147	67.727147	3.37	0.0712
Height	1	58.944152	58.944152	2.93	0.0918
Bodyweight	1	17.298218	17.298218	0.86	0.3572
BMI	1	0.100748	0.100748	0.01	0.9438
Sedentarytime	1	5.559038	5.559038	0.28	0.6009
Smoking	1	1.549639	1.549639	0.08	0.7822
Alcholdrinking	1	49.220377	49.220377	2.45	0.1227

Source	DF	Type III SS	Mean Square	F Value	Pr > F
KEMSPre	1	404.3204654	404.3204654	20.11	<.0001
Sex	1	26.8145422	26.8145422	1.33	0.2526
Age	1	70.2278800	70.2278800	3.49	0.0663
Height	1	0.4125994	0.4125994	0.02	0.8866
Bodyweight	1	0.4281512	0.4281512	0.02	0.8844
BMI	1	0.0491341	0.0491341	0.00	0.9607
Sedentarytime	1	20.2713978	20.2713978	1.01	0.3192
Smoking	1	19.4742393	19.4742393	0.97	0.3288
Alcholdrinking	1	49.2203769	49.2203769	2.45	0.1227

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Class Level Information		
Class	Levels	Values
Group	2	CG IG

Number of Observations Read	74
Number of Observations Used	71

6-min Walk Distance (6MWD) Comparison by Group

The GLM Procedure

Dependent Variable: MWDPost MWDPost

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	191524.6965	21280.5218	6.43	<.0001
Error	61	201976.0500	3311.0828		
Corrected Total	70	393500.7465			

R-Square	Coeff Var	Root MSE	MWDPost Mean
0.486720	12.82150	57.54201	448.7930

Source	DF	Type I SS	Mean Square	F Value	Pr > F
MWDPree	1	177799.2774	177799.2774	53.70	<.0001
Sex	1	3814.0041	3814.0041	1.15	0.2874
Age	1	502.7715	502.7715	0.15	0.6981
Height	1	1550.2496	1550.2496	0.47	0.4964
Bodyweight	1	1469.9546	1469.9546	0.44	0.5077
BMI	1	2303.5819	2303.5819	0.70	0.4075
Sedentarytime	1	820.0348	820.0348	0.25	0.6205
Smoking	1	79.8658	79.8658	0.02	0.8771
Alcholdrinking	1	3184.9567	3184.9567	0.96	0.3306

Source	DF	Type III SS	Mean Square	F Value	Pr > F
MWDPree	1	138700.2151	138700.2151	41.89	<.0001
Sex	1	1630.5250	1630.5250	0.49	0.4855
Age	1	120.4966	120.4966	0.04	0.8493
Height	1	2748.2357	2748.2357	0.83	0.3659
Bodyweight	1	3045.8215	3045.8215	0.92	0.3413
BMI	1	2574.7413	2574.7413	0.78	0.3813
Sedentarytime	1	114.8712	114.8712	0.03	0.8529
Smoking	1	1224.5496	1224.5496	0.37	0.5454
Alcholdrinking	1	3184.9567	3184.9567	0.96	0.3306