

```
* Encoding: UTF-8.
*Select those who have completed programme and in one of our 3 cohort groups.
USE ALL.
COMPUTE filter_$=((Cohort_Group = 1 | Cohort_Group = 2 | Cohort_Group = 3) & (status_code_2 = 4 |
    status_code_2 = 6)).
VARIABLE LABELS filter_$ '(Cohort_Group = 1 | Cohort_Group = 2 | Cohort_Group = 3) & '+
    '(status_code_2 = 4 | status_code_2 = 6) (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

GLM Spaq_leisure_total_init_transformed Spaq_leisure_total_16wk_transformed WITH Age_at_ref2
    Gender2 Cohort_Group IMD_Quintile Local_Authority
    /WSFACTOR=SPAQ 2 Simple(1)
    /METHOD=SSTYPE(3)
    /EMMEANS=TABLES(SPAQ) WITH(Age_at_ref2=MEAN Gender2=MEAN Cohort_Group=MEAN IMD_Quintile=MEAN
        Local_Authority=MEAN)COMPARE ADJ(BONFERRONI)
    /PRINT=DESCRIPTIVE ETASQ
    /CRITERIA=ALPHA(.05)
    /WSDSIGN=SPAQ
    /DESIGN=Age_at_ref2 Gender2 Cohort_Group IMD_Quintile Local_Authority.
```

General Linear Model

Notes		
Output Created		12-JUL-2022 14:32:24
Comments		
Input	Data	S:\Quant\data cleaning\V2\KN\V3\Analysis\Analy sis 27.06.2022\NERS_NS.sav
	Active Dataset	DataSet1
	Filter	(Cohort_Group = 1 Cohort_Group = 2 Cohort_Group = 3) & (status_code_2 = 4 status_code_2 = 6) (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	8313
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM Spaq_leisure_total_init_transformed Spaq_leisure_total_16wk_transformed WITH Age_at_ref2 Gender2 Cohort_Group IMD_Quintile Local_Authority /WSFACTOR=SPAQ 2 Simple(1) /METHOD=SSTYPE(3) /EMMEANS=TABLES(SPAQ) WITH(Age_at_ref2=MEAN Gender2=MEAN Cohort_Group=MEAN IMD_Quintile=MEAN Local_Authority=MEAN)COMPARE ADJ(BONFERRONI) /PRINT=DESCRIPTIVE ETASQ /CRITERIA=ALPHA(.05) /WSDSIGN=SPAQ /DESIGN=Age_at_ref2 Gender2 Cohort_Group IMD_Quintile Local_Authority.	
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20

Within-Subjects Factors

Measure: MEASURE_1

SPAQ	Dependent Variable
1	Spaq_leisure_total_init_transformed
2	Spaq_leisure_total_16wk_transformed

Descriptive Statistics

	Mean	Std. Deviation	N
Spaq_leisure_total_init_transformed	2.4772	.46424	4294
Spaq_leisure_total_16wk_transformed	2.6739	.36549	4294

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
SPAQ	Pillai's Trace	.009	37.168 ^b	1.000	4288.000	<.001	.009
	Wilks' Lambda	.991	37.168 ^b	1.000	4288.000	<.001	.009
	Hotelling's Trace	.009	37.168 ^b	1.000	4288.000	<.001	.009
	Roy's Largest Root	.009	37.168 ^b	1.000	4288.000	<.001	.009
SPAQ * Age_at_ref2	Pillai's Trace	.001	6.133 ^b	1.000	4288.000	.013	.001
	Wilks' Lambda	.999	6.133 ^b	1.000	4288.000	.013	.001
	Hotelling's Trace	.001	6.133 ^b	1.000	4288.000	.013	.001
	Roy's Largest Root	.001	6.133 ^b	1.000	4288.000	.013	.001
SPAQ * Gender2	Pillai's Trace	.000	.106 ^b	1.000	4288.000	.745	.000
	Wilks' Lambda	1.000	.106 ^b	1.000	4288.000	.745	.000
	Hotelling's Trace	.000	.106 ^b	1.000	4288.000	.745	.000
	Roy's Largest Root	.000	.106 ^b	1.000	4288.000	.745	.000
SPAQ * Cohort_Group	Pillai's Trace	.000	1.407 ^b	1.000	4288.000	.236	.000
	Wilks' Lambda	1.000	1.407 ^b	1.000	4288.000	.236	.000
	Hotelling's Trace	.000	1.407 ^b	1.000	4288.000	.236	.000
	Roy's Largest Root	.000	1.407 ^b	1.000	4288.000	.236	.000
SPAQ * IMD_Quintile	Pillai's Trace	.001	3.171 ^b	1.000	4288.000	.075	.001
	Wilks' Lambda	.999	3.171 ^b	1.000	4288.000	.075	.001
	Hotelling's Trace	.001	3.171 ^b	1.000	4288.000	.075	.001
	Roy's Largest Root	.001	3.171 ^b	1.000	4288.000	.075	.001
SPAQ * Local_Authority	Pillai's Trace	.000	1.192 ^b	1.000	4288.000	.275	.000
	Wilks' Lambda	1.000	1.192 ^b	1.000	4288.000	.275	.000
	Hotelling's Trace	.000	1.192 ^b	1.000	4288.000	.275	.000
	Roy's Largest Root	.000	1.192 ^b	1.000	4288.000	.275	.000

a. Design: Intercept + Age_at_ref2 + Gender2 + Cohort_Group + IMD_Quintile + Local_Authority

Within Subjects Design: SPAQ

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
SPAQ	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + Age_at_ref2 + Gender2 + Cohort_Group + IMD_Quintile + Local_Authority

Within Subjects Design: SPAQ

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
SPAQ	Sphericity Assumed	2.490	1	2.490	37.168	<.001	.009
	Greenhouse-Geisser	2.490	1.000	2.490	37.168	<.001	.009
	Huynh-Feldt	2.490	1.000	2.490	37.168	<.001	.009
	Lower-bound	2.490	1.000	2.490	37.168	<.001	.009
SPAQ * Age_at_ref2	Sphericity Assumed	.411	1	.411	6.133	.013	.001
	Greenhouse-Geisser	.411	1.000	.411	6.133	.013	.001
	Huynh-Feldt	.411	1.000	.411	6.133	.013	.001
	Lower-bound	.411	1.000	.411	6.133	.013	.001
SPAQ * Gender2	Sphericity Assumed	.007	1	.007	.106	.745	.000
	Greenhouse-Geisser	.007	1.000	.007	.106	.745	.000
	Huynh-Feldt	.007	1.000	.007	.106	.745	.000
	Lower-bound	.007	1.000	.007	.106	.745	.000
SPAQ * Cohort_Group	Sphericity Assumed	.094	1	.094	1.407	.236	.000
	Greenhouse-Geisser	.094	1.000	.094	1.407	.236	.000
	Huynh-Feldt	.094	1.000	.094	1.407	.236	.000
	Lower-bound	.094	1.000	.094	1.407	.236	.000
SPAQ * IMD_Quintile	Sphericity Assumed	.212	1	.212	3.171	.075	.001
	Greenhouse-Geisser	.212	1.000	.212	3.171	.075	.001
	Huynh-Feldt	.212	1.000	.212	3.171	.075	.001
	Lower-bound	.212	1.000	.212	3.171	.075	.001
SPAQ * Local_Authority	Sphericity Assumed	.080	1	.080	1.192	.275	.000

Error(SPAQ)	Greenhouse-Geisser	.080	1.000	.080	1.192	.275	.000
	Huynh-Feldt	.080	1.000	.080	1.192	.275	.000
	Lower-bound	.080	1.000	.080	1.192	.275	.000
	Sphericity Assumed	287.302	4288	.067			
	Greenhouse-Geisser	287.302	4288.000	.067			
	Huynh-Feldt	287.302	4288.000	.067			
	Lower-bound	287.302	4288.000	.067			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	SPAQ	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
SPAQ	Level 2 vs. Level 1	4.981	1	4.981	37.168	<.001	.009
SPAQ * Age_at_ref2	Level 2 vs. Level 1	.822	1	.822	6.133	.013	.001
SPAQ * Gender2	Level 2 vs. Level 1	.014	1	.014	.106	.745	.000
SPAQ * Cohort_Group	Level 2 vs. Level 1	.188	1	.188	1.407	.236	.000
SPAQ * IMD_Quintile	Level 2 vs. Level 1	.425	1	.425	3.171	.075	.001
SPAQ * Local_Authority	Level 2 vs. Level 1	.160	1	.160	1.192	.275	.000
Error(SPAQ)	Level 2 vs. Level 1	574.605	4288	.134			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	754.033	1	754.033	5383.883	.000	.557
Age_at_ref2	.749	1	.749	5.348	.021	.001
Gender2	.279	1	.279	1.994	.158	.000
Cohort_Group	2.171	1	2.171	15.504	<.001	.004
IMD_Quintile	.339	1	.339	2.417	.120	.001
Local_Authority	.883	1	.883	6.308	.012	.001
Error	600.550	4288	.140			

Estimated Marginal Means

SPAQ

Estimates

Measure: MEASURE_1

SPAQ	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	2.477 ^a	.007	2.463	2.491
2	2.674 ^a	.006	2.663	2.685

a. Covariates appearing in the model are evaluated at the following values:
Age_at_ref2 = 61.2177, Gender2 = 1.6218, Cohort_Group = 1.4273, IMD_Quintile = 3.2217, Local_Authority = 10.36749.

Pairwise Comparisons

Measure: MEASURE_1

(I) SPAQ	(J) SPAQ	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	-.197 [*]	.006	<.001	-.208	-.186
2	1	.197 [*]	.006	<.001	.186	.208

Based on estimated marginal means
*. The mean difference is significant at the .05 level.
b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.224	1240.321 ^a	1.000	4288.000	<.001	.224
Wilks' lambda	.776	1240.321 ^a	1.000	4288.000	<.001	.224
Hotelling's trace	.289	1240.321 ^a	1.000	4288.000	<.001	.224
Roy's largest root	.289	1240.321 ^a	1.000	4288.000	<.001	.224

Each F tests the multivariate effect of SPAQ. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.
a. Exact statistic

