```
  50  0 M>
GET DATA
  51  0 M>  GET DATA
  /TYPE=TXT
  52  0 M>    /TYPE=TXT
  /FILE='D:\low kda score priority basis posts\first post\Levenes Test\student
_por_levenes_test_clean.csv'
  53  0 M>    /FILE='D:\low kda score priority basis posts\first post\Levenes
Test\student_por_levenes_test_clean.csv'
  /ENCODING='UTF8'
  54  0 M>    /ENCODING='UTF8'
  /DELCASE=LINE
  55  0 M>    /DELCASE=LINE
  /DELIMITERS=","
  56  0 M>    /DELIMITERS=","
  /QUALIFIER='"'
  57  0 M>    /QUALIFIER='"'
  /ARRANGEMENT=DELIMITED
  58  0 M>    /ARRANGEMENT=DELIMITED
  /FIRSTCASE=2
  59  0 M>    /FIRSTCASE=2
  /DATATYPEMIN PERCENTAGE=95
  60  0 M>    /DATATYPEMIN PERCENTAGE=95
  /VARIABLES=
  61  0 M>    /VARIABLES=
    case_id F8.0
  62  0 M>      case_id F8.0
    school A8
  63  0 M>      school A8
    sex A8
  64  0 M>      sex A8
    age F8.0
  65  0 M>      age F8.0
    address A8
  66  0 M>      address A8
    famsize A8
  67  0 M>      famsize A8
    Pstatus A8
  68  0 M>      Pstatus A8
    Medu F8.0
  69  0 M>      Medu F8.0
    Fedu F8.0
```

```
70  0 M>      Fedu F8.0
  Mjob A20
71  0 M>      Mjob A20
  Fjob A20
72  0 M>      Fjob A20
  reason A20
73  0 M>      reason A20
  guardian A20
74  0 M>      guardian A20
  traveltime F8.0
75  0 M>      traveltime F8.0
  studytime F8.0
76  0 M>      studytime F8.0
  failures F8.0
77  0 M>      failures F8.0
  schoolsup A8
78  0 M>      schoolsup A8
  famsup A8
79  0 M>      famsup A8
  paid A8
80  0 M>      paid A8
  activities A8
81  0 M>      activities A8
  nursery A8
82  0 M>      nursery A8
  higher A8
83  0 M>      higher A8
  internet A8
84  0 M>      internet A8
  romantic A8
85  0 M>      romantic A8
  famrel F8.0
86  0 M>      famrel F8.0
  freetime F8.0
87  0 M>      freetime F8.0
  goout F8.0
88  0 M>      goout F8.0
  Dalc F8.0
89  0 M>      Dalc F8.0
  Walc F8.0
90  0 M>      Walc F8.0
  health F8.0
```

```
  91  0 M>      health F8.0
    absences F8.0
  92  0 M>      absences F8.0
    G1 F8.0
  93  0 M>      G1 F8.0
    G2 F8.0
  94  0 M>      G2 F8.0
    G3 F8.0.
  95  0 M>      G3 F8.0.
CACHE.
  96  0 M>  CACHE.
EXECUTE.
  97  0 M>  EXECUTE.

  98  0 M>
DATASET NAME LevenesData WINDOW=FRONT.
  99  0 M>  DATASET NAME LevenesData WINDOW=FRONT.

 100  0 M>
TITLE "Levene Test SPSS Import Check".
 101  0 M>  TITLE "Levene Test SPSS Import Check".
```

```
SUBTITLE "Clean CSV from Python; G3 should have 649 valid cases.".
 102  0 M>  SUBTITLE "Clean CSV from Python; G3 should have 649 valid cases.".
```

Levene Test SPSS Import Check
Clean CSV from Python; G3 should have 649 valid cases.

```
 103   0 M>
FREQUENCIES VARIABLES=G3 school sex schoolsup romantic studytime failures abse
nces
 104   0 M>  FREQUENCIES VARIABLES=G3 school sex schoolsup romantic studytime f
ailures absences
  /STATISTICS=MEAN MEDIAN STDDEV VARIANCE MINIMUM MAXIMUM
 105   0 M>    /STATISTICS=MEAN MEDIAN STDDEV VARIANCE MINIMUM MAXIMUM
  /ORDER=ANALYSIS.
 106   0 M>    /ORDER=ANALYSIS.
```

Frequencies

```
[LevenesData]
```

Statistics

		G3	school	sex	schoolsup	romantic	studytime	failures
N	Valid	649	649	649	649	649	649	649
	Missing	0	0	0	0	0	0	0
Mean		11.91					1.93	.22
Median		12.00					2.00	.00
Std. Deviation		3.231					.830	.593
Variance		10.437					.688	.352
Minimum		0					1	0
Maximum		19					4	3

Statistics

		absences
N	Valid	649
	Missing	0
Mean		3.66
Median		2.00
Std. Deviation		4.641
Variance		21.537
Minimum		0
Maximum		32

Frequency Table

Levene Test SPSS Import Check
Clean CSV from Python; G3 should have 649 valid cases.

G3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	15	2.3	2.3	2.3
	1	1	.2	.2	2.5
	5	1	.2	.2	2.6
	6	3	.5	.5	3.1
	7	10	1.5	1.5	4.6
	8	35	5.4	5.4	10.0
	9	35	5.4	5.4	15.4
	10	97	14.9	14.9	30.4
	11	104	16.0	16.0	46.4
	12	72	11.1	11.1	57.5
	13	82	12.6	12.6	70.1
	14	63	9.7	9.7	79.8
	15	49	7.6	7.6	87.4
	16	36	5.5	5.5	92.9
	17	29	4.5	4.5	97.4
	18	15	2.3	2.3	99.7
	19	2	.3	.3	100.0
	Total	649	100.0	100.0	

school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	GP	423	65.2	65.2	65.2
	MS	226	34.8	34.8	100.0
	Total	649	100.0	100.0	

Levene Test SPSS Import Check
Clean CSV from Python; G3 should have 649 valid cases.

sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	F	383	59.0	59.0	59.0
	M	266	41.0	41.0	100.0
	Total	649	100.0	100.0	

schoolsup

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	581	89.5	89.5	89.5
	yes	68	10.5	10.5	100.0
	Total	649	100.0	100.0	

romantic

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	410	63.2	63.2	63.2
	yes	239	36.8	36.8	100.0
	Total	649	100.0	100.0	

studytime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	212	32.7	32.7	32.7
	2	305	47.0	47.0	79.7
	3	97	14.9	14.9	94.6
	4	35	5.4	5.4	100.0
	Total	649	100.0	100.0	

Levene Test SPSS Import Check
Clean CSV from Python; G3 should have 649 valid cases.

failures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	549	84.6	84.6	84.6
	1	70	10.8	10.8	95.4
	2	16	2.5	2.5	97.8
	3	14	2.2	2.2	100.0
	Total	649	100.0	100.0	

absences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	244	37.6	37.6	37.6
	1	12	1.8	1.8	39.4
	2	110	16.9	16.9	56.4
	3	7	1.1	1.1	57.5
	4	93	14.3	14.3	71.8
	5	12	1.8	1.8	73.7
	6	49	7.6	7.6	81.2
	7	3	.5	.5	81.7
	8	42	6.5	6.5	88.1
	9	7	1.1	1.1	89.2
	10	21	3.2	3.2	92.4
	11	5	.8	.8	93.2
	12	12	1.8	1.8	95.1
	13	1	.2	.2	95.2
	14	8	1.2	1.2	96.5
	15	2	.3	.3	96.8
	16	10	1.5	1.5	98.3
	18	3	.5	.5	98.8
	21	2	.3	.3	99.1
	22	2	.3	.3	99.4
	24	1	.2	.2	99.5
	26	1	.2	.2	99.7
	30	1	.2	.2	99.8

Levene Test SPSS Import Check
Clean CSV from Python; G3 should have 649 valid cases.

absences

	Frequency	Percent	Valid Percent	Cumulative Percent
32	1	.2	.2	100.0
Total	649	100.0	100.0	

```
 107   0 M>
DESCRIPTIVES VARIABLES=G3 age studytime failures absences G1 G2
 108   0 M>  DESCRIPTIVES VARIABLES=G3 age studytime failures absences G1 G2
  /STATISTICS=MEAN STDDEV VARIANCE MIN MAX.
 109   0 M>    /STATISTICS=MEAN STDDEV VARIANCE MIN MAX.
```

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
G3	649	0	19	11.91	3.231	10.437
age	649	15	22	16.74	1.218	1.484
studytime	649	1	4	1.93	.830	.688
failures	649	0	3	.22	.593	.352
absences	649	0	32	3.66	4.641	21.537
G1	649	0	19	11.40	2.745	7.536
G2	649	0	19	11.57	2.914	8.489
Valid N (listwise)	649					

```
 110   0 M>
* ---------- Create numeric grouping variables ----------.
 111   0 M>  * ---------- Create numeric grouping variables ----------.

 112   0 M>
RECODE school ("GP"=1) ("MS"=2) INTO school_n.
 113   0 M>  RECODE school ("GP"=1) ("MS"=2) INTO school_n.
VARIABLE LABELS school_n "School".
 114   0 M>  VARIABLE LABELS school_n "School".
VALUE LABELS school_n 1 "School GP" 2 "School MS".
 115   0 M>  VALUE LABELS school_n 1 "School GP" 2 "School MS".
```

```
 116  0 M>
RECODE sex ("F"=1) ("M"=2) INTO sex_n.
 117  0 M>  RECODE sex ("F"=1) ("M"=2) INTO sex_n.
VARIABLE LABELS sex_n "Sex".
 118  0 M>  VARIABLE LABELS sex_n "Sex".
VALUE LABELS sex_n 1 "Female" 2 "Male".
 119  0 M>  VALUE LABELS sex_n 1 "Female" 2 "Male".

 120  0 M>
RECODE schoolsup ("no"=0) ("yes"=1) INTO schoolsup_n.
 121  0 M>  RECODE schoolsup ("no"=0) ("yes"=1) INTO schoolsup_n.
VARIABLE LABELS schoolsup_n "Extra educational support".
 122  0 M>  VARIABLE LABELS schoolsup_n "Extra educational support".
VALUE LABELS schoolsup_n 0 "No school support" 1 "School support yes".
 123  0 M>  VALUE LABELS schoolsup_n 0 "No school support" 1 "School support y
es".

 124  0 M>
RECODE romantic ("no"=0) ("yes"=1) INTO romantic_n.
 125  0 M>  RECODE romantic ("no"=0) ("yes"=1) INTO romantic_n.
VARIABLE LABELS romantic_n "Romantic relationship".
 126  0 M>  VARIABLE LABELS romantic_n "Romantic relationship".
VALUE LABELS romantic_n 0 "No romantic relationship" 1 "Romantic relationship
yes".
 127  0 M>  VALUE LABELS romantic_n 0 "No romantic relationship" 1 "Romantic r
elationship yes".

 128  0 M>
COMPUTE age_group_n = $SYSMIS.
 129  0 M>  COMPUTE age_group_n = $SYSMIS.
IF (age <= 17) age_group_n = 1.
 130  0 M>  IF (age <= 17) age_group_n = 1.
IF (age >= 18) age_group_n = 2.
 131  0 M>  IF (age >= 18) age_group_n = 2.
VARIABLE LABELS age_group_n "Age group".
 132  0 M>  VARIABLE LABELS age_group_n "Age group".
VALUE LABELS age_group_n 1 "Younger age <=17" 2 "Older age 18+".
 133  0 M>  VALUE LABELS age_group_n 1 "Younger age <=17" 2 "Older age 18+".
```

```
 134  0 M>
COMPUTE studytime_group_n = $SYSMIS.
 135  0 M>  COMPUTE studytime_group_n = $SYSMIS.
IF (studytime <= 2) studytime_group_n = 1.
 136  0 M>  IF (studytime <= 2) studytime_group_n = 1.
IF (studytime >= 3) studytime_group_n = 2.
 137  0 M>  IF (studytime >= 3) studytime_group_n = 2.
VARIABLE LABELS studytime_group_n "Studytime group".
 138  0 M>  VARIABLE LABELS studytime_group_n "Studytime group".
VALUE LABELS studytime_group_n 1 "Lower studytime 1-2" 2 "Higher studytime 3-4
".
 139  0 M>  VALUE LABELS studytime_group_n 1 "Lower studytime 1-2" 2 "Higher s
tudytime 3-4".

 140  0 M>
COMPUTE failures_group_n = $SYSMIS.
 141  0 M>  COMPUTE failures_group_n = $SYSMIS.
IF (failures = 0) failures_group_n = 1.
 142  0 M>  IF (failures = 0) failures_group_n = 1.
IF (failures >= 1) failures_group_n = 2.
 143  0 M>  IF (failures >= 1) failures_group_n = 2.
VARIABLE LABELS failures_group_n "Failures group".
 144  0 M>  VARIABLE LABELS failures_group_n "Failures group".
VALUE LABELS failures_group_n 1 "No previous failure" 2 "One or more failures"
.
 145  0 M>  VALUE LABELS failures_group_n 1 "No previous failure" 2 "One or mo
re failures".

 146  0 M>
COMPUTE absences_group_n = $SYSMIS.
 147  0 M>  COMPUTE absences_group_n = $SYSMIS.
IF (absences = 0) absences_group_n = 1.
 148  0 M>  IF (absences = 0) absences_group_n = 1.
IF (absences >= 1 AND absences <= 5) absences_group_n = 2.
 149  0 M>  IF (absences >= 1 AND absences <= 5) absences_group_n = 2.
IF (absences >= 6 AND absences <= 15) absences_group_n = 3.
 150  0 M>  IF (absences >= 6 AND absences <= 15) absences_group_n = 3.
IF (absences >= 16) absences_group_n = 4.
 151  0 M>  IF (absences >= 16) absences_group_n = 4.
```

```
VARIABLE LABELS absences_group_n "Absences group".
 152  0 M>  VARIABLE LABELS absences_group_n "Absences group".
VALUE LABELS absences_group_n
 153  0 M>  VALUE LABELS absences_group_n
  1 "No absences 0"
 154  0 M>    1 "No absences 0"
  2 "Low absences 1-5"
 155  0 M>    2 "Low absences 1-5"
  3 "Moderate absences 6-15"
 156  0 M>    3 "Moderate absences 6-15"
  4 "High absences 16+".
 157  0 M>    4 "High absences 16+".

 158  0 M>
EXECUTE.
 159  0 M>  EXECUTE.

 160  0 M>
FORMATS age studytime failures absences G1 G2 G3 school_n sex_n schoolsup_n ro
mantic_n age_group_n studytime_group_n failures_group_n absences_group_n (F8.0
).
 161  0 M>  FORMATS age studytime failures absences G1 G2 G3 school_n sex_n sc
hoolsup_n romantic_n age_group_n studytime_group_n fai
               lures_group_n absences_group_n (F8.0).

 162  0 M>
* ============================================================.
 163  0 M>  * ============================================================.
* Standard SPSS Levene homogeneity tables.
 164  0 M>  * Standard SPSS Levene homogeneity tables.
* GLM gives Levene tests based on mean, median, adjusted df and trimmed mean.
 165  0 M>  * GLM gives Levene tests based on mean, median, adjusted df and tr
immed mean.
* ============================================================.
 166  0 M>  * ============================================================.

 167  0 M>
TITLE "Standard SPSS Levene Homogeneity Tables for G3".
 168  0 M>  TITLE "Standard SPSS Levene Homogeneity Tables for G3".
```

Levene Test SPSS Import Check

Clean CSV from Python; G3 should have 649 valid cases.

```
 169   0 M>
GLM G3 BY school_n
 170   0 M>  GLM G3 BY school_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 171   0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=school_n.
 172   0 M>    /DESIGN=school_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
School	1	School GP	423
	2	School MS	226

Descriptive Statistics

Dependent Variable: G3

School	Mean	Std. Deviation	N
School GP	12.58	2.626	423
School MS	10.65	3.834	226
Total	11.91	3.231	649

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	13.232	1	647	.000
	Based on Median	12.706	1	647	.000
	Based on Median and with adjusted df	12.706	1	510.638	.000
	Based on trimmed mean	13.109	1	647	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + school_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	546.629[a]	1	546.629	56.891	.000
Intercept	79469.525	1	79469.525	8270.834	.000
school_n	546.629	1	546.629	56.891	.000
Error	6216.638	647	9.608		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .081 (Adjusted R Squared = .079)

```
 173   0 M>
GLM G3 BY sex_n
 174   0 M>  GLM G3 BY sex_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 175   0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=sex_n.
 176   0 M>    /DESIGN=sex_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
Sex	1	Female	383
	2	Male	266

Descriptive Statistics

Dependent Variable: G3

Sex	Mean	Std. Deviation	N
Female	12.25	3.124	383
Male	11.41	3.321	266
Total	11.91	3.231	649

Standard SPSS Levene Homogeneity Tables for G3

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	.004	1	647	.950
	Based on Median	.007	1	647	.933
	Based on Median and with adjusted df	.007	1	633.314	.933
	Based on trimmed mean	.018	1	647	.895

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + sex_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	112.683[a]	1	112.683	10.962	.001
Intercept	87869.613	1	87869.613	8548.368	.000
sex_n	112.683	1	112.683	10.962	.001
Error	6650.584	647	10.279		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .017 (Adjusted R Squared = .015)

```
 177  0 M>
GLM G3 BY age_group_n
 178  0 M>  GLM G3 BY age_group_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 179  0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=age_group_n.
 180  0 M>    /DESIGN=age_group_n.
```

General Linear Model

Standard SPSS Levene Homogeneity Tables for G3

Between-Subjects Factors

		Value Label	N
Age group	1	Younger age <=17	468
	2	Older age 18+	181

Descriptive Statistics

Dependent Variable: G3

Age group	Mean	Std. Deviation	N
Younger age <=17	12.13	2.821	468
Older age 18+	11.34	4.058	181
Total	11.91	3.231	649

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	18.897	1	647	.000
	Based on Median	18.150	1	647	.000
	Based on Median and with adjusted df	18.150	1	540.895	.000
	Based on trimmed mean	19.573	1	647	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + age_group_n

Standard SPSS Levene Homogeneity Tables for G3

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	81.263[a]	1	81.263	7.868	.005
Intercept	71853.836	1	71853.836	6957.409	.000
age_group_n	81.263	1	81.263	7.868	.005
Error	6682.004	647	10.328		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .012 (Adjusted R Squared = .010)

```
 181   0 M>
GLM G3 BY studytime_group_n
 182   0 M>  GLM G3 BY studytime_group_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 183   0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=studytime_group_n.
 184   0 M>    /DESIGN=studytime_group_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
Studytime group	1	Lower studytime 1-2	517
	2	Higher studytime 3-4	132

Descriptive Statistics

Dependent Variable: G3

Studytime group	Mean	Std. Deviation	N
Lower studytime 1-2	11.58	3.288	517
Higher studytime 3-4	13.18	2.644	132
Total	11.91	3.231	649

Standard SPSS Levene Homogeneity Tables for G3

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	1.857	1	647	.173
	Based on Median	1.814	1	647	.178
	Based on Median and with adjusted df	1.814	1	612.530	.179
	Based on trimmed mean	1.875	1	647	.171

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + studytime_group_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	269.711[a]	1	269.711	26.873	.000
Intercept	64475.443	1	64475.443	6424.156	.000
studytime_group_n	269.711	1	269.711	26.873	.000
Error	6493.555	647	10.036		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .040 (Adjusted R Squared = .038)

```
 185  0 M>
GLM G3 BY failures_group_n
 186  0 M>  GLM G3 BY failures_group_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 187  0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=failures_group_n.
 188  0 M>    /DESIGN=failures_group_n.
```

General Linear Model

Standard SPSS Levene Homogeneity Tables for G3

Between-Subjects Factors

		Value Label	N
Failures group	1	No previous failure	549
	2	One or more failures	100

Descriptive Statistics

Dependent Variable: G3

Failures group	Mean	Std. Deviation	N
No previous failure	12.51	2.829	549
One or more failures	8.59	3.300	100
Total	11.91	3.231	649

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	.120	1	647	.729
	Based on Median	.047	1	647	.829
	Based on Median and with adjusted df	.047	1	554.725	.829
	Based on trimmed mean	.014	1	647	.905

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + failures_group_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1299.882[a]	1	1299.882	153.938	.000
Intercept	37661.127	1	37661.127	4460.010	.000
failures_group_n	1299.882	1	1299.882	153.938	.000
Error	5463.385	647	8.444		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .192 (Adjusted R Squared = .191)

```
 189  0 M>
GLM G3 BY absences_group_n
 190  0 M>  GLM G3 BY absences_group_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 191  0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=absences_group_n.
 192  0 M>    /DESIGN=absences_group_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
Absences group	1	No absences 0	244
	2	Low absences 1-5	234
	3	Moderate absences 6-15	150
	4	High absences 16+	21

Standard SPSS Levene Homogeneity Tables for G3

Descriptive Statistics

Dependent Variable: G3

Absences group	Mean	Std. Deviation	N
No absences 0	12.04	4.072	244
Low absences 1-5	12.06	2.541	234
Moderate absences 6-15	11.61	2.672	150
High absences 16+	10.76	2.406	21
Total	11.91	3.231	649

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	6.676	3	645	.000
	Based on Median	6.128	3	645	.000
	Based on Median and with adjusted df	6.128	3	456.596	.000
	Based on trimmed mean	6.531	3	645	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + absences_group_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	50.016[a]	3	16.672	1.602	.188
Intercept	34467.116	1	34467.116	3311.554	.000
absences_group_n	50.016	3	16.672	1.602	.188
Error	6713.251	645	10.408		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .007 (Adjusted R Squared = .003)

193 0 M>

```
GLM G3 BY schoolsup_n
 194   0 M>  GLM G3 BY schoolsup_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 195   0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=schoolsup_n.
 196   0 M>    /DESIGN=schoolsup_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
Extra educational support	0	No school support	581
	1	School support yes	68

Descriptive Statistics

Dependent Variable: G3

Extra educational support	Mean	Std. Deviation	N
No school support	11.98	3.316	581
School support yes	11.28	2.304	68
Total	11.91	3.231	649

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	10.499	1	647	.001
	Based on Median	10.983	1	647	.001
	Based on Median and with adjusted df	10.983	1	636.596	.001
	Based on trimmed mean	10.857	1	647	.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + schoolsup_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	29.823[a]	1	29.823	2.866	.091
Intercept	32931.641	1	32931.641	3164.320	.000
schoolsup_n	29.823	1	29.823	2.866	.091
Error	6733.443	647	10.407		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .004 (Adjusted R Squared = .003)

```
 197  0 M>
GLM G3 BY romantic_n
 198  0 M>  GLM G3 BY romantic_n
  /PRINT=DESCRIPTIVE HOMOGENEITY
 199  0 M>    /PRINT=DESCRIPTIVE HOMOGENEITY
  /DESIGN=romantic_n.
 200  0 M>    /DESIGN=romantic_n.
```

General Linear Model

Between-Subjects Factors

		Value Label	N
Romantic relationship	0	No romantic relationship	410
	1	Romantic relationship yes	239

Descriptive Statistics

Dependent Variable: G3

Romantic relationship	Mean	Std. Deviation	N
No romantic relationship	12.13	3.004	410
Romantic relationship yes	11.52	3.561	239
Total	11.91	3.231	649

Standard SPSS Levene Homogeneity Tables for G3

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
G3	Based on Mean	3.868	1	647	.050
	Based on Median	3.935	1	647	.048
	Based on Median and with adjusted df	3.935	1	616.544	.048
	Based on trimmed mean	3.596	1	647	.058

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: G3

b. Design: Intercept + romantic_n

Tests of Between-Subjects Effects

Dependent Variable: G3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	55.494[a]	1	55.494	5.353	.021
Intercept	84466.231	1	84466.231	8147.213	.000
romantic_n	55.494	1	55.494	5.353	.021
Error	6707.772	647	10.367		
Total	98761.000	649			
Corrected Total	6763.267	648			

a. R Squared = .008 (Adjusted R Squared = .007)

```
 201  0 M>
* ============================================================.
 202  0 M>  * ============================================================.
* Descriptive tables for article interpretation.
 203  0 M>  * Descriptive tables for article interpretation.
* ============================================================.
 204  0 M>  * ============================================================.

 205  0 M>
TITLE "Group Descriptive Statistics for G3".
 206  0 M>  TITLE "Group Descriptive Statistics for G3".
```

```
 207  0 M>
MEANS TABLES=G3 BY school_n
 208  0 M>  MEANS TABLES=G3 BY school_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 209  0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * School	649	100.0%	0	0.0%	649	100.0%

Report

G3

School	N	Mean	Median	Std. Deviation	Variance	Minimum	Maximum
School GP	423	12.58	13.00	2.626	6.894	0	19
School MS	226	10.65	11.00	3.834	14.699	0	19
Total	649	11.91	12.00	3.231	10.437	0	19

```
 210  0 M>
MEANS TABLES=G3 BY sex_n
 211  0 M>  MEANS TABLES=G3 BY sex_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 212  0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Sex	649	100.0%	0	0.0%	649	100.0%

Group Descriptive Statistics for G3

Report

G3

Sex	N	Mean	Median	Std. Deviation	Variance	Minimum	Maximum
Female	383	12.25	12.00	3.124	9.760	0	19
Male	266	11.41	11.00	3.321	11.027	0	19
Total	649	11.91	12.00	3.231	10.437	0	19

```
 213   0 M>
MEANS TABLES=G3 BY age_group_n
 214   0 M>  MEANS TABLES=G3 BY age_group_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 215   0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Age group	649	100.0%	0	0.0%	649	100.0%

Report

G3

Age group	N	Mean	Median	Std. Deviation	Variance	Minimum
Younger age <=17	468	12.13	12.00	2.821	7.961	0
Older age 18+	181	11.34	11.00	4.058	16.469	0
Total	649	11.91	12.00	3.231	10.437	0

Report

G3

Age group	Maximum
Younger age <=17	19
Older age 18+	19
Total	19

```
 216   0 M>
MEANS TABLES=G3 BY studytime_group_n
```

```
 217   0 M>  MEANS TABLES=G3 BY studytime_group_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 218   0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Studytime group	649	100.0%	0	0.0%	649	100.0%

Report

G3

Studytime group	N	Mean	Median	Std. Deviation	Variance	Minimum
Lower studytime 1-2	517	11.58	11.00	3.288	10.810	0
Higher studytime 3-4	132	13.18	13.00	2.644	6.990	6
Total	649	11.91	12.00	3.231	10.437	0

Report

G3

Studytime group	Maximum
Lower studytime 1-2	19
Higher studytime 3-4	19
Total	19

```
 219   0 M>
MEANS TABLES=G3 BY failures_group_n
 220   0 M>  MEANS TABLES=G3 BY failures_group_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 221   0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Group Descriptive Statistics for G3

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Failures group	649	100.0%	0	0.0%	649	100.0%

Report

G3

Failures group	N	Mean	Median	Std. Deviation	Variance	Minimum
No previous failure	549	12.51	12.00	2.829	8.002	0
One or more failures	100	8.59	10.00	3.300	10.891	0
Total	649	11.91	12.00	3.231	10.437	0

Report

G3

Failures group	Maximum
No previous failure	19
One or more failures	16
Total	19

```
 222  0 M>
MEANS TABLES=G3 BY absences_group_n
 223  0 M>  MEANS TABLES=G3 BY absences_group_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 224  0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Absences group	649	100.0%	0	0.0%	649	100.0%

Group Descriptive Statistics for G3

Report

G3

Absences group	N	Mean	Median	Std. Deviation	Variance	Minimum
No absences 0	244	12.04	13.00	4.072	16.583	0
Low absences 1-5	234	12.06	12.00	2.541	6.456	6
Moderate absences 6-15	150	11.61	11.00	2.672	7.138	5
High absences 16+	21	10.76	10.00	2.406	5.790	6
Total	649	11.91	12.00	3.231	10.437	0

Report

G3

Absences group	Maximum
No absences 0	19
Low absences 1-5	19
Moderate absences 6-15	18
High absences 16+	16
Total	19

```
 225  0 M>
MEANS TABLES=G3 BY schoolsup_n
 226  0 M>  MEANS TABLES=G3 BY schoolsup_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 227  0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Extra educational support	649	100.0%	0	0.0%	649	100.0%

Group Descriptive Statistics for G3

Report

G3

Extra educational support	N	Mean	Median	Std. Deviation	Variance	Minimum
No school support	581	11.98	12.00	3.316	10.996	0
School support yes	68	11.28	11.00	2.304	5.309	0
Total	649	11.91	12.00	3.231	10.437	0

Report

G3

Extra educational support	Maximum
No school support	19
School support yes	18
Total	19

```
 228  0 M>
MEANS TABLES=G3 BY romantic_n
 229  0 M>  MEANS TABLES=G3 BY romantic_n
  /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
 230  0 M>    /CELLS=COUNT MEAN MEDIAN STDDEV VARIANCE MIN MAX.
```

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
G3 * Romantic relationship	649	100.0%	0	0.0%	649	100.0%

Report

G3

Romantic relationship	N	Mean	Median	Std. Deviation	Variance	Minimum
No romantic relationship	410	12.13	12.00	3.004	9.022	0
Romantic relationship yes	239	11.52	12.00	3.561	12.679	0
Total	649	11.91	12.00	3.231	10.437	0

Group Descriptive Statistics for G3

Report

G3

Romantic relationship	Maximum
No romantic relationship	19
Romantic relationship yes	18
Total	19

```
 231  0 M>
* ============================================================.
 232  0 M>  * ============================================================.
* Boxplots.
 233  0 M>  * Boxplots.
* ============================================================.
 234  0 M>  * ============================================================.

 235  0 M>
TITLE "G3 Boxplots by Group".
 236  0 M>  TITLE "G3 Boxplots by Group".
```

```
 237   0 M>
EXAMINE VARIABLES=G3 BY school_n
 238   0 M>  EXAMINE VARIABLES=G3 BY school_n
  /PLOT=BOXPLOT
 239   0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 240   0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 241   0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

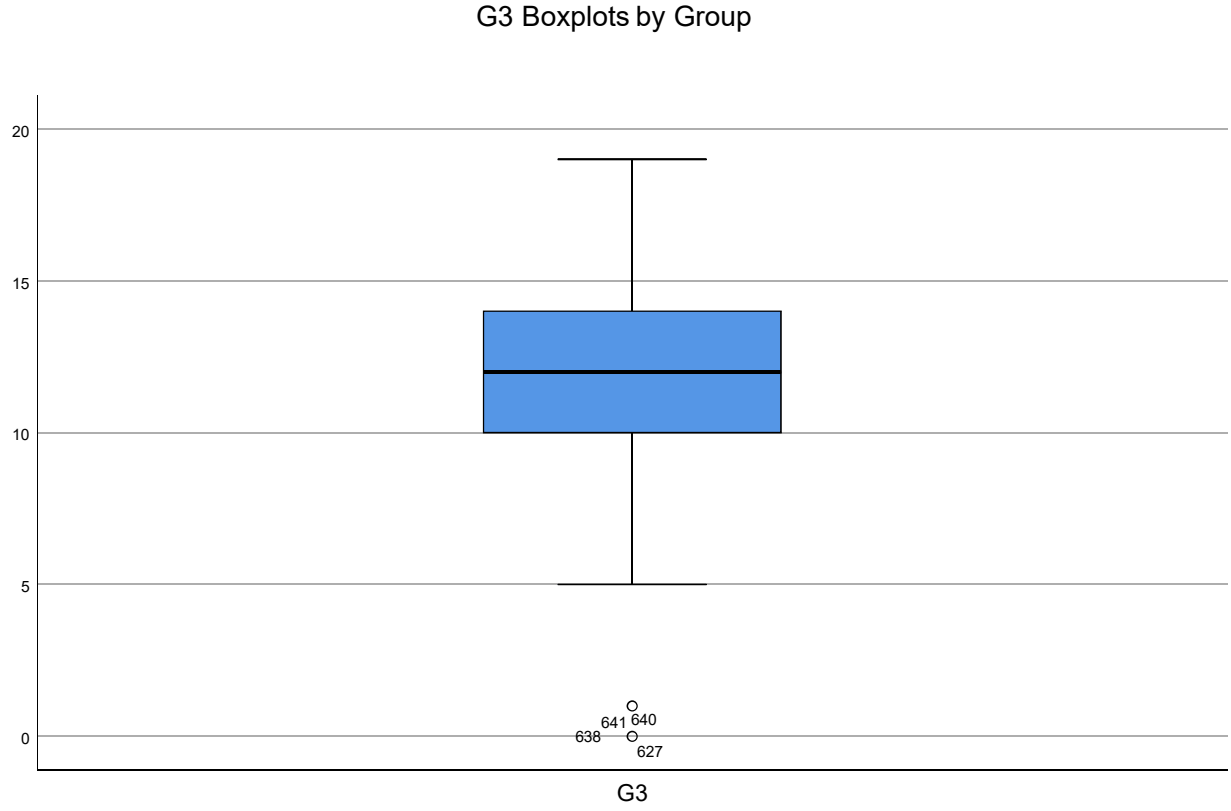
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



School

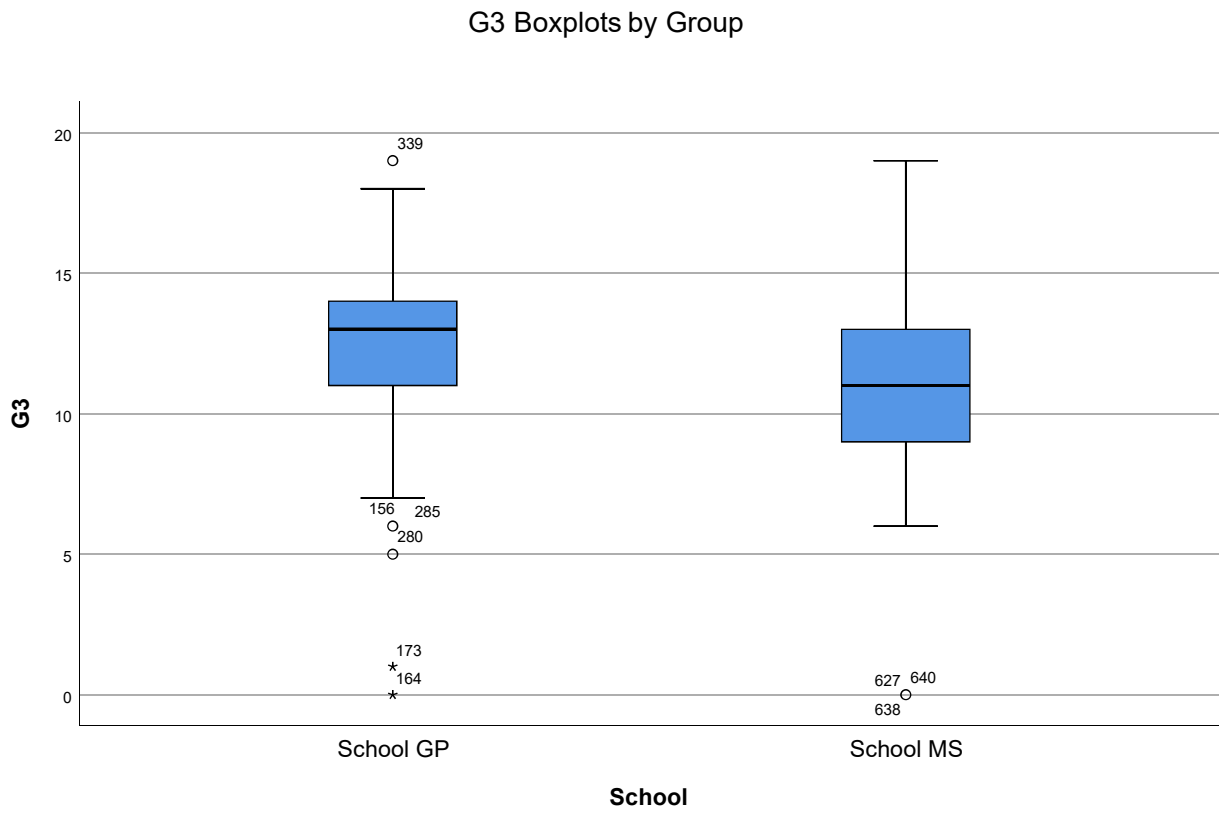
Case Processing Summary

		Cases					
		Valid		Missing		Total	
	School	N	Percent	N	Percent	N	Percent
G3	School GP	423	100.0%	0	0.0%	423	100.0%
	School MS	226	100.0%	0	0.0%	226	100.0%

Descriptives

	School			Statistic	Std. Error
G3	School GP	Mean		12.58	.128
		95% Confidence Interval for Mean	Lower Bound	12.33	
			Upper Bound	12.83	
		5% Trimmed Mean		12.62	
		Median		13.00	
		Variance		6.894	
		Std. Deviation		2.626	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		3	
		Skewness		-.336	.119
		Kurtosis		1.388	.237
	School MS	Mean		10.65	.255
		95% Confidence Interval for Mean	Lower Bound	10.15	
			Upper Bound	11.15	
		5% Trimmed Mean		10.85	
		Median		11.00	
		Variance		14.699	
		Std. Deviation		3.834	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.828	.162
		Kurtosis		1.778	.322

G3




```
 242  0 M>
EXAMINE VARIABLES=G3 BY sex_n
 243  0 M>  EXAMINE VARIABLES=G3 BY sex_n
  /PLOT=BOXPLOT
 244  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 245  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 246  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

Case Processing Summary

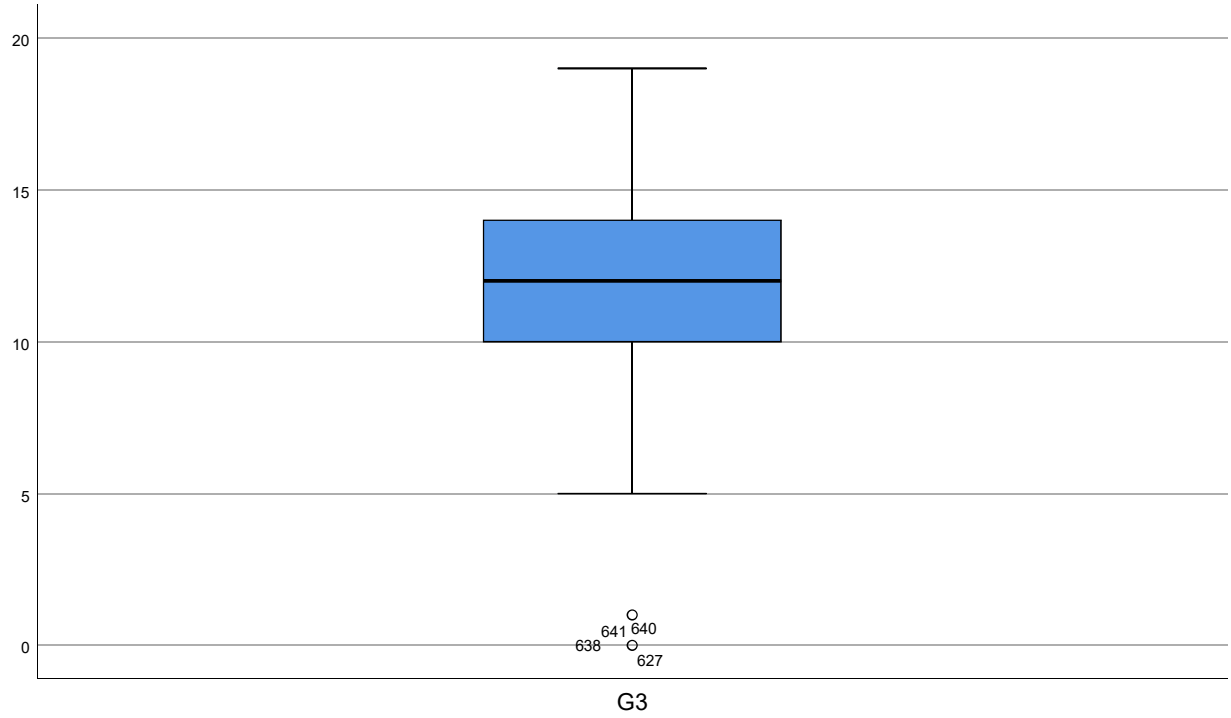
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

G3 Boxplots by Group

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Sex

G3 Boxplots by Group

Case Processing Summary

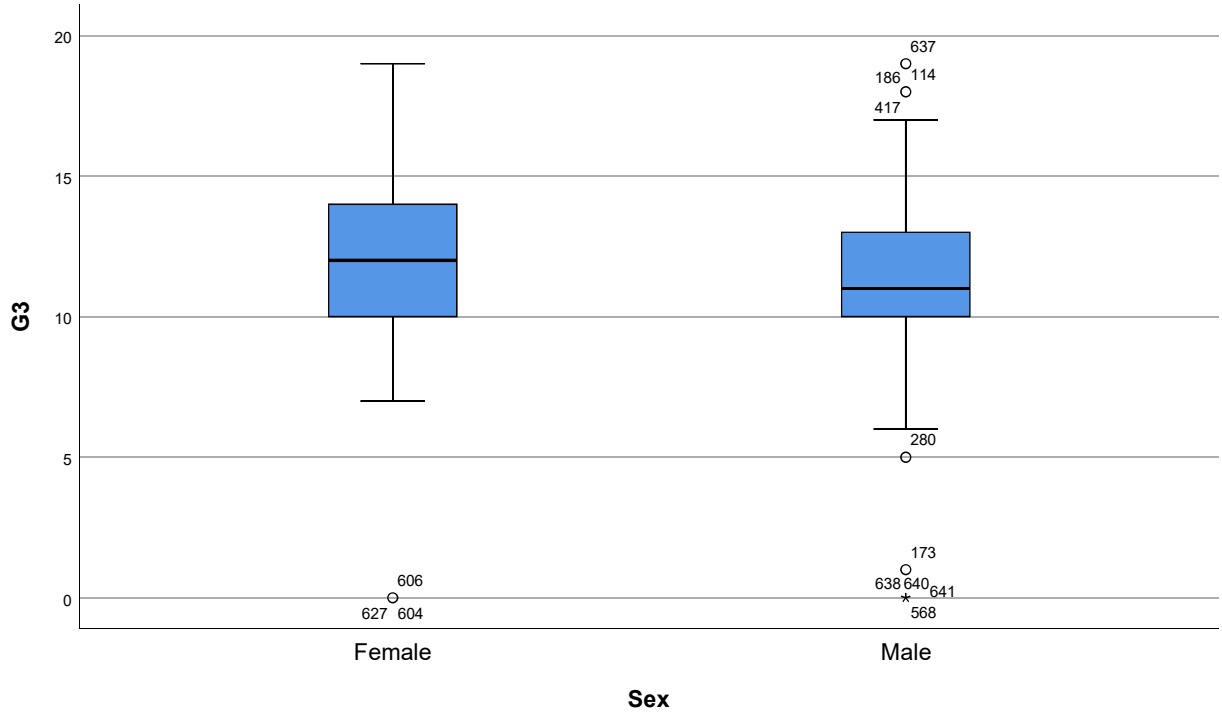
		Cases					
		Valid		Missing		Total	
	Sex	N	Percent	N	Percent	N	Percent
G3	Female	383	100.0%	0	0.0%	383	100.0%
	Male	266	100.0%	0	0.0%	266	100.0%

Descriptives

	Sex			Statistic	Std. Error
G3	Female	Mean		12.25	.160
		95% Confidence Interval for Mean	Lower Bound	11.94	
			Upper Bound	12.57	
		5% Trimmed Mean		12.37	
		Median		12.00	
		Variance		9.760	
		Std. Deviation		3.124	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.857	.125
		Kurtosis		2.683	.249
	Male	Mean		11.41	.204
		95% Confidence Interval for Mean	Lower Bound	11.01	
			Upper Bound	11.81	
		5% Trimmed Mean		11.60	
		Median		11.00	
		Variance		11.027	
		Std. Deviation		3.321	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		3	
		Skewness		-.980	.149
		Kurtosis		2.803	.298

G3 Boxplots by Group

G3




```
 247  0 M>
EXAMINE VARIABLES=G3 BY age_group_n
 248  0 M>  EXAMINE VARIABLES=G3 BY age_group_n
  /PLOT=BOXPLOT
 249  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 250  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 251  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

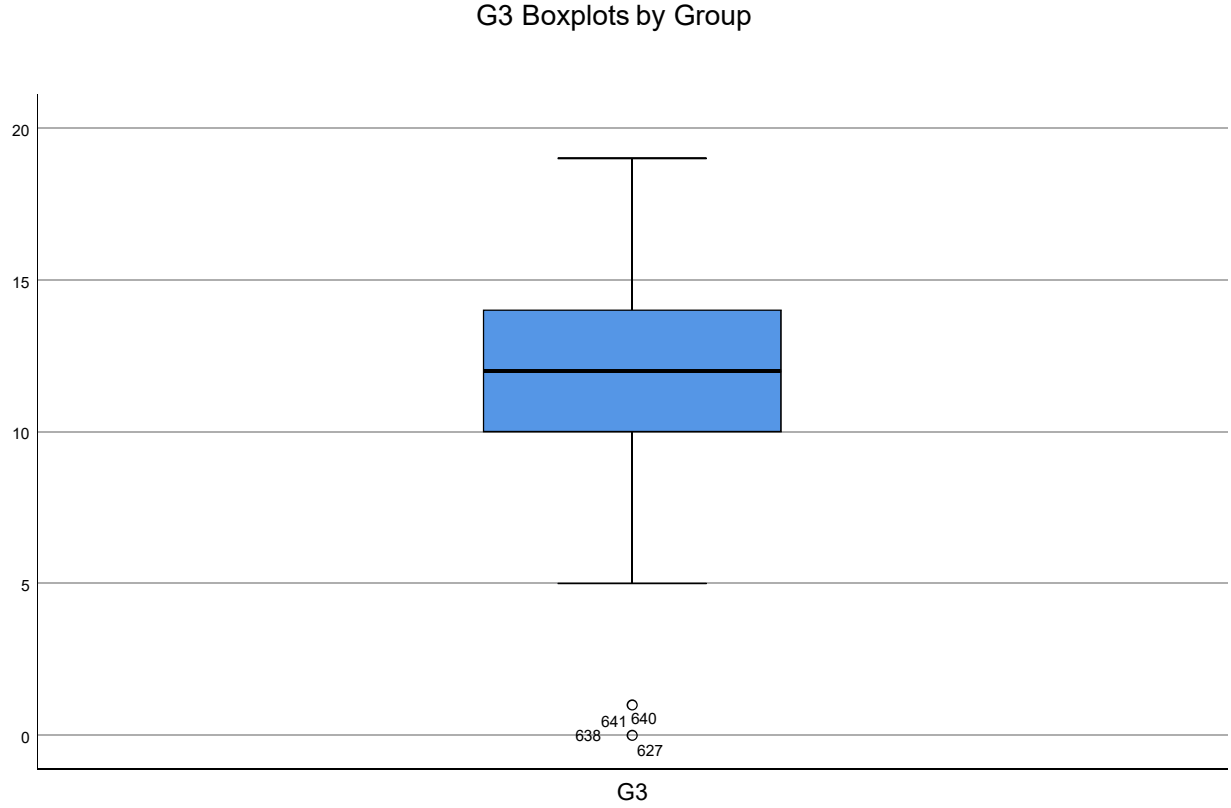
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Age group

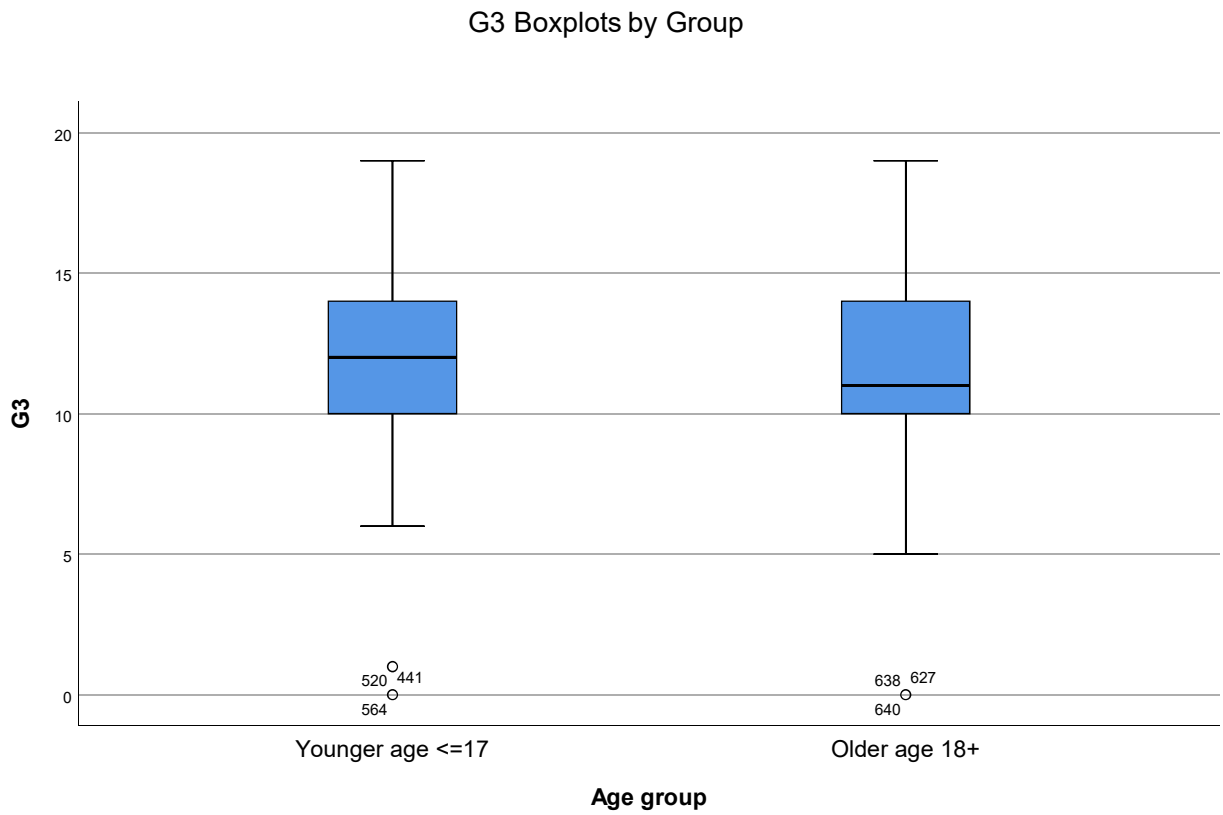
Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Age group	N	Percent	N	Percent	N	Percent
G3	Younger age <=17	468	100.0%	0	0.0%	468	100.0%
	Older age 18+	181	100.0%	0	0.0%	181	100.0%

Descriptives

	Age group			Statistic	Std. Error
G3	Younger age <=17	Mean		12.13	.130
		95% Confidence Interval for Mean	Lower Bound	11.87	
			Upper Bound	12.38	
		5% Trimmed Mean		12.16	
		Median		12.00	
		Variance		7.961	
		Std. Deviation		2.821	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.514	.113
		Kurtosis		2.197	.225
	Older age 18+	Mean		11.34	.302
		95% Confidence Interval for Mean	Lower Bound	10.74	
			Upper Bound	11.93	
		5% Trimmed Mean		11.62	
		Median		11.00	
		Variance		16.469	
		Std. Deviation		4.058	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.999	.181
		Kurtosis		1.585	.359

G3




```
 252  0 M>
EXAMINE VARIABLES=G3 BY studytime_group_n
 253  0 M>  EXAMINE VARIABLES=G3 BY studytime_group_n
  /PLOT=BOXPLOT
 254  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 255  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 256  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

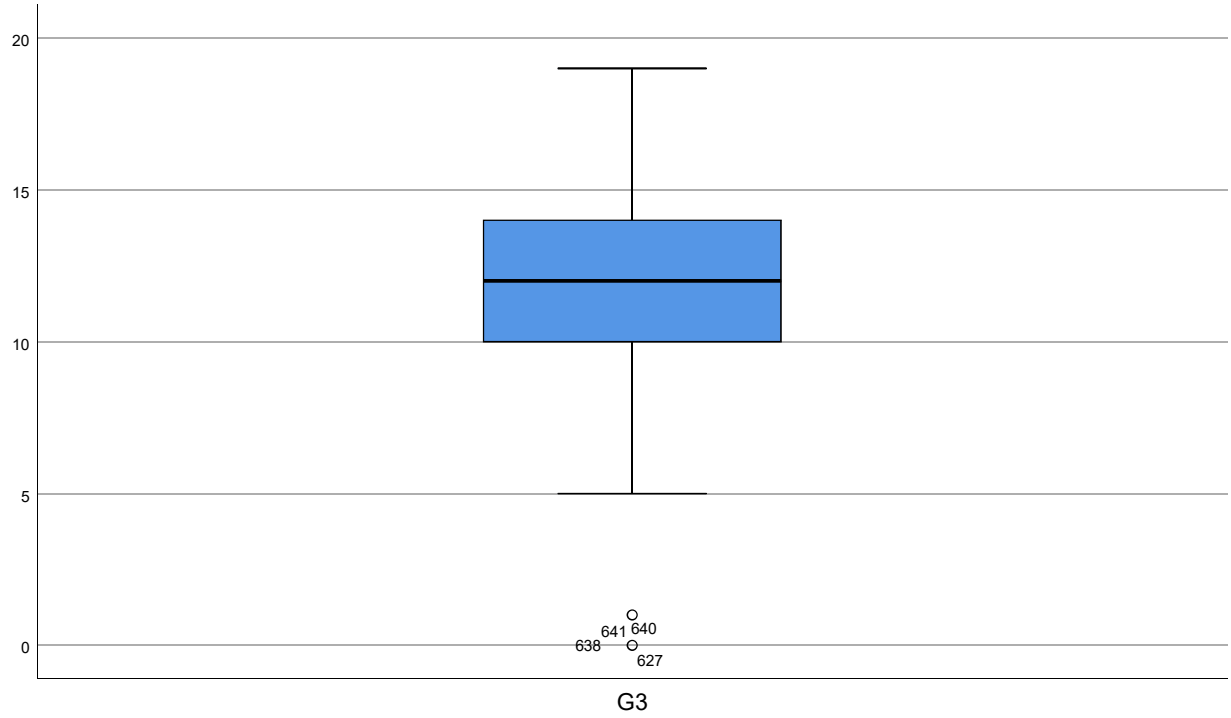
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Studytime group

G3 Boxplots by Group

Case Processing Summary

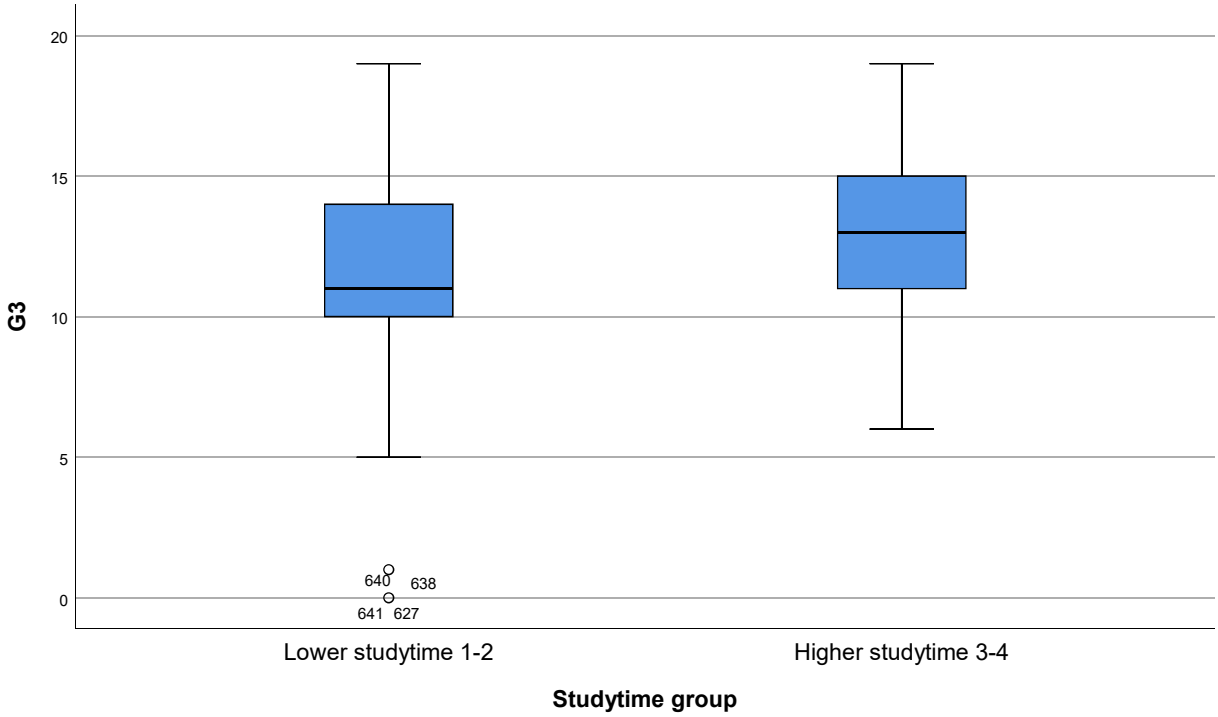
		Cases					
		Valid		Missing		Total	
	Studytime group	N	Percent	N	Percent	N	Percent
G3	Lower studytime 1-2	517	100.0%	0	0.0%	517	100.0%
	Higher studytime 3-4	132	100.0%	0	0.0%	132	100.0%

Descriptives

	Studytime group			Statistic	Std. Error
G3	Lower studytime 1-2	Mean		11.58	.145
		95% Confidence Interval for Mean	Lower Bound	11.30	
			Upper Bound	11.86	
		5% Trimmed Mean		11.76	
		Median		11.00	
		Variance		10.810	
		Std. Deviation		3.288	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.989	.107
		Kurtosis		2.830	.214
	Higher studytime 3-4	Mean		13.18	.230
		95% Confidence Interval for Mean	Lower Bound	12.73	
			Upper Bound	13.64	
		5% Trimmed Mean		13.21	
		Median		13.00	
		Variance		6.990	
		Std. Deviation		2.644	
		Minimum		6	
		Maximum		19	
		Range		13	
		Interquartile Range		4	
		Skewness		-.054	.211
		Kurtosis		-.417	.419

G3 Boxplots by Group

G3




```
 257  0 M>
EXAMINE VARIABLES=G3 BY failures_group_n
 258  0 M>  EXAMINE VARIABLES=G3 BY failures_group_n
  /PLOT=BOXPLOT
 259  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 260  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 261  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

G3 Boxplots by Group

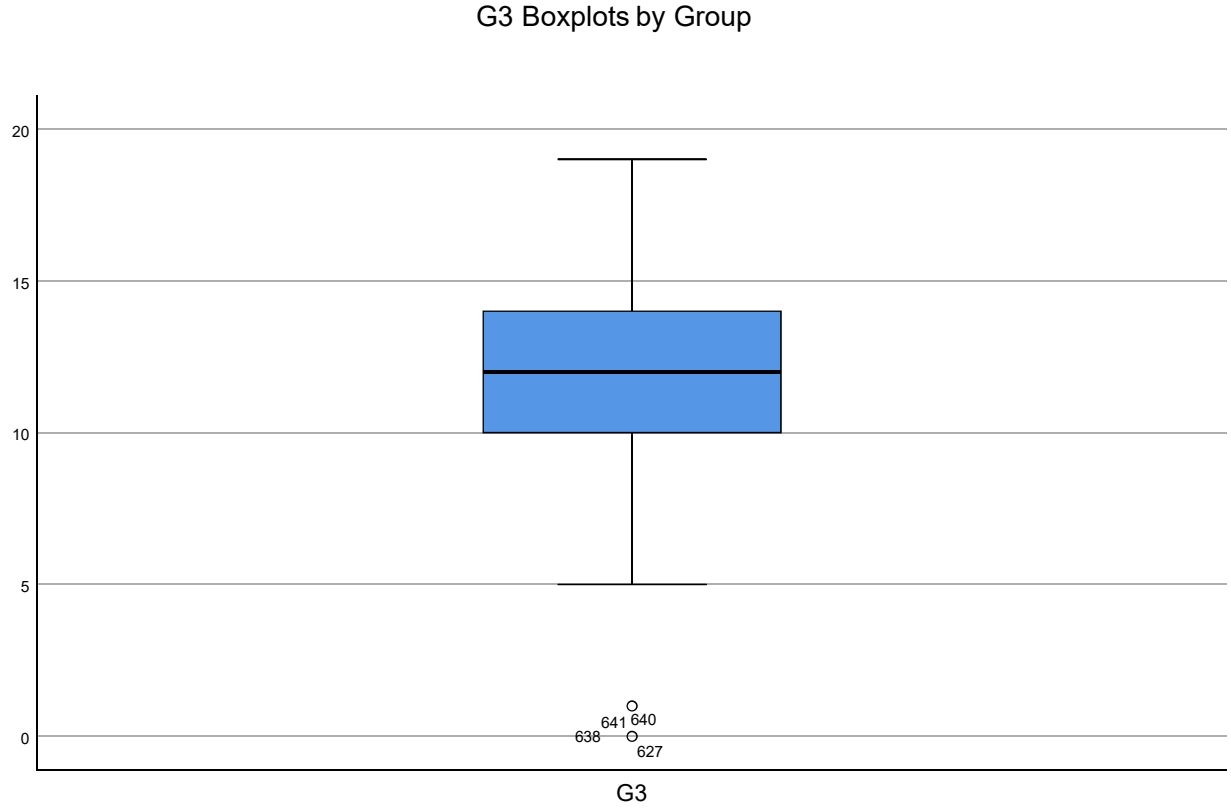
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Failures group

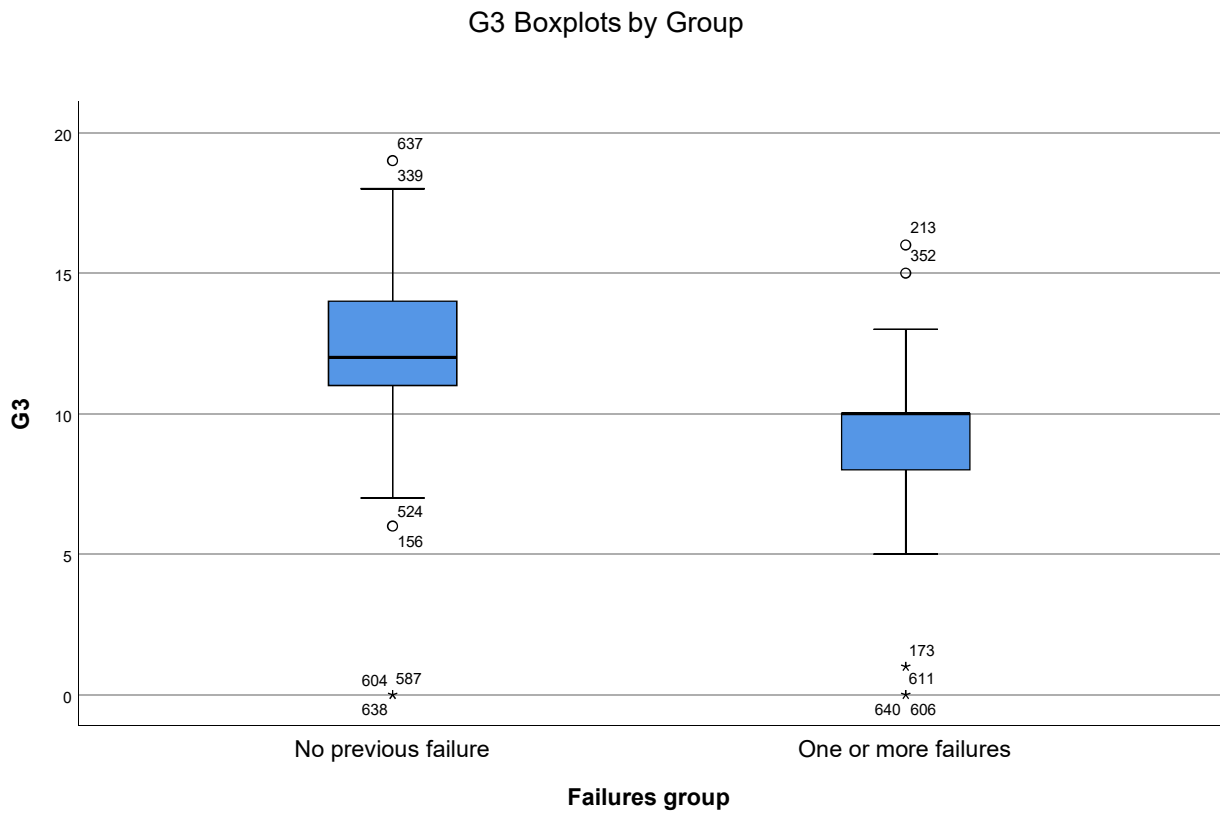
Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Failures group	N	Percent	N	Percent	N	Percent
G3	No previous failure	549	100.0%	0	0.0%	549	100.0%
	One or more failures	100	100.0%	0	0.0%	100	100.0%

Descriptives

	Failures group			Statistic	Std. Error
G3	No previous failure	Mean		12.51	.121
		95% Confidence Interval for Mean	Lower Bound	12.27	
			Upper Bound	12.75	
		5% Trimmed Mean		12.58	
		Median		12.00	
		Variance		8.002	
		Std. Deviation		2.829	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		3	
		Skewness		-.696	.104
		Kurtosis		2.838	.208
	One or more failures	Mean		8.59	.330
		95% Confidence Interval for Mean	Lower Bound	7.94	
			Upper Bound	9.24	
		5% Trimmed Mean		8.77	
		Median		10.00	
		Variance		10.891	
		Std. Deviation		3.300	
		Minimum		0	
		Maximum		16	
		Range		16	
		Interquartile Range		2	
		Skewness		-1.426	.241
		Kurtosis		2.265	.478

G3




```
 262  0 M>
EXAMINE VARIABLES=G3 BY absences_group_n
 263  0 M>  EXAMINE VARIABLES=G3 BY absences_group_n
  /PLOT=BOXPLOT
 264  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 265  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 266  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

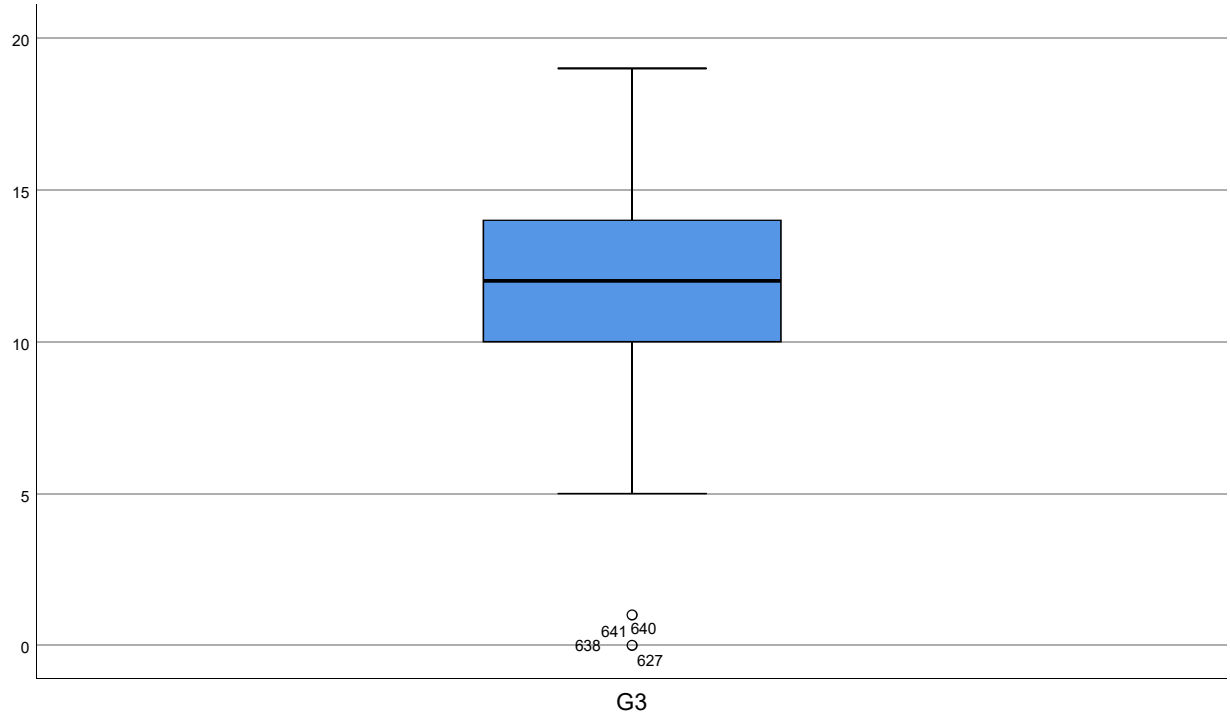
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Absences group

G3 Boxplots by Group

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Absences group	N	Percent	N	Percent	N	Percent
G3	No absences 0	244	100.0%	0	0.0%	244	100.0%
	Low absences 1-5	234	100.0%	0	0.0%	234	100.0%
	Moderate absences 6-15	150	100.0%	0	0.0%	150	100.0%
	High absences 16+	21	100.0%	0	0.0%	21	100.0%

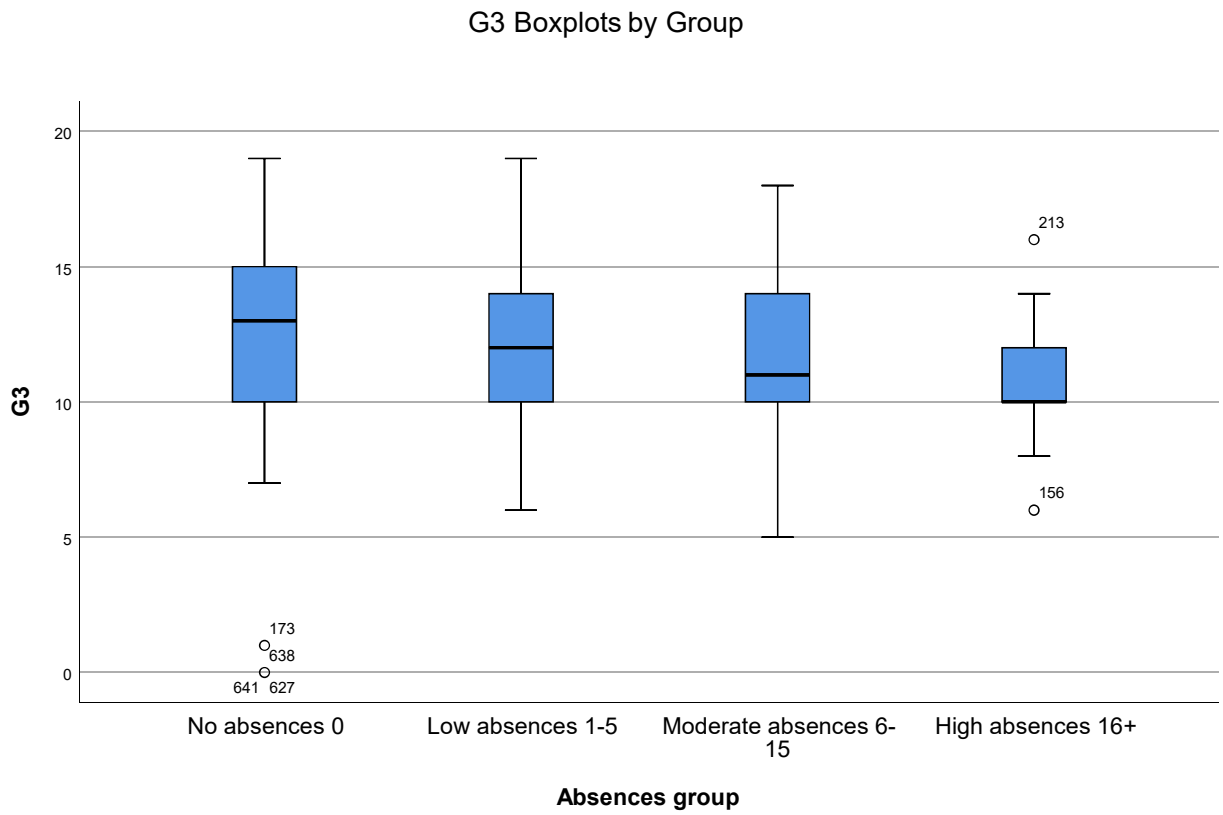
Descriptives

	Absences group			Statistic	Std. Error
G3	No absences 0	Mean		12.04	.261
		95% Confidence Interval for Mean	Lower Bound	11.53	
			Upper Bound	12.55	
		5% Trimmed Mean		12.38	
		Median		13.00	
		Variance		16.583	
		Std. Deviation		4.072	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		5	
		Skewness		-1.394	.156
		Kurtosis		2.559	.310
	Low absences 1-5	Mean		12.06	.166
		95% Confidence Interval for Mean	Lower Bound	11.73	
			Upper Bound	12.38	
		5% Trimmed Mean		12.02	
		Median		12.00	
		Variance		6.456	
		Std. Deviation		2.541	
		Minimum		6	
		Maximum		19	
		Range		13	
		Interquartile Range		4	

Descriptives

Absences group			Statistic	Std. Error
	Skewness		.241	.159
	Kurtosis		-.336	.317
Moderate absences 6-15	Mean		11.61	.218
	95% Confidence Interval for Mean	Lower Bound	11.18	
		Upper Bound	12.04	
	5% Trimmed Mean		11.56	
	Median		11.00	
	Variance		7.138	
	Std. Deviation		2.672	
	Minimum		5	
	Maximum		18	
	Range		13	
	Interquartile Range		4	
	Skewness		.313	.198
	Kurtosis		-.427	.394
High absences 16+	Mean		10.76	.525
	95% Confidence Interval for Mean	Lower Bound	9.67	
		Upper Bound	11.86	
	5% Trimmed Mean		10.74	
	Median		10.00	
	Variance		5.790	
	Std. Deviation		2.406	
	Minimum		6	
	Maximum		16	
	Range		10	
	Interquartile Range		3	
	Skewness		.238	.501
	Kurtosis		-.022	.972

G3




```
 267   0 M>
EXAMINE VARIABLES=G3 BY schoolsup_n
 268   0 M>  EXAMINE VARIABLES=G3 BY schoolsup_n
  /PLOT=BOXPLOT
 269   0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 270   0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 271   0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

Case Processing Summary

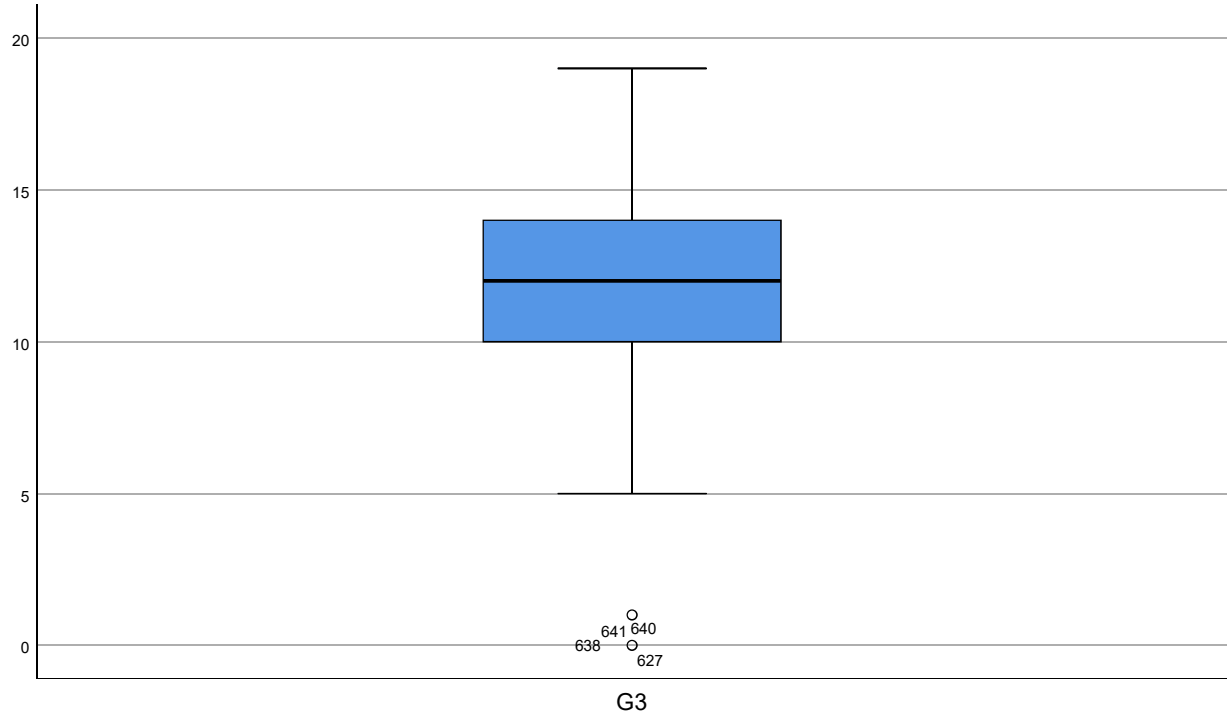
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

G3 Boxplots by Group

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Extra educational support

G3 Boxplots by Group

Case Processing Summary

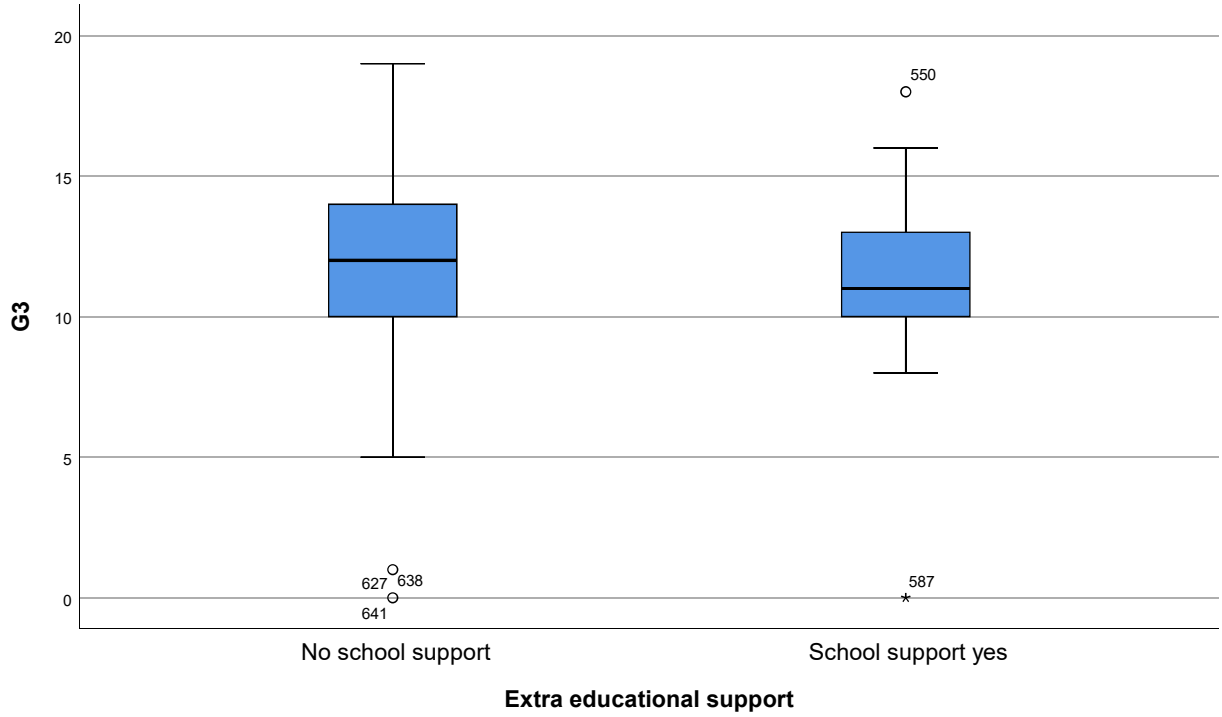
		Cases					
		Valid		Missing		Total	
	Extra educational support	N	Percent	N	Percent	N	Percent
G3	No school support	581	100.0%	0	0.0%	581	100.0%
	School support yes	68	100.0%	0	0.0%	68	100.0%

Descriptives

	Extra educational support			Statistic	Std. Error
G3	No school support	Mean		11.98	.138
		95% Confidence Interval for Mean	Lower Bound	11.71	
			Upper Bound	12.25	
		5% Trimmed Mean		12.15	
		Median		12.00	
		Variance		10.996	
		Std. Deviation		3.316	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.926	.101
		Kurtosis		2.500	.202
	School support yes	Mean		11.28	.279
		95% Confidence Interval for Mean	Lower Bound	10.72	
			Upper Bound	11.84	
		5% Trimmed Mean		11.34	
		Median		11.00	
		Variance		5.309	
		Std. Deviation		2.304	
		Minimum		0	
		Maximum		18	
		Range		18	
		Interquartile Range		3	
		Skewness		-1.356	.291
		Kurtosis		8.243	.574

G3 Boxplots by Group

G3




```
 272  0 M>
EXAMINE VARIABLES=G3 BY romantic_n
 273  0 M>  EXAMINE VARIABLES=G3 BY romantic_n
  /PLOT=BOXPLOT
 274  0 M>    /PLOT=BOXPLOT
  /STATISTICS=DESCRIPTIVES
 275  0 M>    /STATISTICS=DESCRIPTIVES
  /MISSING=LISTWISE.
 276  0 M>    /MISSING=LISTWISE.
```

Explore

Total Sample

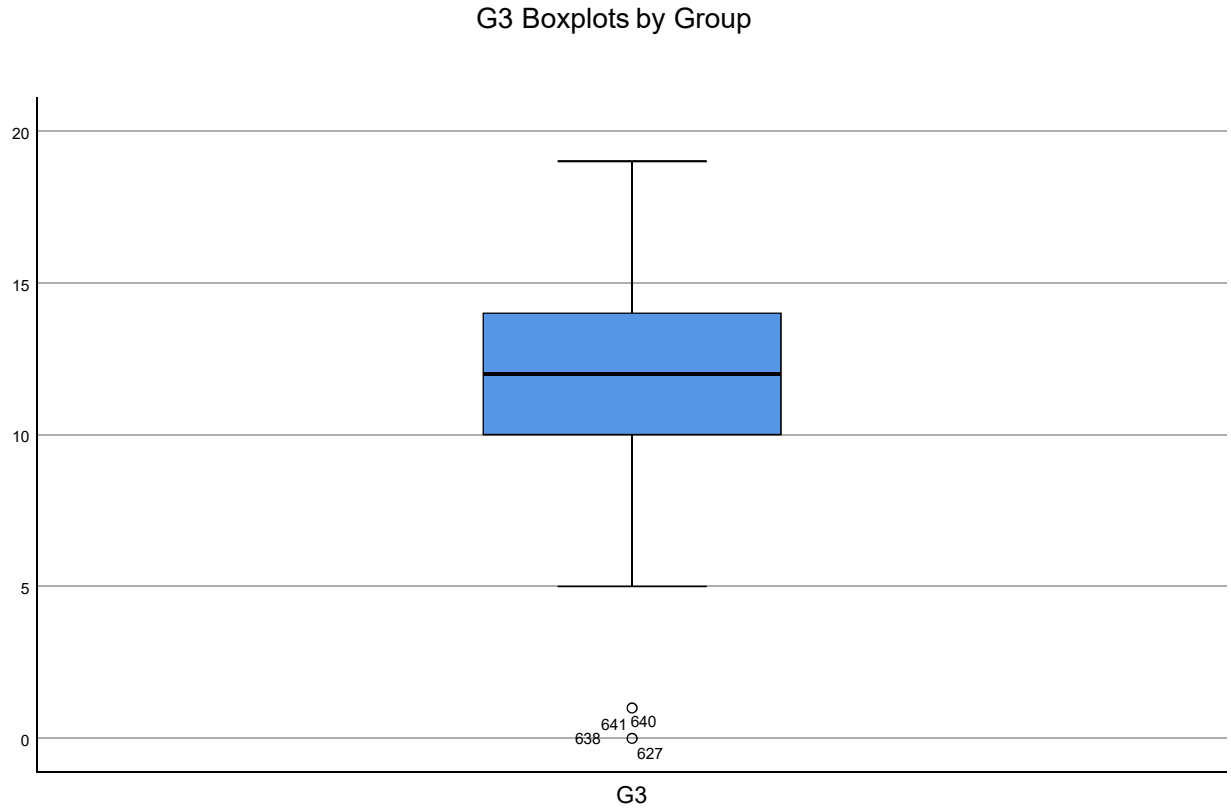
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

			Statistic	Std. Error
G3	Mean		11.91	.127
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean		12.06	
	Median		12.00	
	Variance		10.437	
	Std. Deviation		3.231	
	Minimum		0	
	Maximum		19	
	Range		19	
	Interquartile Range		4	
	Skewness		-.913	.096
	Kurtosis		2.712	.192

G3



Romantic relationship

Case Processing Summary

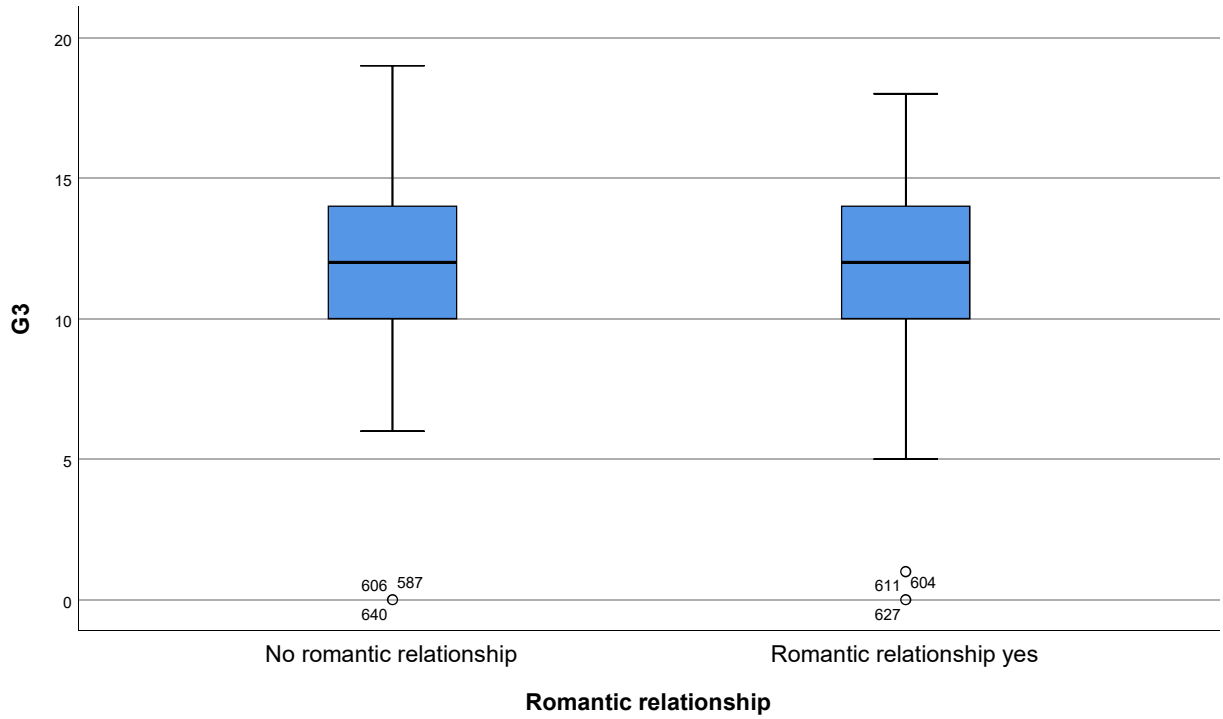
		Cases					
		Valid		Missing		Total	
	Romantic relationship	N	Percent	N	Percent	N	Percent
G3	No romantic relationship	410	100.0%	0	0.0%	410	100.0%
	Romantic relationship yes	239	100.0%	0	0.0%	239	100.0%

G3 Boxplots by Group

Descriptives

	Romantic relationship			Statistic	Std. Error
G3	No romantic relationship	Mean		12.13	.148
		95% Confidence Interval for Mean	Lower Bound	11.84	
			Upper Bound	12.42	
		5% Trimmed Mean		12.20	
		Median		12.00	
		Variance		9.022	
		Std. Deviation		3.004	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	
		Skewness		-.658	.121
		Kurtosis		2.519	.240
	Romantic relationship yes	Mean		11.52	.230
		95% Confidence Interval for Mean	Lower Bound	11.07	
			Upper Bound	11.98	
		5% Trimmed Mean		11.79	
		Median		12.00	
		Variance		12.679	
		Std. Deviation		3.561	
		Minimum		0	
		Maximum		18	
		Range		18	
		Interquartile Range		4	
		Skewness		-1.091	.157
		Kurtosis		2.418	.314

G3




```
 277  0 M>
* ============================================================.
 278  0 M>  * ============================================================.
* Manual Brown-Forsythe median-centered Levene tests.
 279  0 M>  * Manual Brown-Forsythe median-centered Levene tests.
* Logic: group median -> absolute deviation from group median -> ANOVA.
 280  0 M>  * Logic: group median -> absolute deviation from group median -> A
NOVA.
* ============================================================.
 281  0 M>  * ============================================================.

 282  0 M>
DATASET ACTIVATE LevenesData.
 283  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_school.
 284  0 M>  DATASET COPY BF_school.
DATASET ACTIVATE BF_school.
 285  0 M>  DATASET ACTIVATE BF_school.
SORT CASES BY school_n.
 286  0 M>  SORT CASES BY school_n.
```

```
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=school_n /group_median_G3=MEDIAN
(G3).
 287  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=school_n /group_medi
an_G3=MEDIAN(G3).
COMPUTE absdev_school = ABS(G3 - group_median_G3).
 288  0 M>  COMPUTE absdev_school = ABS(G3 - group_median_G3).
EXECUTE.
 289  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by School".
 290  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by School".
```

```
ONEWAY absdev_school BY school_n /STATISTICS DESCRIPTIVES /MISSING ANALYSIS.
 291  0 M>  ONEWAY absdev_school BY school_n /STATISTICS DESCRIPTIVES /MISSING
 ANALYSIS.
```

Oneway

[BF_school]

Descriptives

absdev_school

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
School GP	423	2.0780	1.65683	.08056	1.9197	2.2364
School MS	226	2.6947	2.74383	.18252	2.3350	3.0544
Total	649	2.2928	2.11855	.08316	2.1295	2.4561

Descriptives

absdev_school

	Minimum	Maximum
School GP	.00	13.00
School MS	.00	11.00
Total	.00	13.00

ANOVA

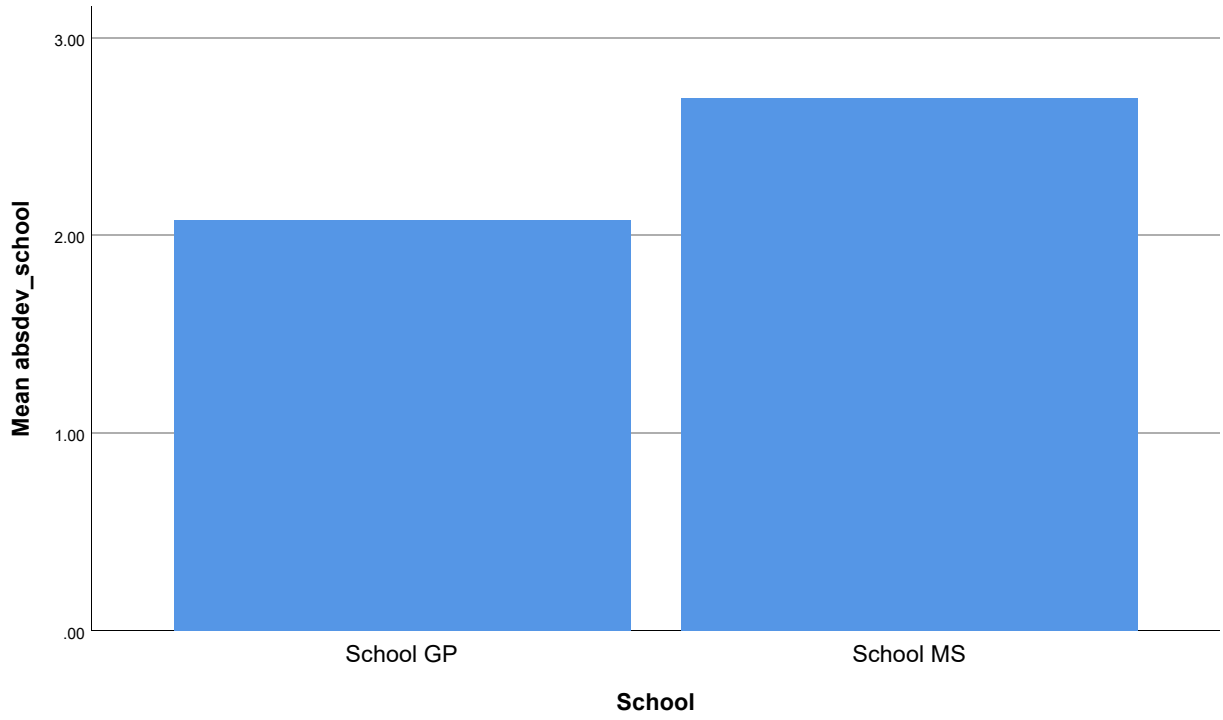
absdev_school

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.017	1	56.017	12.706	.000
Within Groups	2852.359	647	4.409		
Total	2908.376	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_school) BY school_n.
 292  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_school) BY school_n.
```

Graph

Brown-Forsythe Median-Centered Levene Test G3 by School




```
 293  0 M>
DATASET ACTIVATE LevenesData.
 294  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_sex.
 295  0 M>  DATASET COPY BF_sex.
DATASET ACTIVATE BF_sex.
 296  0 M>  DATASET ACTIVATE BF_sex.
SORT CASES BY sex_n.
 297  0 M>  SORT CASES BY sex_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=sex_n /group_median_G3=MEDIAN(G3
).
 298  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=sex_n /group_median_
G3=MEDIAN(G3).
COMPUTE absdev_sex = ABS(G3 - group_median_G3).
 299  0 M>  COMPUTE absdev_sex = ABS(G3 - group_median_G3).
EXECUTE.
 300  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Sex".
 301  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Sex".
```

```
ONEWAY absdev_sex BY sex_n /STATISTICS DESCRIPTIVES /MISSING ANALYSIS.
 302  0 M>  ONEWAY absdev_sex BY sex_n /STATISTICS DESCRIPTIVES /MISSING ANALY
SIS.
```

Oneway

[BF_sex]

Descriptives

absdev_sex

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Female	383	2.3681	2.04983	.10474	2.1622	2.5741
Male	266	2.3534	2.37342	.14552	2.0669	2.6399
Total	649	2.3621	2.18649	.08583	2.1936	2.5306

Descriptives

absdev_sex

	Minimum	Maximum
Female	.00	12.00
Male	.00	11.00
Total	.00	12.00

ANOVA

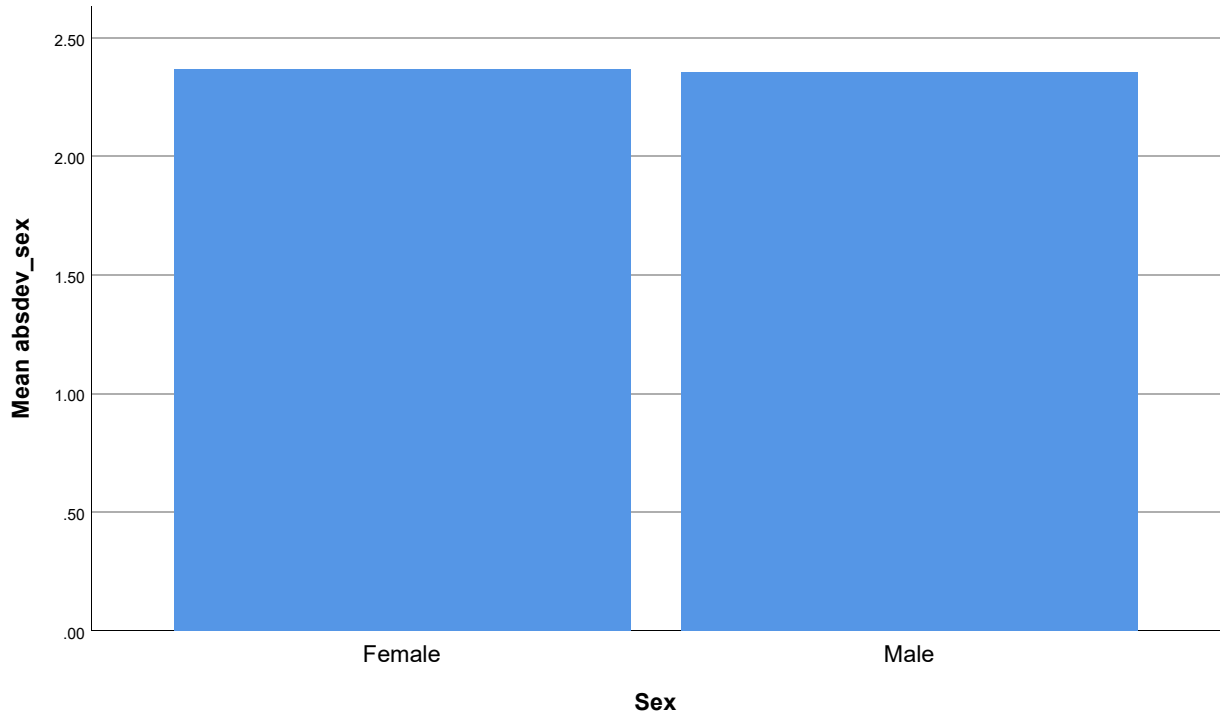
absdev_sex

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.034	1	.034	.007	.933
Within Groups	3097.873	647	4.788		
Total	3097.908	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_sex) BY sex_n.
 303  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_sex) BY sex_n.
```

Graph

Brown-Forsythe Median-Centered Levene Test G3 by Sex




```
 304  0 M>
DATASET ACTIVATE LevenesData.
 305  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_age.
 306  0 M>  DATASET COPY BF_age.
DATASET ACTIVATE BF_age.
 307  0 M>  DATASET ACTIVATE BF_age.
SORT CASES BY age_group_n.
 308  0 M>  SORT CASES BY age_group_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=age_group_n /group_median_G3=MED
IAN(G3).
 309  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=age_group_n /group_m
edian_G3=MEDIAN(G3).
COMPUTE absdev_age = ABS(G3 - group_median_G3).
 310  0 M>  COMPUTE absdev_age = ABS(G3 - group_median_G3).
EXECUTE.
 311  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Age".
 312  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Age".
```

```
ONEWAY absdev_age BY age_group_n /STATISTICS DESCRIPTIVES /MISSING ANALYSIS.
 313  0 M>  ONEWAY absdev_age BY age_group_n /STATISTICS DESCRIPTIVES /MISSING
 ANALYSIS.
```

Oneway

[BF_age]

Descriptives

absdev_age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Younger age <=17	468	2.1603	1.81652	.08397	1.9953	2.3253
Older age 18+	181	2.9558	2.79250	.20756	2.5462	3.3654
Total	649	2.3821	2.16140	.08484	2.2155	2.5487

Descriptives

absdev_age

	Minimum	Maximum
Younger age <=17	.00	12.00
Older age 18+	.00	11.00
Total	.00	12.00

ANOVA

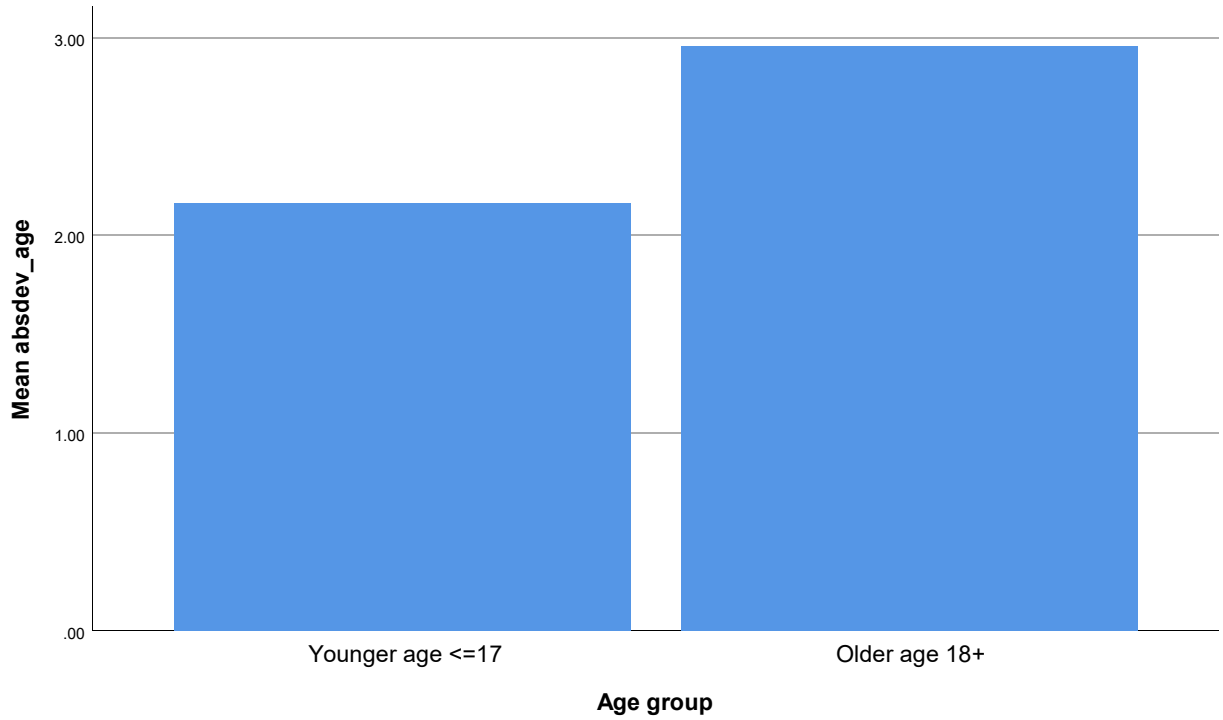
absdev_age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	82.605	1	82.605	18.150	.000
Within Groups	2944.627	647	4.551		
Total	3027.233	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_age) BY age_group_n.
 314  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_age) BY age_group_n.
```

Graph

Brown-Forsythe Median-Centered Levene Test G3 by Age




```
 315  0 M>
DATASET ACTIVATE LevenesData.
 316  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_studytime.
 317  0 M>  DATASET COPY BF_studytime.
DATASET ACTIVATE BF_studytime.
 318  0 M>  DATASET ACTIVATE BF_studytime.
SORT CASES BY studytime_group_n.
 319  0 M>  SORT CASES BY studytime_group_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=studytime_group_n /group_median_
G3=MEDIAN(G3).
 320  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=studytime_group_n /g
roup_median_G3=MEDIAN(G3).
COMPUTE absdev_studytime = ABS(G3 - group_median_G3).
 321  0 M>  COMPUTE absdev_studytime = ABS(G3 - group_median_G3).
EXECUTE.
 322  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Studytime".
 323  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Studytime"
.
```

```
ONEWAY absdev_studytime BY studytime_group_n /STATISTICS DESCRIPTIVES /MISSING
 ANALYSIS.
 324  0 M>  ONEWAY absdev_studytime BY studytime_group_n /STATISTICS DESCRIPTI
VES /MISSING ANALYSIS.
```

Oneway

```
[BF_studytime]
```

Descriptives

absdev_studytime

	N	Mean	Std. Deviation	Std. Error	95% Confidence ... Lower Bound
Lower studytime 1-2	517	2.3946	2.32425	.10222	2.1938
Higher studytime 3-4	132	2.1061	1.59798	.13909	1.8309
Total	649	2.3359	2.19805	.08628	2.1665

Descriptives

absdev_studytime

	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
Lower studytime 1-2	2.5954	.00	11.00
Higher studytime 3-4	2.3812	.00	7.00
Total	2.5053	.00	11.00

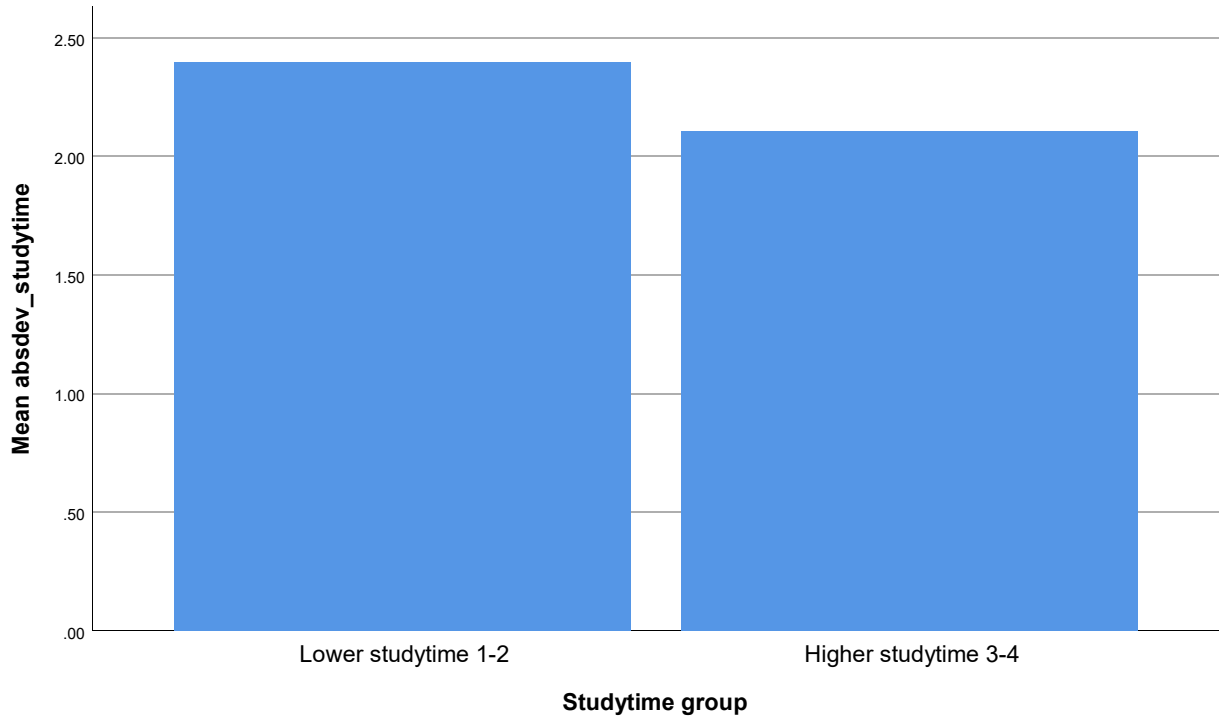
ANOVA

absdev_studytime

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.754	1	8.754	1.814	.178
Within Groups	3122.020	647	4.825		
Total	3130.773	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_studytime) BY studytime_group_n.
 325  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_studytime) BY studytime_group_n.
```

Graph




```
 326  0 M>
DATASET ACTIVATE LevenesData.
 327  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_failures.
 328  0 M>  DATASET COPY BF_failures.
DATASET ACTIVATE BF_failures.
 329  0 M>  DATASET ACTIVATE BF_failures.
SORT CASES BY failures_group_n.
 330  0 M>  SORT CASES BY failures_group_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=failures_group_n /group_median_G
3=MEDIAN(G3).
 331  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=failures_group_n /gr
oup_median_G3=MEDIAN(G3).
COMPUTE absdev_failures = ABS(G3 - group_median_G3).
 332  0 M>  COMPUTE absdev_failures = ABS(G3 - group_median_G3).
EXECUTE.
 333  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Failures".
 334  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Failures".
```

```
ONEWAY absdev_failures BY failures_group_n /STATISTICS DESCRIPTIVES /MISSING A
NALYSIS.
 335  0 M>  ONEWAY absdev_failures BY failures_group_n /STATISTICS DESCRIPTIVE
S /MISSING ANALYSIS.
```

Oneway

[BF_failures]

Descriptives

absdev_failures

	N	Mean	Std. Deviation	Std. Error	95% Confidence ... Lower Bound
No previous failure	549	2.1785	1.87303	.07994	2.0215
One or more failures	100	2.1300	2.88379	.28838	1.5578
Total	649	2.1710	2.05856	.08081	2.0124

Descriptives

absdev_failures

	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
No previous failure	2.3355	.00	12.00
One or more failures	2.7022	.00	10.00
Total	2.3297	.00	12.00

ANOVA

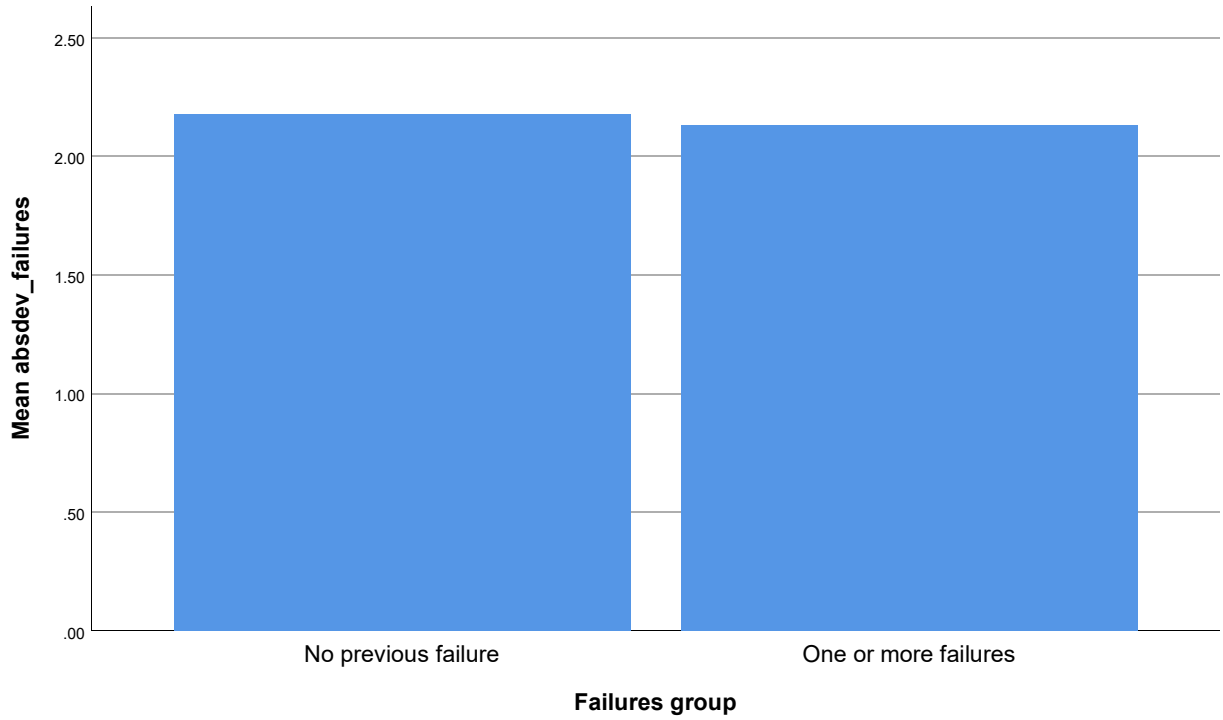
absdev_failures

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.199	1	.199	.047	.829
Within Groups	2745.816	647	4.244		
Total	2746.015	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_failures) BY failures_group_n.
 336  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_failures) BY failures_group_n.
```

Graph

Brown-Forsythe Median-Centered Levene Test G3 by Failures




```
 337  0 M>
DATASET ACTIVATE LevenesData.
 338  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_absences.
 339  0 M>  DATASET COPY BF_absences.
DATASET ACTIVATE BF_absences.
 340  0 M>  DATASET ACTIVATE BF_absences.
SORT CASES BY absences_group_n.
 341  0 M>  SORT CASES BY absences_group_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=absences_group_n /group_median_G
3=MEDIAN(G3).
 342  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=absences_group_n /gr
oup_median_G3=MEDIAN(G3).
COMPUTE absdev_absences = ABS(G3 - group_median_G3).
 343  0 M>  COMPUTE absdev_absences = ABS(G3 - group_median_G3).
EXECUTE.
 344  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Absences".
 345  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Absences".
```

```
ONEWAY absdev_absences BY absences_group_n /STATISTICS DESCRIPTIVES /MISSING A
NALYSIS.
 346  0 M>  ONEWAY absdev_absences BY absences_group_n /STATISTICS DESCRIPTIVE
S /MISSING ANALYSIS.
```

Oneway

```
[BF_absences]
```

Descriptives

absdev_absences

	N	Mean	Std. Deviation	Std. Error	95% Confidence ... Lower Bound
No absences 0	244	2.8361	3.07080	.19659	2.4488
Low absences 1-5	234	2.0470	1.50033	.09808	1.8538
Moderate absences 6-15	150	2.0933	1.76219	.14388	1.8090
High absences 16+	21	1.8095	1.72102	.37556	1.0261
Total	649	2.3467	2.30170	.09035	2.1693

Descriptives

absdev_absences

	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
No absences 0	3.2233	.00	13.00
Low absences 1-5	2.2402	.00	7.00
Moderate absences 6-15	2.3776	.00	7.00
High absences 16+	2.5929	.00	6.00
Total	2.5241	.00	13.00

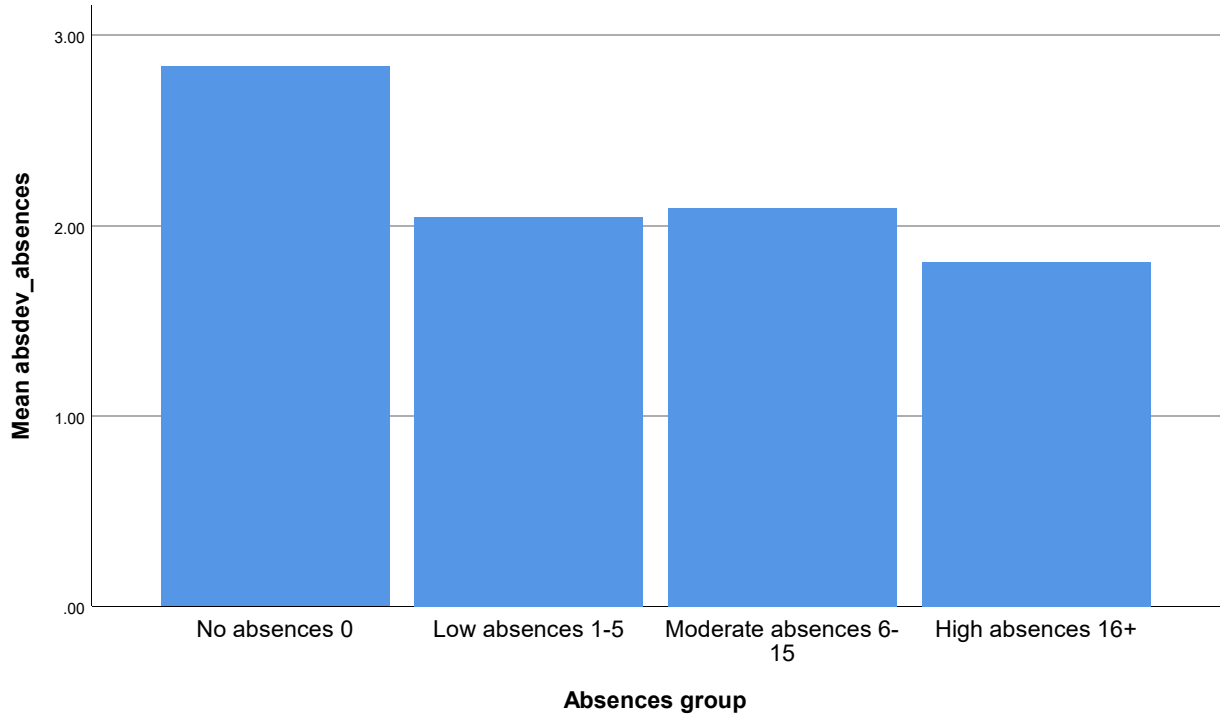
ANOVA

absdev_absences

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	95.138	3	31.713	6.128	.000
Within Groups	3337.857	645	5.175		
Total	3432.995	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_absences) BY absences_group_n.
 347  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_absences) BY absences_group_n.
```

Graph




```
 348  0 M>
DATASET ACTIVATE LevenesData.
 349  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_schoolsup.
 350  0 M>  DATASET COPY BF_schoolsup.
DATASET ACTIVATE BF_schoolsup.
 351  0 M>  DATASET ACTIVATE BF_schoolsup.
SORT CASES BY schoolsup_n.
 352  0 M>  SORT CASES BY schoolsup_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=schoolsup_n /group_median_G3=MED
IAN(G3).
 353  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=schoolsup_n /group_m
edian_G3=MEDIAN(G3).
COMPUTE absdev_schoolsup = ABS(G3 - group_median_G3).
 354  0 M>  COMPUTE absdev_schoolsup = ABS(G3 - group_median_G3).
EXECUTE.
```

```
 355  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by School Support".
 356  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by School Sup
port".

>Warning # 2003.  Command name: TITLE
>The title given exceeds 60 characters in length.  The first 60 characters wil
l
>be used.
```

```
ONEWAY absdev_schoolsup BY schoolsup_n /STATISTICS DESCRIPTIVES /MISSING ANALY
SIS.
 357  0 M>  ONEWAY absdev_schoolsup BY schoolsup_n /STATISTICS DESCRIPTIVES /M
ISSING ANALYSIS.
```

Oneway

```
[BF_schoolsup]
```

Descriptives

absdev_schoolsup

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
No school support	581	2.4854	2.19291	.09098	2.3067	2.6641
School support yes	68	1.5735	1.69561	.20562	1.1631	1.9840
Total	649	2.3898	2.16324	.08491	2.2231	2.5566

Descriptives

absdev_schoolsup

	Minimum	Maximum
No school support	.00	12.00
School support yes	.00	11.00
Total	.00	12.00

ANOVA

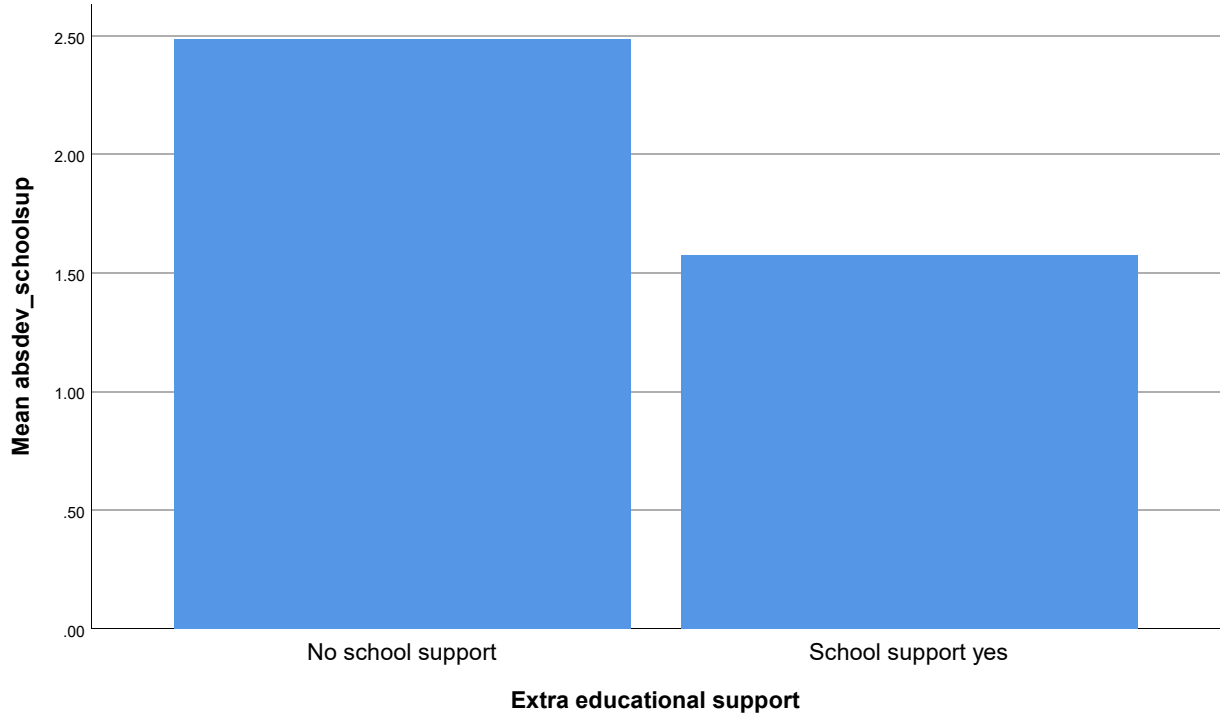
absdev_schoolsup

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.615	1	50.615	10.983	.001
Within Groups	2981.758	647	4.609		
Total	3032.373	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_schoolsup) BY schoolsup_n.
 358  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_schoolsup) BY schoolsup_n.
```

Graph

Brown-Forsythe Median-Centered Levene Test G3 by School Supp




```
 359  0 M>
DATASET ACTIVATE LevenesData.
 360  0 M>  DATASET ACTIVATE LevenesData.
DATASET COPY BF_romantic.
 361  0 M>  DATASET COPY BF_romantic.
DATASET ACTIVATE BF_romantic.
 362  0 M>  DATASET ACTIVATE BF_romantic.
SORT CASES BY romantic_n.
 363  0 M>  SORT CASES BY romantic_n.
AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=romantic_n /group_median_G3=MEDI
AN(G3).
 364  0 M>  AGGREGATE /OUTFILE=* MODE=ADDVARIABLES /BREAK=romantic_n /group_me
dian_G3=MEDIAN(G3).
COMPUTE absdev_romantic = ABS(G3 - group_median_G3).
 365  0 M>  COMPUTE absdev_romantic = ABS(G3 - group_median_G3).
EXECUTE.
 366  0 M>  EXECUTE.
TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Romantic".
 367  0 M>  TITLE "Brown-Forsythe Median-Centered Levene Test G3 by Romantic".
```

```
ONEWAY absdev_romantic BY romantic_n /STATISTICS DESCRIPTIVES /MISSING ANALYSI
S.
 368  0 M>  ONEWAY absdev_romantic BY romantic_n /STATISTICS DESCRIPTIVES /MIS
SING ANALYSIS.
```

Oneway

[BF_romantic]

Descriptives

absdev_romantic

	N	Mean	Std. Deviation	Std. Error	95% Confidence ... Lower Bound
No romantic relationship	410	2.2707	1.96731	.09716	2.0797
Romantic relationship yes	239	2.6192	2.45322	.15869	2.3066
Total	649	2.3991	2.16369	.08493	2.2323

Descriptives

absdev_romantic

	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
No romantic relationship	2.4617	.00	12.00
Romantic relationship yes	2.9319	.00	12.00
Total	2.5659	.00	12.00

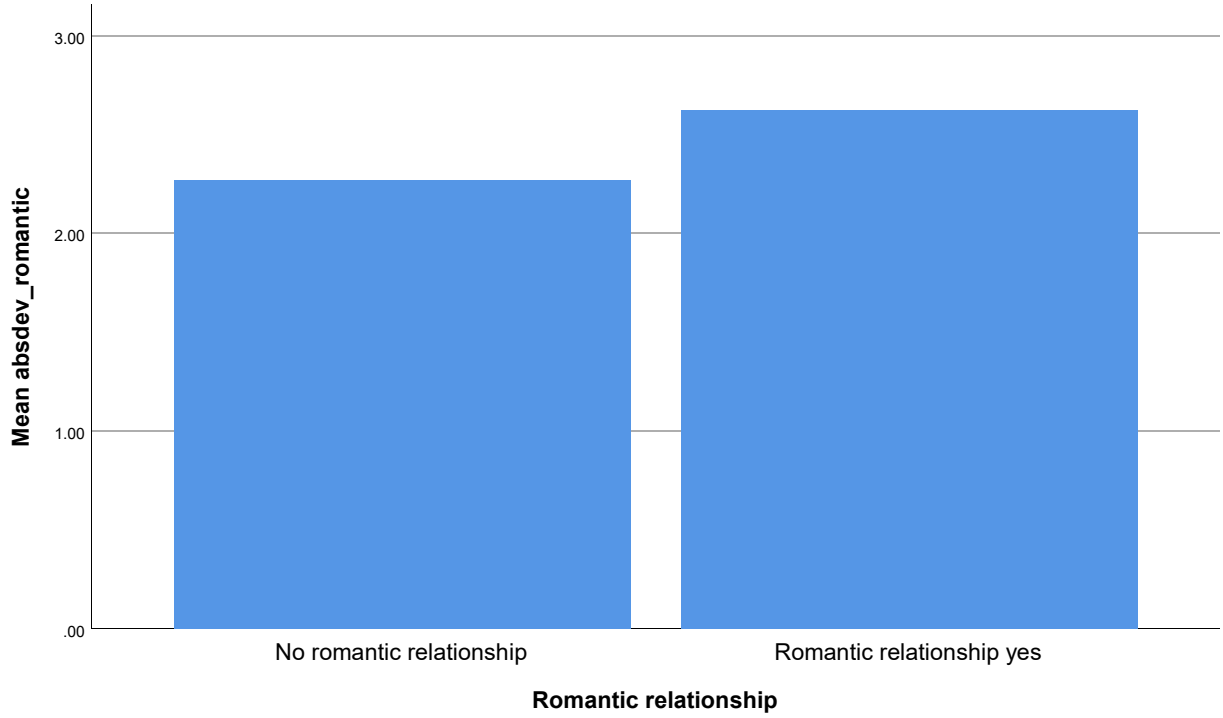
ANOVA

absdev_romantic

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.339	1	18.339	3.935	.048
Within Groups	3015.300	647	4.660		
Total	3033.639	648			

```
GRAPH /BAR(SIMPLE)=MEAN(absdev_romantic) BY romantic_n.
 369  0 M>  GRAPH /BAR(SIMPLE)=MEAN(absdev_romantic) BY romantic_n.
```

Graph




```
 370   0 M>
DATASET ACTIVATE LevenesData.
 371   0 M>  DATASET ACTIVATE LevenesData.

 372   0 M>
SAVE OUTFILE='D:\low kda score priority basis posts\first post\Levenes Test\sp
ss\Levenes_Test_SPSS_Working_Data_From_Clean_File.sav'
 373   0 M>  SAVE OUTFILE='D:\low kda score priority basis posts\first post\Lev
enes Test\spss\Levenes_Test_SPSS_Working_Data_From_Cle
               an_File.sav'
  /COMPRESSED.
 374   0 M>    /COMPRESSED.

 375   0 M>
OUTPUT EXPORT
 376   0 M>  OUTPUT EXPORT
  /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=PRINTSETTING
 377   0 M>    /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=PRINTSETTING
```

```
  /PDF DOCUMENTFILE='D:\low kda score priority basis posts\first post\Levenes
Test\spss\Levenes_Test_SPSS_Output_From_Clean_File.pdf'
 378  0 M>    /PDF DOCUMENTFILE='D:\low kda score priority basis posts\first p
ost\Levenes Test\spss\Levenes_Test_SPSS_Output_From_Cl
               ean_File.pdf'
  EMBEDBOOKMARKS=YES EMBEDFONTS=YES.
 379  0 M>    EMBEDBOOKMARKS=YES EMBEDFONTS=YES.
```

Output Export

```
[LevenesData] D:\low kda score priority basis posts\first post\Levenes Test\sp
ss\Levenes_Test_SPSS_Working_Data_From_Clean_File.sav
```

Export Summary

Viewer	Levenes_Test_SPSS_Output_From_Clean_File
Document File	D:\low kda score priority basis posts\first post\Levenes Test\spss\Levenes_Test_SPSS_Output_From_Clean_File.pdf

```
 380  0 M>
OUTPUT SAVE
 381  0 M>  OUTPUT SAVE
  OUTFILE='D:\low kda score priority basis posts\first post\Levenes Test\spss\
Levenes_Test_SPSS_Output_From_Clean_File.spv'.
 382  0 M>    OUTFILE='D:\low kda score priority basis posts\first post\Levene
s Test\spss\Levenes_Test_SPSS_Output_From_Clean_File.s
               pv'.

 383  0 M>
TITLE.
 384  0 M>  TITLE.
```

```
SUBTITLE.
 385  0 M>  SUBTITLE.
```

```
 386  0 M>
* ============================================================.
 387  0 M>  * ============================================================.
* END.
 388  0 M>  * END.
* ============================================================.
 389  0 M>  * ============================================================.
```