

King's College London

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PG Cert/PG Dip/MSc Examination

7PADMPAR Research Skills: From Methods & Procedures to Analysis & Reporting; Coursework 2 Paper

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Student ID Number 19071714 Date 15 December 2021

Coursework Assessment II
Research Skills: From Methods & Procedures to Analysis and Reporting
(7PADMPAR)

Study 1 Part 1

For this study, seventy-two participants were recruited. All of them watched a series of video clips of graphic violence in order to elicit intrusive memories. After 24 hours, they returned to the lab and were randomly assigned to 4 groups: 'No-task control' ($n = 18$), 'Reactivation+Tetris' ($n = 18$), 'Tetris Only' ($n = 18$) and 'Reactivation Only' ($n = 18$).

Preliminary comparisons of the means were carried out to verify whether the participants in each condition were equally paying attention to the film as well as whether no one condition group showed a higher or lower level of distress.

It has been found that the mean attention paid score for all groups was 9.49 ($SD = .65$) and the mean scores for the control group ($M = 9.67, SD = .49$), the 'Reactivation + Tetris' group ($M = 9.28, SD = .83$), the 'Tetris Only' group ($M = 9.56, SD = .61$) and the 'Reactivation Only' group ($M = 9.44, SD = .62$) were similar.

The mean post film distress rating score for all groups was 6.26 ($SD = 2.15$) with similar mean scores for the control group ($M = 6.44, SD = 1.88$), the 'Reactivation + Tetris' group ($M = 6.44, SD = 1.69$), the 'Tetris Only' group ($M = 6.11, SD = 2.59$) and the 'Reactivation Only' group ($M = 6.05, SD = 2.16$).

Pre-intervention mean number of image-based intrusive memories was 3.32 ($SD = 2.21$) with equal occurrence of intrusive memories for the control group ($M = 3.56$, $SD = 2.41$), the 'Reactivation + Tetris' group ($M = 3.11$, $SD = 2.25$), the 'Tetris Only' group ($M = 3.17$, $SD = 1.58$) and the 'Reactivation Only' group ($M = 3.44$, $SD = 2.64$), as predicted.

Following the experimental task, the descriptive analysis found a difference for each of the four conditions groups in the mean number of memory intrusions on the seven days, with the 'Reactivation+Tetris' group showing the lowest mean number of intrusions ($M = 1.89$, $SD = 1.75$), followed by the 'Tetris Only group' ($M = 3.89$, $SD = 2.89$) and the 'Reactivation Only' group ($M = 4.83$, $SD = 3.33$), while the 'No-Task Control' group shows the highest mean number of intrusions ($M = 5.11$, $SD = 4.23$).

A one-way between-group ANOVA found the differences between group mean number of memory intrusions to be significant ($F(3, 68) = 3.80$, $p = .014$, $\eta_p^2 = .14$)

Post-hoc comparisons indicated that there is a significant difference between the 'No-Task Control' group and the 'Reactivation+Tetris' ($p = .017$), and between the 'Reactivation Only' and the 'Reactivation+Tetris' ($p = .034$). However, comparisons between the others group were found to be not significant.

The figure 1 below shows the means number of intrusive memories over the seven days following the Experimental Task for the four groups.

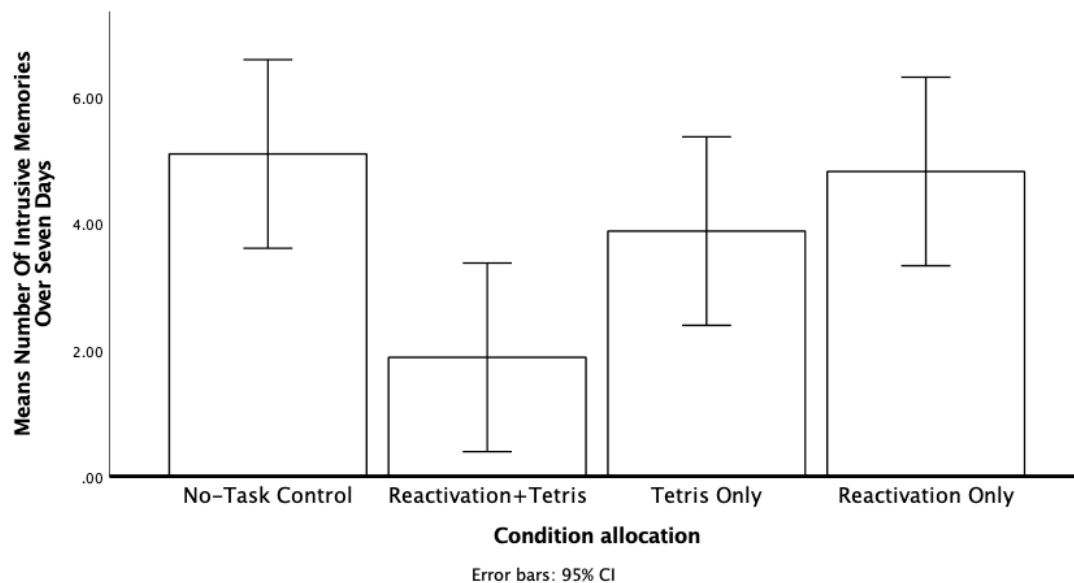


Figure 1: Mean numbers of intrusive memories over the seven days following the Experimental Task for the four conditions 'No-Task Control', 'Reactivation+Tetris', 'Tetris Only', and 'Reactivation Only'.

Regarding the number of image based intrusive memories during the 2-minutes Intrusion Provocation Task on day 7, the descriptive analysis found a difference in the mean between the four groups, with the 'Reactivation+Tetris' group showing the lowest mean number of intrusions ($M = 1.11$, $SD = 1.78$), followed by the 'Tetris Only group' ($M = 3.11$, $SD = 2.52$), whilst the 'No-Task Control' group ($M = 3.39$, $SD = 2.81$) and the 'Reactivation Only' group ($M = 4.17$, $SD = 2.12$) show a higher mean number of intrusions.

The one-way between-group ANOVA found the differences between group mean number of memory intrusions to be significant ($F(3, 68) = 5.57$, $p = .002$, $\eta_p^2 = .20$).

A post hoc analysis found a significant difference between the 'No-Task Control' group and the 'Reactivation+Tetris' group ($p = .024$), and between the 'Reactivation Only' group and the 'Reactivation+Tetris' group ($p = .001$). No other comparisons were found to be significant.

Study 1 Part 2

The preintervention descriptive analysis was made by observing the means of the different groups regarding the attention paid to the film score, the post film distress score and the number of intrusive memories prior to the experimental task. There was no effect to be found, that's why a simple descriptive analysis comparison of the means was chosen.

After intervention, and as this between groups study involved more than two conditions (four groups in this case), an unrelated ANOVA analysis (as opposed to a t-test) was chosen to be carried out for the analysis of the effect of the experimental manipulation (Field, 2009). As the results were found to be significant for the two variables of interest, a post hoc analysis was performed using Tukey's Honestly Significant Difference test which has good power and controls over Type I error in the case of an equal sample counts between groups (Field, 2009).

Student ID Number: 19071714

References

Field. (2009). *Discovering Statistics Using SPSS*. Sage Publications.

Study 2 Part 1

The analyses are based on an observational study conducted on eligible students from Halifax University ($N = 137$) who completed an online questionnaire about their alcohol use, drinking motives, positive and negative affect, social support and anxiety.

Firstly, to understand the relationship between alcohol use and the four drinking motives (social motives, enhancement motives, coping motives and conformity motives), a Pearson's r correlation analysis was performed with alcohol use as the dependent variable.

The analysis shows a small positive correlation (cf. Figure 1) between alcohol use and social motives ($r = .18, p = .036, n = 137$) as well as between alcohol use and enhancement motives ($r = .21, p = .013, n = 137$) as shown below (cf. Figure 2). No significant correlation was found for the other variables (coping and conformity motives).

This analysis shows that alcohol use by students at Halifax University is correlated with two of the four drinking motives predicted, social and enhancement motives.

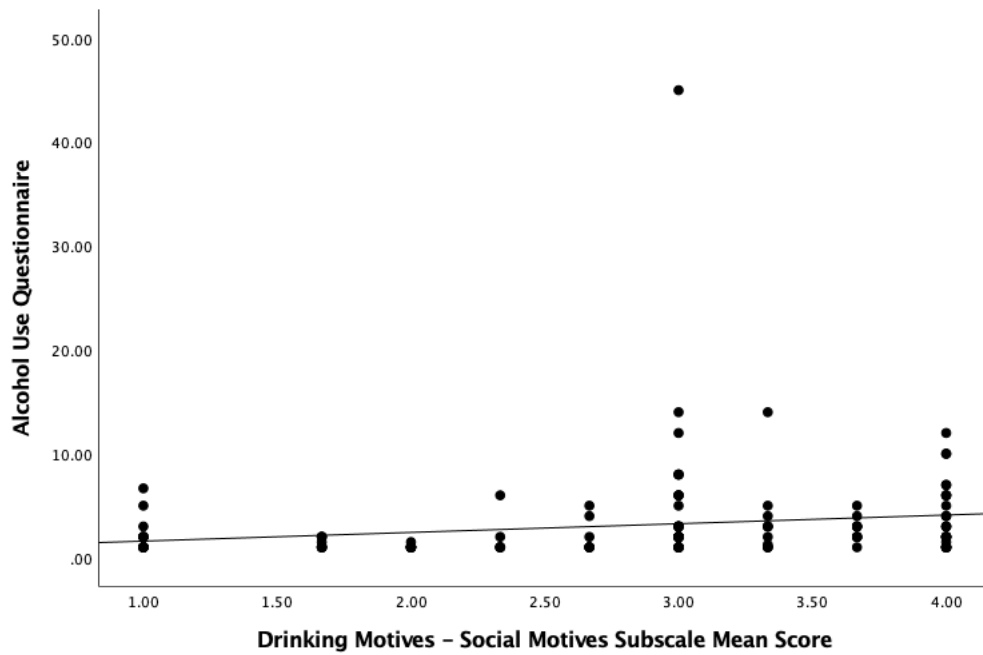


Figure 1 - Correlation between alcohol use and social motives

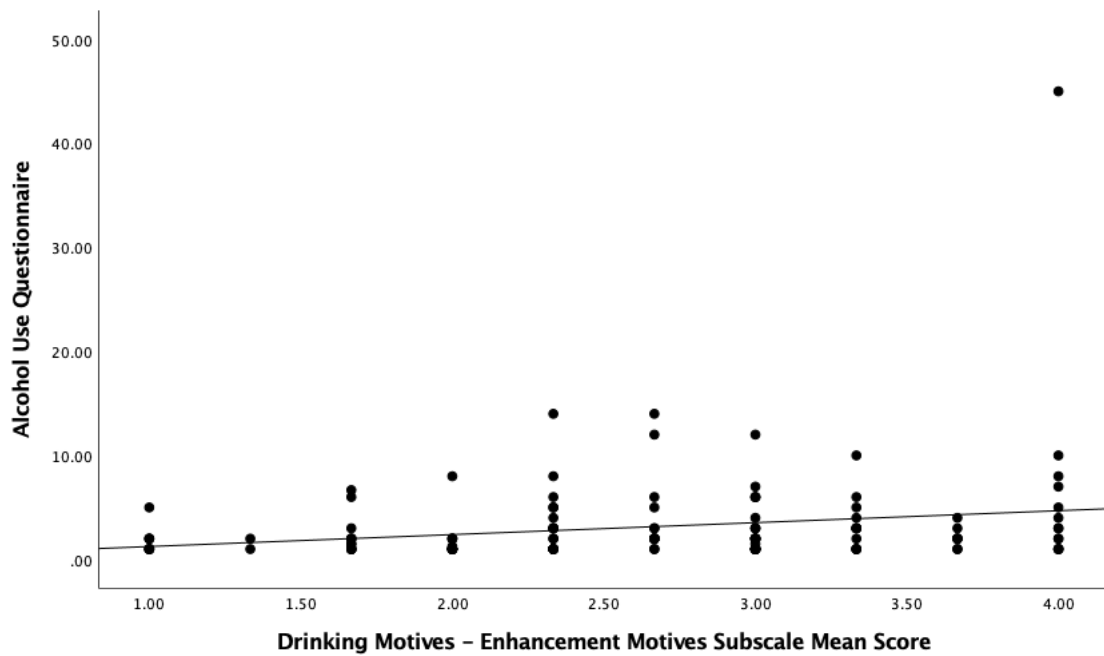


Figure 2 - Correlation between alcohol use and enhancement motives

Secondly, we were interested to look at the correlation between alcohol-related-problems and the drinking motives.

A Pearson's r analysis found a moderate positive correlation between alcohol-related-problems and social motives ($r = .31, p < .001, n = 137$) (cf. Figure 3) and between alcohol-related-problems and coping motives ($r = .39, p < .001, n = 137$) (cf. Figure 4) as well as a small positive correlation between alcohol-related-problems and enhancement motives ($r = .22, p = .009, n = 137$) (cf. Figure 5), and between alcohol-related-problems and conformity motives ($r = .22, p = .009, n = 137$) (cf. Figure 6).

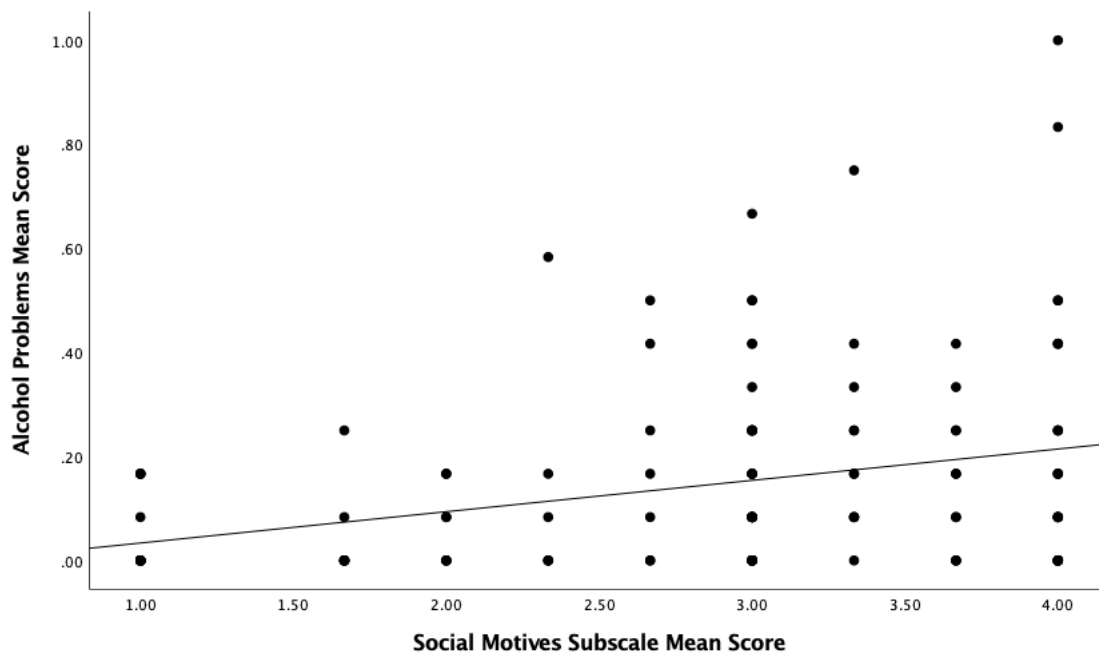


Figure 3 – Correlation between alcohol-related-problems and social motives

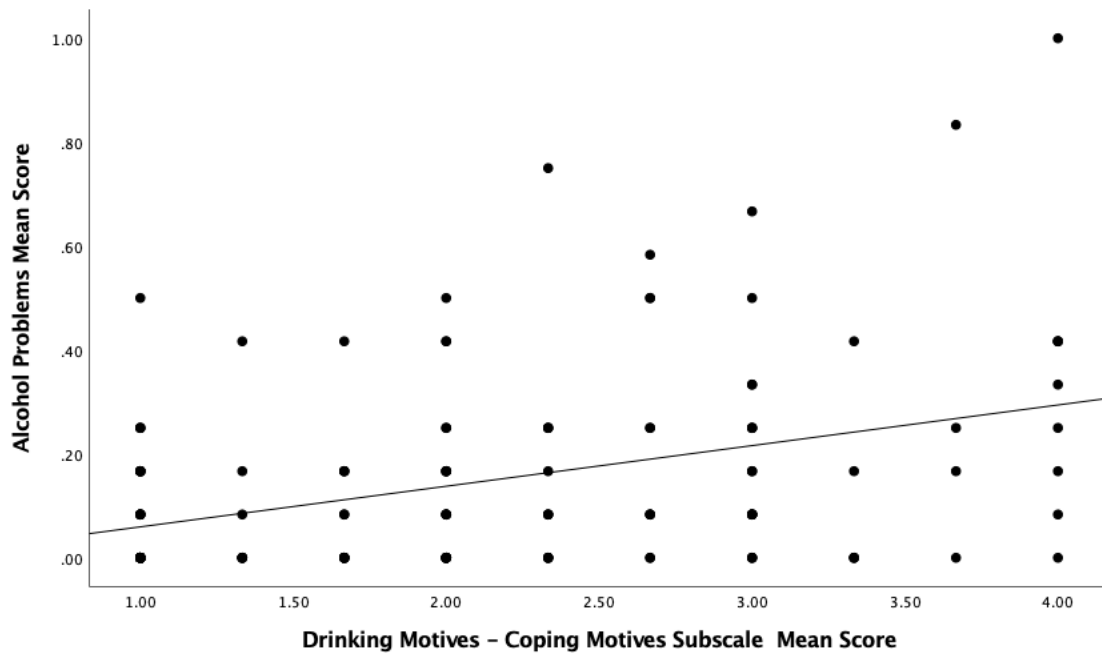


Figure 4 – Correlation between alcohol-related-problems and coping motives

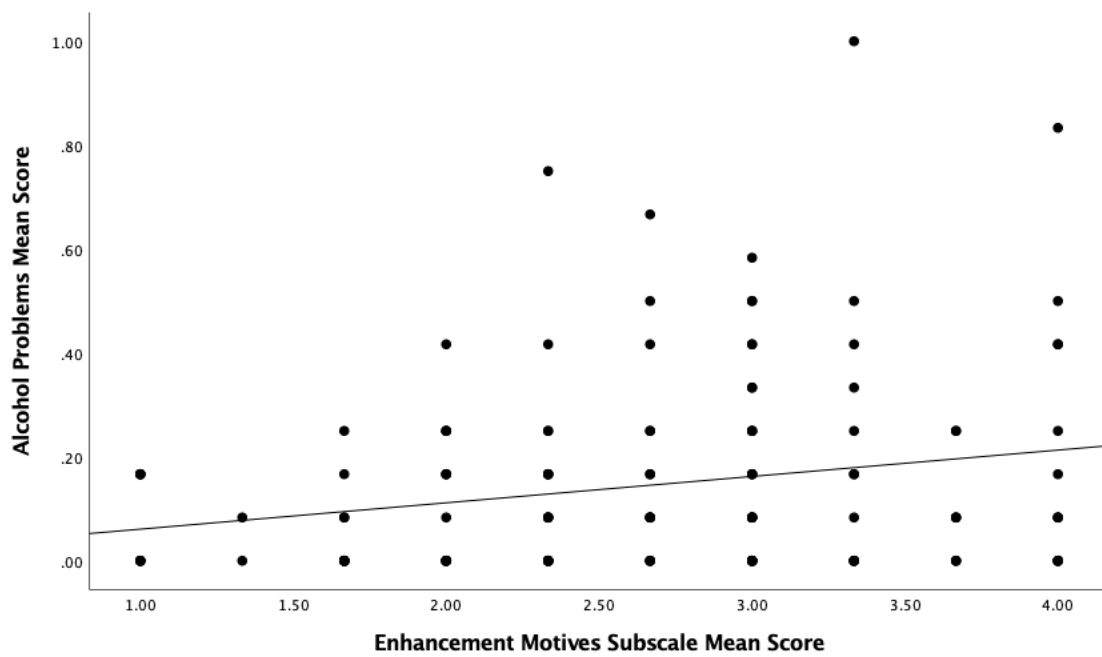


Figure 5 – Correlation between alcohol-related-problems and enhancement motives

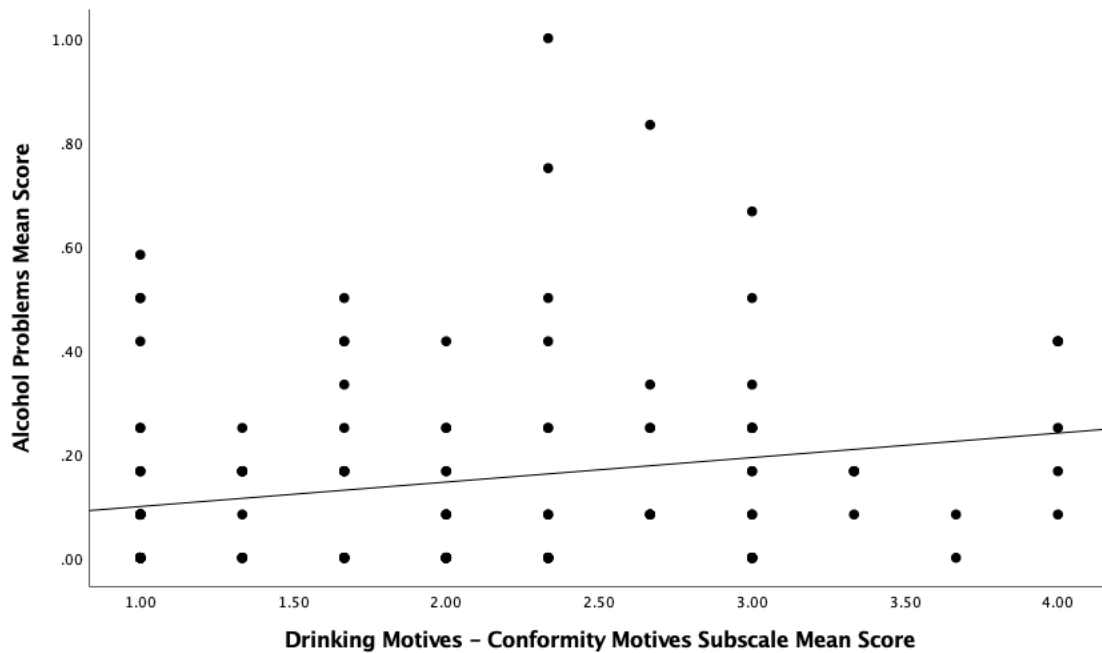


Figure 6 – Correlation between alcohol-related-problems and conformity motives

To understand the relationship between participants beliefs on the level of support they had and alcohol-related-problems, a Pearson's r was performed and shows that state perceived social support variable is negatively correlated (cf. Figure 7) with alcohol-related-problems ($r = -.19, p = .031, n = 137$). This analysis shows that higher state perceived social support is linked with lower alcohol problems.

Finally, a multiple regression analysis was performed with alcohol related problems as the dependent variable and drinking motive coping, state social anxiety, satisfaction with life and negative affect as the predictor variables.

The regression model shows that 23% of the alcohol related problems score can be predicted by the four above predictors ($R^2 = .23$, Adjusted $R^2 = .21$, $F(4, 132) = 9.78$, $p < .001$).

The strongest predictor for alcohol related problems was drinking motive-coping ($\beta = .30$, $p < .001$) followed by state social anxiety as the second-best predictor ($\beta = .27$, $p = .007$).

The two other variables, satisfaction with life ($\beta = .05$, $p = .58$) and negative affect ($\beta = .07$, $p = .52$) were not significant.

Study 2 Part 2

For this study, as we want to look at relationships between alcohol use and alcohol related problems with regards to different motives, a Pearson's r correlation analysis was asked to be performed. The Person's correlation coefficient shows the standardized covariance that expresses the measure of the strength and the direction of a relationship between different variables that are interval or scale variables (Field, 2009). For this study, we can observe that the relationships between the variables are weak to moderate (Pearson's r coefficients are less than .5).

As there are some relationships between the variables, a regression was asked to take a step further. The regression is useful to predict an outcome variable (in this case, alcohol related problems) from one (simple regression) or multiple predictors variables (multiple regression). The multiple regression enables us to see how much percentage the variables all together account in the prediction of the outcome of interest. The correlation coefficient is an indicator of how good the fit of the regression model is (Fields, 2009). Finally, the standardized coefficients Beta allows us to answer the question of the strongest and weakest predictor of the outcome variable.

References

Field. (2009). *Discovering Statistics Using SPSS*. Sage Publications.

Appendix A

Appendix A.1. Descriptive Statistics for the attention paid to the film variable

| Descriptive Statistics | | | | | |
|---|----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Attention paid to the film rating: How much attention did you pay to the film from 0–not at all to 10–extremely | 72 | 8.00 | 10.00 | 9.4861 | .64988 |
| Valid N (listwise) | 72 | | | | |

Appendix A.2. Comparison of the attention paid to the film score means between the four groups

| Case Processing Summary | | | | | | |
|---|----------|---------|----------------|---------|-------|---------|
| | Included | | Cases Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Attention paid to the film rating: How much attention did you pay to the film from 0–not at all to 10–extremely * Condition allocation | 72 | 100.0% | 0 | 0.0% | 72 | 100.0% |

Report

Attention paid to the film rating: How much attention did you pay to the film from 0–not at all to 10–extremely

| Condition allocation | Mean | N | Std. Deviation |
|----------------------|--------|----|----------------|
| No–Task Control | 9.6667 | 18 | .48507 |
| Reactivation+Tetris | 9.2778 | 18 | .82644 |
| Tetris Only | 9.5556 | 18 | .61570 |
| Reactivation Only | 9.4444 | 18 | .61570 |
| Total | 9.4861 | 72 | .64988 |

Appendix A.3. Descriptive Statistics for the post film distress variable

| Descriptive Statistics | | | | | |
|--|----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Post film distress rating: How distressing did you find the film from 0–not at all to 10–extremely | 72 | .00 | 10.00 | 6.2639 | 2.15585 |
| Valid N (listwise) | 72 | | | | |

Appendix A.4. Comparison of the post film distress score means between the four groups

Case Processing Summary

| | Included | | Cases Excluded | | Total | |
|--|----------|---------|----------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Post film distress rating: How distressing did you find the film from 0–not at all to 10–extremely * Condition allocation | 72 | 100.0% | 0 | 0.0% | 72 | 100.0% |

Report

Post film distress rating: How distressing did you find the film from 0–not at all to 10–extremely

| Condition allocation | Mean | N | Std. Deviation |
|----------------------|--------|----|----------------|
| No–Task Control | 6.4444 | 18 | 1.88562 |
| Reactivation+ Tetris | 6.4444 | 18 | 1.68810 |
| Tetris Only | 6.1111 | 18 | 2.58705 |
| Reactivation Only | 6.0556 | 18 | 2.48459 |
| Total | 6.2639 | 72 | 2.15585 |

Appendix A.5. Means Comparison between the four groups for the number of intrusions at Day 0

Case Processing Summary

| | Included | | Cases Excluded | | Total | |
|---|----------|---------|----------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Day 0: Number of image–based intrusive memories in the Intrusion Diary [pre–intervention] * Condition allocation | 72 | 100.0% | 0 | 0.0% | 72 | 100.0% |

Report

Day 0: Number of image–based intrusive memories in the Intrusion Diary [pre–intervention]

| Condition allocation | Mean | N | Std. Deviation |
|----------------------|--------|----|----------------|
| No–Task Control | 3.5556 | 18 | 2.40642 |
| Reactivation+ Tetris | 3.1111 | 18 | 2.24628 |
| Tetris Only | 3.1667 | 18 | 1.58114 |
| Reactivation Only | 3.4444 | 18 | 2.63957 |
| Total | 3.3194 | 72 | 2.21281 |

Appendix A.6. ANOVA of the means number of memory intrusions on the seven days following the experimental task between the four conditions

Between-Subjects Factors

| | | Value Label | N |
|----------------------|------|-----------------------|----|
| Condition allocation | 1.00 | No-Task Control | 18 |
| | 2.00 | Reactivation + Tetris | 18 |
| | 3.00 | Tetris Only | 18 |
| | 4.00 | Reactivation Only | 18 |

Descriptive Statistics

Dependent Variable: Days 1–7: Number of image-based intrusive memories in the Intrusion Diary [post-intervention]

| Condition allocation | Mean | Std. Deviation | N |
|----------------------|--------|----------------|----|
| No-Task Control | 5.1111 | 4.22721 | 18 |
| Reactivation+Tetris | 1.8889 | 1.74521 | 18 |
| Tetris Only | 3.8889 | 2.88788 | 18 |
| Reactivation Only | 4.8333 | 3.32990 | 18 |
| Total | 3.9306 | 3.35809 | 72 |

Levene's Test of Equality of Error Variances^{a,b}

| | | Levene Statistic | df1 | df2 | Sig. |
|---|--------------------------------------|------------------|-----|--------|------|
| Days 1–7: Number of image-based intrusive memories in the Intrusion Diary [post-intervention] | Based on Mean | 2.955 | 3 | 68 | .039 |
| | Based on Median | 1.693 | 3 | 68 | .177 |
| | Based on Median and with adjusted df | 1.693 | 3 | 52.791 | .180 |
| | Based on trimmed mean | 2.485 | 3 | 68 | .068 |

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

a. Dependent variable: Days 1–7: Number of image-based intrusive memories in the Intrusion Diary [post-intervention]

b. Design: Intercept + Condition

Tests of Between-Subjects Effects

Dependent Variable: Days 1–7: Number of image-based intrusive memories in the Intrusion Diary [post-intervention]

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-----------------|-------------------------|----|-------------|---------|-------|---------------------|
| Corrected Model | 114.819 ^a | 3 | 38.273 | 3.795 | .014 | .143 |
| Intercept | 1112.347 | 1 | 1112.347 | 110.289 | <.001 | .619 |
| Condition | 114.819 | 3 | 38.273 | 3.795 | .014 | .143 |
| Error | 685.833 | 68 | 10.086 | | | |
| Total | 1913.000 | 72 | | | | |
| Corrected Total | 800.653 | 71 | | | | |

a. R Squared = .143 (Adjusted R Squared = .106)

Appendix A.7. Post-hoc comparison of the number of memory intrusions on the seven days following the experimental task

Multiple Comparisons

Dependent Variable: Days 1–7: Number of image–based intrusive memories in the Intrusion Diary [post–intervention]
Tukey HSD

| (I) Condition allocation | (J) Condition allocation | Mean Difference (I–J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------------|--------------------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| No–Task Control | Reactivation+ Tetris | 3.2222* | 1.05860 | .017 | .4342 | 6.0103 |
| | Tetris Only | 1.2222 | 1.05860 | .657 | –1.5658 | 4.0103 |
| | Reactivation Only | .2778 | 1.05860 | .994 | –2.5103 | 3.0658 |
| Reactivation+ Tetris | No–Task Control | –3.2222* | 1.05860 | .017 | –6.0103 | –.4342 |
| | Tetris Only | –2.0000 | 1.05860 | .242 | –4.7881 | .7881 |
| | Reactivation Only | –2.9444* | 1.05860 | .034 | –5.7325 | –.1564 |
| Tetris Only | No–Task Control | –1.2222 | 1.05860 | .657 | –4.0103 | 1.5658 |
| | Reactivation+ Tetris | 2.0000 | 1.05860 | .242 | –.7881 | 4.7881 |
| | Reactivation Only | –.9444 | 1.05860 | .809 | –3.7325 | 1.8436 |
| Reactivation Only | No–Task Control | –.2778 | 1.05860 | .994 | –3.0658 | 2.5103 |
| | Reactivation+ Tetris | 2.9444* | 1.05860 | .034 | .1564 | 5.7325 |
| | Tetris Only | .9444 | 1.05860 | .809 | –1.8436 | 3.7325 |

Based on observed means.

The error term is Mean Square(Error) = 10.086.

*. The mean difference is significant at the .05 level.

Appendix A.8. ANOVA of the means number of intrusions on the provocation task between the four conditions

Between–Subjects Factors

| | | Value Label | N |
|----------------------|------|-----------------------|----|
| Condition allocation | 1.00 | No–Task Control | 18 |
| | 2.00 | Reactivation + Tetris | 18 |
| | 3.00 | Tetris Only | 18 |
| | 4.00 | Reactivation Only | 18 |

Descriptive Statistics

Dependent Variable: Intrusion Provocation Task [IPT]: Number of image–based intrusive memories during 2min laboratory task on Day 7

| Condition allocation | Mean | Std. Deviation | N |
|----------------------|--------|----------------|----|
| No–Task Control | 3.3889 | 2.81046 | 18 |
| Reactivation+ Tetris | 1.1111 | 1.77859 | 18 |
| Tetris Only | 3.1111 | 2.51791 | 18 |
| Reactivation Only | 4.1667 | 2.12132 | 18 |
| Total | 2.9444 | 2.55579 | 72 |

Levene's Test of Equality of Error Variances^{a,b}

| | | Levene Statistic | df1 | df2 | Sig. |
|---|--------------------------------------|------------------|-----|--------|------|
| Intrusion Provocation Task [IPT]: Number of image–based intrusive memories during 2min laboratory task on Day 7 | Based on Mean | 1.886 | 3 | 68 | .140 |
| | Based on Median | 2.150 | 3 | 68 | .102 |
| | Based on Median and with adjusted df | 2.150 | 3 | 57.954 | .104 |
| | Based on trimmed mean | 1.997 | 3 | 68 | .123 |

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

a. Dependent variable: Intrusion Provocation Task [IPT]: Number of image–based intrusive memories during 2min laboratory task on Day 7

b. Design: Intercept + Condition

Tests of Between-Subjects Effects

Dependent Variable: Intrusion Provocation Task [IPT]: Number of image-based intrusive memories during 2min laboratory task on Day 7

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-----------------|-------------------------|----|-------------|---------|-------|---------------------|
| Corrected Model | 91.444 ^a | 3 | 30.481 | 5.567 | .002 | .197 |
| Intercept | 624.222 | 1 | 624.222 | 114.003 | <.001 | .626 |
| Condition | 91.444 | 3 | 30.481 | 5.567 | .002 | .197 |
| Error | 372.333 | 68 | 5.475 | | | |
| Total | 1088.000 | 72 | | | | |
| Corrected Total | 463.778 | 71 | | | | |

a. R Squared = .197 (Adjusted R Squared = .162)

Appendix A.9. Post-hoc comparison of the number of intrusions on the provocation task between the four conditions**Multiple Comparisons**Dependent Variable: Intrusion Provocation Task [IPT]: Number of image-based intrusive memories during 2min laboratory task
Tukey HSD

| (I) Condition allocation | (J) Condition allocation | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------------|--------------------------|-----------------------|------------|------|-------------------------|---------|
| No-Task Control | Reactivation+Tetris | 2.2778 [*] | .77999 | .024 | .2235 | 4.3321 |
| | Tetris Only | .2778 | .77999 | .984 | -1.7765 | 2.3321 |
| | Reactivation Only | -.7778 | .77999 | .752 | -2.8321 | 1.2765 |
| Reactivation+Tetris | No-Task Control | -2.2778 [*] | .77999 | .024 | -4.3321 | -.2235 |
| | Tetris Only | -2.0000 | .77999 | .059 | -4.0543 | .0543 |
| | Reactivation Only | -3.0556 [*] | .77999 | .001 | -5.1098 | -1.0013 |
| Tetris Only | No-Task Control | -.2778 | .77999 | .984 | -2.3321 | 1.7765 |
| | Reactivation+Tetris | 2.0000 | .77999 | .059 | -.0543 | 4.0543 |
| | Reactivation Only | -1.0556 | .77999 | .533 | -3.1098 | .9987 |
| Reactivation Only | No-Task Control | .7778 | .77999 | .752 | -1.2765 | 2.8321 |
| | Reactivation+Tetris | 3.0556 [*] | .77999 | .001 | 1.0013 | 5.1098 |
| | Tetris Only | 1.0556 | .77999 | .533 | -.9987 | 3.1098 |

Based on observed means.

The error term is Mean Square(Error) = 5.475.

*. The mean difference is significant at the .05 level.

Appendix B

Appendix B.1. Pearson's *r* correlation analysis between alcohol use and drinking motives

| | | Correlations | | | | |
|---|---------------------|---------------------------|---|---|--|---|
| | | Alcohol Use Questionnaire | Drinking Motives Revised – Short Form: Social Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Coping Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Enhancement Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Conformity Motives Subscale Mean Score |
| Alcohol Use Questionnaire | Pearson Correlation | 1 | .179* | .025 | .211* | .000 |
| | Sig. (2-tailed) | | .036 | .772 | .013 | .999 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Social Motives Subscale Mean Score | Pearson Correlation | .179* | 1 | .274** | .533** | .486** |
| | Sig. (2-tailed) | .036 | | .001 | <.001 | <.001 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | Pearson Correlation | .025 | .274** | 1 | .419** | .305** |
| | Sig. (2-tailed) | .772 | .001 | | <.001 | <.001 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Enhancement Motives Subscale Mean Score | Pearson Correlation | .211* | .533** | .419** | 1 | .144 |
| | Sig. (2-tailed) | .013 | <.001 | <.001 | | .094 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Conformity Motives Subscale Mean Score | Pearson Correlation | .000 | .486** | .305** | .144 | 1 |
| | Sig. (2-tailed) | .999 | <.001 | <.001 | .094 | |
| | N | 137 | 137 | 137 | 137 | 137 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix B.2. Pearson's *r* correlation analysis between alcohol-related-problems and drinking motives

| | | Correlations | | | | |
|---|---------------------|---------------------------------------|---|--|---|---|
| | | Alcohol Problems Checklist Mean Score | Drinking Motives Revised – Short Form: Social Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Enhancement Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Coping Motives Subscale Mean Score | Drinking Motives Revised – Short Form: Conformity Motives Subscale Mean Score |
| Alcohol Problems Checklist Mean Score | Pearson Correlation | 1 | .306** | .222** | .391** | .221** |
| | Sig. (2-tailed) | | <.001 | .009 | <.001 | .009 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Social Motives Subscale Mean Score | Pearson Correlation | .306** | 1 | .533** | .274** | .486** |
| | Sig. (2-tailed) | <.001 | | <.001 | .001 | <.001 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Enhancement Motives Subscale Mean Score | Pearson Correlation | .222** | .533** | 1 | .419** | .144 |
| | Sig. (2-tailed) | .009 | <.001 | | <.001 | .094 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | Pearson Correlation | .391** | .274** | .419** | 1 | .305** |
| | Sig. (2-tailed) | <.001 | .001 | <.001 | | <.001 |
| | N | 137 | 137 | 137 | 137 | 137 |
| Drinking Motives Revised –Short Form: Conformity Motives Subscale Mean Score | Pearson Correlation | .221** | .486** | .144 | .305** | 1 |
| | Sig. (2-tailed) | .009 | <.001 | .094 | <.001 | |
| | N | 137 | 137 | 137 | 137 | 137 |

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix B.3. Pearson's *r* correlation analysis between beliefs on the level of support and alcohol-related-problems

| Correlations | | State Perceived Social Support Mean Score | Alcohol Problems Checklist Mean Score |
|---|---------------------|---|---------------------------------------|
| State Perceived Social Support Mean Score | Pearson Correlation | 1 | -.185 [*] |
| | Sig. (2-tailed) | | .031 |
| | N | 137 | 137 |
| Alcohol Problems Checklist Mean Score | Pearson Correlation | -.185 [*] | 1 |
| | Sig. (2-tailed) | .031 | |
| | N | 137 | 137 |

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix B.4. Multiple linear regression between alcohol-related-problems (criterion) and coping as a dinking motive, sate social anxiety, life satisfaction and negative affect

| Variables Entered/Removed ^a | | | |
|--|---|-------------------|--------|
| Model | Variables Entered | Variables Removed | Method |
| 1 | PANAS Negative Affect Mean Score, Drinking Motives Revised – Short Form: Coping Motives Subscale Mean Score, 5-item Satisfaction with Life Scale Mean Score, State Social Anxiety Mean Score ^b | . | Enter |

a. Dependent Variable: Alcohol Problems Checklist Mean Score

b. All requested variables entered.

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|-------------------|-----|
| Alcohol Problems Checklist Mean Score | .1442 | .18838 | 137 |
| Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | 2.0827 | .94262 | 137 |
| State Social Anxiety Mean Score | 3.0073 | 1.01893 | 137 |
| 5–item Satisfaction with Life Scale Mean Score | 4.2938 | 1.51805 | 137 |
| PANAS Negative Affect Mean Score | 1.9579 | .91458 | 137 |

Correlations

| | | Alcohol Problems Checklist Mean Score | Drinking Motives Revised – Short Form: Coping Motives Subscale Mean Score | State Social Anxiety Mean Score | 5–item Satisfaction with Life Scale Mean Score | PANAS Negative Affect Mean Score |
|---------------------|--|---------------------------------------|---|---------------------------------|--|----------------------------------|
| Pearson Correlation | Alcohol Problems Checklist Mean Score | 1.000 | .391 | .376 | -.182 | .319 |
| | Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | .391 | 1.000 | .305 | -.247 | .397 |
| | State Social Anxiety Mean Score | .376 | .305 | 1.000 | -.454 | .601 |
| | 5–item Satisfaction with Life Scale Mean Score | -.182 | -.247 | -.454 | 1.000 | -.566 |
| | PANAS Negative Affect Mean Score | .319 | .397 | .601 | -.566 | 1.000 |
| Sig. (1–tailed) | Alcohol Problems Checklist Mean Score | . | <.001 | <.001 | .017 | <.001 |
| | Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | .000 | . | .000 | .002 | .000 |
| | State Social Anxiety Mean Score | .000 | .000 | . | .000 | .000 |
| | 5–item Satisfaction with Life Scale Mean Score | .017 | .002 | .000 | . | .000 |
| | PANAS Negative Affect Mean Score | .000 | .000 | .000 | .000 | . |
| N | Alcohol Problems Checklist Mean Score | 137 | 137 | 137 | 137 | 137 |
| | Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | 137 | 137 | 137 | 137 | 137 |
| | State Social Anxiety Mean Score | 137 | 137 | 137 | 137 | 137 |
| | 5–item Satisfaction with Life Scale Mean Score | 137 | 137 | 137 | 137 | 137 |
| | PANAS Negative Affect Mean Score | 137 | 137 | 137 | 137 | 137 |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .478 ^a | .229 | .205 | .16794 |

- a. Predictors: (Constant), PANAS Negative Affect Mean Score, Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score, 5–item Satisfaction with Life Scale Mean Score, State Social Anxiety Mean Score
- b. Dependent Variable: Alcohol Problems Checklist Mean Score

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|--------------------|
| 1 | Regression | 1.103 | 4 | .276 | 9.781 | <.001 ^b |
| | Residual | 3.723 | 132 | .028 | | |
| | Total | 4.826 | 136 | | | |

- a. Dependent Variable: Alcohol Problems Checklist Mean Score
- b. Predictors: (Constant), PANAS Negative Affect Mean Score, Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score, 5–item Satisfaction with Life Scale Mean Score, State Social Anxiety Mean Score

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--|-----------------------------|------------|---------------------------|--------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.184 | .091 | | -2.007 | .047 |
| | Drinking Motives Revised –Short Form: Coping Motives Subscale Mean Score | .059 | .017 | .295 | 3.523 | <.001 |
| | State Social Anxiety Mean Score | .049 | .018 | .267 | 2.741 | .007 |
| | 5–item Satisfaction with Life Scale Mean Score | .007 | .012 | .053 | .558 | .578 |
| | PANAS Negative Affect Mean Score | .015 | .022 | .070 | .649 | .517 |

- a. Dependent Variable: Alcohol Problems Checklist Mean Score