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Additional supplementary material to paper: Zhang et al: Stress-induced change in salience network coupling prospectively predicts trauma-related symptoms. *Translational Psychiatry* (2022)12:63; <https://doi.org/10.1038/s41398-022-01798-0>

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Background:

We received two additional questions from colleagues in the field related to the results of the above cited paper (Zhang et al., 2022). As we deem both questions relevant for current discussions in the field about resilience, we provide the questions and our responses as additional supplementary material, that can be referred to as follows: Zhang et al., 2023: *Additional supplementary material to Zhang et al., 2022, Translational Psychiatry, 12:63; <https://www.epanlab.nl/wp-content/uploads/2023/09/Online.Additional.Suppl-Zhang-2022-Transl.Psychiatry.pdf>*

1. **Question:** *You report a certain number of traumatization in the police students between W1 and W2, as well as an increase in symptoms (PSS, PCL). Did you see a relationship between the trauma exposure level and symptom increases?*

REPLY: Yes, Spearman correlations suggest a trend for a relationship between changes in PLES and PCL from w1 to w2 only for the police students ($\rho=0.1$, $p=0.087$), with Pearson's correlations suggesting a significant relationship ($r=0.14$, $p=0.02$).

2. **Question 2:** *In the analysis on the between SN-DMN delta-FC at W1 predicting PSS symptoms you also report that this remains when correcting for trauma exposure level (ples_diff). In the subsequent analysis on the CEN delta-FC, you don't report that post-hoc analysis.*

REPLY: Additional analyses indicated that including trauma exposure level (ples_diff) in the analysis (i.e., partial Spearman correlation) still yield the same significant results as reported in our paper:

The effect of within CEN connectivity on the CAPs sum score was $\rho=0.21$ (in the paper) and became $\rho=0.19$ after inclusion of ples_diff ($p=0.011$). The global CEN connectivity effect changed from initial $\rho=0.19$ to $\rho=0.16$ when partialling out the ples_diff effect ($p=0.033$). Based on the *fdr*-corrected *p*-values from the paper, both results would remain significant.

Note: ples_diff = ples_w2 minus ples_w1; pcl_diff = pcl_w2 minus pcl_w1.

Abbreviations: W1 = assessment Wave 1; W2 = assessment Wave 2; PCL is PTSD Symptom Checklist; PLES = Police Event Scale; PSS = Perceived Stress Scale; CEN = Central Executive Network; SN = Salience Network; DMN is Default Mode Network. For design and out come of the study, see: (Zhang et al., 2022 *Translational Psychiatry* (2022)12:63 ; <https://doi.org/10.1038/s41398-022-01798-0>)