# **Supplementary Online Material**

# Aberrant salience and reward processing: A comparison of measures in schizophrenia and anxiety

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**Table S1**

Correlation between variables for schizophrenia group.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ASI | Aberrant Salience | | Adaptive Salience | |
|  |  | Implicit | Explicit | Implicit | Explicit | A:A | G:L |
| Implicit AS | -.17 |  |  |  |  |  |  |
| Explicit AS | .17 | .11 |  |  |  |  |  |
| Implicit AdS | .04 | -.16 | .10 |  |  |  |  |
| Explicit AdS | -.14 | -.23 | -.21 | .50\*\* |  |  |  |
| A:A | .40 | .06 | -.55 | .00 | -.37 |  |  |
| G:L | -.14 | .12 | -.11 | .07 | .36 | -.48 |  |
| Hard Choices | .21 | -.06 | .17 | -.24 | -.16 | .32 | -.32 |
| L Pr | .15 | .06 | .16 | -.35 | -.30 | .15 | -.49 |
| M Pr | .25 | .05 | .31 | -.32 | -.24 | .06 | .05 |
| H Pr | .18 | -.20 | .05 | -.04 | .04 | .41 | -.30 |
| L $ | .18 | -.16 | .15 | -.11 | -.18 | .33 | -.07 |
| M $ | .23 | -.07 | .08 | -.28 | -.19 | .15 | -.20 |
| H $ | .21 | -.14 | .05 | -.25 | -.08 | .29 | -.37 |
| L Pr, L $ | .12 | .02 | .22 | .00 | -.16 | -.15 | .08 |
| L Pr, M $ | .07 | .00 | .08 | -.36 | -.21 | .01 | -.67\* |
| L Pr, H $ | .19 | .10 | .12 | -.45\* | -.35 | .32 | -.39 |
| M Pr, L $ | .16 | -.23 | .37\* | -.07 | -.18 | .07 | .49 |
| M Pr, M $ | .18 | .34 | .25 | -.31 | -.17 | -.59\* | .50 |
| M Pr, H $ | .24 | .01 | .20 | -.32 | -.20 | .26 | -.28 |
| H Pr, L $ | .19 | -.21 | -.06 | -.16 | -.13 | .53 | -.37 |
| H Pr, M $ | .25 | -.20 | .11 | -.02 | -.10 | .57 | -.18 |
| H Pr, H $ | .11 | -.16 | .09 | .03 | .20 | .19 | -.26 |
| L EV | .13 | -.01 | .23 | -.35 | -.32 | .13 | -.38 |
| M EV | .27 | .03 | .13 | -.32 | -.18 | .16 | -.05 |
| H EV | .09 | -.24 | .05 | .02 | .19 | .21 | -.31 |
| $ Coef | .01 | .02 | -.19 | -.31 | -.33 | .36 | -.48 |
| Pr Coef | -.05 | -.26 | -.23 | -.20 | -.37\* | .48 | -.37 |
| $ × Pr Coef | .03 | .15 | .21 | .35 | .54\*\* | -.43 | .39 |

*Note*: ASI = Aberrant Salience Inventory; Aberrant Salience = Salience Attribution Test Aberrant Salience; Adaptive Salience = Salience Attribution Test Adaptive Salience; A:A = Stimulus Chase Task approach-avoid ratio; G:L = Stimulus Chase Task gain-loss ratio. For Effort Expenditure for Reward Task variables: L = low; M = medium; H = high; Pr = probability; $ = reward; Coef = coefficient.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

Only highlighted correlations survived Holm correction for multiple comparisons.

**Table S2**

Correlation between variables for anxiety group.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ASI | Aberrant Salience | | Adaptive Salience | |
|  |  | Implicit | Explicit | Implicit | Explicit | A:A | G:L |
| Implicit AS | -.32† |  |  |  |  |  |  |
| Explicit AS | -.02 | -.08 |  |  |  |  |  |
| Implicit AdS | -.11 | -.10 | .01 |  |  |  |  |
| Explicit AdS | -.15 | -.45\*\* | -.23 | .22 |  |  |  |
| A:A | -.03 | .03 | .17 | -.31 | .08 |  |  |
| G:L | .20 | -.03 | -.53\*\* | .24 | -.16 | -.53\*\* |  |
| Hard Choices | .04 | -.15 | .02 | .07 | -.08 | -.10 | .46\* |
| L Pr | .26 | -.03 | -.03 | -.17 | -.44\*\* | -.21 | .47\* |
| M Pr | -.04 | .04 | -.08 | .18 | -.17 | -.41 | .56\*\* |
| H Pr | -.06 | -.30 | .12 | .08 | .24 | .40 | .01 |
| L $ | .05 | -.04 | .17 | -.23 | -.17 | .54\*\* | -.15 |
| M $ | -.11 | -.09 | .04 | .12 | -.06 | -.02 | .48\* |
| H $ | .07 | -.14 | -.07 | .14 | -.03 | -.48\* | .49\* |
| L Pr, L $ | .26 | .00 | .07 | -.13 | -.25 | .14 | .02 |
| L Pr, M $ | .08 | -.13 | -.10 | -.09 | -.05 | -.15 | .38 |
| L Pr, H $ | .19 | .07 | -.02 | -.13 | -.55\*\* | -.19 | .33 |
| M Pr, L $ | .22 | -.14 | -.05 | -.18 | -.23 | -.02 | .35 |
| M Pr, M $ | -.19 | .01 | .05 | .28 | -.18 | -.13 | .45\* |
| M Pr, H $ | -.03 | .13 | -.14 | .15 | -.09 | -.52\* | .45\* |
| H Pr, L $ | -.16 | .02 | .20 | -.15 | -.04 | .58\*\* | -.27 |
| H Pr, M $ | -.06 | -.08 | .08 | -.02 | .11 | .20 | .23 |
| H Pr, H $ | .04 | -.50\*\* | .01 | .24 | .41\* | -.34 | .23 |
| L EV | .30 | -.05 | -.05 | -.21 | -.45\*\* | -.12 | .47\* |
| M EV | -.13 | .07 | .09 | .07 | -.09 | .01 | .27 |
| H EV | .06 | -.46\*\* | -.01 | .15 | .47\*\* | -.07 | .14 |
| $ Coef | .01 | .12 | .28 | -.15 | -.31 | -.04 | -.23 |
| Pr Coef | -.12 | .12 | .46\*\* | -.25 | -.28 | .35 | -.39 |
| $ x Pr Coef | .02 | -.20 | -.40\* | .31 | .49\*\* | -.29 | .33 |

*Note*: ASI = Aberrant Salience Inventory; Aberrant Salience = Salience Attribution Test Aberrant Salience; Adaptive Salience = Salience Attribution Test Adaptive Salience; A:A = Stimulus Chase Task approach-avoid ratio; G:L = Stimulus Chase Task gain-loss ratio. For Effort Expenditure for Reward Task variables: L = low; M = medium; H = high; Pr = probability; $ = reward; Coef = coefficient.

† *p* < .05. 1-tailed

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001 two-tailed

No correlations survived Holm correction for multiple comparisons

**Table S3**

Correlation between variables for unaffected group

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ASI | Aberrant Salience | | Adaptive Salience | |
|  |  | Implicit | Explicit | Implicit | Explicit | A:A | G:L |
| Implicit AS | -.12 |  |  |  |  |  |  |
| Explicit AS | .16 | .33† |  |  |  |  |  |
| Implicit AdS | .09 | -.05 | .17 |  |  |  |  |
| Explicit AdS | -.03 | -.20 | .00 | .17 |  |  |  |
| A:A | -.04 | .07 | .16 | .25 | -.46 |  |  |
| G:L | -.57\* | -.28 | -.69\*\* | -.30 | .04 | -.16 |  |
| Hard Choices | -.10 | -.17 | .01 | .09 | -.13 | .33 | .03 |
| L Pr | .02 | .02 | .05 | .13 | -.38\* | .58\* | -.13 |
| M Pr | .00 | -.18 | -.10 | -.13 | -.20 | .17 | .05 |
| H Pr | -.22 | -.20 | .05 | .18 | .27 | -.03 | .20 |
| L $ | -.13 | -.08 | .02 | .30 | -.25 | .40 | -.08 |
| M $ | -.11 | -.05 | .00 | .03 | -.18 | .30 | -.06 |
| H $ | .11 | -.03 | .09 | .09 | .01 | .14 | -.08 |
| L Pr, L $ | .02 | -.04 | .14 | .35 | -.17 | .60\* | -.24 |
| L Pr, M $ | .07 | -.02 | .00 | .10 | -.40\* | .59\* | -.33 |
| L Pr, H $ | -.03 | .05 | .06 | .06 | -.32 | .48\* | .01 |
| M Pr, L $ | -.29 | -.06 | -.04 | .14 | -.38\* | .39 | -.10 |
| M Pr, M $ | -.14 | -.05 | -.08 | -.24 | -.06 | .16 | .09 |
| M Pr, H $ | .23 | -.19 | -.08 | -.14 | -.07 | .06 | .04 |
| H Pr, L $ | -.02 | -.15 | -.04 | .19 | -.02 | .22 | .10 |
| H Pr, M $ | -.22 | -.13 | .02 | .10 | .08 | .00 | .18 |
| H Pr, H $ | -.20 | -.19 | .09 | .11 | .43\* | -.38 | .18 |
| L EV | .00 | .01 | .03 | .16 | -.45\* | .61\*\* | -.18 |
| M EV | .11 | -.18 | -.06 | -.09 | -.08 | .18 | .05 |
| H EV | .02 | -.01 | .12 | .17 | .37\* | -.29 | -.07 |
| $ Coef | .09 | -.26 | -.01 | -.22 | -.18 | -.13 | .15 |
| Pr Coef | .02 | -.26 | -.01 | -.16 | -.20 | -.13 | .10 |
| $ x Pr Coef | -.03 | .24 | .01 | .17 | .28 | .08 | -.05 |

*Note*: ASI = Aberrant Salience Inventory; Aberrant Salience = Salience Attribution Test Aberrant Salience; Adaptive Salience = Salience Attribution Test Adaptive Salience; A:A = Stimulus Chase Task approach-avoid ratio; G:L = Stimulus Chase Task gain-loss ratio. For Effort Expenditure for Reward Task variables: L = low; M = medium; H = high; Pr = probability; $ = reward; Coef = coefficient.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

Only highlighted correlations survived Holm correction for multiple comparisons.



**Fig. S1.** Mean group scores showing non-significant differences in planned comparisons for reward × probability combinations of the Effort Expenditure for Reward Task. Error bars show standard error of the mean.