**Supplementary Table S2.**

**Correlations between impulsivity measures (self-reports and laboratory measures) in the healthy control group**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **BIS 11 Tot** | **BIS 11**  **Nl** | **BIS 11**  **MI** | **BIS 11**  **AI** | **UPPS**  **Urgency** | **UPPS**  **Premed** | **UPPS**  **Perserv** | **UPPS**  **SS** | **STIMP**  **Stress** | **STIMP**  **Baseline** | **IMT**  **Baseline** | **IMT**  **Stress** | **DD**  **Baseline** | **DD**  **Stress** | **GS**  **Baseline** | **GS**  **Stress** |
| **BIS 11 Tot** | **r=** | - | **.887\*\*** | **.800\*\*** | **.712\*\*** | **.395\*** | **.400\*** | **.576\*\*** | -.070 | .356 | **.414\*** | .263 | .096 | .301 | .234 | .010 | .058 |
| **p=** | **.000** | **.000** | **.000** | **.031** | **.029** | **.001** | .714 | .053 | **.023** | .160 | .614 | .113 | .213 | .956 | .760 |
| **BIS 11**  **Nl** | **r=** | **.887\*\*** | - | **.522\*\*** | **.512\*\*** | **.405\*** | .268 | **.523\*\*** | -.086 | .294 | .309 | .340 | .211 | .311 | **.385\*** | .020 | .134 |
| **p=** | **.000** | **.003** | **.004** | **.027** | .153 | **.003** | .651 | .115 | .097 | .066 | .264 | .100 | **.036** | .916 | .481 |
| **BIS 11**  **MI** | **r=** | **.800\*\*** | **.522\*\*** | - | **.384\*** | .137 | **.429\*** | .313 | .057 | .182 | .201 | .078 | .001 | .077 | -.032 | -.053 | -.143 |
| **p=** | **.000** | **.003** | **.036** | .470 | **.018** | .092 | .763 | .335 | .288 | .681 | .996 | .693 | .867 | .780 | .452 |
| **BIS 11**  **AI** | **r=** | **.712\*\*** | **.512\*\*** | **.384\*** | - | **.443\*** | .284 | **.603\*\*** | -.172 | **.446\*** | **.593\*\*** | .184 | -.053 | **.377\*** | .162 | .079 | .168 |
| **p=** | **.000** | **.004** | **.036** | **.014** | .128 | **.000** | .362 | **.014** | **.001** | .329 | .782 | **.044** | .394 | .680 | .373 |
| **UPPS**  **Urgency** | **r=** | **.395\*** | **.405\*** | .137 | **.443\*** | - | .128 | .338 | .022 | .166 | **.457\*** | .147 | .076 | .352 | .350 | .239 | .139 |
| **p=** | **.031** | **.027** | .470 | **.014** | .501 | .067 | .909 | .380 | **.011** | .439 | .690 | .061 | .058 | .204 | .463 |
| **UPPS**  **Premed** | **r=** | **.400\*** | .268 | **.429\*** | .284 | .128 | - | **.416\*** | .347 | .277 | .257 | .296 | .316 | .209 | -.151 | -.241 | -.065 |
| **p=** | **.029** | .153 | **.018** | .128 | .501 | **.022** | .060 | .138 | .170 | .113 | .088 | .277 | .426 | .200 | .733 |
| **UPPS**  **Perserv** | **r=** | **.576\*\*** | **.523\*\*** | .313 | **.603\*\*** | .338 | **.416\*** | - | -.181 | .287 | .286 | .255 | .193 | .246 | .151 | -.114 | .016 |
| **p=** | **.001** | **.003** | .092 | **.000** | .067 | **.022** | .337 | .124 | .125 | .173 | .308 | .199 | .425 | .550 | .933 |
| **UPPS**  **SS** | **r=** | -.070 | -.086 | .057 | -.172 | .022 | .347 | -.181 | - | .078 | .043 | .084 | .117 | .048 | .010 | -.035 | -.008 |
| **p=** | .714 | .651 | .763 | .362 | .909 | .060 | .337 | .682 | .823 | .659 | .538 | .805 | .960 | .854 | .967 |
| **STIMP**  **Stress** | **r=** | **.356** | .294 | .182 | **.446\*** | .166 | .277 | .287 | .078 | - | **.788\*\*** | .164 | .071 | .195 | .110 | .027 | .235 |
| **p=** | **.053** | .115 | .335 | **.014** | .380 | .138 | .124 | .682 | **.000** | .387 | .710 | .309 | .563 | .888 | .211 |
| **STIMP Baseline** | **r=** | **.414\*** | .309 | .201 | **.593\*\*** | **.457\*** | .257 | .286 | .043 | **.788\*\*** | - | .144 | .092 | **.406\*** | .268 | .232 | .297 |
| **p=** | **.023** | .097 | .288 | **.001** | **.011** | .170 | .125 | .823 | **.000** | .448 | .627 | **.029** | .153 | .216 | .111 |
| **IMT**  **Baseline** | **r=** | .263 | .340 | .078 | .184 | .147 | .296 | .255 | .084 | .164 | .144 | - | **.670\*\*** | .208 | .256 | .091  .631 | .107 |
| **p=** | .160 | .066 | .681 | .329 | .439 | .113 | .173 | .659 | .387 | .448 | **.000** | .278 | .171 | .573 |
| **IMT**  **Stress** | **r=** | .096 | .211 | .001 | -.053 | .076 | .316 | .193 | .117 | .071 | .092 | **.670\*\*** | - | .283 | **.412\*** | .103  .587 | .187 |
| **p=** | .614 | .264 | .996 | .782 | .690 | .088 | .308 | .538 | .710 | .627 | **.000** | .137 | **.023** | .322 |
| **DD**  **Baseline** | **r=** | .301 | .311 | .077 | **.377\*** | .352 | .209 | .246 | .048 | .195 | **.406\*** | .208 | .283 | - | **.683\*\*** | .**390\***  **.036** | **.397\*** |
| **p=** | .113 | .100 | .693 | **.044** | .061 | .277 | .199 | .805 | .309 | **.029** | .278 | .137 | **.000** | **.033** |
| **DD**  **Stress** | **r=** | .234 | **.385\*** | -.032 | .162 | .350 | -.151 | .151 | .010 | .110 | .268 | .256 | **.412\*** | **.683\*\*** | - | .292  .118 | .236 |
| **p=** | .213 | **.036** | .867 | .394 | .058 | .426 | .425 | .960 | .563 | .153 | .171 | **.023** | **.000** | .208 |
| **GS**  **Baseline** | **r=**  **p=** | .010  .956 | .020  .916 | -.053  .780 | .079  .680 | .239  .204 | -.241  .200 | -.114  .550 | -.035  .854 | .027  .888 | .232  .216 | 091  .631 | 103  .587 | **390\***  **.036** | .292  .118 | - | **.605\*\***  **.000** |
| **GS**  **Stress** | **r=**  **p=** | .058  .760 | .134  .481 | -.143  .452 | .168  .373 | .139  .463 | -.065  .733 | .016  .933 | -.008  .967 | .235  .211 | .297  .111 | .107  .573 | .187  .322 | **.397\***  **.033** | .236  .208 | **.605\*\***  **.000** | - |

Note: r= Pearson Correlation Coefficient, p= p-value (two-tailed), \*\* Correlation is significant at the 0.01 level, \* Correlation is significant at the 0.05 level

**Correlations between impulsivity measures (self-reports and laboratory measures) in the Borderline Personality Disorder patient group**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **BIS 11 Tot** | **BIS 11**  **Nl** | **BIS 11**  **MI** | **BIS 11**  **AI** | **UPPS**  **Urgency** | **UPPS**  **Premed** | **UPPS**  **Perserv** | **UPPS**  **SS** | **STIMP**  **Stress** | **STIMP**  **Baseline** | **IMT**  **Baseline** | **IMT**  **Stress** | **DD**  **Baseline** | **DD**  **Stress** | **GS**  **Baseline** | **GS**  **Stress** |
| **BIS 11 Tot** | **r=** | - | **.837\*\*** | **.741\*\*** | **.760\*\*** | .238 | **.788\*\*** | **.770\*\*** | .255 | **.506\*\*** | .346 | .086 | -.011 | -.140 | -.099 | .317 | .314 |
| **p=** | **.000** | **.000** | **.000** | .206 | **.000** | **.000** | .174 | **.004** | .061 | .652 | .952 | .468 | .602 | .088 | .091 |
| **BIS 11**  **Nl** | **r=** | **.837\*\*** | - | .342 | **.546\*\*** | .059 | **.703\*\*** | **.738\*\*** | .110 | **.477\*\*** | **.386\*** | -.018 | -.037 | -.155 | -.175 | .351 | .346 |
| **p=** | **.000** | .064 | **.002** | .757 | **.000** | **.000** | .564 | **.008** | **.035** | .924 | .848 | .421 | .354 | .057 | .061 |
| **BIS 11**  **MI** | **r=** | **.741\*\*** | .342 | - | **.372\*** | .359 | **.622\*\*** | **.437\*** | **.369\*** | .275 | .138 | .106 | -.052 | -.085 | -.133 | .083 | .078 |
| **p=** | **.000** | .064 | **.043** | .051 | **.000** | **.016** | **.045** | .141 | .465 | .578 | .784 | .659 | .482 | .662 | .680 |
| **BIS 11**  **AI** | **r=** | **.760\*\*** | **.546\*\*** | **.372\*** | - | .148 | **.474\*\*** | **.624\*\*** | .105 | **.440\*** | .274 | .152 | .099 | -.077 | .162 | .319 | .324 |
| **p=** | **.000** | **.002** | **.043** | .435 | **.008** | **.000** | .580 | **.015** | .144 | .422 | .604 | .689 | .393 | .086 | .080 |
| **UPPS**  **Urgency** | **r=** | .238 | .059 | .359 | .148 | - | .157 | .350 | **.449\*** | .226 | .101 | .103 | -.063 | -.187 | .150 | -.312 | -.292 |
| **p=** | .206 | .757 | .051 | .435 | .408 | .058 | **.013** | .229 | .596 | .588 | .741 | .330 | .428 | .093 | .117 |
| **UPPS**  **Premed** | **r=** | **.788\*\*** | **.703\*\*** | **.622\*\*** | **.474\*\*** | .157 | - | **.625\*\*** | .276 | .482\*\* | .537\*\* | -.078 | -.070 | -.356 | **-.376\*** | .186 | .180 |
| **p=** | **.000** | **.000** | **.000** | **.008** | .408 | **.000** | .139 | .007 | .002 | .680 | .711 | .058 | **.041** | .324 | .340 |
| **UPPS**  **Perserv** | **r=** | **.770\*\*** | **.738\*\*** | **.437\*** | **.624\*\*** | .350 | **.625\*\*** | - | .202 | .488\*\* | .283 | .128 | .034 | -.201 | -.079 | .151 | .178 |
| **p=** | **.000** | **.000** | **.016** | **.000** | .058 | **.000** | .285 | .006 | .129 | .500 | .859 | .295 | .677 | .426 | .348 |
| **UPPS**  **SS** | **r=** | .255 | .110 | **.369\*** | .105 | **.449\*** | .276 | .202 | - | .177 | .330 | .090 | .125 | .022 | .087 | .019 | -.151 |
| **p=** | .174 | .564 | **.045** | .580 | **.013** | .139 | .285 | .349 | .075 | .634 | .509 | .909 | .649 | .922 | .425 |
| **STIMP**  **Stress** | **r=** | **.506\*\*** | **.477\*\*** | .275 | **.440\*** | .226 | **.482\*\*** | **.488\*\*** | .177 | - | **.663\*\*** | .071 | .212 | -.272 | -.217 | .103 | .071 |
| **p=** | **.004** | **.008** | .141 | **.015** | .229 | **.007** | **.006** | .349 | **.000** | .708 | .261 | .154 | .248 | .589 | .710 |
| **STIMP Baseline** | **r=** | .346 | **.386\*** | .138 | .274 | .101 | **.537\*\*** | .283 | .330 | **.663\*\*** | - | .076 | .345 | -.154 | -.109 | .162 | .091 |
| **p=** | .061 | **.035** | .465 | .144 | .596 | **.002** | .129 | .075 | **.000** | .691 | .062 | .426 | .565 | .392 | .632 |
| **IMT**  **Baseline** | **r=** | .086 | -.018 | .106 | .152 | .103 | -.078 | .128 | .090 | .071 | .076 | - | **.491\*\*** | .092 | .151 | .187 | .030 |
| **p=** | .652 | .924 | .578 | .422 | .588 | .680 | .500 | .634 | .708 | .691 | **.006** | .635 | .427 | .321 | .874 |
| **IMT**  **Stress** | **r=** | -.011 | -.037 | -.052 | .099 | -.063 | -.070 | .034 | .125 | .212 | .345 | **.491\*\*** | - | .053 | .250 | .103 | -.009 |
| **p=** | .952 | .848 | .784 | .604 | .741 | .711 | .859 | .509 | .261 | .062 | **.006** | .785 | .182 | .321 | .962 |
| **DD**  **Baseline** | **r=** | -.140 | -.155 | -.085 | -.077 | -.187 | -.356 | -.201 | .022 | -.272 | -.154 | .092 | .053 | - | **.688\*\*** | .102 | .124 |
| **p=** | .468 | .421 | .659 | .689 | .330 | .058 | .295 | .909 | .154 | .426 | .635 | .785 | **.000** | .597 | .523 |
| **DD**  **Stress** | **r=** | -.099 | -.175 | -.133 | .162 | .150 | **-.376\*** | -.079 | .087 | -.217 | -.109 | .151 | .250 | **.688\*\*** | - | .121 | .061 |
| **p=** | .602 | .354 | .482 | .393 | .428 | **.041** | .677 | .649 | .248 | .565 | .427 | .182 | **.000** | .524 | .747 |
| **GS**  **Baseline** | **r=**  **p=** | 317  .088 | .351  .057 | .083  .662 | .319  .086 | -.312  .093 | .186  .324 | .151  .426 | .019  .922 | .103  .589 | .162  .392 | .187  .321 | .103  .321 | .102  .597 | .121  .524 | - | **.854\*\***  **.000** |
| **GS**  **Stress** | **r=**  **p=** | .314  .091 | .346  .061 | .078  .680 | .324  .080 | -.292  .117 | .180  .340 | .178  .348 | -.151  .435 | .071  .710 | .091  .632 | .030  .874 | -.009  .962 | .124  .523 | .061  .747 | **.854\*\***  **.000** | - |

Note: r= Pearson Correlation Coefficient, p= p-value (two-tailed), \*\* Correlation is significant at the 0.01 level, \* Correlation is significant at the 0.05 level

**Correlations between impulsivity measures (self-reports and laboratory measures) in the Attention Deficit Hyperactivity Disorder patient group**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **BIS 11 Tot** | **BIS 11**  **Nl** | **BIS 11**  **MI** | **BIS 11**  **AI** | **UPPS**  **Urgency** | **UPPS**  **Premed** | **UPPS**  **Perserv** | **UPPS**  **SS** | **STIMP**  **Stress** | **STIMP**  **Baseline** | **IMT**  **Baseline** | **IMT**  **Stress** | **DD**  **Baseline** | **DD**  **Stress** | **GS**  **Baseline** | **GS**  **Stress** |
| **BIS 11 Tot** | **r=** | - | **.874\*\*** | **.865\*\*** | **.511\*\*** | .350 | **.781\*\*** | .298 | .179 | .237 | .205 | .007 | -.078 | -.209 | -.150 | .127 | -.129 |
| **p=** | **.000** | **.000** | **.005** | .068 | **.000** | .124 | .361 | .224 | .295 | .973 | .695 | .285 | .456 | .519 | .512 |
| **BIS 11**  **Nl** | **r=** | **.874\*\*** | - | **.635\*\*** | .265 | .358 | **.679\*\*** | **.410\*** | -.029 | .150 | .233 | .041 | -.037 | -.101 | -.076 | .039 | -.055 |
| **p=** | **.000** | **.000** | .173 | .061 | **.000** | **.030** | .883 | .447 | .233 | .836 | .853 | .609 | .707 | .845 | .779 |
| **BIS 11**  **MI** | **r=** | **.865\*\*** | **.635\*\*** | - | .197 | **.402\*** | **.716\*\*** | .120 | **.451\*** | .292 | .118 | .025 | -.031 | -.331 | -.204 | .248 | -.037 |
| **p=** | **.000** | **.000** | .314 | **.034** | **.000** | .542 | **.016** | .132 | .549 | .898 | .875 | .086 | .308 | .203 | .854 |
| **BIS 11**  **AI** | **r=** | **.511\*\*** | .265 | .197 | - | -.083 | .331 | .145 | -.122 | .064 | .119 | -.090 | -.156 | .021 | -.039 | -.059 | -.296 |
| **p=** | **.005** | .173 | .314 | .674 | .086 | .463 | .537 | .746 | .545 | .648 | .429 | .917 | .845 | .766 | .126 |
| **UPPS**  **Urgency** | **r=** | .350 | .358 | **.402\*** | -.083 | - | .223 | **.406\*** | .327 | .247 | -.107 | .072 | -.098 | -.011 | .264 | .156 | .294 |
| **p=** | .068 | .061 | **.034** | .674 | .254 | **.032** | .089 | .206 | .587 | .718 | .620 | .954 | .183 | .427 | .129 |
| **UPPS**  **Premed** | **r=** | **.781\*\*** | **.679\*\*** | **.716\*\*** | .331 | .223 | - | .101 | .271 | .200 | .362 | .126 | .048 | -.160 | -.150 | .129 | -.131 |
| **p=** | **.000** | **.000** | **.000** | .086 | .254 | .608 | .164 | .308 | .058 | .524 | .808 | .416 | .456 | .514 | .506 |
| **UPPS**  **Perserv** | **r=** | .298 | **.410\*** | .120 | .145 | **.406\*** | .101 | - | -.218 | .133 | -.037 | -.255 | **-.384\*** | -.062 | .069 | .169 | **.422\*** |
| **p=** | .124 | **.030** | .542 | .463 | **.032** | .608 | .265 | .500 | .852 | .190 | **.044** | .754 | .733 | .391 | **.025** |
| **UPPS**  **SS** | **r=** | .179 | -.029 | **.451\*** | -.122 | .327 | .271 | -.218 | - | .099 | .143 | -.079 | .042 | .068 | .039 | .309 | .169 |
| **p=** | .361 | .883 | **.016** | .537 | .089 | .164 | .265 | .615 | .468 | .688 | .833 | .731 | .848 | .110 | .393 |
| **STIMP**  **Stress** | **r=** | .237 | .150 | .292 | .064 | .247 | .200 | .133 | .099 | - | .233 | -.147 | -.205 | -.160 | .041 | -.196 | -.179 |
| **p=** | .224 | .447 | .132 | .746 | .206 | .308 | .500 | .615 | .233 | .456 | .296 | .415 | .839 | .328 | .372 |
| **STIMP Baseline** | **r=** | .205 | .233 | .118 | .119 | -.107 | .362 | -.037 | .143 | .233 | - | .248 | .288 | -.059 | -.137 | -.174 | -.189 |
| **p=** | .295 | .233 | .549 | .545 | .587 | .058 | .852 | .468 | .233 | .202 | .138 | .766 | .495 | .384 | .344 |
| **IMT**  **Baseline** | **r=** | .007 | .041 | .025 | -.090 | .072 | .126 | -.255 | -.079 | -.147 | .248 | - | **.821\*\*** | .098 | .204 | .117 | -.112 |
| **p=** | .973 | .836 | .898 | .648 | .718 | .524 | .190 | .688 | .456 | .202 | **.000** | .622 | .307 | .554 | .571 |
| **IMT**  **Stress** | **r=** | -.078 | -.037 | -.031 | -.156 | -.098 | .048 | **-.384\*** | .042 | -.205 | .288 | **.821\*\*** | - | .037 | .065 | .186 | -.063 |
| **p=** | .695 | .853 | .875 | .429 | .620 | .808 | **.044** | .833 | .296 | .138 | **.000** | .850 | .749 | .343 | .750 |
| **DD**  **Baseline** | **r=** | -.209 | -.101 | -.331 | .021 | -.011 | -.160 | -.062 | .068 | -.160 | -.059 | .098 | .037 | - | **.782\*\*** | -.287 | .024 |
| **p=** | .285 | .609 | .086 | .917 | .954 | .416 | .754 | .731 | .415 | .766 | .622 | .850 | **.000** | .138 | .905 |
| **DD**  **Stress** | **r=** | -.150 | -.076 | -.204 | -.039 | .264 | -.150 | .069 | .039 | .041 | -.137 | .204 | .065 | **.782\*\*** | - | -.085 | .273 |
| **p=** | .456 | .707 | .308 | .845 | .183 | .456 | .733 | .848 | .839 | .495 | .307 | .749 | **.000** | .672 | .168 |
| **GS**  **Baseline** | **r=**  **p=** | .127  .519 | .039  .845 | .248  .203 | -.059  .766 | .156  .427 | .129  .514 | .169  .391 | .309  .110 | -.196  .328 | -.174  .384 | .117  .554 | .186  .343 | -.287  .138 | -.085  .672 | - | .**655\*\***  **.000** |
| **GS**  **Stress** | **r=**  **p=** | -.129  .512 | -.055  .779 | -.037  .854 | -.296  .126 | .294  .129 | -.131  .506 | **.422\***  **.025** | .169  .393 | -.179  .372 | -.189  .344 | -.112  .571 | -.063  .750 | .024  .905 | .273  .168 | .**655\*\***  **.000** | - |

Note: r= Pearson Correlation Coefficient, p= p-value (two-tailed), \*\* Correlation is significant at the 0.01 level, \* Correlation is significant at the 0.05 level

**Abbreviations:**

**BIS 11 Tot =** Barratt Impulsiveness Scale 11, Total Score

**BIS 11 Nl =** Barratt Impulsiveness Scale 11, Non-Planning Impulsiveness Subscale Score

**BIS 11 MI =** Barratt Impulsiveness Scale 11, Motor Impulsiveness Subscale Score

**BIS 11 AI =** Barratt Impulsiveness Scale 11, Attentional Impulsiveness Subscale Score

**UPPS Urgency =** UPPS Impulsive Behavior Scale, Urgency Subscale Score

**UPPS Premed =** UPPS Impulsive Behavior Scale, (Lack of) Premeditation Subscale Score

**UPPS Perserv =** UPPS Impulsive Behavior Scale, (Lack of) Perseverance Subscale Score

**UPPS SS =** UPPS Impulsive Behavior Scale, Sensation Seeking Subscale Score

**STIMP Baseline =** State Impulsivity Questionaire, Mean for Resting Conditions

**STIMP Stress =** State Impulsivity Questionaire, Mean for Stress Conditions

**IMT Baseline =** Immediate Memory Task, Ratio of Commission Errors to Correct Responses under Resting Conditions

**IMT Stress =** Immediate Memory Task, Ratio of Commission Errors to Correct Responses under Stress Conditions

**DD Baseline =** Delay Discounting Parameter for Resting Conditions

**DD Stress =** Delay Discounting Parameter for Stress Conditions

**GS Baseline =** GoStop Percentage of Correct Inhibition for Resting Conditions

**GS Stress =** GoStop Percentage of Correct Inhibition for Stress Conditions