**Supplementary Table 1**. Each table depicts results from t-tests investigating gender differences in this sample of ILF, IFOF and UF microstructure, respectively.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Left ILF | | |  | Right ILF | | |
|  | Males | Females | *p*-value |  | Males | Females | *p*-value |
| FA | .47 | .39 | .39 |  | .5 | .47 | .15 |
| AD (x10-3 mm2/s) | 1.23 | 1.29 | .76 |  | 1.21 | 1.24 | .81 |
| MD (x10-3 mm2/s) | .78 | .79 | .6 |  | .78 | .77 | .08 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Left IFOF | | |  | Right IFOF | | |
|  | Males | Females | *p*-value |  | Males | Females | *p*-value |
| FA | .51 | .51 | .17 |  | .52 | .5 | .21 |
| AD (x10-3 mm2/s) | 1.28 | 1.26 | .18 |  | 1.26 | 1.26 | .5 |
| MD (x10-3 mm2/s) | .78 | .77 | .41 |  | .77 | .78 | .94 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Left UF | | |  | Right UF | | |
|  | Males | Females | *p*-value |  | Males | Females | *p*-value |
| FA | .46 | .45 | .93 |  | .46 | .45 | .72 |
| AD (x10-3 mm2/s) | 1.11 | 1.18 | .053 |  | 1.17 | 1.15 | .48 |
| MD (x10-3 mm2/s) | .77 | .78 | .7 |  | .77 | .75 | .28 |

**Supplementary Table 2**. The results from a correlation analysis investigating whether age co-varies with microstructure of the ILF, IFOF, and UF. There were no statistically significant effects.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Inferior longitudinal fasciculus* | Left/Right | | | |
|  | RD | FA | MD | AD |
| Age | *p =* .46/.78 | *p* = .27/.71 | *p* = .20/.17 | *p* = .74/.40 |
| *Inferior fronto-occipital fasciculus* | Left/Right | | | |
|  | RD | FA | MD | AD |
| Age | *p =* .66/.35 | *p* = .27/.58 | *p* = .15/.05 | *p* = .77/.39 |
| *Uncinate fasciculus* | Left/Right | | | |
|  | RD | FA | MD | AD |
| Age | *p =* .70/.57 | *p* = .44/.10 | *p* = .51/.51 | *p* = .42/.36 |

**Supplementary Table 3**. The results from a regression analysis of radial diffusivity (RD).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Inferior Longitudinal Fasciculus | | | |  | Inferior Fronto-Occipital Fasciculus | | | |  | Uncinate Fasciculus | | | |
| Dependent Variable | Predictor Variables | *β* | *t* | *F* | *R2* |  | *β* | *t* | *F* | *R2* |  | *β* | *t* | *F* | *R2* | |
| Emotion Recognition |  |  |  | 2.07 | .16 |  |  |  | 2.45 | .18 |  |  |  | .02 | .00 | |
|  | Right RD | .25 | 1.18 |  |  |  | .36 | 1.35 |  |  |  | .01 | .05 |  |  | |
|  | Left RD | -.43 | 2.00 |  |  |  | -.59 | 2.20 |  |  |  | -.05 | -.19 |  |  | |
| Face Memory |  |  |  | .8 | .07 |  |  |  | 1.69 | .11 |  |  |  | .91 | .07 | |
|  | Right RD | .26 | 1.26 |  |  |  | -.24 | .96 |  |  |  | -.28 | 1.31 |  |  | |
|  | Left RD | -.02 | .08 |  |  |  | -.11 | .45 |  |  |  | .18 | .85 |  |  | |
| Facial Identity Perception |  |  |  | .16 | .014 |  |  |  | .27 | .02 |  |  |  | .02 | .00 | |
|  | Right RD | .09 | .40 |  |  |  | .17 | .42 |  |  |  | .02 | .10 |  |  | |
|  | Left RD | .04 | .19 |  |  |  | -.214 | -.73 |  |  |  | .03 | .11 |  |  | |