Supplementary Table 5. Final model of multiple linear regression analysis results on predictors of the normalized changes of IED_{errors} after TCC training for the female participants (n=33)

| | Unstandardized coefficients | | Standardized coefficients | | Adjusted R ² | Adjusted R ² | F | <i>p</i> -value |
|-------------------------------------|-----------------------------|-------------------|---------------------------|-----------------|-------------------------|-------------------------|------------|-----------------|
| | В | Standard error | Beta | <i>p</i> -value | Aujusteu K | change | I ' | p-value |
| Constant | 7.733 | 3.825 | | 0.068 | | | | |
| Covariates Age | -0.036 | 0.027 | -0.446 | 0.207 | | | | |
| Education | -0.063 | 0.044 | -0.405 | 0.179 | | | | |
| GFA _{pre} of the PSTP loop | -10.393 | 4.576 | -0.748 | 0.044* | 0.152 | 0.313 | 5.157 | 0.044* |

GFA_{pre}, generalized fractional anisotropy at baseline; IED_{errors} , the number of total errors of the Intra/Extra-dimensional set shift test; PSTP, prefronto-striatal-thalamo-prefrontal; TCC, Tai Chi Chuan group. Normalized change of $IED_{errors} = (post-test IED_{errors} - pre-test IED_{errors}) / pre-test IED_{errors}$.

The stepwise method was applied, using the criteria of p(F) < 0.05 as the probability-to-enter and $p(F) \ge 0.10$ as probability-to-remove. Age and education were entered as covariates.

^{*}p < 0.05.