**Supplementary Material**

**Figure S1:** Physical activity and working memory performance divided into diagnosis

 (schizophrenia and bipolar spectrum illness)

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**Figure S2:** Physical activity and BDNF mRNA levels, divided into percentiles

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**Table S1:** Hours of physical activity per week is associated with better performance on

cognitive tasks

Variable Coefficient s.e. *t*  p-value

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Working memory** |  |  |  |  |  |  |  |
|  Physical exercise | 0.14 | 0.07 | 2.46 | 0.01 |
|  Goodness of fit |  |  |  | p˂0.001 |
| **Executive function** |  |  |  |  |
|  Physical exercise | 0.12 | 0.07 | 2.24 | 0.03 |
|  Goodness of fit |  |  |  | p˂0.001 |
| **Verbal memory** |  |  |  |  |
|  Physical exercise | 0.04 | 0.07 | 0.67 | 0.51 |
|  Goodness of fit |  |  |  | p˂0.001 |
| **General cognition (WASI)** |  |  |  |  |
|  Physical exercise | 0.04 | 0.07 | 0.72 | 0.47 |
|  Goodness of fit |  |  |  | p˂0.001 |

Data are corrected for age, sex, diagnosis (SZ, BD) and NART errors.