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Dynamic Functional Connectivity Analysis with Temporal Convolutional Network for Attention Deficit/Hyperactivity Disorder Identification – *Supplementary Materials*

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In what follows, we compare our method with several state-of-the-art approaches using rs-fMRI data from ADHD-200 database for ADHD identification.

1 COMPARISON WITH STATE-OF-THE-ART METHODS

We further compare the results achieved by our TDNet method with those of the state-of-the-art methods using ADHD-200 database for ADHD identification. It is worth noting that all these methods use the standard training/test sets division by the data set. Diagnostic performance of these methods is summarized in Table 1, where the best results are highlighted in bold. From Table 1, we can see that our method can obtain competitive results in nearly all imaging sites for ADHD vs. NC classification. Specifically, our method achieves the average accuracy of 73.2% for ADHD classification, which is higher than the second-best average accuracy value of 72.0% (achieved by (Zhang et al., 2017)) on the same dataset. The results show that considering higher-order interactions and temporal dynamic patterns of FC is helpful in improving diagnosis performance.

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Table 1. Comparison with existing studies for ADHD identification using ADHD-200 dataset.

Method	Site					Average
	KKI	NI	NYU	OHSU	PKU	
PCA-LDA Dey et al. (2012)	72.7	**72.0**	70.7	73.5	62.7	70.3
SICE Zhang et al. (2017)	63.6	**72.0**	70.7	79.4	**74.5**	72.0
AGDM Dey et al. (2014)	54.6	48.0	-	**82.4**	58.8	60.9
3D CNN Zou et al. (2017)	72.8	-	70.5	-	63.0	68.8
EM-MI Dou et al. (2020)	**81.8**	-	63.4	-	70.6	71.9
TDNet (Ours)	**81.8**	68.0	**73.2**	76.5	66.7	**73.2**

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