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Interpretable Deep Learning Analysis of Online Social Anxiety in Adolescents Using Feature Saliency Mapping

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1. Round 1

1.1. Reviewer 1

Reviewer:

The construct online social anxiety should be more sharply distinguished from traditional social anxiety by explicitly identifying its unique digital behavioral manifestations.

A brief conceptual framework or schematic reference should be introduced here to visually clarify the mediational logic.

Add a benchmark comparison with conventional statistical models to demonstrate incremental predictive value.

Clarify whether SHAP values were normalized or standardized before ranking features.

Strengthen theoretical grounding by explicitly linking this pattern to social comparison theory.

Expand discussion of how this finding supports or refines dual-pathway models of anxiety.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

Please clarify whether these predictors were treated as independent features or as interacting constructs, and how multicollinearity was addressed during preprocessing.

Reformulate the aim into explicit research questions or testable hypotheses to sharpen empirical focus.

The manuscript should justify the use of a cross-sectional design in light of developmental claims about adolescent anxiety trajectories.

Report construct validity evidence (e.g., factor structure or CFA indices) in addition to reliability.

Provide sample items, internal consistency coefficients, and evidence of preliminary validation for this newly developed instrument.

Report the exact neuron configuration and provide a rationale for architecture selection (e.g., grid search, pilot tuning).

Provide confidence intervals for the correlations to strengthen inferential rigor.

Authors uploaded the revised manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.

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