Appendix A. Exploratory Experiments

As shown in Figure A.1, we conducted exploratory experiments to demonstrate that injecting adversarial edges with higher influence leads to more severe attacks. Specifically, we employed the representative non-target adversarial attack named Metattack, to modify the graph structure on public datasets. From the attacked graph, we extracted a small set of adversarial edges with varying levels of influence and injected them into the original graph to create test graphs. In this experiment, we used the vanilla GCN as the backbone model for semi-supervised node classification. Additionally, we utilized Degree and PageRank metrics to assess the influence of nodes, thereby evaluating the impact of the edges connecting them within the graph.

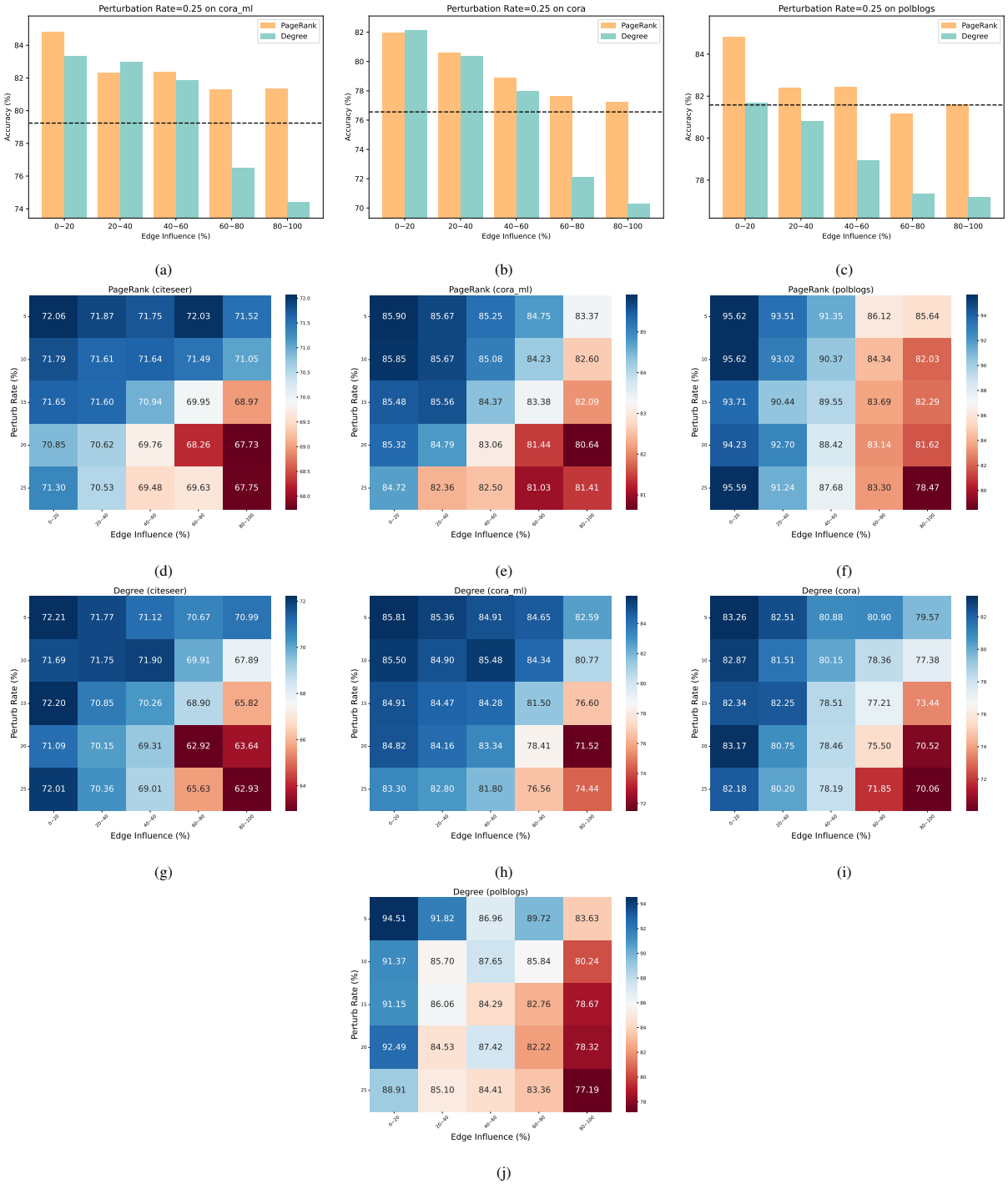

Figure A.1: Figure A.1a to Figure A.1c display the variation in performance at different perturbation rates, with the black dashed line representing the performance when adversarial edges are randomly selected, serving as a reference. Figure A.1d to Figure A.1j show the variation in classification performance as the influence of adversarial edges increases.