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Erik D Slivken* (erikslivken@math.ucdavis.edu), 1303 F St, Davis, CA 95616. *Jigsaw Percolation on Erdős-Rényi Random Graphs.*

We analyze the jigsaw percolation model introduced by Brummitt, Chatterjee, Dey, and Sivakoff by considering graphs where both underlying people and puzzle graphs are Erdős-Rényi random graphs. Let p_{ppl} and p_{puz} denote the probability that an edge exists in the respective people and puzzle graphs and define $p_{\text{eff}} = p_{\text{ppl}}p_{\text{puz}}$, the effective probability. We show that if $p_{\text{eff}}(n \log n) < e^{-5}$ the people graph will not solve the puzzle graph *a.s.s.*, whereas if $p_{\text{eff}}(n \log n) > \pi^2/6$, the people graph will solve the puzzle graph *a.s.s.* as long as both p_{ppl} and p_{puz} are greater than $\log n/n$. (Received January 19, 2015)