

Although it is well-known that there is a relationship between socio-physical distance and edge probability in interpersonal networks, the predictive power of such distances for total network structure has not been established. Here, it is shown that upper bounds on the marginal edge probabilities for far-flung dyads can be used to place a lower bound on the predictive power of distance, and one such bound is derived.

Application of this bound to the special case of uniformly placed vertices on the plane suggests that only modest constraints are required for distance effects to dominate at large physical scales.

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