Focus Degree Centrality

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$$F_C \equiv \sum_{d=1}^{m} g(d)\big(o(d) - e(d)\big)$$

where $o(d)$ and $e(d)$ are the observed and expected number of neighbors with the shortest paths d between center node v_c, and $g(d) = \exp\big(-d^2\big)$.

It considers not only the first-order degree (number of nodes connected to the center node), but also the higher-order degrees (number of nodes with the shortest paths to the center node larger than 1).