Traditional routing protocols, designed for energy-rich networks, face challenges when applied to Wireless Sensor Networks (WSNs) due to their energy constraints. Flooding, a common technique, broadcasts packets to all nodes, ignoring energy limitations. This leads to inefficiencies like implosion (multiple copies of the same packet reaching a node) and overlap (redundant packet transmissions). To address these shortcomings, gossiping offers an alternative. In gossiping, a sensor node randomly selects a neighbor to forward a received packet, repeating this process until all nodes have received the .data. This method helps conserve energy by reducing redundant transmissions