Examining Social Connectivity through Email Network Analysis: Study of Librarians' Emailing Groups in Pakistan

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Abstract : Social platforms like online discussion and mailing groups are well aligned with academic as well as professional learning spaces. Professional communities are increasingly moving to online forums for sharing and capturing the intellectual abilities. This study investigated dynamics of social connectivity of yahoo mailing groups of Pakistani Library and Information Science (LIS) professionals using Graph Theory technique. Design/Methodology: Social Network Analysis is the increasingly concerned domain for scientists in identifying whether people grow together through online social interaction or, whether they just reflect connectivity. We have conducted a longitudinal study using Network Graph Theory technique to analyze the large data-set of email communication. The data was collected from three yahoo mailing groups using network analysis software over a period of six months i.e. January to June 2016. Findings of the network analysis were reviewed through focus group discussion with LIS experts and selected respondents of the study. Data were analyzed in Microsoft Excel and network diagrams were visualized using NodeXL and ORA-Net Scene package. Findings: Findings demonstrate that professionals and students exhibit intellectual growth the more they get tied within a network by interacting and participating in communication through online forums. The study reports on dynamics of the large network by visualizing the email correspondence among group members in a network consisting vertices (members) and edges (randomized correspondence). The model pair wise relationship between group members was illustrated to show characteristics, reasons, and strength of ties. Connectivity of nodes illustrated the frequency of communication among group members through examining node coupling, diffusion of networks, and node clustering has been demonstrated in-depth. Network analysis was found to be a useful technique in investigating the dynamics of the large network.