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Comparing Friends and Peer Tutors Amidst COVID-19 Using Social Network Analysis

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Peer tutor network and academic performance: A UKM pilot study

A/p Ratanarajah, J. , Razak, F.A. , Zamzuri, Z.H. (2020) *AIP Conference Proceedings*

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Abstract

COVID-19 has drastically changed the teaching patterns of higher education from face-to-face to online learning, and it has also affected students' engagement socially and academically. Understanding the nature of students' engagement during online learning can help in identifying related issues so that various initiatives can be implemented in adapting to this situation. In this study, social network analysis is conducted to gain insights on students' engagement during COVID-19. Directed and weighted networks were used to visualize and analyze friendship as well as peer tutor networks obtained from online questionnaires answered by all students in the class. Contrasting friends and peer tutors reveals some hidden interactions between students and shines some light on dynamics of the online learning community. The results indicate that, popular and important peer tutors may not be high achievers and thus possibly contributing to the spread of misinformation in the online learning community. By comparing weighted indegree and betweenness centrality values, we suggest approaches to cultivate a healthy online learning community. This study highlights the use of social network analysis to assist and monitor students' engagement and further formulate strategies in order to make the class a conducive online learning community, particularly in the advent of online learning in higher education institutions. © 2023 by the authors.

Author keywords

COVID-19; friendship networks; higher education; online learning community; peer tutor networks; student engagement

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