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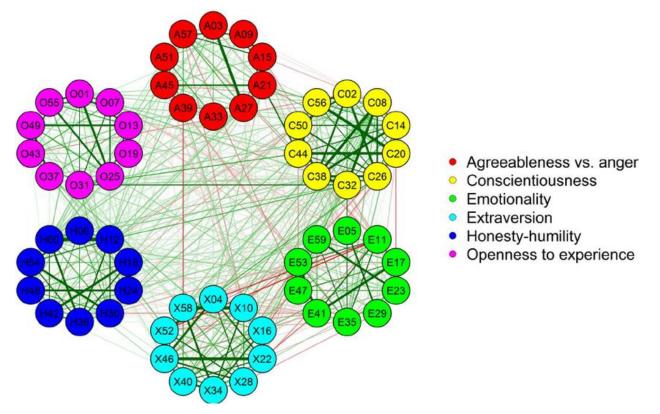
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RESEARCH ARTICLE: SARPPIC: Exploiting COVID-19 Contact Tracing Recommendation Through Social Awareness

DATASET: Graphical-Representation-of-the-Network-of-the-HEXACO-60-Items

We utilized and interconnected two real-world data sets namely: HEXACO-60 Dataset which is available in IEEE Data Port at: <u>http://dx.doi.org/10.21227/phht-pn81</u> and the ATU Dataset in SARVE-2 [1] available at DOI: 10.1109/TETC.2018.2854718.



As shown above, the HEXACO-60 dataset contains 60 contact points and a total of 249 betweenness

centrality data. The contact points with the highest betweenness centrality initially required for experimentation in accordance to our *SARPPIC* algorithm are C02, C08 and C14 (26), C38, C32, and C26 (19), H06, H12 and H16 (31), and X40, X34 and X28 (23).

As stated in [1], data was gathered from students (contact points in *SARPPIC*) at Accra Technical University in Higher National Diploma (HND) Marketing (n=2864), HND Computer Science (n=720) and HND Building Technology (n=812). Therefore, the ATU dataset utilized in this paper contains a total of 4396 users (2421 males representing 55.07% and 1975 females representing 44.93%). The present and past social ties of the ATU Data set are shown in the Tables below. Additionally, we have attached an excel file of all the data collected and how computations were done using appropriate formulas.

-	Past Soci	al Tie Data	Present Social Tie Data				
	Contact	Number of	Contact	Number of			
	Duration	Attendees	Duration	Attendees			
-	5	126	5	129			
	10	370	10	438			
	15	165	15	154			
	20	405	20	420			
	25	299	25	244			
	30	471	30	432			
	35	229	35	223			
	40	301	40	298			
	45	124	45	119			
	50	254	50	239			
	55	61	55	62			
	60	181	60	182			
	65	145	65	161			
	70	104	70	104			
	75	1	75	1			
	80	61	80	61			

TABLE IV ATU DATASET- CONTACT DURATION TRENDS

Past Tie Strength Data		Present Tie Strength Data	
Contact	Number of	Contact	Number of
Frequency	Contact	Frequency	Contact Points
	Points		
1	263	1	438
2	1246	2	1127
3	669	3	805
4	477	4	485
5	291	5	245
6	243	6	134
7	108	7	63

TABLE I						
ATU DATASET- CONTACT FREQUENCY TRENDS						
Past Tie Strength Data	Present Tie Strength D					

REFERENCE

 N. Y. Asabere, B. Xu, A. Acakpovi, and N. Deonauth, "SARVE-2: exploiting social venue recommendation in the context of smart conferences," *IEEE Transactions on Emerging Topics in Computing*, 2018. DOI: 10.1109/TETC.2018.2854718