

EXPLORING HOMOPHILY IN FRESHMEN

SUTD HASS 02.210TS: Who Gets Ahead? Sociology of Social Networks and Social Capital
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Why do we choose the groups that we choose?



HYPOTHESIS

We expect **high retention rates (>70%)** in groups going from 03.007 in Term 2 to 10.009 in Term 3.

Based on the concepts of **Networking and Homophily**, we believe that people would choose to group together across terms for projects.

Socio-centric networks create common goals in students and fosters connections.

"Basically, homophilous relations help friendships survive other structural challenges. This pattern parallels the findings among adults that **homophily becomes more important to tie activation during times of crisis or trouble**."

DATA COLLECTION

Each **person is considered to be a node/vertex** in the 2 group composition graphs, each representing each module. If two persons are in the same group for either subject, they would then be **connected by an undirected edge**.

Analysis was done using methods involving the **Graph Edit Distance** between the two graphs formed. This measure is then normalized into a percentage form to give a more intuitive and concrete measure on how similar these two graphs are.

To get **teammate retention rate**, we compare against two types of graph candidates: the respective empty graphs and the corresponding complement graphs.

RESULTS

Based on the results people could either choose to stay in the same group or choose to not stay in the group.

Reasons why people **stay** in the same group

- **Common goals** arise from a group project
- **Familiarity** with group members
- **High Grades** may be a motivator for result-oriented people

Reasons why people **do not stay** in the same group

- **Imbalance** between leaders and followers
- **Problem** with like-minded people
- **Surface homophily**
- **Differing** course objectives



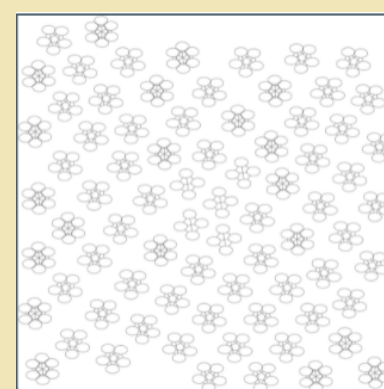
ANALYSIS

Teammate Retention Rate

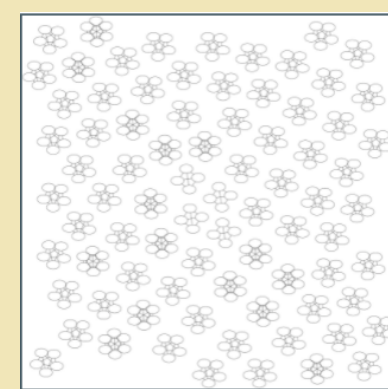
Benchmark	03.007 Groupings Graph	10.009 Groupings Graph	Average Similarity Rate
Empty Graph	75.9%	76.3%	76.1%
Complement Graph	48.9%	50.5%	49.7%

Average: $(76.1\% + 49.7\%) / 2 = 62.9\%$

Grouping Graphs



03.007 Introduction to Design
2019 Groups



10.009 The Digital World
2020 Groups

CONCLUSION

- Our networks help us to find connections and that it is these **connections that give us the abilities to gain access to certain opportunities** to be socially mobile.
- Kadushin's **concept of mutuality**, which implies that "relations are reciprocal, that is, they involve a give and take between the two parties"
- A need within 3.007 to find differing skill sets, and by the time 10.009 came around **people already knew which familiar faces to look for** in creating groups even when the need to network was still present for a fundamentally different project

References

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2. Kadushin C. (2011). *Understanding Social Networks: Theories, Concepts, and Findings*. Oxford University Press.
3. McPherson M., Smith-Lovin L., Cook J. (2001). *Birds of a Feather: Homophily in Social Networks*. Annual Review of Sociology 27:1, 415-444. Retrieved from: <https://doi.org/10.1146/annurev.soc.27.1.415>

