

The Talent Pool of HK Universities

——in the context of COVID-19

7004 A - Group 6

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1. Background

2020 vs 2021

+126%

The number of applicants consulting for postgraduate study in Hong Kong

Are there any

- Relationships between applicant's school of graduation and the school of admission in Hong Kong?
- Relationships between undergraduate and postgraduate majors?
- Changes in HK Universities' admission criteria before and after the pandemic?

2. Data Collection & Cleansing



SOURCES

- CompassEDU's
Admission PG Offers
- 2021 QS Ranking
- 985&211
Categorization

2804 Candidates' Profiles

Between 2018 and 2021

1945 Candidates' Profiles

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2. Data Collection & Cleansing



METHODS & TOOLS

- Crawl Web Data
- Develop Rules
- Detect keywords
- Graph via Excel & Gephi & Jamovi

Majors					
1	Social Science	Philosophy	Law	Education	Language
2	Science	Science	Physics	Biology	Chemistry
3	Engineering	Engineering	Computer Science	Financial Technology	Information Engineering
4	Business	Economics	Management	Mechanical Automation	Engineering Management
5	Medicine	Medicine	Nursing	Cardiology	Chinese Medicine
6	Agronomy	Agriculture	Rural Development	Forest Agronomy	Desert Cultivation

2. Data Collection & Cleansing



CHALLENGES

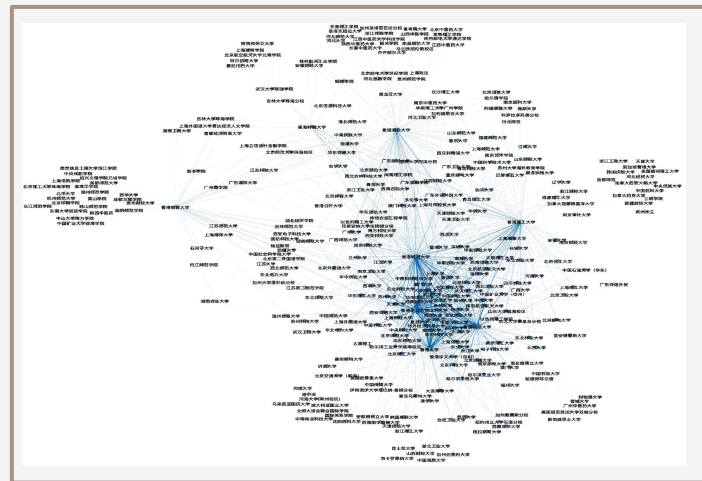
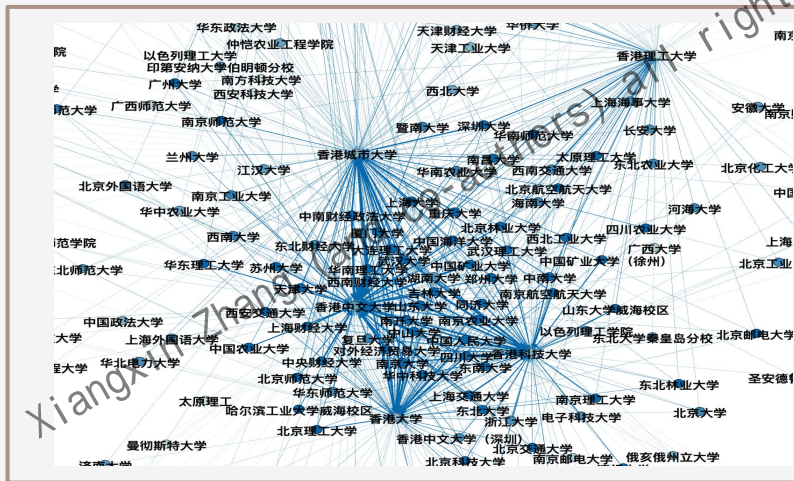
- Retrieve Timestamps
- Translate qualitative data into Quantitative Data
- Grade Conversion

TOEFL Score	IELTS Band
0-31	0-4
32-34	4.5
35-45	5
46-59	5.5
60-78	6
79-93	6.5
94-101	7
102-109	7.5
110-114	8
115-117	8.5
118-120	9

3.1 The network of universities

HK Top 3 ace in applicants' origins while the last 3 are at the edge

- More students from top schools (985 & QS Top 50) are admitted to Top 3 HK universities compared to lower-tier schools
- The institutions of applicants to HKBU, Lingnan U, and EduHK are hardly related to other 5 universities in Hong Kong



3.2 The network of universities

City U sent most offers. HK is strongly attracting talents from Greater Bay Area

- Some applicants may take City U as the guaranteed offer. While EduHK and LU send out less offers.

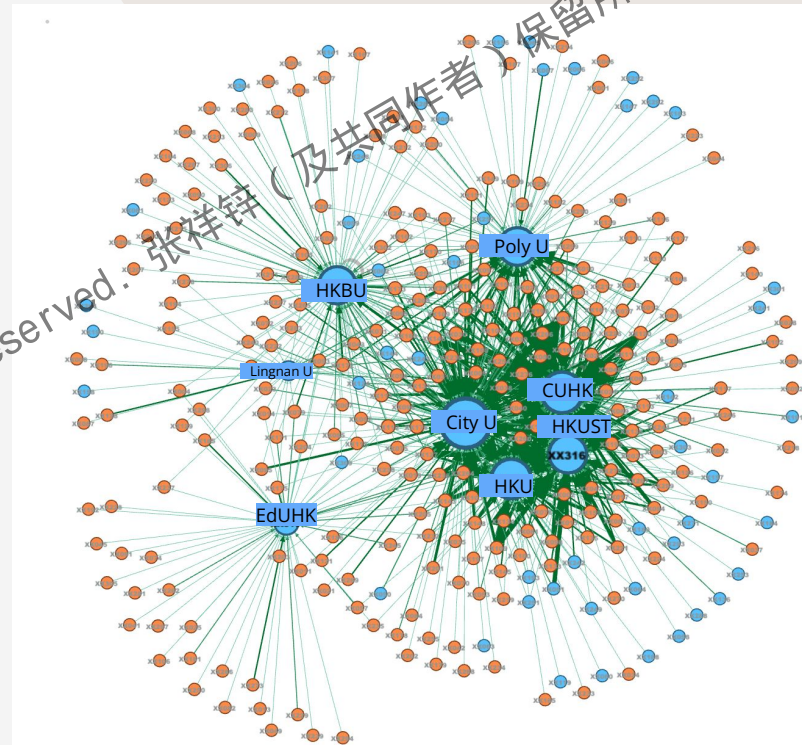
Label		In-Degree
香港城市大学	City U	163
香港中文大学	CUHK	125
香港大学	HKU	119
香港理工大学	Poly U	112
香港科技大学	HKUST	111
香港浸会大学	HKBU	107
香港教育大学	EdUHK	51
香港岭南大学	Lingnan	29

- Applicants from Greater Bay Area are more interconnected.

Label		Out-Degree
澳门科技大学	MUST	7
广州大学	GZU	7
南京师范大学	NNU	7
华东理工大学	ECUST	7
西南大学	SWU	6
苏州大学	SUDA	6
深圳大学	SZU	6
广东外语外贸大学	GDUFS	6

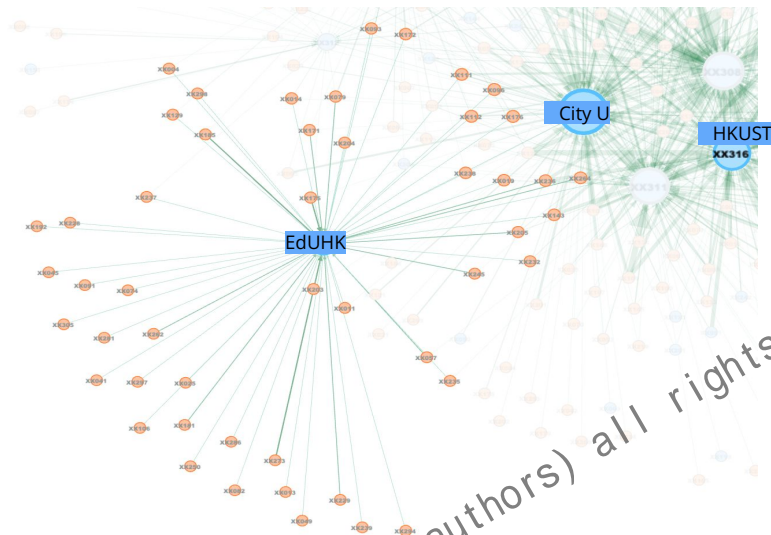
3.3 Offers Given to Mainland China VS Overseas Talents

- $\frac{7}{8}$ HK universities gave **>10** offers to talents with overseas educational background.
- HKUST, CUHK, and HKU gave more admission offers to overseas universities.



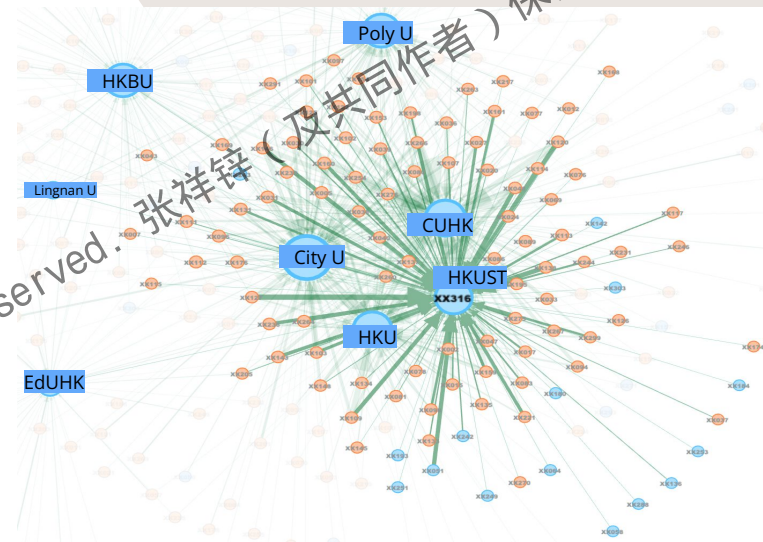
81.65% Mainland / 18.35% Overseas

3.3 Offers Given to Mainland China VS Overseas Talents



EdUHK:

Give Most Offers to Mainland Talents



HKUST:

Give Most Offers to Overseas Talents

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4.1 The Relationship of Majors

Q1: the most popular major for Bachelor

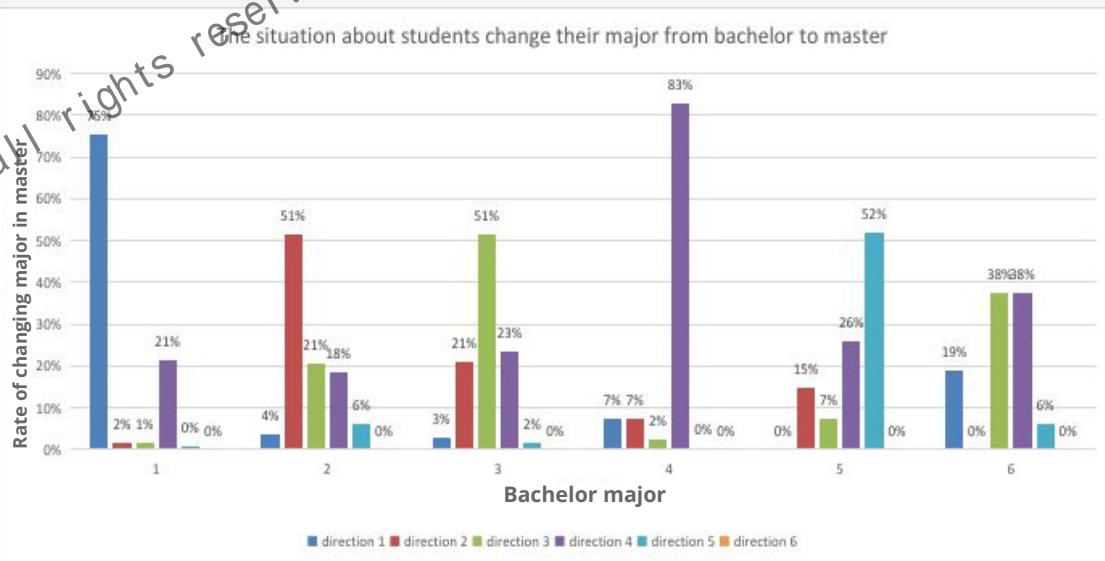
Major	No. of students choose the Single major	No. of students choose double majors	sum	No. of students change their major	No. of students change their major(rate)
1	406	11	417	103	25%
2	172	13	185	90	49%
3	690	7	697	339	49%
4	744	26	770	131	17%
5	26	1	27	13	48%
6	16	0	16	16	100%
			2112		

- More students choose the same major in master as their bachelor.

The most popular major is commerce both in Bachelor and Master.

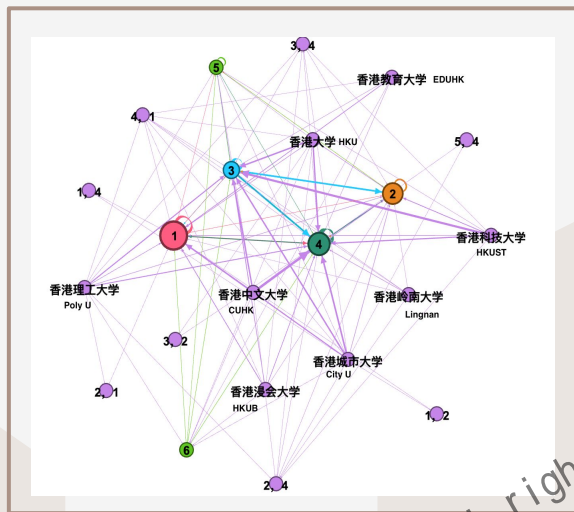
- Nobody chooses agriculture in Master.

- Influence factors: personal preference, employment environment, Covid-19.

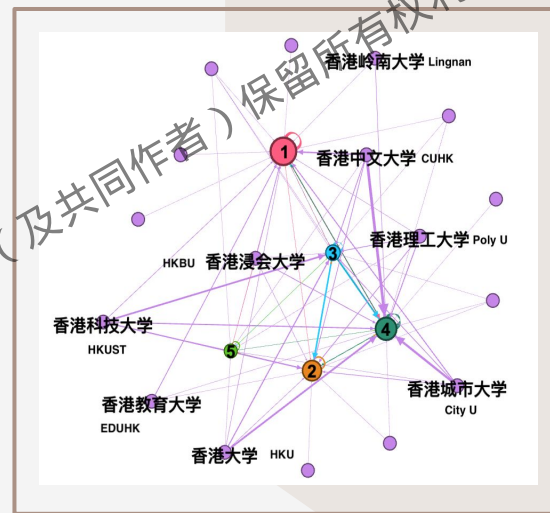


4.2 The Relationship of Majors

Universities prefer to admit undergraduate majors



Major offered by the university



Node color interpretation

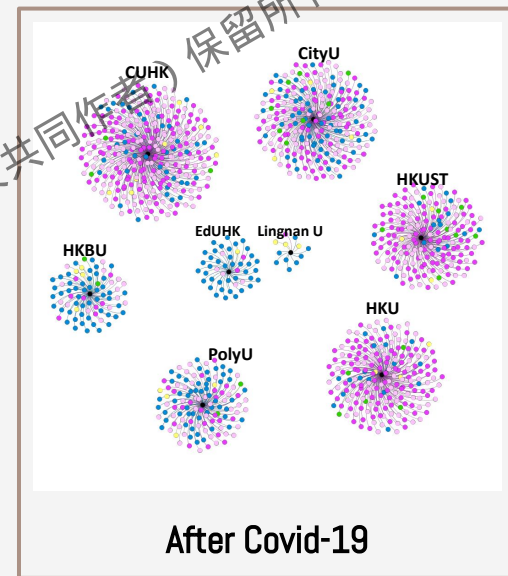
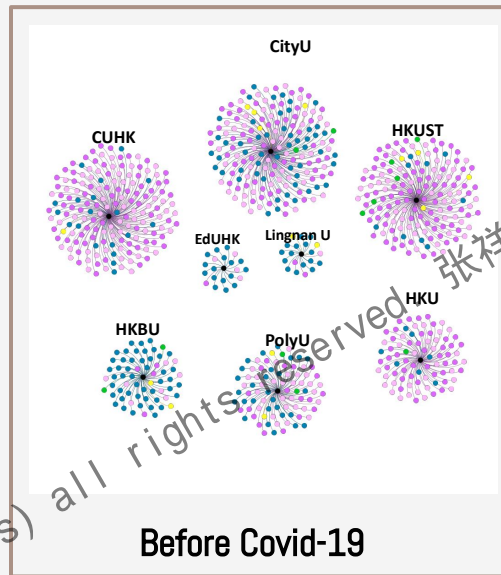
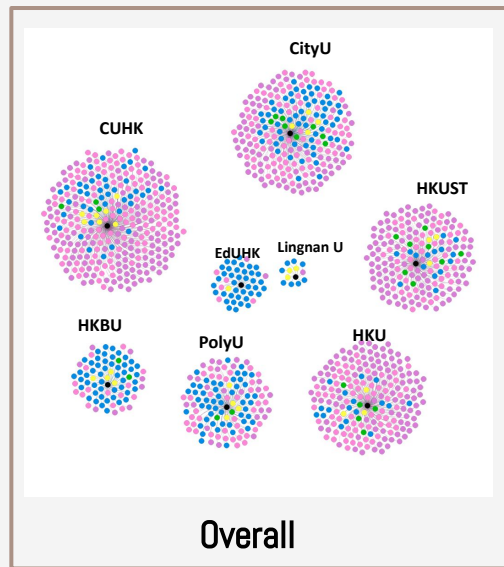
- 1-Social Science
- 2-Science
- 3-Engineering
- 4-Business
- 5-Medicine
- 6-Agronomy

Major changes

The situation about major changes from bachelor to master (value)							
	direction 1	direction 2	direction 3	direction 4	direction 5	direction 6	sum
1	314	7	6	89	1	0	417
2	7	95	38	34	11	0	185
3	20	145	358	162	12	0	697
4	56	56	18	639	1	0	770
5	0	4	2	7	14	0	27
6	3	0	6	6	1	0	16
							2112
The situation about major changes from bachelor to master (rate)							
	direction 1	direction 2	direction 3	direction 4	direction 5	direction 6	sum
1	75%	2%	1%	21%	0%	0%	100%
2	4%	51%	21%	18%	6%	0%	100%
3	3%	21%	51%	23%	2%	0%	100%
4	7%	7%	2%	83%	0%	0%	100%
5	0%	15%	7%	26%	52%	0%	100%
6	19%	0%	38%	38%	6%	0%	100%

5.1 The Impact of COVID-19

Comparison dimension: Undergraduate university



Node color interpretation

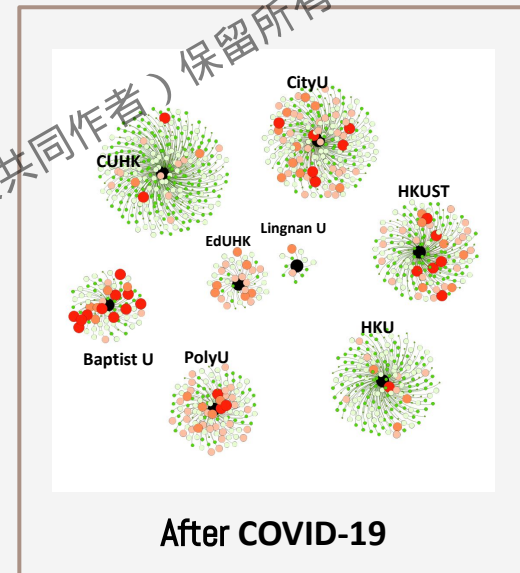
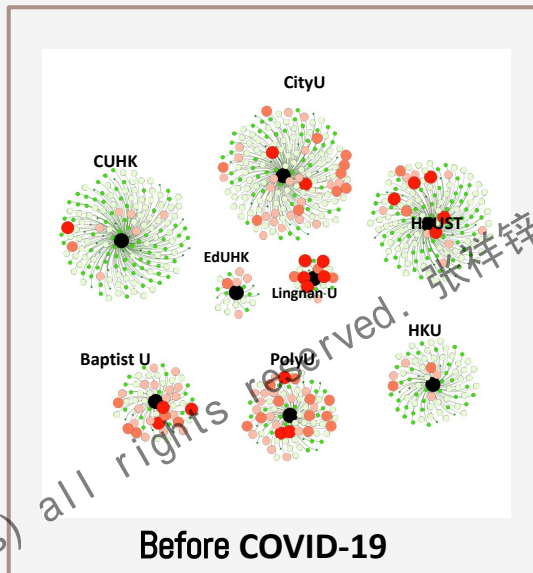
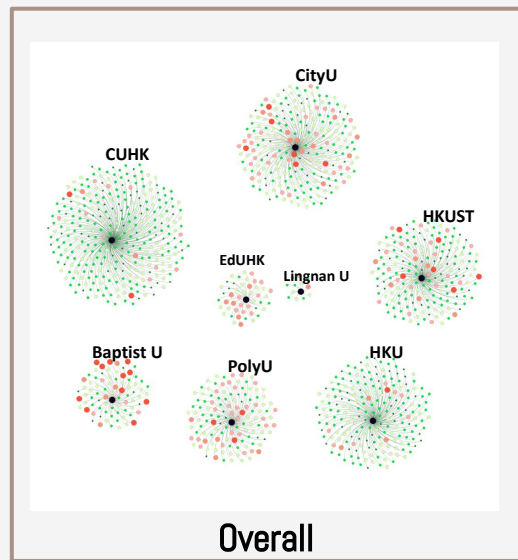
- **Dark pink:** 985 & QS top 50
- **Light pink:** 211 & QS 50-100
- **Blue:** Non-985/211 & QS 100-200
- **Green:** QS 200-400
- **Yellow:** After QS 400

Insights

- Basic preferences remain with some minor changes
- After COVID-19, offer holders from non-985/211 and post-QS 100 universities increased. (especially PolyU)
- Poly U & CityU's offer holders have a diverse undergraduate background

5.2 The Impact of COVID-19

Comparison dimension: GPA



Node color interpretation

- **Green:** GPA ≥ 80 (The greener the color, the higher the GPA)
- **Red:** GPA < 80 (The redder the color, the lower the GPA)
- The larger the point, the lower the GPA

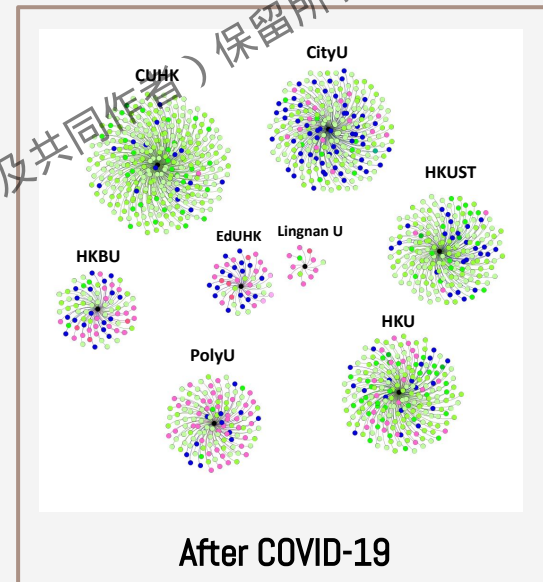
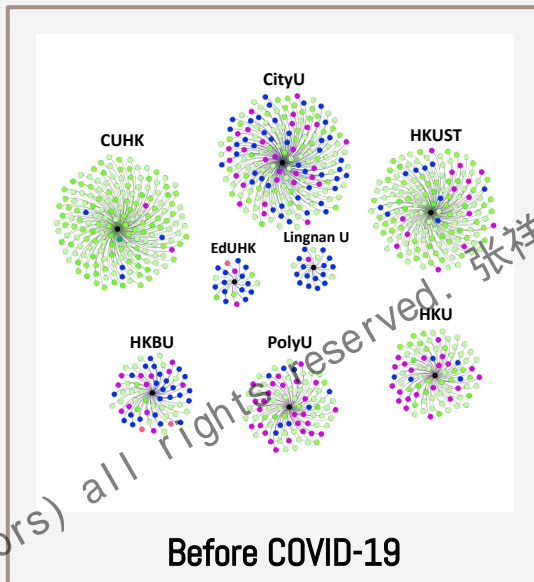
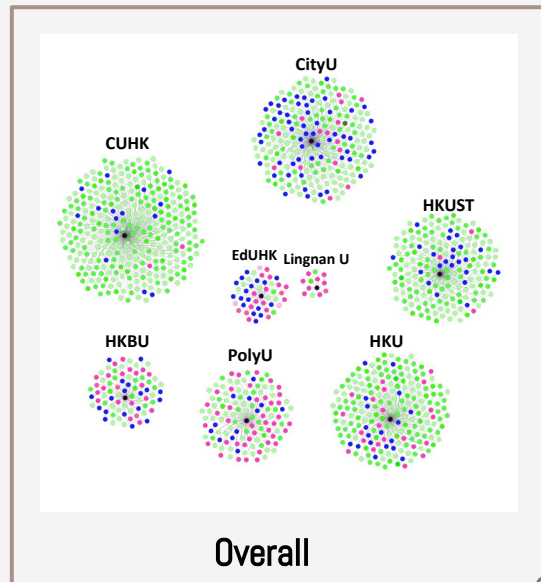
we can find which university the big red nodes (offer holder with low GPA) are concentrated in

Insights

- The GPA of most offer holders from 8Us in HK is above 80
- HKU and CUHK have highest requirements for GPA, followed by HKUST and CityU, and other universities have relatively lower requirements
- After Covid-19, offer holders with GPA lower than 80 have increased, especially in HKUST and CityU, but HKU and CUHK still maintain high requirements for GPA

5.3 The Impact of COVID-19

Comparison dimension: IELTS score



Node color interpretation

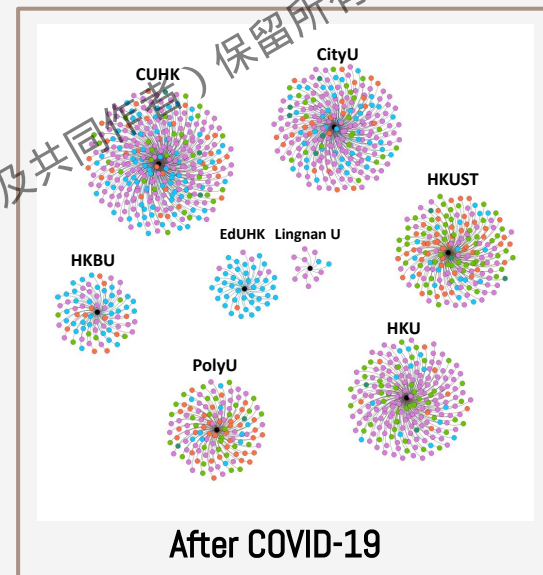
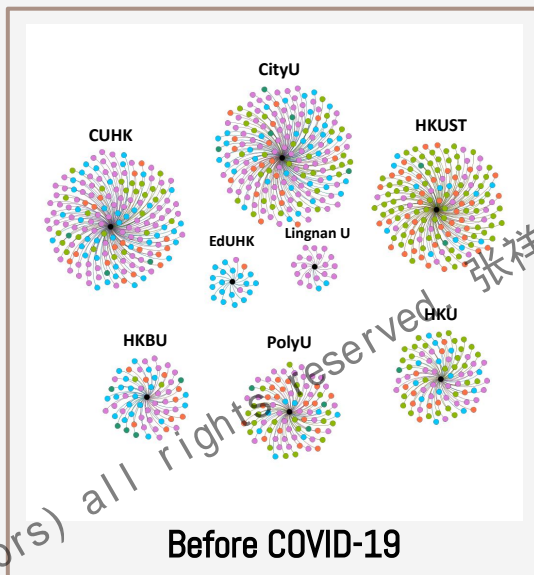
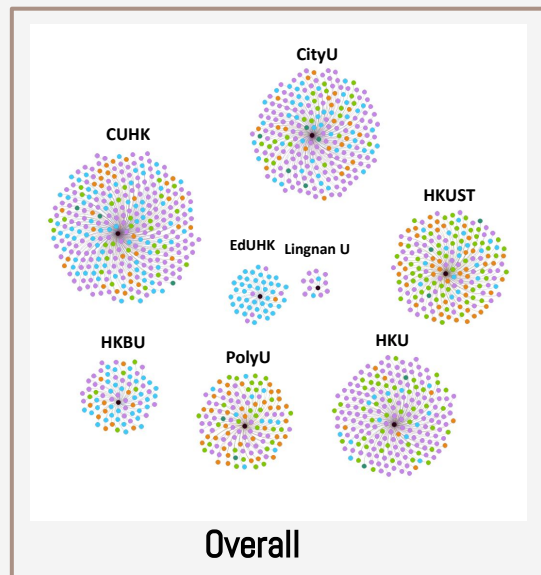
- **Blue:** no IELTS score
- **Purple:** less than 6.5
- **Green:** greater than 6.5

Insights

- CUHK has particularly strict requirements for IELTS scores.
- After COVID-19, universities in HK have reduced the requirements for IELTS.
- After COVID-19, students who completed their undergraduate degrees in HK or abroad is increasing. (especially HKU/HKUST)

5.4 The Impact of COVID-19

Comparison dimension: Admission major category



Node color interpretation

- **Blue**: Social Science
- **Orange**: Science
- **Grass green**: Engineering
- **Purple**: Business
- **Dark green**: Medicine

Insights

- The major settings in HKUST and PolyU are more balanced.
- After COVID-19, business has become the most popular major. (take HKU/CUHK/CityU for examples)

6. Applications

- If applicants want to apply for Postgraduate in CUHK and HKU, they should have a significantly higher GPA and language test scores
- The rumor that “City U is a guaranteed offer” is actually true to some applicants
- For applicants who may want to switch majors after enrollment, choosing universities that have diverse majors may makes their lives easier.

6. Limitations

- Some top-school candidates may be out of our sight.
- Data are geographically concentrated in Mainland China.
- We might oversimplified data of candidates having multiple degrees.
- Our insights might be restrained only to people who were admitted.
- Applicants having multiple majors are recorded as single-major applicants.

A photograph of a modern building facade with a large, bold, black 'THANKS' sign. The building has a textured, light-colored concrete or stone surface. Below the sign, there are several dark, rectangular openings, possibly windows or doors, framed by vertical concrete pillars. The overall style is minimalist and architectural.

THANKS

Does anyone have any questions?

Presented by 7004 A - Group 6

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