1222summary_caseI

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NYC opioid users' clustering result:

1. Case I.1: Consider all person(ever injected, never injected). Adding variables, ever injected POs, ever injected other drugs, PO injection years, other drug injection years.

Result for Case I:

Network Summary:

1. Nodes:

cluster	Freq
1	195
2	143
3	201

2. Edges:

parent	child	Freq
1	1	134
2	1	37
3	1	21
1	2	25
2	2	61
3	2	46
1	3	8
2	3	37
3	3	146

2.2 Count number of each edge pair types. (ignore parent, child status OR treate parent1-child2 and parent2-child1 as the same edge pair).

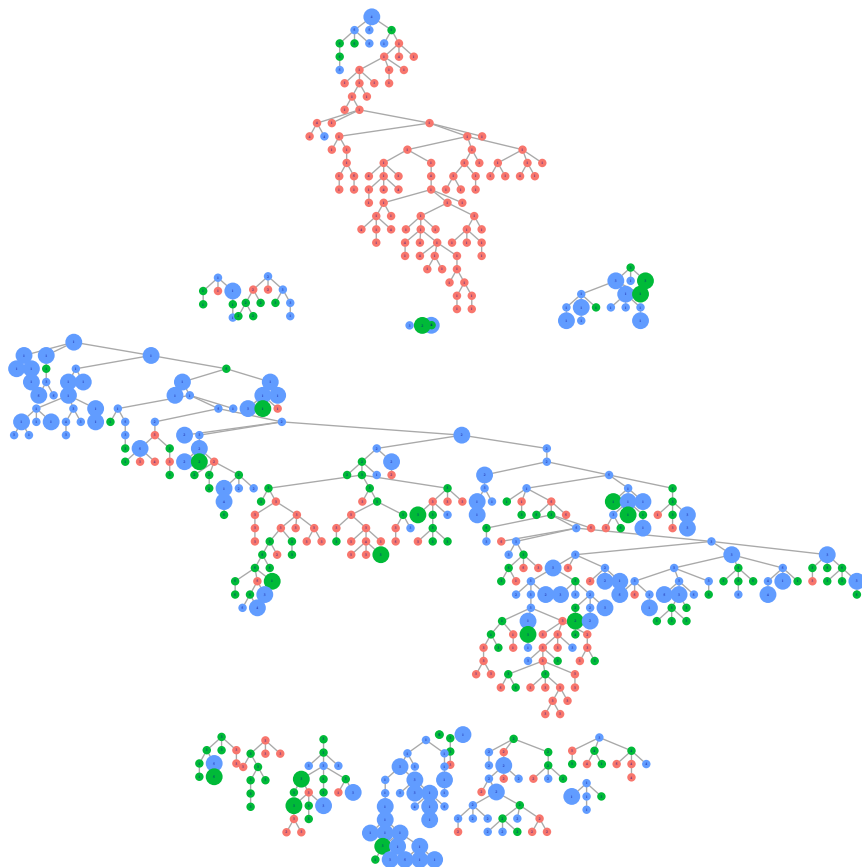|	leastRisk_count	midRisk_count	mostRisk_count	leastRisk_prop	midRisk_prop	mostRisk_prop
leastRisk	134	62	29	0.60	0.28	0.13
middleRisk	62	61	83	0.30	0.30	0.40
mostRisk	29	83	146	0.11	0.32	0.57

2.3 Count number of HCV positive participants for each edge pair type.

	leastRisk_count	midRisk_count	mostRisk_count	leastRisk_prop	midRisk_prop	mostRisk_prop
leastRisk	0	5	10	0.00	0.33	0.67
middleRisk	5	6	46	0.09	0.11	0.81
mostRisk	10	46	129	0.05	0.25	0.70

2.4 This table represents (amount of HCV positive)/(number of person) for each edge pair type. For example, in 2.2 we got 146 mostRisk-mostRisk pairs, this tells us this type of pair contains 146*2 = 292 participants. In 2.3, we have 129 participants are HCV positive among the 292 participants in the mostRisk-mostRisk pairs. Then, rate of HCV positive = 129/292 = 0.44, 44% participants in the mostRisk-mostRisk pair are HCV positive. Similarly, we can interpret other numbers in the table.

1	2	3
0.00	0.04	0.17
0.04	0.05	0.28
0.17	0.28	0.44

- 1=Manhatan
- 2=StateIsland
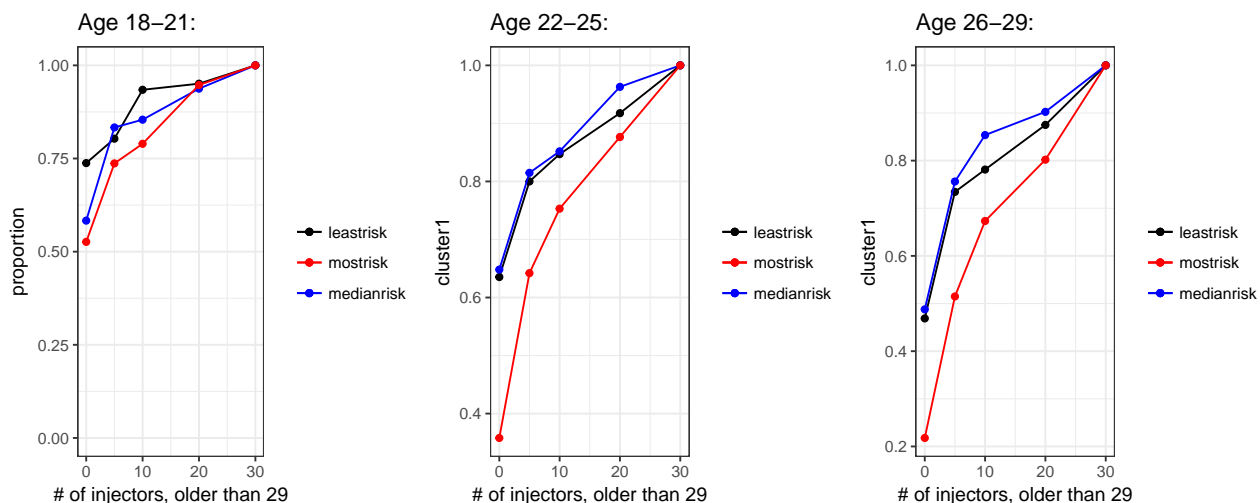- 3=Brooklyn
- 4=Bronx
- 5=Queens

- HCV0
- HCV1
- Cluster1
- Cluster2
- Cluster3

Variables Summary:

1. HCV (wasn't included in the clustering model)

	freq,HCV=0	freq,HCV=1	percent,HCV=0	percentfrq_HCV=1
cluster1	195	0	1.0000000	0.0000000
cluster2	127	16	0.8881119	0.1118881
cluster3	112	89	0.5572139	0.4427861

2. Cluster vs Age vs PO users older than 29:

Age 18–21: / Age 22–25: / Age 26–29:

	freq.0	freq.1-5	freq.6-10	freq.11-20	freq.20+	perc.0	perc.1-5	perc.6-10	perc.11-20	prec.20+
age18-21	45	4	8	1	3	0.74	0.07	0.13	0.02	0.05
age22-25	54	14	4	6	7	0.64	0.16	0.05	0.07	0.08
age25+	19	15	3	5	7	0.39	0.31	0.06	0.10	0.14

	freq.0	freq.1-5	freq.6-10	freq.11-20	freq.20+	perc.0	perc.1-5	perc.6-10	perc.11-20	prec.20+
age18-21	28	12	1	4	3	0.58	0.25	0.02	0.08	0.06
age22-25	35	9	2	6	2	0.65	0.17	0.04	0.11	0.04
age25+	20	11	4	2	4	0.49	0.27	0.10	0.05	0.10

	freq.0	freq.1-5	freq.6-10	freq.11-20	freq.20+	perc.0	perc.1-5	perc.6-10	perc.11-20	prec.20+
age18-21	10	4	1	3	1	0.53	0.21	0.05	0.16	0.05
age22-25	29	23	9	10	10	0.36	0.28	0.11	0.12	0.12
age25+	22	30	16	13	20	0.22	0.30	0.16	0.13	0.20

Variables used in the clustering model:

1. Soc_3: Age

	mean.age
cluster1	23.05641
cluster2	23.47552
cluster3	25.25871

2. Soc_4: Do you consider yourself to be Hispanic or Latino?

	freq.HorL=0	freq.HorL=1	perc.HorL=0	perc.HorL=1
cluster1	103	92	0.53	0.47
cluster2	117	26	0.82	0.18
cluster3	165	36	0.82	0.18

3. Soc_6: Borough

	freq.M	freq.SI	feq.Brook	freq.Bronx	freq.Q	perc.M	perc.SI	perc.Brook	perc.Bronx	perc.Q
cluster1	87	16	63	18	11	0.45	0.08	0.32	0.09	0.06
cluster2	23	21	71	4	24	0.16	0.15	0.50	0.03	0.17
cluster3	84	35	52	9	21	0.42	0.17	0.26	0.04	0.10

4. Soc_10: Gender

	freq.M	freq.F	perc.M	perc.F
cluster1	142	53	0.73	0.27
cluster2	89	54	0.62	0.38
cluster3	135	66	0.67	0.33

5. Soc_13: Currently homeless?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	183	12	0.94	0.06
cluster2	114	29	0.80	0.20
cluster3	104	97	0.52	0.48

6. Soc_19: Highest education

	freq.High-	freq.High	freq.College-	freq.College+	perc.High-	perc.High	perc.College-	perc.College+
cluster1	43	92	54	6	0.22	0.47	0.28	0.03
cluster2	18	68	47	10	0.13	0.48	0.33	0.07
cluster3	47	64	80	10	0.23	0.32	0.40	0.05

7. Soc_20: Currently a student?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	151	44	0.77	0.23
cluster2	118	25	0.83	0.17
cluster3	188	13	0.94	0.06

8. Soc_21: Employment status

	freq.Full	freq.Part	freq.OddJobs	freq.Disabled	freq.Unempoyed	freq.Other	perc.Full	perc.Part	perc.OddJobs	perc.Disabled	perc.Unempoyed	perc.Other
cluster1	20	26	31	2	104	12	0.10	0.13	0.16	0.01	0.53	0.06
cluster2	17	14	30	1	74	7	0.12	0.10	0.21	0.01	0.52	0.05
cluster3	13	4	32	12	127	13	0.06	0.02	0.16	0.06	0.63	0.06

9. Soc_22: Socioeconomic class while growing up

	freq.Affluent	freq.UppMid	freq.Mid	freq.LowMid	freq.Poor	perc.Affluent	perc.UppMid	perc.Mid	perc.LowMid	perc.Poor
cluster1	2	13	97	59	24	0.01	0.07	0.50	0.30	0.12
cluster2	5	14	70	41	13	0.03	0.10	0.49	0.29	0.09
cluster3	5	36	71	62	27	0.02	0.18	0.35	0.31	0.13

10. Injection 2: last 30 days' Injection risk behavior

- InjRisk behavior = 0: no injected
- InjRisk behavior = 1: Injected, but didn't receivie syrings from others or give to others
- InjRisk behavior = 2: Injected, didn't receive, but gave syrings to others
- InjRisk behavior = 3: Injected, didn't give, but received syrings from others
- InjRisk behavior = 4: Injected, received and gave syrings to others

	freq.0	freq.1	freq.2	freq.3	freq.4	perc.0	perc.1	perc.2	perc.3	prec.4
cluster1	194	0	1	0	0	0.99	0.00	0.01	0.00	0.00
cluster2	16	81	15	5	26	0.11	0.57	0.10	0.03	0.18
cluster3	24	100	31	15	31	0.12	0.50	0.15	0.07	0.15

11. Inj_POs: ever injected PO or not?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	195	0	1.00	0.00
cluster2	106	37	0.74	0.26
cluster3	29	172	0.14	0.86

12. Inj_Others: ever injected other drugs, cocaine, heroine, etc?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	188	7	0.96	0.04
cluster2	2	141	0.01	0.99
cluster3	1	200	0.00	1.00

13. InjPO_years: POs injection years?

	mean.InjPO_years
cluster1	0.0000000
cluster2	0.5174825
cluster3	7.0696517

14. InjOther_years: Other drugs injection year?

	mean.InjOther_years
cluster1	0.0358974
cluster2	2.7902098
cluster3	7.3034826

	freq.0	freq.[1]	freq.[2]	freq.[3]	freq.[4]	freq.[5]	freq.[6-10]	freq.[10-30]	perc.0	perc.[1]	perc.[2]	perc.[3]	perc.[4]	perc.[5]	perc.[6-10]	perc.[10-30]
cluster1	188	7	0	0	0	0	0	0	0.96	0.04	0.00	0.00	0.00	0.00	0.00	0.00
cluster2	2	30	34	38	20	13	6	0	0.01	0.21	0.24	0.27	0.14	0.09	0.04	0.00
cluster3	1	4	7	15	13	23	103	35	0.00	0.02	0.03	0.07	0.06	0.11	0.51	0.17

15. NetChar_4: how many are older than 29 among people u know that use POs and live in NYC?

- NetChar4 = 0: 0
- NetChar4 = 1: 1-5
- NetChar4 = 2: 6-10
- NetChar4 = 3: 11-20
- NetChar4 = 4: 20+

	freq.0	freq.1	freq.2	freq.3	freq.4	perc.0	perc.1	perc.2	perc.3	prec.4
cluster1	118	33	15	12	17	0.61	0.17	0.08	0.06	0.09
cluster2	83	32	7	12	9	0.58	0.22	0.05	0.08	0.06
cluster3	61	57	26	26	31	0.30	0.28	0.13	0.13	0.15

16. NetChar_22: how many inject drugs among people u know that use POs and live in NYC?

- NetChar22 = 0: 0
- NetChar22 = 1: 1-5
- NetChar22 = 2: 6-10
- NetChar22 = 3: 11-20
- NetChar22 = 4: 20+

	freq.0	freq.1	freq.2	freq.3	freq.4	perc.0	perc.1	perc.2	perc.3	prec.4
cluster1	98	55	11	10	21	0.50	0.28	0.06	0.05	0.11
cluster2	19	43	30	22	29	0.13	0.30	0.21	0.15	0.20
cluster3	18	35	33	36	79	0.09	0.17	0.16	0.18	0.39

17. Bing_1: how many days did u binge on drugs in last 30 days?

- Binge = 0: 0
- Binge = 1: 1-5
- Binge = 2: 6-10
- Binge = 3: 11-20
- Binge = 4: 20+

	freq.0	freq.1	freq.2	freq.3	freq.4	perc.0	perc.1	perc.2	perc.3	prec.4
cluster1	74	73	22	13	13	0.38	0.37	0.11	0.07	0.07
cluster2	40	62	28	11	2	0.28	0.43	0.20	0.08	0.01
cluster3	54	95	28	15	9	0.27	0.47	0.14	0.07	0.04

18. Overdose_8: Ever overdosed?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	155	40	0.79	0.21
cluster2	87	56	0.61	0.39
cluster3	62	139	0.31	0.69

19. AttOverdose_5: Do u currently have Narcan/Naloxone?

	freq.No	freq.Yes	perc.No	perc.Yes
cluster1	186	9	0.95	0.05
cluster2	98	45	0.69	0.31
cluster3	99	102	0.49	0.51

20. LifetimeSex_4: How many, if any, people gave u drugs or money to have sex with them?

- changed to 0, 1

	freq.0	freq.1	perc.0	perc.1
cluster1	178	17	0.91	0.09
cluster2	115	28	0.80	0.20
cluster3	130	71	0.65	0.35

21. Legal_2: how many arrested are drug related?

- Legal2 = 0: 0
- Legal2 = 1: 1
- Legal2 = 2: 2
- Legal2 = 3: 3-5
- Legal2 = 4: 5+

	freq.0	freq.1	freq.2	freq.3	freq.4	perc.0	perc.1	perc.2	perc.3	prec.4
cluster1	84	29	18	33	31	0.43	0.15	0.09	0.17	0.16
cluster2	60	23	29	22	9	0.42	0.16	0.20	0.15	0.06
cluster3	41	37	29	41	53	0.20	0.18	0.14	0.20	0.26