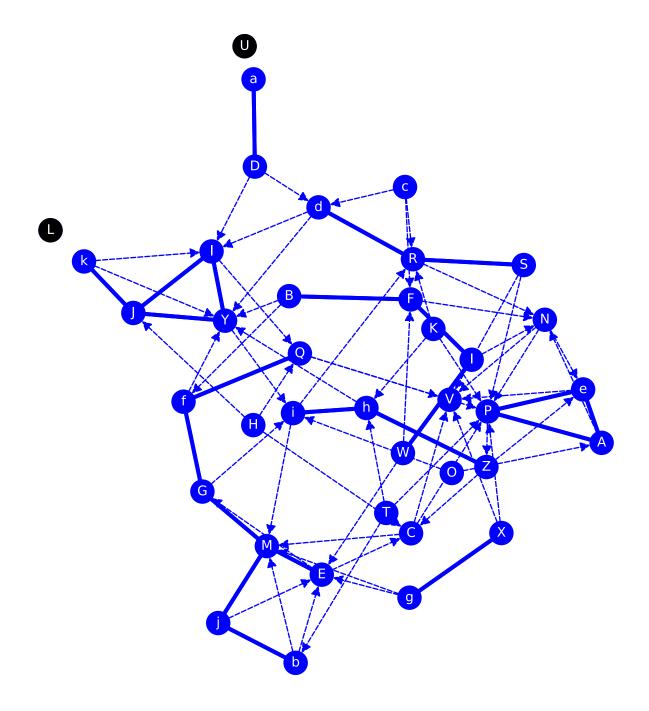


GROUP 1 - DEMO 3 NETWORK GRAPH

A. Whom would you choose to spend a free outing with?

NN 38, NE 102, ND 7%, NC 17%, NT 28%, NR 43%





GROUP 1 - DEMO 3 RAW SCORES

A. Whom would you choose to spend a free outing with?

ID	CHOICES	IC	PR	ВТ	CL	HU	ND
A	N, P, e	0.08	0.04	0.01	0.30	0.05	
В	F, Y, f	0.03	0.01	0.02	0.06	0.02	
С	P, M, V	0.08	0.03	0.05	0.28	0.08	
D	a, d, l	0.03	0.01	0.02	0.03	0.01	
Е	C, M, G	0.14	0.04	0.05	0.28	0.02	
F	N, B, I	0.11	0.02	0.02	0.11	0.01	
G	f, M, i	0.08	0.04	0.08	0.29	0.02	
Н	C, J, Q	0.00	0.01	0.00	0.00	0.01	←
I	N, F, W	0.05	0.01	0.01	0.07	0.01	
J	Y, I, k	0.11	0.04	0.03	0.28	0.01	
K	P, R, h	0.00	0.01	0.00	0.00	0.06	←
L	-	0.00	0.01	0.00	0.00	0.00	\rightleftharpoons
М	E, G, j	0.19	0.06	0.11	0.35	0.01	
N	P, e, V	0.11	0.03	0.03	0.32	0.08	
0	A, i	0.00	0.01	0.00	0.00	0.01	←
Р	A, e, Z	0.24	0.07	0.12	0.42	0.02	
Q	P, f, V	0.08	0.03	0.05	0.27	0.07	
R	N, d, S	0.14	0.03	80.0	0.29	0.01	
S	P, V, R	0.03	0.01	0.01	0.22	80.0	
T	P, h, b	0.00	0.01	0.00	0.00	0.05	←
U	-	0.00	0.01	0.00	0.00	0.00	\rightleftharpoons
V	-	0.16	0.05	0.00	0.40	0.00	\rightarrow
W	F, E, I	0.03	0.01	0.01	0.05	0.01	
X	P, V, g	0.03	0.01	0.00	0.03	0.07	
Υ	I, i, J	0.19	0.06	0.13	0.37	0.01	
Z	e, C, h	0.05	0.03	0.08	0.31	0.03	
а	D	0.03	0.01	0.00	0.03	0.00	
b	M, E, j	0.05	0.01	0.00	0.21	0.02	
С	F, d, R	0.00	0.01	0.00	0.00	0.02	←
d	Y, I, R	0.08	0.02	0.03	0.23	0.02	
е	A, P, V	0.11	0.06	0.01	0.34	0.07	
f	Y, G, Q	0.08	0.03	0.05	0.28	0.01	
g	M, E, X	0.03	0.01	0.01	0.03	0.02	
h	Y, i, Z	0.11	0.03	0.07	0.31	0.01	
i	M, R, h	0.11	0.05	0.14	0.35	0.04	
j	M, E, b	0.05	0.03	0.02	0.26	0.02	
k	Y, I, J	0.03	0.02	0.00	0.22	0.01	
I	Y, J, Q	0.14	0.05	0.05	0.29	0.01	

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub ND No In-Degree (\leftarrow) No Out-Degree (\rightarrow) No In or Out-Degree (\rightleftharpoons)



GROUP 1 - DEMO 3 RANK SCORES

A. Whom would you choose to spend a free outing with?

ID	CHOICES	IC	PR	ВТ	CL	HU	ND
A	N, P, e	6	10	21	10	9	
В	F, Y, f	8	27	19	24	20	
С	P, M, V	6	18	12	13	1	
D	a, d, l	8	25	20	26	33	
E	C, M, G	4	11	11	13	17	
F	N, B, I	5	22	17	22	34	
G	f, M, i	6	9	6	12	12	
Н	C, J, Q	9	31	29	27	31	←
1	N, F, W	7	26	25	23	30	
J	Y, I, k	5	8	15	14	23	
K	P, R, h	9	31	29	27	7	←
L	-	9	31	29	27	36	\rightleftarrows
M	E, G, j	2	2	4	4	25	
N	P, e, V	5	12	16	7	3	
Ο	A, i	9	31	29	27	24	←
Р	A, e, Z	1	1	3	1	19	
Q	P, f, V	6	16	13	16	4	
R	N, d, S	4	14	7	11	32	
S	P, V, R	8	24	26	19	2	
T	P, h, b	9	31	29	27	8	←
U	-	9	31	29	27	36	\rightleftharpoons
V	-	3	5	29	2	36	\rightarrow
W	F, E, I	8	29	22	25	27	
X	P, V, g	8	30	27	26	6	
Υ	l, i, J	2	3	2	3	29	
Z	e, C, h	7	13	5	8	11	
а	D	8	28	29	26	35	
b	M, E, j	7	23	28	21	15	
С	F, d, R	9	31	29	27	18	←
d	Y, I, R	6	20	14	18	14	
е	A, P, V	5	4	23	6	5	
f	Y, G, Q	6	17	10	15	26	
g	M, E, X	8	30	24	26	16	
h	Y, i, Z	5	15	8	9	22	
i	M, R, h	5	7	1	5	10	
j	M, E, b	7	19	18	17	13	
k	Y, I, J	8	21	29	20	21	
I	Y, J, Q	4	6	9	12	28	

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub ND No In-Degree (←) No Out-Degree (→) No In or Out-Degree (⇄) Very low Low High Very high



GROUP 1 - DEMO 3

NODES ORDERED BY RANK SCORES

A. Whom would you choose to spend a free outing with?

RANK	IC	RANK	PR	RANK	ВТ	RANK	CL	RANK	HU
1	Р	1	P	1	i	1	Р	1	С
2	М	2	М	2	Υ	2	V	2	S
2	Υ	3	Υ	3	Р	3	Υ	3	N
3	V	4	е	4	М	4	М	4	Q
4	Е	5	V	5	Z	5	i	5	е
4	R	6	1	6	G	6	е	6	Χ
4	1	7	i	7	R	7	Ν	7	K
5	F	8	J	8	h	8	Z	8	Т
5	J	9	G	9	l	9	h	9	Α
5	N	10	Α	10	f	10	Α	10	i
5	е	11	Е	11	Е	11	R	11	Z
5	h	12	N	12	С	12	G	12	G
5	i	13	Z	13	Q	12	I	13	j
6	Α	14	R	14	d	13	С	14	d
6	С	15	h	15	J	13	Е	15	b
6	G	16	Q	16	N	14	J	16	g
6	Q	17	f	17	F	15	f	17	Е
6	d	18	С	18	j	16	Q	18	С
6	f	19	j	19	В	17	j	19	Р
7	I	20	d	20	D	18	d	20	В
7	Z	21	k	21	Α	19	S	21	k
7	b	22	F	22	W	20	k	22	h
7	j	23	b	23	е	21	b	23	J
8	В	24	S	24	g	22	F	24	0
8	D	25	D	25	I	23	I	25	М
8	S	26	I	26	S	24	В	26	f
8	W	27	В	27	Χ	25	W	27	W
8	Χ	28	а	28	b	26	D	28	1
8	а	29	W	29	Н	26	Χ	29	Υ
8	g	30	Χ	29	K	26	а	30	1
8	k	30	g	29	L	26	g	31	Н
9	Н	31	Н	29	0	27	Н	32	R
9	K	31	K	29	Т	27	K	33	D
9	L	31	L	29	U	27	L	34	F
9	0	31	Ο	29	V	27	0	35	а
9	T	31	Т	29	а	27	Т	36	L
9	U	31	U	29	С	27	U	36	U
9	С	31	С	29	k	27	С	36	V

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub



GROUP 1 - DEMO 3 TYPES OF EDGES

A. Whom would you choose to spend a free outing with?

Type I - Non reciprocal edges

 $X \to Y$ in network $A \cdot not \ Y \to X$ in network A

ΕG FΝ HC ΗJ ANВΥ Βf СМ CP CV D d DΙ ΕC Gί ΗQ ΙN ΚP KRΚh Τb ΝP ΝV ОА O i PZQΡ QV RNSP S V ΤP Τh WΕ WFΧP Nе gΕ i M ZC Ζe bΕ b M сF c R c d d Y dΙ e V g M hΥ i R įΕ

Type II - Reciprocal edges

 $X \to Y$ in network $A \cdot Y \to X$ in network A

BFFΙ $\mathsf{G}\,\mathsf{M}$ G f ١w JΥ Jk JI) M j Ре Q f RS R d Ζh Ае Dа $\mathsf{E}\,\mathsf{M}$ bj h i

Type III - Half symmetrical edges

 $X \to Y$ in network $A \cdot X \to Y$ in network B

QVQf

Type IV - Reversed half symmetrical edges

 $X \to Y$ in network $A \cdot Y \to X$ in network B

fQ

Type V - Full symmetrical edges

 $X \to Y,\, Y \to X$ in network $A \cdot X \to Y,\, Y \to X$ in network B

No edge of this type



GROUP 1 - DEMO 3 NETWORK COMPONENTS

A. Whom would you choose to spend a free outing with?

Connected components

36 A·B·C·D·E·F·G·H·I·J·K·M·N·O·P·Q·R·S·T·V·W·X·Y·Z·a·b·c·d·e·f·g·h·i·j·k·l

22 A·C·E·G·J·M·N·P·Q·R·S·Y·Z·b·d·e·f·h·i·j·k·l) [4 A·N·P·e] (J·Y·k·l) (B·F·I·W

 $oxed{f E}\cdot{\sf M}\cdot{\sf b}\cdot{\sf j}$ $oxed{f 3}$ $oxed{f C}\cdot{\sf E}\cdot{\sf M}$ $oxed{f E}\cdot{\sf M}\cdot{\sf g}$ $oxed{f G}\cdot{\sf M}\cdot{\sf i}$ $oxed{f F}\cdot{\sf I}\cdot{\sf W}$ $oxed{f C}\cdot{\sf P}\cdot{\sf Z}$ $oxed{f B}\cdot{\sf Y}\cdot{\sf f}$ $oxed{f N}\cdot{\sf V}\cdot{\sf e}$ $oxed{f Y}\cdot{\sf h}\cdot{\sf i}$

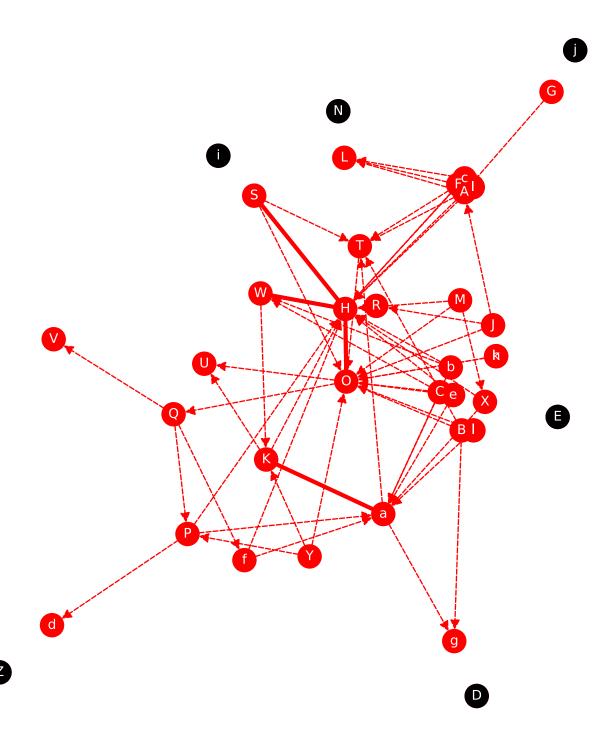
 $oxed{\mathsf{E}\cdot\mathsf{G}\cdot\mathsf{M}}$ $oxed{\mathsf{D}\cdot\mathsf{d}\cdot\mathsf{I}}$ $oxed{\mathsf{R}\cdot\mathsf{c}\cdot\mathsf{d}}$ $oxed{\mathsf{Y}\cdot\mathsf{d}\cdot\mathsf{I}}$ $oxed{\mathsf{F}\cdot\mathsf{I}\cdot\mathsf{N}}$ $oxed{\mathsf{P}\cdot\mathsf{Z}\cdot\mathsf{e}}$



GROUP 1 - DEMO 3 NETWORK GRAPH

B. Whom would you not choose to spend a free outing with?

NN 38, NE 63, ND 4%, NC 31%, NT 12%, NR 13%





GROUP 1 - DEMO 3 RAW SCORES

B. Whom would you not choose to spend a free outing with?

ID	CHOICES	IC	PR	ВТ	CL	HU	ND
A	H, L, T	0.05	0.02	0.01	0.05	0.05	
В	T, O, g	0.00	0.01	0.00	0.00	0.03	←
С	O, W, a	0.00	0.01	0.00	0.00	0.05	←
D	-	0.00	0.01	0.00	0.00	0.00	\rightleftharpoons
E	-	0.00	0.01	0.00	0.00	0.00	\rightleftharpoons
F	H, L, T	0.00	0.01	0.00	0.00	0.05	←
G	Α	0.00	0.01	0.00	0.00	0.00	←
Н	O, W, S	0.38	0.15	0.10	0.47	0.03	
I	Н	0.00	0.01	0.00	0.00	0.03	←
J	A, O, R	0.00	0.01	0.00	0.00	0.02	←
K	H, a, U	0.08	0.05	0.02	0.25	0.06	
L	-	0.08	0.02	0.00	0.10	0.00	\rightarrow
M	H, O, X	0.00	0.01	0.00	0.00	0.06	←
N	-	0.00	0.01	0.00	0.00	0.00	\rightleftharpoons
Ο	H, U, Q	0.32	0.14	0.13	0.42	0.04	
Р	H, a, d	0.05	0.02	0.03	0.21	0.06	
Q	P, V, f	0.03	0.05	0.08	0.27	0.00	
R	-	0.03	0.01	0.00	0.03	0.00	\rightarrow
S	H, T, O	0.03	0.05	0.01	0.28	0.06	
Т	0	0.14	0.05	0.01	0.30	0.02	
U	-	0.05	0.06	0.00	0.29	0.00	\rightarrow
V	-	0.03	0.02	0.00	0.21	0.00	\rightarrow
W	H, K	0.08	0.06	0.02	0.30	0.04	
X	H, a	0.03	0.01	0.00	0.03	0.05	
Υ	O, K, P	0.00	0.01	0.00	0.00	0.03	←
Z	-	0.00	0.01	0.00	0.00	0.00	\rightleftarrows
а	T, g, K	0.22	0.05	0.03	0.25	0.02	
b	H, W, a	0.00	0.01	0.00	0.00	0.06	←
С	H, L	0.00	0.01	0.00	0.00	0.04	←
d	-	0.03	0.02	0.00	0.17	0.00	\rightarrow
е	H, O, a	0.00	0.01	0.00	0.00	0.07	←
f	H, a	0.03	0.02	0.01	0.20	0.05	
g	-	0.05	0.03	0.00	0.21	0.00	\rightarrow
h	0	0.00	0.01	0.00	0.00	0.02	←
i	-	0.00	0.01	0.00	0.00	0.00	\rightleftarrows
j	-	0.00	0.01	0.00	0.00	0.00	\rightleftarrows
k	0	0.00	0.01	0.00	0.00	0.02	←
I	O, a	0.00	0.01	0.00	0.00	0.04	←

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub ND No In-Degree (\leftarrow) No Out-Degree (\rightarrow) No In or Out-Degree (\rightleftharpoons)



GROUP 1 - DEMO 3 RANK SCORES

B. Whom would you not choose to spend a free outing with?

ID	CHOICES	IC	PR	ВТ	CL	HU	ND
A	H, L, T	6	14	8	15	8	
В	T, O, g	8	17	13	17	15	←
С	O, W, a	8	17	13	17	9	←
D	-	8	17	13	17	23	⇄
Е	-	8	17	13	17	23	\rightleftharpoons
F	H, L, T	8	17	13	17	8	←
G	Α	8	17	13	17	22	←
Н	O, W, S	1	1	2	1	16	
I	Н	8	17	13	17	14	←
J	A, O, R	8	17	13	17	18	←
K	H, a, U	5	7	7	8	4	
L	-	5	13	13	14	23	\rightarrow
M	H, O, X	8	17	13	17	5	←
N	-	8	17	13	17	23	⇄
Ο	H, U, Q	2	2	1	2	12	
Р	H, a, d	6	11	5	10	6	
Q	P, V, f	7	9	3	7	21	
R	-	7	16	13	16	23	\rightarrow
S	Н, Т, О	7	6	11	6	2	
T	Ο	4	8	9	3	19	
U	-	6	3	13	5	23	\rightarrow
V	-	7	12	13	9	23	\rightarrow
W	H, K	5	4	6	4	13	
Χ	Н, а	7	16	12	16	7	
Υ	O, K, P	8	17	13	17	17	←
Z	-	8	17	13	17	23	⇄
а	T, g, K	3	5	4	8	20	
b	H, W, a	8	17	13	17	3	←
С	H, L	8	17	13	17	11	←
d	-	7	15	13	13	23	\rightarrow
е	H, O, a	8	17	13	17	1	←
f	Н, а	7	12	10	12	7	
g	-	6	10	13	11	23	\rightarrow
h	0	8	17	13	17	19	←
i	-	8	17	13	17	23	⇄
j	-	8	17	13	17	23	⇄
k	0	8	17	13	17	19	←
1	O, a	8	17	13	17	10	←

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub ND No In-Degree (←) No Out-Degree (→) No In or Out-Degree (⇄) Very low High Very high



GROUP 1 - DEMO 3

NODES ORDERED BY RANK SCORES

B. Whom would you not choose to spend a free outing with?

RANK	IC	RANK	PR	RANK	ВТ	RANK	CL	RANK	HU
1	Н	1	H	1	0	1	Н	1	е
2	0	2	0	2	Н	2	0	2	S
3	а	3	U	3	Q	3	Т	3	b
4	Т	4	W	4	а	4	W	4	K
5	K	5	а	5	Р	5	U	5	М
5	L	6	S	6	W	6	S	6	Р
5	W	7	K	7	K	7	Q	7	Χ
6	Α	8	Т	8	Α	8	K	7	f
6	Р	9	Q	9	Т	8	а	8	Α
6	U	10	g	10	f	9	V	8	F
6	g	11	Р	11	S	10	Р	9	С
7	Q	12	V	12	Χ	11	g	10	1
7	R	12	f	13	В	12	f	11	С
7	S	13	L	13	С	13	d	12	0
7	V	14	Α	13	D	14	L	13	W
7	Χ	15	d	13	Е	15	Α	14	1
7	d	16	R	13	F	16	R	15	В
7	f	16	Χ	13	G	16	Χ	16	Н
8	В	17	В	13	I	17	В	17	Υ
8	С	17	С	13	J	17	С	18	J
8	D	17	D	13	L	17	D	19	T
8	Е	17	Е	13	M	17	Е	19	h
8	F	17	F	13	N	17	F	19	k
8	G	17	G	13	R	17	G	20	а
8	I	17	l	13	U	17	I	21	Q
8	J	17	J	13	V	17	J	22	G
8	М	17	M	13	Υ	17	M	23	D
8	N	17	N	13	Z	17	N	23	Е
8	Υ	17	Υ	13	b	17	Υ	23	L
8	Z	17	Z	13	С	17	Z	23	N
8	b	17	b	13	d	17	b	23	R
8	С	17	С	13	е	17	С	23	U
8	е	17	е	13	g	17	е	23	V
8	h	17	h	13	h	17	h	23	Z
8	i	17	i	13	i	17	i	23	d
8	j	17	j	13	j	17	j	23	g
8	k	17	k	13	k	17	k	23	i
8	I	17	1	13	1	17	I	23	j

IC In-Degree PR PageRank BT Betweenness CL Closenness HU Hub



GROUP 1 - DEMO 3 TYPES OF EDGES

B. Whom would you not choose to spend a free outing with?

Type I - Non reciprocal edges

 $X \to Y$ in network $B \cdot not \ Y \to X$ in network B

[FH] JA FL FT GA ΑН ΑL Βg CO CW Ca $[\mathsf{IH}]$ KU ΜН ΜО ΟQ OU [PH] Pa Ρd QΡ QV Q f SO ST TO WKMXΥO ΥP b W 10 аΤ bΗ b a сΗ сL е Н e O e a fΗ f a hΟ kΟ a g

Type II - Reciprocal edges

 $X \to Y$ in network $B \cdot Y \to X$ in network B

HO HS HW Ka

Type III - Half symmetrical edges

 $X \to Y$ in network $B \, \cdot \, X \to Y$ in network A

QV Qf

Type IV - Reversed half symmetrical edges

 $X \to Y$ in network $B \cdot Y \to X$ in network A

Qf

Type V - Full symmetrical edges

 $X \to Y,\, Y \to X$ in network $B \cdot X \to Y,\, Y \to X$ in network A

No edge of this type



GROUP 1 - DEMO 3 NETWORK COMPONENTS

B. Whom would you not choose to spend a free outing with?

Connected components

32 A·B·C·F·G·H·I·J·K·L·M·O·P·Q·R·S·T·U·V·W·X·Y·a·b·c·d·e·f·g·h·k·I

10 H·K·O·P·Q·S·T·W·a·f 3 B·O·T H·K·W H·O·e O·S·T H·M·O H·W·b

 $\left(\begin{array}{c} \mathsf{H} \cdot \mathsf{M} \cdot \mathsf{X} \end{array} \right) \left(\begin{array}{c} \mathsf{H} \cdot \mathsf{O} \cdot \mathsf{S} \end{array} \right)$



GROUP 1 - DEMO 3 SOCIOGRAM

ID	RP	RJ	GP	GJ	MP	MR	BL	OR	IM	Al	II	ST
Α	3	2	3	3	2	0	1	0	5	97	104	controversial
В	1	0	3	3	1	0	1	0	1	97	93	neglected
С	3	0	3	3	0	0	3	0	3	101	97	-
D	1	0	3	0	1	0	1	3	1	103	93	neglected
Е	5	0	3	0	1	0	5	3	5	111	107	-
F	4	0	3	3	2	0	4	0	4	103	107	-
G	3	0	3	1	2	0	3	2	3	105	104	-
Н	0	14	3	3	0	3	-14	0	14	69	86	rejected
I	2	0	3	1	2	0	2	2	2	103	100	underrated
J	4	0	3	3	3	0	4	0	4	103	110	-
K	0	3	3	3	0	1	-3	0	3	90	86	-
L	0	3	0	0	0	0	-3	0	3	90	86	-
M	7	0	3	3	3	0	7	0	7	109	121	appreciated
N	4	0	3	0	0	0	4	3	4	109	100	-
0	0	12	2	3	0	1	-12	-1	12	70	86	rejected
Р	9	2	3	3	2	0	7	0	11	109	124	popular
Q	3	1	3	3	1	0	2	0	4	99	100	-
R	5	1	3	0	2	0	4	3	6	109	110	-
S	1	1	3	3	1	1	0	0	2	96	93	underrated
Т	0	5	3	1	0	0	-5	2	5	90	86	rejected
U	0	2	0	0	0	0	-2	0	2	92	86	underrated
V	6	1	0	0	0	0	5	0	7	105	107	-
W	1	3	3	2	1	1	-2	1	4	94	93	-
Χ	1	1	3	2	1	0	0	1	2	97	93	underrated
Υ	7	0	3	3	2	0	7	0	7	109	117	appreciated
Z	2	0	3	0	1	0	2	3	2	105	97	underrated
а	1	8	1	3	1	1	-7	-2	9	78	93	rejected
b	2	0	3	3	1	0	2	0	2	99	97	underrated
С	0	0	3	2	0	0	0	1	0	97	86	neglected
d	3	1	3	0	1	0	2	3	4	105	100	-
е	4	0	3	3	2	0	4	0	4	103	107	-
f	3	1	3	2	2	0	2	1	4	101	104	-
g	1	2	3	0	1	0	-1	3	3	99	93	-
h	4	0	3	1	2	0	4	2	4	107	107	-
i	4	0	3	0	1	0	4	3	4	109	104	-
j	2	0	3	0	2	0	2	3	2	105	100	underrated
k	1	0	3	1	1	0	1	2	1	101	93	neglected
1	5	0	3	2	2	0	5	1	5	107	110	-

RP Received preferences RJ Received rejections GP Given preferences GJ Given rejections MP Mutual preferences MJ Mutual rejections OR Orientation IM Impact MP Balance AI Affiliation coefficient II Influence coefficient ST Status in the group Very low Low High



GROUP 1 - DEMO 3 SOCIOGRAM

Type I cohesion index : 43.14% , Type II cohesion index : 0.58 Type I conflitct index : 12.70% , Type II conflitct index : 0.11

ID	Count	Median	Mean	Std	Min	P25	P50	P75	Max
Received preferences	38	2	2.68	2.27	0	1	2	4	9
Received rejections	38	0	1.66	3.18	0	0	0	2	14
Given Preferences	38	3	2.68	0.87	0	3	3	3	3
Given rejections	38	2	1.66	1.32	0	0	2	3	3
Mutual preferences	38	1	1.16	0.89	0	0	1	2	3
Mutual rejections	38	0	0.21	0.58	0	0	0	0	3
Balance	38	2	1.03	4.61	-14	0	2	4	7
Orientation	38	0	1.03	1.38	-2	0	0	2	3
Impact	38	4	4.34	3.05	0	2	4	5	14
Affiliation coeff. raw	38	3	2.05	5.19	-14	1	3	5	8
Influence coeff. raw	38	4	3.84	2.88	0	2	4	6	11
Affiliation coeff.	38	102	100.00	10.00	69	97	102	105	111
Influence coeff.	38	100	100.00	10.00	86	93	100	107	124

Std Standard Deviation Min Minimum value P25 25° percentile P50 50° percentile P75 75° percentile Max Maximum value