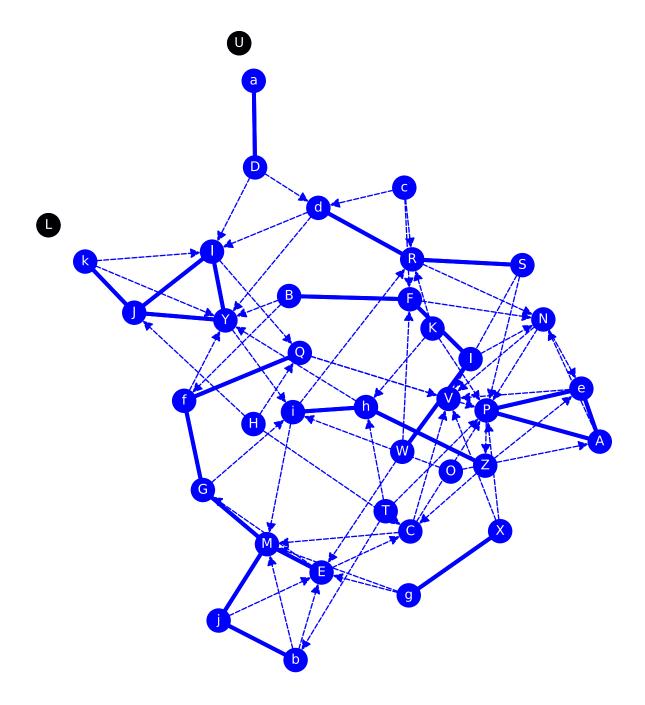


GROUP 1 - DEMO 3 NETWORK GRAPH

#### 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	0.08	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	<del>-</del>	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	E	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	I	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	Ο	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 EMbj 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 E·M·b·j B·F·I·W

J·Y·k·I B E·G·M G·M·i P·Z·e F·I·N N·V·e R·c·d E·M·g B·Y·f

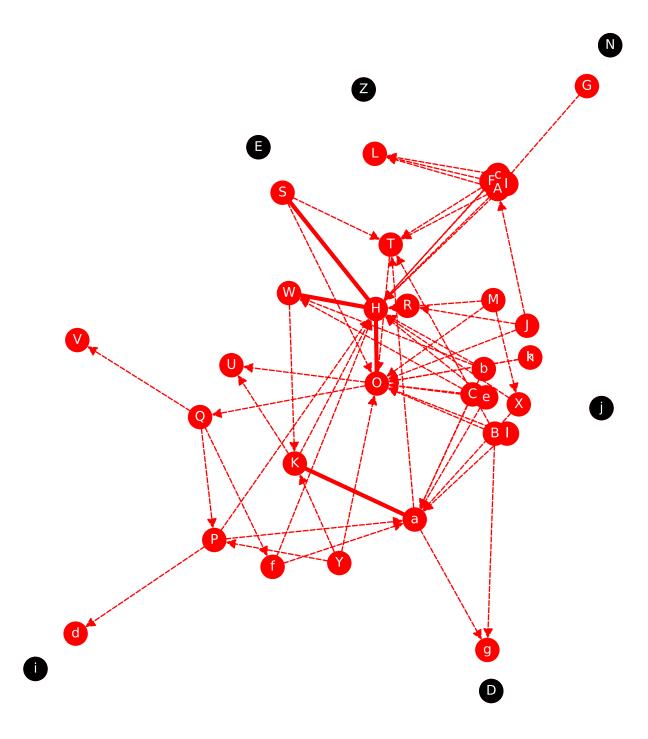
 $Y \cdot d \cdot I$   $\left( D \cdot d \cdot I \right) \left( C \cdot P \cdot Z \right) \left( C \cdot E \cdot M \right) \left( F \cdot I \cdot W \right) \left( Y \cdot h \cdot i \right)$ 



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	<b>←</b>
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	<b>←</b>
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	<b>←</b>
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	$\rightleftharpoons$
0	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	<b>←</b>
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	<b>←</b>
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
Α	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	<b>←</b>
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	
Т	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	<b>←</b>
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·W·b ] [ O·S·T ] [ H·M·X ] [ H·O·e ] [ H·K·W

 $H \cdot M \cdot O \cap H \cdot O \cdot S$ 



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	99	100	controversial
В	1	0	3	3	1	0	1	0	1	97	91	neglected
С	3	0	3	3	0	0	3	0	3	99	94	-
D	1	0	3	0	1	0	1	3	1	103	100	neglected
Ε	5	0	3	0	1	0	5	3	5	110	112	-
F	4	0	3	3	2	0	4	0	4	104	103	-
G	3	0	3	1	2	0	3	2	3	106	106	-
Н	0	14	3	3	0	3	-14	0	14	69	85	rejected
I	2	0	3	1	2	0	2	2	2	104	103	underrated
J	4	0	3	3	3	0	4	0	4	106	106	-
K	0	3	3	3	0	1	-3	0	3	89	85	-
L	0	3	0	0	0	0	-3	0	3	89	85	-
М	7	0	3	3	3	0	7	0	7	111	115	appreciated
N	4	0	3	0	0	0	4	3	4	106	106	-
0	0	12	2	3	0	1	-12	-1	12	71	81	rejected
Р	9	2	3	3	2	0	7	0	11	110	118	popular
Q	3	1	3	3	1	0	2	0	4	99	97	-
R	5	1	3	0	2	0	4	3	6	110	115	-
S	1	1	3	3	1	1	0	0	2	96	91	underrated
Т	0	5	3	1	0	0	-5	2	5	89	91	rejected
U	0	2	0	0	0	0	-2	0	2	90	85	underrated
V	6	1	0	0	0	0	5	0	7	103	103	-
W	1	3	3	2	1	1	-2	1	4	94	94	-
Χ	1	1	3	2	1	0	0	1	2	97	94	underrated
Υ	7	0	3	3	2	0	7	0	7	110	112	appreciated
Z	2	0	3	0	1	0	2	3	2	104	103	underrated
а	1	8	1	3	1	1	-7	-2	9	80	85	rejected
b	2	0	3	3	1	0	2	0	2	99	94	underrated
С	0	0	3	2	0	0	0	1	0	96	88	neglected
d	3	1	3	0	1	0	2	3	4	104	106	-
е	4	0	3	3	2	0	4	0	4	104	103	-
f	3	1	3	2	2	0	2	1	4	103	103	-
g	1	2	3	0	1	0	-1	3	3	99	100	-
h	4	0	3	1	2	0	4	2	4	108	109	-
i	4	0	3	0	1	0	4	3	4	108	109	-
j	2	0	3	0	2	0	2	3	2	106	106	underrated
k	1	0	3	1	1	0	1	2	1	101	97	neglected
	5	0	3	2	2	0	5	1	5	108	109	-

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

Cohesion index: 0.58

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
	38	5	3.21	5.71	-14	1	5	7	10
Affiliation coefficient	38	103	100.00	10.00	69	96	103	106	111
	38	5	4.87	3.26	-1	2	5	7	11
Influence coefficient	38	101	100.00	10.00	81	91	101	106	118

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