

A typology of personal networks of immigrants in Spain

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Acculturation

- "The process of adapting to or adopting practices of a culture different from one's own".
- Acculturation is usually measured with instruments that are culture-dependent (e.g., ARSMA).
- The construction of a culturally independent measure of acculturation can be based on personal networks.

Personal networks and acculturation

- Personal networks reflect both macro- and micro-level variations in adaptation to a host country
 - Macro: E.g., migration policy of the host country, similarity of cultural norms to those of the country of origin,...
 - Micro: E.g., having employment, language mastery, chain migration or not,...

Hypothesis

- Three stages of acculturation
- 1: one dense cluster, largely consisting of alters from the country of origin
- 2: multiple clusters, some primarily from Spain, some for country of origin, high betweenness
- 3: the multiple clusters from stage 2 become interconnected and form 1 loosely connected, more heterogeneous cluster

Research goals

- To develop a typology of the personal networks of immigrants
- To investigate whether the types of networks differ in years of residence in Spain

Data

- Snowball sampling; 294 immigrants in Barcelona from four migrant groups (for the Spanish part of the project)
 - 78 Senegambians; 70 Moroccans; 81 Argentinans; 65 Dominicans
 - 286 valid cases (8 cases were excluded from the analysis because they had missing data or were outliers on network characteristics)
- Personal interviews were held; software Egonet was used to collect data about:
 - 1. Characteristics of the respondent
 - 2. List of 45 alters (personal network delineation)
 - 3. Characteristics of each of the alters (network composition)
 - 4. Whether each pair of alters was related or not (network structure)

Method

- For each personal network (excluding ego), we calculated structural and compositional characteristics
- "Meta-analysis" over the 286 valid networks:
 - K-means cluster analysis based on various network characteristics (see next slide), to identify homogeneous groups of networks ("*network profiles*")
 - ANOVA to see whether profiles differ in years of residence
 - Multinomial logistic regression to predict profile membership from years of residence controlled for background variables age, sex, country of origin, employment

K-means cluster analysis

- Based on the network variables (all standardized):
 - 1. Proportion of alters whose country of origin is Spain
 - 2. Proportion of fellow migrants
 - 3. Number of clusters ("*subgroups*") within the network
 - 4. Subgroup homogeneity regarding living in Spain
 - 5. Density
 - 6. Network betweenness centralization
 - 7. Average frequency of contact (7-point scale)
 - 8. Average closeness (5-point scale)
 - 9. Proportion of family in the network

Results cluster analysis

- Five-cluster solution was best interpretable
- Characteristics that most contributed to the cluster partition are:
 - density
 - homogeneity of the subgroups regarding living in Spain
 - percentage of Spanish in the network
- Cluster sizes:
 - Profile 1, "the scarce network": N = 54
 - Profile 2, "the dense family network": N = 28
 - Profile 3, "the multiple subgroups network": N = 73
 - Profile 4, "the two worlds connected network": N = 75
 - Profile 5, "the embedded network": N = 50

	Scarce	Dense family	Multiple subgrps	2worlds connect.	Embed- ded
% Spanish	8	9	26	16	49
% migrants	17	20	48	35	29
Nsubgroups (sg)	21/4	1	3¼	11⁄4	11/2
Homogeneity sg.	high	high	high	low	high
Density	.28	.76	.16	.36	.30
Betweenness	high	low	high	middle	high
Freq. contact	^{1/} 3week	^{3/} month	^{2/} month	^{2/} month	^{1/} week
Closeness	high	middle	low	high	middle
% family	32	54	22	40	28

Profile 1. Scarce network



Size: country of living (large = Spain, small = other country)

	Scarce	Dense family	Multiple subgrps	2worlds connect.	Embed- ded
% Spanish	8	9	26	16	49
% migrants	17	20	48	35	29
N subgroups (sg)	21/4	1	3¼	11⁄4	11/2
Homogeneity sg.	high	high	high	low	high
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Closeness	high	middle	low	high	middle
% family	32	54	22	40	28

Profile 2. Dense family network



Color: country of origin (white = foreign, black = Spain); Size: country of living (large = Spain, small = other country)

	Scarce	Dense family	Multiple subgrps	2worlds connect.	Embed- ded
% Spanish	8	9	26	16	49
% migrants	17	20	48	35	29
N subgroups (sg)	21/4	1	3¼	11⁄4	11/2
Homogeneity sg.	high	high	high	low	high
Density	.28	.76	.16	.36	.30
Betweenness	high	low	high	middle	high
Freq. contact	^{1/} 3week	^{3/} month	^{2/} month	^{2/} month	^{1/} week
Closeness	high	middle	low	high	middle
% family	32	54	22	40	28

Profile 3: Multiple subgroups network



Color: country of origin (white = foreign, black = Spain); Size: country of living (large = Spain, small = other country)

	Scarce	Dense family	Multiple subgrps	2worlds connect.	Embed- ded
% Spanish	8	9	26	16	49
% migrants	17	20	48	35	29
N subgroups (<i>sg</i>)	21⁄4	1	3¼	11⁄4	11/2
Homogeneity sg.	high	high	high	low	high
Density	.28	.76	.16	.36	.30
Betweenness	high	low	high	middle	high
Freq. contact	^{1/} 3week	^{3/} month	^{2/} month	^{2/} month	^{1/} week
Closeness	high	middle	low	high	middle
% family	32	54	22	40	28

Profile 4: Two worlds connected



Color: country of origin (white = foreign, black = Spain); Size: country of living (large = Spain, small = other country)

	Scarce	Dense family	Multiple subgrps	2worlds connect.	Embed- ded
% Spanish	8	9	26	16	49
% migrants	17	20	48	35	29
N subgroups (sg)	21/4	1	3¼	11⁄4	11/2
Homogeneity sg.	high	high	high	low	high
Density	.28	.76	.16	.36	.30
Betweenness	high	low	high	middle	high
Freq. contact	^{1/} 3week	^{3/} month	^{2/} month	^{2/} month	^{1/} week
Closeness	high	middle	low	high	middle
% family	32	54	22	40	28

Profile 5: Embedded network



Size: country of living (large = Spain, small = other country)

Is the partition related to years of residence?



Overall:

F(4, 2.67) = 6.634,

p < .001

Per profile:

There are two homogeneous subsets that differ significantly in years of residence: Profiles 1 and 2, versus profiles 3, 4, and 5.

Is the partition also related to years of residence when controlled for background characteristics?

Multinominal logistic regression

- **Age** and **employment status** did not have significant effects
- Sex and country of origin, however, influenced profile membership significantly: e.g., Senegambians had a higher probability to have a "dense family network" than others.
- However, even controlled for these background characteristics, years of residence still predicts cluster membership.

Conclusion

- The network profiles give valuable information about adaptation to a host country
- The scarce network and the dense family network seem "transitional networks", whereas the other three seem more settled.

Need for a longitudinal model

- To investigate how networks in each of the profiles evolve.
- To investigate whether there are different trajectories of network change, depending on (e.g.) **culture** and **entry situation**
- We now perform a second wave as part of the ECRP Project "Dynamics of actors and networks across levels: individuals, groups, organizations and social settings"

Thank you

• The paper can be obtained via: MirandaJessica.Lubbers@UAB.es

