Trust and diversity as an outcome of associative behavior patterns in Chile

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Trust

- Confidence in others (unknown) is one of the lowest compared to other countries in the region (Latinobarómetro)
- The "infrasocialized" explanations point to individuation processes marked by the ideology of individualistic entrepreneurship (Araujo & Martucceli, 2012; Yopo, 2013).
- The "over-socialized" explanations point to the pressure of a system of norms that leaves little room for collective action and the development of public interest (Oxhorn, 2004).
- Low civic rates and general collective participation (Espinoza & Rabí, 2009)

The structural bases: Collective action and trust

- Structural-relational explanations point to framentary interaction patterns and restricted to primary circles (Castells, 2015)
- Strong polarization in the associative field (Cantillan & Espinoza, in press) and state-citizenship interaction mediated by individuals or interest groups.
    - Collective action unfolds in highly competitive territorial contexts
    - Vertical fragmentation between popular and state politics (polycentric field)
    - Low membership rate
    - Precarious state financing (Alenda & Sandoval, 2003)

Theory: Associative field, Quantity versus relations

- Interaction patterns between associations and not the mere number of experiences largely determine the integration of the civil society field, and the probability of exposure to diverse people (in relation to the perspective of Lester M. Salamon)
- The expansion of the personal networks of the members to more than one organization also creates networks between voluntary associations, which may allow the transfer of resources and the trust developed within organizations towards others more or less similar
- The extension of trust to distant circles involves making an assessment of the trustworthiness of individuals who do not know each other directly, which suggests that the parties are likely to focus on the predictability of each other's behavior or the average person (Glanville, 2016; Paxton, 2007; Paxton & Glanville, 2015)

Associative field

- They are constituted as informal networks that depend on multiple memberships and the informal contact of members of diverse organizations.
- There are associations that probably overlap more with others as a result of the number of relationships that their members have with members of other associations.
- A proxy identified by the literature is multiple memberships (Moody & White, 2003; Paxton, 2007; Pena López & Sánchez-Santos, 2018)
- Cave world v / s small world (Watts & Strogatz, 1998)

Associative field

- Is made up of:
  - Patterns of individual civic behavior
  - Interaction patterns and associative composition.

Hypothesis

- **H1**: The associative behavior pattern that most connects to other associative types is positively related to generalized trust and the diversity of personal networks.
- **H2**: The most closed associative behavior patterns (closure) are negatively related to generalized trust and the diversity of personal networks

Methodology

- We use the class procedure to model the assumed heterogeneity of associative behaviors at the national level
- We model classes including covariates
- And finally we use the use of class memberships to predict the variation of general trust and diversity
- The procedures have been performed with the LMest package (Bartolucci et al., 2020), and the MplusAutomation package (Hallquist et al., 2020) both designed for R environment and the Mplus v. 7.3. (Muthén & Muthén, 2009)

Mixed latent class analysis with distal outcome

- They are used to explore the relationship between this variable and other auxiliary variables observed.
- The most stable approach is the BCH method, which uses a multiple weighted group analysis, where the groups correspond to the latent classes (Bakk et al., 2014).
- The BCH method uses weights wij that reflect the measurement error of the latent class variable. In estimating the auxiliary model, its observation in class / group j is assigned a weight of wij and the auxiliary model is estimated as a multiple-group model using these weights.

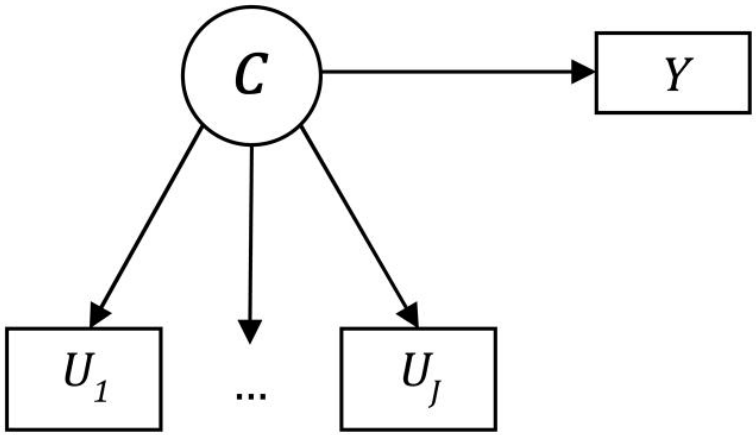


Figure 1: LCA with distal outcome model

Data

- Data come from the 2016-2018 (wave 1-3) measurement of The Longitudinal Chilean Social Survey (ELSOC) https://coes.cl/encuesta-panel/.
- The longitudinal ELSOC survey collects information about social conflict and social cohesion in Chile using in-person interviews at the respondent's home.
- The survey uses multistage random sampling stratified by city size, clustered by housing blocks and randomly generated individual addresses, where respondents between 18 and 75 years old were selected at random among current residents.
- **ELSOC survey has a size N=2927 in the first wave (2016) and the N=2984 in the third wave (2018)**
- In general, represent 77% of Chile's population and 93% of its urban population, comprising 40 cities and 92 administrative districts (communities). The response rate is 62.4% of the eligible sample, considering 8.9% refusal rate and 28.8% unreachable contacts.

ELSOC-COES
Estudio Longitudinal Social de Chile

Measures

Variable	Definition
Neighbors	Memberships in neighbors associations yes=1; no=0
Religious	Membership in religious associations yes=1; no=0
Political party	Memberships in party associations yes=1; no=0
Union	Memberships in Union associations yes=1; no=0
Professional	Memberships in professional associations yes=1; no=0
Charity	Memberships in Charity associations yes=1; no=0
Sport	Memberships in sport associations yes=1; no=0
Students	Memberships in students associations yes=1; no=0
Others	Memberships in other associations yes=1; no=0

Measures II

Variable	Definition
Gender	Male (0), Female (1)
Education level	Years of formal education, Ref= Without education, (1) Basic education, (2) Middle education, (3) Technical education, (4) Higher education, (5) Postgraduate.
Trust	Generalized measure of perception of trust in individuals: Trusts others = 1; Don't trust = 0 (originally raised in the GSS)
Diversity	Diversity index is a sum of the occupations present in the position generator in which people report knowing someone (min = 0; max = 13)

Results: Latent class models fit

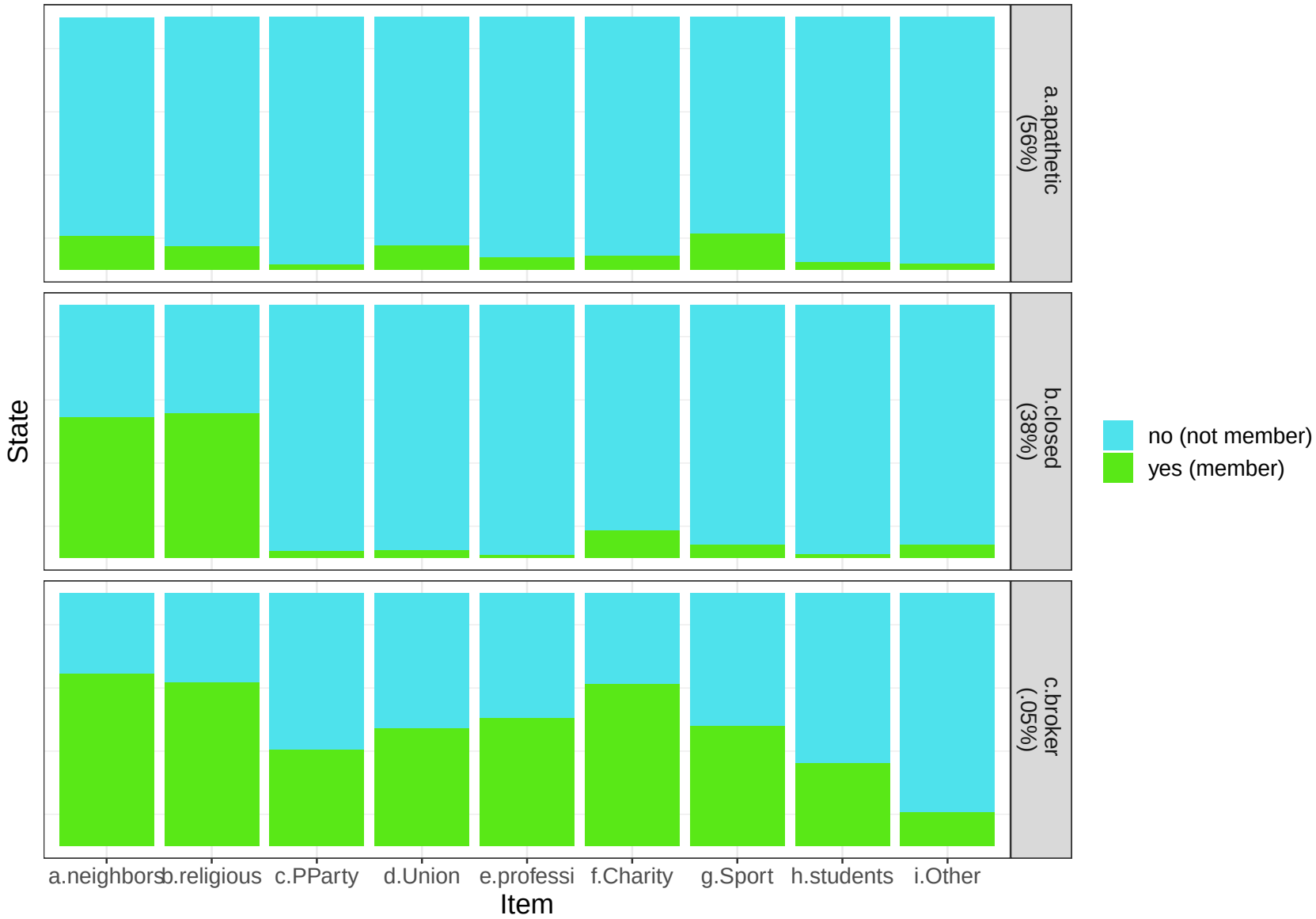
	Llik	AIC	BIC	N	TT
1 class	-14179.53	28377.07	28428.41	2219	2
2 class	-13366.02	26798.04	26986.30	2219	2
3 class	-12835.20	25820.39	26248.25	2219	2**
4 class	-12675.32	25572.64	26205.88	2219	2
5 class	-12509.49	25348.92	26290.21	2219	2

Covariables

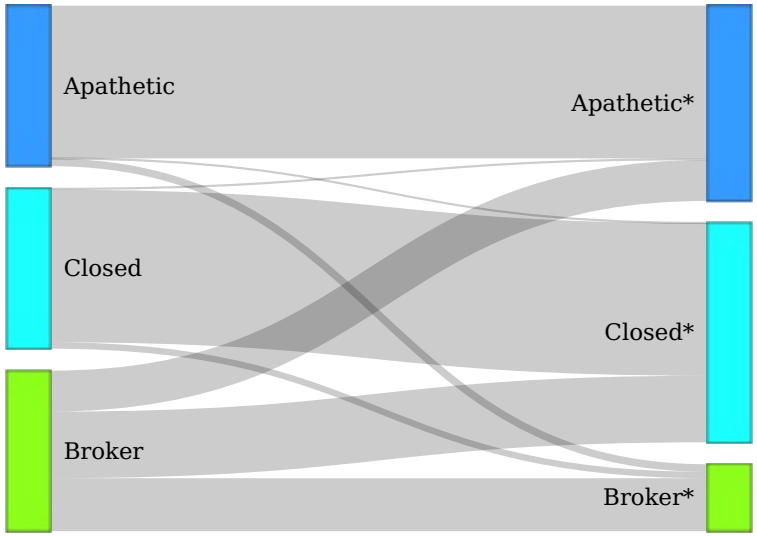
Parameters affecting the logit for the initial probabilities	Class 2	Class 3
intercept	-3.6336	-4.8687
mujer	1.2494	-0.1113**
nivel_educ	-0.2315***	0.2307
edad	0.0499	0.0370

p<0.05, *p<0.01*, ***p<0.001***

Classes/States



Transition probabilities



	State 1*	State 2*	State 3*
State 1	0.9512	0.0017	0.0471
State 2	0.0099	0.9502	0.0399
State 3	0.2551	0.4148	0.3301

Distal outcomes results

Trust (distal outcome)	Mean	SE
Class 1 (broker)	0.287	0.055
Class 2 (Aphatetic)	0.181	0.009
Class 3 (Closed)	0.116	0.023

Distal outcomes results II

Trust (distal outcome)	Chi-square	P-value
Overall test	9.698	0.008
Class 1 vs. 2	3.596	0.058
Class 1 vs. 3	7.676	0.006
Class 2 vs. 3	6.024	0.014

Distal outcomes results III

Diversity (distal outcome)	Mean	SE
Class 1 (broker)	7.410	0.520
Class 2 (Aphatetic)	6.331	0.082
Class 3 (Closed)	6.754	0.228

Distal outcomes results IV

Diversity (distal outcome)	Chi-square	P-value
Overall test	6.774	0.034
Class 1 vs. 2	4.169	0.041
Class 1 vs. 3	1.232	0.267
Class 2 vs. 3	2.598	0.107

Conclusions

- The low level of membership in voluntary associations in Chile is notable.
- The associative behavior pattern that we call “broker” is the least numerous and least stable over time.
- It is remarkable that the pattrn “broker” accumulates the largest number of people who trust other strangers
- At the same time, it is the pattern that accumulates the most diversity.
- Finally, it is noteworthy that the pattern that least trusts others is the closed one (which corresponds to our hypothesis)
- and that the difference, in favor of the “broker” class, is the strongest in relation to the others.

Limitations

- the “mixed distal outcome” analysis was performed with only one wave.
- The analysis of transitions between classes is limited to two waves.
- The analysis is an abstract image and does not tell us much about specific contexts, in which eventually the density of links between associations is greater.

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