Collective efficacy in the cross-border area

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Preamble and objectives

The concept of collective efficacy reflects the variable nature of cohesion and social control in collectivities or neighborhoods. It is inspired, on the one hand, from a long tradition of community studies and by the resurgence of the concerns for sociability and social cohesion brought by the concept of social capital. On the other hand, the concept obviously derives from the fundamental psychological notion of the *self-efficacy*, proposed by Bandura (1977). In psychology, the self-efficacy stands for the belief of a person in her/his own ability, more precisely, his/her belief that he/she can fulfill properly certain objectives. According to those who have proposed the concept (Sampson & Graif, 2009), collective efficacy stands for the convergent belief of the members of a collectivity in the harmony of objectives, in the capacity of members to achieve these common objectives. Such beliefs mobilize membership and are able to contribute to the achievement of collective goods which the "conventional" dimensions of the social capital (belief and networks) cannot provide directly. Beliefs in the capacity of own collectivities or in the communality of certain objectives and values can also explain the proven efficacy of several deficient collectivities in tight social networks (bonding type), where the majority participates intensely in the bridging (delocalized and without similarities) networks which, however succeed in providing, through community involvement, the public goods that are, such as public safety. (Sampson, Raudenbush, & Earls, 1997) have found, for example, that collective efficacy has a negative relationship with the incidence of violent offences at the neighborhood level, even when other factors are being controlled at the neighborhood level, such as the economic disadvantage.

The investigations concerning the sources of collective efficacy are relatively recent. Occasionally empirical studies have indicated several factors at the level of collectivities which may inhibit collective efficacy: deprivation (community poverty) or residential mobility (Duncan, Duncan, Okut, Strycker, & Hix-Small, 2003), both situations being able to erode social relationships and social trust. A constant factor in these studies is ethnic or racial heterogeneity (Duncan, et al., 2003; Sampson, et al., 1997), by implementing an argumentative approach related to that of Putnam (Putnam, 2007). Cultural diversity incurs the fragmentation of relationships along ethnic lines through a segregated sociability which prevents communication and interaction across ethnic borders. But some multilevel empirical researches show the fact that a sense of collective efficacy is determined rather by individual characteristics (economic status, marital status), whereas the hypotheses of contextual determination are less supported by data (Duncan, et al., 2003).

The chapter herein covers several objectives regarding the study of collective efficacy in the communities of the four border counties in Hungary and Romania included in the investigation of the ENRI study: the quantification of collective efficacy, the comparison of collective efficacy levels between the two countries and the exploration of the determinants of collective efficacy, comparatively in the Romanian and Hungarian collectivities included in the study's sample.

Collective efficacy quantification

Initially, for the quantification of collective efficacy, 8 Likert type items have been included, having values measured on a 5 stage scale (from total disagreement to total agreement):

The initial scale items have been:

Do you agree with the following statements regarding the locality where you live?

1. This is a tight, united neighborhood.
2. Generally, the people of this neighborhood do not get well along.
3. The people of this neighborhood are willing to help their neighbors.
4. The people of this neighborhood do not share the same values.
5. The people of this neighborhood are trustworthy.
6. The people of this neighborhood intervene if youngsters are too noisy.
7. The people of this neighborhood would intervene if youngsters soiled the walls or the streets.
8. The people of this neighborhood would scold a child if he/she was disrespectful.

The percentage distributions of the valid cases of the eight items are shown below:

Tabel 1. Distribution of answers to the items of collective efficacy

		strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree	% missing
1	This is a very tight community	6.7	10.5	31.1	34.1	17.7	1.0
2	People here are generally do not get along with each other	15	28.6	31.7	17.3	7.4	1.0
3	People here are willing to help their neighbors	2.9	7.4	30	39.4	20.3	1.1
4	People here are characterized by diverse values	2.5	10.5	32.3	28.5	26.3	3.0
5	People here are trustworthy	2.9	7.7	40.6	36.1	12.6	1.4
6	People here would act and do something if children are noisy	9.2	10.3	30.8	37.2	12.4	3.6
7	People here would act and do something if children were drawing on the walls of if they were littering	2.4	7.3	25.8	41.8	22.7	2.9
8	People here would scold children if they are rude	4	9.1	29.6	40.7	16.6	3.1

The scale construction has required several item transformation operations: 1) the reversal of the alurs of item; 2) the calculation of realibility measures and the determination of the scale

construction's method; 3) the inputation of values using multiple regression for the cases with missing values – values have been calculated for 101 cases showing missing records, non-answers or the "I don't know" value; 4) the calculation of the collective efficacy score with all valid cases.

Finally, the score with a satisfying accuracy index (alpha=0,707) was built using the above items, except for those numbered as 2, 4 and 6. The individual score for the perception of collective efficacy was built by adding the items' values. The variable obtained has a 17.9 average, a minimum of 4.85 and a maximum of 25.79. Following the inputs, 9 cases have remained without perceived collective efficacy score due to the high number of missing values at the initial items. Both the K-S and Shapiro-Wilks tests reject the normality hypothesis for the distribution of these variables.

How does collective efficacy vary in populations?

As the collective efficacy concerns a characteristic of human collectivities, we have indicated below the ECP averages for the sample localities, grouped per countries, following the decreasing order of the locality averages:

Table 1. Average collective efficacy by settlements

		ECP
Kálmánháza	HU	21.3
Hajdúsámson	HU	21.1
Ebes	HU	20.7
Sényõ	HU	20.5
Apagy	HU	20.5
Mátészalka	HU	20.4
Mikepércs	HU	20.1
Kocsord	HU	19.4
Sáránd	HU	19.1
Nyírpazony	HU	18.9
Balmazújváros	HU	18.6
Debrcen	HU	18.5

Nyíretelek	HU	18.4
Kisvárda	HU	17.7
Nyíregyháza	HU	17.7
Ópályi	HU	17.5
Berettyóújfalu	HU	17.3
Balkány	HU	17.0
Földes	HU	16.7
Kaba	HU	16.5
Hajdúnánás	HU	15.5
Nagycserkesz	HU	14.8
Sauca	RO	21.3
Negresti Oas	RO	20.3
Auseu	RO	19.3
Curatele	RO	18.9
Osorhei	RO	18.5
Alesd	RO	18.5
Foieni	RO	18.2
Piscolt	RO	17.8
Dorolt	RO	17.8
Valea lui Mihai	RO	17.8
Satu-Mare	RO	17.5
Stei	RO	17.3
Beius	RO	17.2
Tasnad	RO	17.2
Oradea	RO	17.0

Marghita	RO	16.9
Tiream	RO	16.5
Salonta	RO	16.4
Carei	RO	16.3
Madaras	RO	16.2
Avram Iancu	RO	15.4
Spinus	RO	15.4
Pietroasa	RO	15.3

These figures are informative only as the localities' subsamples are not representative. On the other hand, we notice high variations of the ECP average values, both in the Romanian subsample and in the Hungarian one.

Collective efficacy in Romania and Hungary

The comparisons of the collective efficacy's distribution per countries and ethnicities indicate quite clearly the apparent advantage of the Hungarian citizens. The comparison shows that the values of the efficacy perceived in Hungary are much higher than in Romania, which raises the issue if the difference can be assigned to different perceptions between countries or ethnicities. The K-S test indicates a significant difference between the distributions of collective efficacy in the two countries.

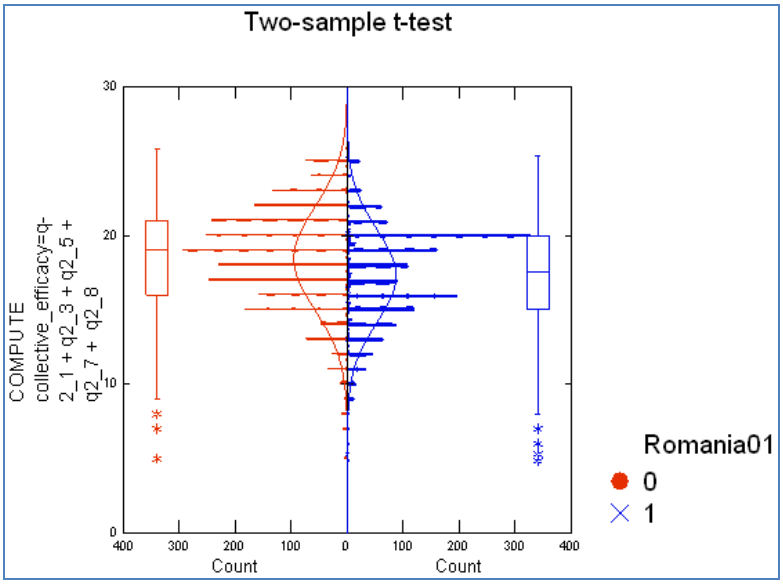

Figure 1. Collective efficacy by country

The comparisons per ethnicities and nations suggest that the difference is made rather between countries than between nations. The difference between the Romanians and the Hungarians in Romania, concerning the ECP, is insignificant.

Table 2. Collective efficacy by ethnicity and country

		Average of collective efficacy
Hungary	Hungarian[1]	18.47
Romania	Romanian	17.20
	Hungarian	17.46

Multivariate models of collective efficacy

In the process of modeling collective efficacy, we have introduced several variables at the individual level (age, gender, training level, marital status and ethnicity) as well as a variable at the context level – the type of locality.

Table 3. OLS regression model of collective efficacy

	Hungary					Romania				
	B	Std. Error	Beta	t	Sig.	B	Std. Error	Beta	t	Sig.
(Constant)	15.580	0.907		17.179	0.000	16.714	0.557		29.981	0.000
Respondent's Age	0.008	0.010	0.032	0.755	0.450	0.010	0.011	0.052	0.980	0.327
Gender (male=1)	0.284	0.226	0.040	1.257	0.209	-0.300	0.223	-0.047	-1.345	0.179
Subject's education (university education=1)	0.671	0.397	0.053	1.691	0.091	0.152	0.264	0.021	0.577	0.564
Marital status (married or coabitation=1)	-0.374	0.228	-0.054	-1.642	0.101	-0.195	0.230	-0.030	-0.849	0.396
Occupation (subject retired=1)	0.380	0.353	0.045	1.076	0.282	0.603	0.373	0.086	1.616	0.106
Settlement type (urban=1)	1.245	0.226	0.173	5.510	0.000 **	0.082	0.236	0.013	0.349	0.727
Ethnicity (Hungarian=1)	0.783	0.753	0.032	1.039	0.299	0.077	0.247	0.011	0.313	0.754
	R2=0,033					R2=0,012				

The regression pattern of collective efficacy is much better determined in Hungary than in Romania due to the influence of the locality type: the Hungarian citizens of urban areas perceive collectivities which

[1] Our comparison has excluded the Romanians of the Hungarian sample, due to their small number – a single subject from Hungaria has declared himself as being of Romanian ethnicity.

they are part of as being more cohesive than those of rural areas. This difference does not occur in the case of Romanian citizens. In Romania, none of the predictors included in the analysis influences in a significant manner the value of the perceived collective efficacy.

In order to obtain better results, several improvements of the collective efficacy patterning are required: testing its inter-specific variability (in the quite probable case that ICC>0.05), the construction of multilevel regression patterns to explain the multilevel efficacy. The respective patterns should also contain, among the interdependent variables, the ethnical fractionalization index of the collectivities included in the study, in order to test the impact of this characteristic upon the control and competency collective feelings of their residents.

Results' summary

- Collective efficacy may be quantified at a satisfying level of accuracy by 4 items of the initial 7 item scale.
- The average of the collective efficacy feeling is significantly higher in Hungary than in Romania.
- The Hungarians in Romania have collective efficacy indices similar to their Romanian ethnicity neighbors', which suggests the fact that there is no ethnical determination of the collective efficacy feeling.
- The type of locality (rural or urban) is the only significant predictor of personal efficacy: it indicates a positive effect of urban localities in Hungary upon the control and cohesion feelings of their inhabitants.

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