

# Measuring social capital in aged community of Arab cities in Southwest Iran: using monte carlo simulation sampling

## Abstract

**Background:** Measuring of social capital has turned out to be a point view in most social studies Social capital defined as linkage among social systems and groups for strengthening communication among citizens. Notwithstanding, there is neglect for that among gerontologists sociologically.

**Method:** This study attend to portray distribution of social capital within 3031 aged samples in eight counties of Khuzistan province in southwest of Iran with the majority of Arab dwellers during 2020. About 26 definitions for indicators of social capital were mentioned and 23 main categories were collected.

**Results:** Finally, the instrument for collection of data was conducted by them. Social Intermediary is new indicator to estimate social capital about elders first time. Findings have mentioned new definition for social capital in Gerontological aspect.

**Discussion and conclusion:** There are most deference and variations within indicators of social capital upon rural are and ethnicity that war policies about seniors in society.

**Keywords:** indicators, Iran, Khuzistan province, measurement, monte carlo simulation sampling, social capital

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## Introduction

The human society has experienced traditional and constant order. There was a time when policy making, states, values and norms, social and religious beliefs, and life styles were not in constant change, evaluation doubts, and suspicion. Administrators of society managed to enforce order in social context of such a situation through various implements and so to respond to livelihood and social meets of their society's members. Industrial revolution and booming of technology in the West and around the world increased fast technical progressing and amid that we encountered the development wedge, needs, and prospects. This phenomenon itself provoked seditions and turbulences in society in a way to direct urbanization. These polemic situations deliberated the Scientific and administrative contributors to reform and re - order the society for progress and development.

At first, the progress and development were translated and shaped only within economic and technical improvement and recovery. An increase of national incomes and productions was emphasized, and more so, the importation of environment and nature by modern technology and Science. But, social scientists deduced that in this progress and report with comparative research to other non - Western societies; there is another capital which was cropped and shaped by unanimity, assimilation, co-working, and participation of commons to achieve their shared goals predicated social capital. This kind of capital is produced by appropriate norms and values of assimilation and co-production. Also it is resulted via reciprocal interactions and trusts, joint values, existence of requirement backgrounds, and bases (political and social context and various social networks) for the involvement of all cities in active and consequent participation.

Nowadays, developed countries are enterprising in their macro planning for society annual time by my capital along with economic and commercial investments. Nonetheless, developing societies have faced various barriers such as dissatisfaction and inefficiency in

administrative parts, reduction of trusty and reciprocal actions among citizens and within common - state, and lack of participatory and volunteering beliefs for the improvement of social problems. All of them could be evaluated in the field of social capital within organized networks for pathology of social system.

The main issue giving rise to this research is that social capital in the macro level of social and economic planning was not paid the due attention, hence a particular situation among destination factors of collective system. This study attended to describe this phenomenon among the increasing population of aged citizen in great districts of Khuzistan province in southwest of Iran. This community is the best reference group for the next generation and tends to have a higher rate of increasing population than the natural rate. In this study, the amount of level and distribution of social capital among elder population of selected urban colons of some cities in Khuzistān Province (southwest of Iran near Iraq's border line, with the majority of Arab dwellers) namely Ahwaz, Abādān, Māh-Shahr Port, Behbahān, Izeh, Andimeshk, Dasht-Azadegān, and Dezfūl were evaluated in 2020.

## Conceptual framework

Human nature requires communication and relations with others for the fulfillment of needs and achievement of goals and that is how "the society" is shaped. Interpersonal relationships among citizens lead to the exchange of information. The commons define and take collective revenues via various social networks such as neighborhood, friendship, kinship, and family; while their individual and plural life style is be improved by active participation in society. Whenever these relations have a strong basis and high quality and quantity, and act more systematically and harmonically; the collective goals would be most reachable in less time and with lower cost. In this situation, social capital needs to be evaluated and studied as particular compound of social relationships and the quality of such relations. Social relationships will be the same as social capital when it bases

on reciprocal norms and is issued by joint norms and values of citizens. Social capital will lead to a simplified participation process of members for achievement of common revenues. Notwithstanding, there is social capital neither within individuals and nor in social structure; rather, it is formed among relational space of individuals. Social capital is not owned by the state, a particular organization, or

the market; rather the whole society can participate in producing it. Social capital is composed by thousand interactions of everyday life among people.<sup>1</sup> According to table one, there are a lot of definitions for this concept from past till now. It initially shows the best definitions of social capital and then mentions its main parts (Table 1).

**Table 1** Definitions of social capital

Thinker	Definition of social capital
Karl Marx <sup>16</sup>	He has mentioned in "La Capital" 1st vol. (Marx & Fowkes, 1902) a different view Social Capital :total value of anal production of work.
Judson Hanifan	His First use of this term our modern view on Social Capital that also will fellowship, sympathy, and social intercom the individuals and families who make up social unit,"( Arneil, 2006)
J.Jacobs	Urbane networks are social capital that have no replacement capital in urban
Hannerz	It is sources of glows and kindness of friends and kinships to each other which could be shape in companionship and aim for combat to poverty.
Mignot	Social capital dependent on social system as potential source for value which is controlled and changed for strategic and beneficial goals.
Stone	Social capital is one equated with notions of strong or prosperous communities and has been heralded as the glue that holds communities together.Yet, it is an empirically elusive concept and still little is known about social capital in practice - particularly as It features in different types of families and communities.
Stieglitz	A mortar of grafter in society as economical view.
OECD	Social capital is network of values, norms, and common believes which facilitate collaboration of interior and within groups.
Edwards	Social capital relates to the resources available within communities in networks of mutual support, reciprocity, and trust. It is a contributor to community strength Soni capital can be accumulated when people interact with each other in families workplaces, neighborhoods, local associations, interest groups, government and a range of informal and formal meeting places.
Mernisi	It is kind of traditional correlation of society that collected groups of citizens are able + pursue social planning for themselves with pious their own time.

Now the polemic subject is “what are the components of social capital?” According to the above definitions, there are details and traits in social structure order interactions among people and guide them to particular ways that provide collective revenues easily. Random and temporary social relations cannot be the provider of collective revenues, but they should be as tough networks or institutionalized relations, according to Bourdieu (Bourdieu, 1986). The social relations would be a potential resource for providing collective revenues and goals when they are within trusty sphere and norms, based on voluntary participation of others. The present definition of social capital is nearest to Putnam’s definition, which referred to structural dimension of social capital as “Networks” and objectivity and cognitive dimension of social capital and subjectivity as “Trust” and “Norms.” According to David Halpern<sup>2</sup> the dimensions of social capital are as:

- a) Norms, Values, and Expectancies
- b) Networks
- c) Warranty of Sanctions.<sup>2</sup>

Two of the parts above have been mentioned beforehand, but the third phenomenon could be given to members and citizens formally or informally as “rewards” and “punishments.” Warranty of sanctions might be as ordinal sanctions, not necessarily as norms but in formal law and article with bankroll of government. It is better to pay attention that particular parts of warranty of sanctions, which are informal and alliterated norms, could be as social capital discussible within the norms of society rather than in separate. Instead, formal norms as governmental laws and articles could be as reinforcements and providers of social capital because, according to Coleman,<sup>3</sup>

judicial and governmental law and norms are not concealed in social relations; rather, they are authorized out of such bonds.<sup>3</sup> The creative sources of social capital are family, scholar places, markets and trade unions, neighborhood communities, and citizenship institutes.<sup>4</sup> All of these fountains are important, but citizenship institutes might be more vital. In the production of social capital, the main sources are the minimum times that members devote to voluntary institutions rather than spending in family.<sup>5,6</sup> Like other social phenomena, all kinds of capital should be reserved in society together until they could be beneficial and useful for society. If every kind of capital is reserved for a particular group or cast than for revenues of society, they would have negative and inadvisable results.<sup>6,7</sup>

## Materials and methods

### Instrumentation

Putnam’s definition<sup>8</sup> for social capital serves as the basic operationalized definition of this study. According to him, social capital in collected aspects of social system which facilitate agreement and collaboration of people for receiving joint revenues.<sup>8</sup> These aspects are Norms Social Networks and Reciprocal Trust. To take the best views on the measuring of social capital and IE Indicators, some related studies and national research were evaluated and studied. These include namely measuring social capital in five regions of Australia by Bullen and Onyx,<sup>1</sup> Richard Rose’s study on social capital and lifestyle in Russia,<sup>9</sup> Narayan and Dippa’s indicators for social capital, measurement of social capital as structural and cognitive aspect in India and Panama by Krishna and Schrader,<sup>10</sup> social capital survey of Benchmark under supervision Putnam, Indicators of social capital by Australian Bureau of Statistics [ABS],<sup>11</sup> study of Grootaert

and others,<sup>12</sup> and Stone and Hughe’s works and research (2001 to 2004) in Australian Institute for Family Studies.<sup>13,14</sup> Briefly speaking, social capital is divided into the three main domains of Networks,

Trust, and Norms and 23 sub items. Accordingly, indexes of social capital and its references are listed in Table 2.

**Table 2** Indexes of social capital which are used in this study and its references

Literature	Indexes and its definitions
Australian Bureau of Statistics: <sup>12</sup>	Trust and its capability:
Bullen & Onyx, <sup>1</sup> Granovetter <sup>17</sup>	measuring of trusty to acquaintances (Family members. Kinships, friends, co - workers, neighborhoods) and to strange, various organizations and governmental administrators (government managers politics.) & Capability of trust measurement of risk in trust in environment (e. 3. being, or not being of larceny etc)
Grootaert, <sup>18</sup> Grootaert, Narayan, Jones & Woolcock, <sup>19</sup> Krishna & Schrader <sup>20</sup> Stone, <sup>13</sup> Stone & Hughes, <sup>2002a</sup> <sup>7</sup> Stone & Hughes, <sup>2002b</sup> <sup>5</sup>	
Australian Bureau of Statistics <sup>1</sup> Bullen & Onyx <sup>1</sup>	Social Participation:
Granovetter, <sup>21</sup> Granovetter, <sup>22</sup> Stone, <sup>13</sup> Stone & Hughes, <sup>6,7</sup> Rose <sup>9</sup>	Civil Participation: All of tasks and actions within politics aspects and spaces, governmental parts, management of clubs and associations and NGOs usually be as formal membership of person and having particular laws, stratifications, and status.
Bullen & Onyx, <sup>1</sup> Krishna& Schrader, <sup>10</sup> Krishna, <sup>23</sup> Putnam,Sander,Gibson, <sup>8</sup> Kennedy Converse, Putnam et al. <sup>8</sup>	Cooperation: Cooperative norms are internal sense of citizens about companionship of Others and their society. It conduces to equivalent between individual and common benefits and revenues.
Bullen, <sup>1</sup> Granovetter, <sup>22</sup> Krishna, <sup>10</sup> Putnam <sup>8</sup>	Companionship: Companionship is being aimed for joint goals in collective situations ( e .g . companionship of neighbors to each others for promotion and improvement environment, voluntary participation in community with local governors).
Hughes & Stone, <sup>5</sup> Stone, <sup>13</sup> Stone & Hughes <sup>6,7</sup>	Tolerance: Measuring of acceptable and respect of deferent attitudes and thoughts norms. life styles, believes, and others.
Bullen, <sup>1</sup> Stone <sup>13,5</sup>	Security: . Measurement of safety, leisure, and convenience of citizens in their houses and in communities, and society.
Putnam, <sup>8</sup> Hughes, Stone, <sup>13</sup> Stone <sup>5</sup>	Social support(Commercial & Emotional): Patronage of persons to each other socially, commercially, and emotionally when it is needed in everyday life.
Grootaert, <sup>19</sup> Grootaert et al. <sup>24</sup> Krishna & Schrader, <sup>20</sup> Krishna <sup>23</sup>	Social Solidarity: Acceptance sense by others as members of society and having convenience within neighborhood environments, local communities, groups. and clubs.
Putnam, <sup>8</sup> Hughes, Stone <sup>5,15</sup>	Self- Efficiency: Citizens' attitudes and senses on their eliciency in society and able to effect on nctions, environment, and decision making.
Hughes & Stone, <sup>5</sup> Stone, <sup>13</sup> Stone & Hughes <sup>6</sup>	Value of Life: Means that sense of satisfaction about life, valuation of him / herself and personality in society.
Authors <sup>25</sup>	Social Intermediary: Active role of person within struggle, Involvements, and disputations of kinships, friends family members, neighbors, teammates, and kiths at conciliator.

In accordance with the above classification for social capital and its definitions, the indicators, operational concepts, and indexes of social capital are stated in table three upon citations of Table 3.

**Table 3** The indicators, operational concepts, and indexes of social capital

Concept	Basic indexes	Secondary (accessory) indexes		Operational definition	
Social Capital (Aspects of social system which improve & facilitate companionship & cooperation of citizens for goals achievement & joint aims)	I.Trust and its capability	Informal Trust		How much do you have trust to these persons: family members, kinships, friends, neighbors, and former teammates?	
		Formal Trust		How much do you think these institutions and organizations give us revenues and benefits?	
		Generalized Trust		How much do you have any trusty to strangers and unknown persons?	
		Capability of Trust in Environment		How much might you find your lost things e.g. money, wallet?	
		Security Sense		How much do you have any trusty about walking around your home lonely at nights or days?	
	II Norms	Cooperation	Individual Duty		Sense of Individual duties & tasks for problem solving & decision making quarter
		Companionship	Social Clement		Renunciation of him/her times & money for improving of quarter
			Local		Having some tasks on problem solving or commonweal works
			Governmental		Companionships with people & government on parsimony
		Tolerance			Pleasure to live with people in other culture and rites
		Self-Efficiency			Belief on multicultural situation can solve & improve social problems
					Achievement to live in multicultural community nor union-cultural
					Belief on self-efficiency of him/her in quarter for problem solving & decision making while his/her life and youth periods
		Value of Life			Belief on self-efficiency of him/her in quarter for problem solving & decision making
			Belief on self-efficiency of people in quarter for problem solving & decision making		
			Satisfaction about youth and adults periods		
			Belief on respect of society for aged		

Table Continued...

Concept	Basic indexes	Secondary (accessory) indexes				Operational definition
		Social Intermediary		Emotional Support		Voluntary actions for intermediate among neighbors 'contests
	III.social network	Social Support		Commercial Support		Help neighbors, friends, & kinships in last year to now as below: About doing their works and solving their problems, attendance to their problems and chats Let some things & tools to them Lend money to them
		Structure	Horizontal	Social participation	Local	Being in following actions in past three months: funeral of neighbors, celebrations of neighbors
	Plural Entertainment				Friday and Popular praying, funeral sections for religious majors & saints	
					Religious	in sections, seminars, gabfests
					Organized	Weekly-Monthly Familial parties, plural outing and promenade
		Quality	Vertical	Civi participationI	Civil Traditions	Continuous Participation in; charitable institutions, familial commercial cash, religious groups
					Membership in cultural groups	Cultural group i.e. Basij
					New style of participation	NGOs and political groups
					Social solidarity	Accent to others not him/ herself alone Ability to find real friends in his/her country or quarter. Guidance of others/children on respect of others rights and chattels. Effective performance of schools/scholars on providing of juveniles for social life. Effective performance of mosques on providing of well social life
						Humanistic and philanthropic relationships of people among each other not for mercenary alone.
						Equality of citizens in law without my discrimination.

The questionnaire of the study was composed with respect to the above indicators and indexes of social capital in quintuple scale (among 1 to 5). Firstly, Social Capital Inventory (SCI) was evaluated by expert and professional judges. Secondly, after reforming some of the clearly operationalized variables and indexes, the validity of accessory variables was obtained by two techniques (Internal validity of items and split half validity) (Table 4).

**Table 4** Descriptive statistics and validity for the three indexes of social capital (N:3031)

Basic variable of ssc	No of items	M(SD)	Skewness	Kurtosis	Alpha
Trust	5	2.29 (.68)	0.43	0.25	.76
Norms	16	3.78 (72)	-0.56	0.33	.71
Social Networks	14	2.35(.88)	0.41	-0.31	0.69

According to table four, validity of basic indexes of social capital was 0.76 for trust and norms=0.71 and social networks=0.69. Validity

**Table 5** Population of aged dwellers in selected counties upon KSCC & ISCC in 2007

Cities	Total population	Aged population	Aged pop. 2017	Aged samples % (n=768)	Aged population in rural area		Aged population in urban area	
					Male	Female	Male	Female
Abadan	277261	36318	46946	11.5	1336	1359	5695	6052
Ahwaz	1338126	160018	206844	51.2	6143	5747	26891	25454
Mah Shahr-Port	252587	42917	55476	13.6	1029	917	4256	4227
Behbahan	175373	23642	30560	7.53	2141	1902	4491	4653
Dezful	401558	50712	65552	16.17	3533	2882	8734	7902
Sum of selected cities	2444905	313607	405378	100	14182	12807	50067	48288
Province	4274979	539880	675003	---	53316	42824	84810	76536

Source: (ISCC, 2008 and KSCC, 2008)  
Population of 2017 was estimated by the authors.

The rationale for the selection of these eight counties is the main and crowded residential areas in the province. All the counties are located in geographical sides (Behbahan and Izeh as eastern Abadan and Mah-Shahr Port as southern, Dezful and Andimeshk as northern, Dasht - Azadegan as the only western city, and Ahwaz in centre of Khuzistan province). Every cities is typical for one of the three ethnics (Ahwaz and Mah - Shahr Port are typical for the mix of ethnics, Izeh and Andimeshk as Lor ethnic, Abadan and Dasht - Azadegan as Arab, and Dezful and Behbahan as Persian). Sampling was based upon the two variables, ethnicity (three ethnic groups: Arabs, Lors, and Persians) and the kind of settlement as in urban and rural areas. Even though attention to the variable of gender is very important for authors, any interview with women especially the elders was unfortunately too difficult for the scholars, and they were selected by examiners randomly. Hence, this item was eventually deleted for the sake of basic sampling.

### Monte carlo simulation sampling

It's not possible these days to obtain information from an entire population we're interested since it's neither practical nor efficient. So, it's always a question how to conclude out of studying limited number of sample groups. Hence, authenticity of our samples as representative of the whole population must be guaranteed. In addition, considering the fact that we are applying samples rather than a whole population, statistical techniques' assumptions must be

of other sub indexes was estimated by Cronbasch alpha, which stated data such as value of life= 0.65, tolerance =0.74, self - efficiency = 0.76, cooperation =0.66, companionship =0.68. Security sense= 0.71, formal trusty =0.78, social participation =0.65, civil participation= 0.77, social support= 0.70, and informal trusty =0.81. Also, the evaluation of social capital by Cronbusch alpha was respectively 0.82 and 0.76, which accords with the acceptance of outcomes.

### Community and sampling

The statistical community of the study is the aged population of 60 year olds and above, among the majority of Arab dwellers in Khuzistin province in south west of Iran near Iraq borderline such as Ahwaz, Dezful, Abadan, Behbahan, Andimeshk, Dasht – Azadegan, Izeh, and Mah -Shahr Port. Total population of aged dwellers was 378946 seniors upon recent local census 2017 in eight selected counties (for province 539880). The samples were 3031 used in cluster sampling within 375 to 381 variety clusters for each county as shown in Table 5 live (ISCC, 2007; KSCC, 2007).

followed carefully in order to maximize their performance. However, traditional assumptions occasionally either are not supported or there is uncertainty in the sample values. To overcome these challenges, two advanced statistical techniques were added by IBM SPSS Statistics that allow users to estimate Bootstrapping and Monte Carlo Simulation in versions 18 and 21, respectively. The basic idea behind bootstrapping is creating additional samples by resampling data (with replacement) from the original sample instead of obtaining additional samples from the population who are hard to reach due to their familiarity. By following the same data distribution as in the original sample, the created samples are likely to be representative of the population. Bootstrapping also is helpful in situations where the exact sampling distribution of the statistics is hard to achieve. Monte Carlo is a computational technique based on constructing a random process for a problem and carrying out a Numerical Experiment by N-fold sampling from a random sequence of numbers with a prescribed probability distribution. Although bootstrapping technique is simple, method of Monte Carlo sampling is one of its strongest models and applied to determine and estimate the statistical accuracy and the distribution from real-world sample statistics, respectively.<sup>15</sup> In return, Bootstrapping technique is quite useful in unreachable and less well-known community such as elderly dwellers in Southwest Iran (52,750,265 older adults in the census of 2016), resulting in 98% confidence into 3031 samples.

## Results

Descriptive findings demonstrated that 64 per cent of samples were men, 96 per cent married, 38 per cent Persian, 32 per cent Arab, 30 per cent Lor, the average of age 66 years old (minimum age 60 and maximum age 98). Among all samples (n=3031), 32 per cent stated that they knew themselves that they had chronic diseases. 27 per cent lived lonely, 12 per cent had retired from governmental sections, 43 per cent were rural dwellers, 17 per cent were loyal members of NGOs or governmental groups, 7 per cent were resident in nursing home. The generalization of the data to Khuzistānid elder women was not totally reliable. According to table six, counties of Dezful, Behbahān, and DashtAzadegān have the least social trusty but Ahwaz, Izeh, and Māh-Shahr Port have the most. The distribution of trusty to unknown persons showed that more than half of the aged people (53.7 per cent) selected “never have trust” with the scale of 5 degree, approximately 4 samples among 5 elderly persons. Ranking of governmental organizations and NGOs upon trusty variable showed a range from the most trusty: Education and literacy organization, charitable NGOs, familial cash members, health and medicine system, police and security system, judiciary system, National Television of Iran (IRIB) to the least trusty for Islamic Parliament of Iran, Bank and commercial system, mass media, particularly newspapers, and markets (Table 6).

**Table 6** Mean score of basic variables of social capital among samples in selected counties (N=3031)

Country	Trust and its capability	Norms	Networks	Social capital
Dasht-Azadegān (A)	1.2	2.4	2.6	2.1
Behbahān (P)	1.6	2.4	2.2	2.1
Dezful (P)	2.1	3.1	1.1	2.1
Abādān (A)	2.1	3.3	2.3	2.6
Māh-Shahr Port (C)	3.5	3.6	2.4	3.2
Andimeshk (L)	3.4	4	4.1	3.9
Ahwāz (C)	4.1	3.5	4.3	4
Izeh (L)	3.2	4.4	4.6	4.1
Sig.	0.001	0.001	0	0
Total	21.2	26.7	23.6	23.8
Mean (Each index)	2.65	3.34	2.95	2.97

Approximately, all the aged participants believed that the future of trusty in Iranian society is declining and there is no promising prospect for it. Factor analysis of the variable of participation and its secondary items applied to Dezful, Behbahān, and Māh-Shahr port Dwellers have the least participation as a whole especially in civil participation. Evaluation of some variables as factors show that all elder dwellers of Khuzistān have the highest range and score in these variables: local companionships, self-efficiency, social intermediary (particularly in this variable), emotional support, religious participation, and local participation. There is a different situation in the scores of some variables that might depend to ethnicity background; Arab, Persian, and Lor ethnic, and the kind of settlement; rural or urban. Table seven indicates average scores of secondary variables of social capital while quintuple scale (between 1 and 5) upon ethnicity and the kind of settlement among aged samples of Khuzistān (eight counties). Also, table eight illustrates the ranking of counties and the average score of social capital and the basic variables of it. As mentioned before, each county could be a candidate for every ethnic group stated in

alphabetical abbreviation of them next to the name of counties (C: complex of every ethnic groups, A: Arab, P: Persian, and L: Lor) (Table 6).

Wholly, the scores of these indexes were more than the median score (3) among aged samples: factor of informal trusty, cooperation, companionship, social intermediary, commercial support, local participation, religious participation, social solidarity, and membership in cultural groups. Ascending ranking of every county in scores of social capital, according to a significant difference of factors mentioned for all of counties, was more than the average score. Counties of Izeh, Ahwāz, and Andimeshk are the highest and Dasht-Azadegān and Abādān are the lowest in ranking. Distribution of basic items of social capital among counties state that Abādān in networks variable, but DashtAzadegān in norms and trust variables have the least scores. According to ethnic stratification of counties, they are Arab dwellers cities, but the rank of social capital for Izeh is as high as the counties with Lor dwellers.

## Discussion and conclusion

Social development could not be reduced to social capital, but it can be acceptable at social capital overplay the main part of the sphere which would be useful for practitioners of social development. In this study, according to Robert Putnam theory and some research and survey, it was attempt to find the range and ranking of basic and secondary indexes of social capital among aged dwellers of 60 years old and above in eight selected counties of Khuzistan province in southwest of Iran. Findings showed deferent distribution of threefold basic and 20 fold secondary variables of social capital according to county, ethnicity, and kind of settlement. Estimation of secondary variables of social capital state these accessory indexes higher than the average o quintuplet scale( more than 3) among aged population e.g. informal trust, membership in cultural groups, cooperation, companionship, social intermediary, local participation, religious participation and social solidarity. These details highlight that social capital as a kind of relationship among the elderly is being shaped informally and locally. The distribution of scores particularly basic indexes of social capital according to ethnicity and kind of settlement, demonstrates that all Arabic counties and Persian cities in some issues have the least grades in social capital scores. For example, Dasht - Azdegan and Abadan (Arab residents areas) have 2.1 and 2.6 scores (average) and Bebhan and Dezful as Persian counties have than 2.5 score. The Lor and mixed ethnic counties are above the medium scores (2.5), which represent a higher degree in social capital domains Rural settlements have different aspects and issues in social capital indexes than urban areas. For instance, they have most scores in these factors (above 3.5): informal trust, cooperation, companionship, social intermediary, emotional support, commercial support, local participation, religious participation, membership in cultural groups, and social solidarity.

It is noteworthy that the urban dwellers have the same scores in some issues in rural areas in cooperation, companionship, social intermediary, local participation, religious participation, membership in cultural groups, and social solidarity. Nevertheless, they have higher scores than rural areas. In these factors (above 3.5): tolerance, formal trust, and civil traditions. Generally, the least scores(less than 2) of all areas and ethnicities were capable of trust, security sense, self - efficiency, and new style of participation. As a polemic issue in Khuzistan province, where ethnic groups in special and the aged dwellers of the province in particular do not have the sense of security and efficient personality, this leads to a new kind of participation in society with conservative vision. Evaluation of organizations and

groups according these 20plet variables of social capital indicated that the non - governmental groups and organizations are in the first rank and the aged dwellers trust them more than governmental ones. Religious participation as one of the variables in social capital was an important determinant in the community of the study. Religious attitudes and behaviors characterized in the form of religious costumes could be adequate in cultural policy and decision making for the effect and reinforcement on the indicators of social capital in the elder population of Khuzistan province and Iran. Social intermediary (as a new index for the evaluation of social capital made by authors) has cool scores among samples as desirable institutionalized element for social capital in Iranian culture. This variable could be sustained for other indexes of social capital with a favorable effect on them and participation and trust in society particularly among aging people who reduce their social moment to other members of community. Even though there are new styles of social participation among elder samples, taken at a glance, there are more particular rather than common. This is particularly the case with family aspects and sphere as well as uttermost increase in kinship and cognation "Harem" (familial sanctum) in Arab and Lor ethnics. Infirmity and intolerance of social capital in non -governmental participation and interactions as civil customs can be related to the inefficiency of cultural policies for institutionalization of this category. Notwithstanding, this concept exists more within Iranian cultural system. Historical existence of religious cults and complexes in this society could be able to aid social capital and redefinition of its social functions.

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## Conflicts of interest

The authors declare they have no conflicts of interest that are directly or indirectly related to the research.

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