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INVESTIGATING THE COMPONENTS OF SOCIAL CAPITAL IN WOMEN-HEADED HOUSEHOLDS USING CONFIRMATION ANALYSIS

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Abstract **The social capital has an important effect on health behaviors of people in society. Therefore, evaluate the components of social capital in women-headed households (WHH) in each community due to vulnerability and the lack of socio-economic background seems necessary. This study conducted to investigate the components of social capital in WHH and its effects on demographic variables by using confirmation analysis. Methods: This cross-sectional study was performed by convenience sampling method on 300 WHH. This was designed to all females who referred to Tehran Municipality (2 District), by using World Bank's Social Capital Questionnaire (SC- IQ). This tool composed of 6 components within 27 questions. Data was analyzed by confirmation analysis using AMOS software. Results: The mean age of participants was 40.6±9.5 years. The majority of WHH (60.3%) were unemployed. In the confirmatory analysis, income and education have the most impact on social capital of WHH. In addition, the education had a positive association with almost all components but has negative correlation with participating in-group work component. The results showed that among the components of social capital, participation in team work was significantly associated with the education. Also, there was a significant relationship between income and all components of social capital except political empowerment. Conclusion: Income and education had a strong effect on social capital in WHH. Hence, by providing opportunities for improvement in these indicators, may improve the physical, psychological and social health and ultimately diminish the negative burden resulting from these vulnerable groups in the society.**

***Index Terms*— Social capital components; Women-headed households; Confirmation analysis**

I. INTRODUCTION

Nowadays, the concept of social capital components is tied to the health and many physical and mental illnesses (1, 2). Social capital is slippery, but nonetheless an important concept: slippery because it has been poorly defined, important because it refers to the basic fundamental of civil society (3). The concept is rooted in several theoretical traditions. Putnam, who drew the concept from Coleman, defined social capital as "those features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions" (4). The social capital is a network that is composed of relations and links, interpersonal and intergroup social trust as well as interactions between individuals and social groups, organizations, and institutions with each other. Despite of various definitions, the social capital is assumed as some degree of social cohesion, interactions, trust, bidirectional mutual relations, perception and sense of mutual commitment between members of a group (2, 5).

Social capital is a new concept that has entered into social, economic, and political fields and recently in the field of health. This concept is similar to an appropriate platform for productivity from other types of capitals. It serves as a path to achieving success in all life aspects of individuals. As a new concept along with other types of capital, the social capital has the same level of importance at least compared to them and it comprises of some components such as membership in social groups, participation in team works, social cohesion, trust, information and communications (3, 6).

On the other hand, social capital may play an essential key role in description of inequalities in social groups through drawing attention to important facts and phenomena (7, 8). One of the groups that is faced with inequalities is WHH which has increasing rate in Iran in the last decades. Therefore, it is necessary to determine and evaluate the components of social capital among WHH because they may be inflicted due to some problems, such as death or divorce of husbands, plenty of responsibility, lack of social and financial support, lack of access to appropriate jobs, and lack of job skills. Hence, WHH probably has more different problems such as mental disorders, having children with problems of social deviation, and poverty (9, 10). According to Glaser and Leisbonin, several factors are considered as effective factors in the formation of social capital such as movement of residence, age, social class, ownership of residential homes, and education (11). In several studies, there is a strong relationship between health and socioeconomic so that individuals belonging to a lower socioeconomic class, such as WHH are suffering unfavorable health status. Lachner et al, investigated the relationship between social capital and health, so they concluded that social capital was measured as a potentially effective factor and, there is a significant inverse relationship between social capital and mortality rate in Chicago (12). Also, in a nationwide study in rural areas of Indonesia, showed there is a positive correlation between social capital and well-being of the family. Families with high social capital had expenditures per capita, more wealth, higher savings and better access to the credit card (13). According to Coleman showed that the importance of social capital and its components of improving health promotion for vulnerable social classes through communication and information dissemination (14). So, Hosseini et al has shown that WHH paid less attention to receive of health care because the lower economic status and sponsorship of the family, which may be due to the rate of women's activity were significantly lower than men in social networks and groups 15).

Based on the results of different studies, the survey of social capital and its components in population especially in WHH are very important. Therefore, the purpose of this study was to investigate the components of social capital in WHH in Tehran, by using confirmation analysis.

II. Materials and Methods

This cross-sectional study was conducted on 300 WHH by a convenience sampling method that has referred to two districts Tehran Municipality (zones 9 and 18). The response rate was 89.8%. Data collection tools were as follows: 1) a demographic questionnaire including variables age, marital status, level of education, employment status, ethnicity, size of residential units, number of dependents, family income average, and length of stay in current living place. 2) The World Bank Social Capital Questionnaire (SC-IQ) which designed for developing countries to examine social capital among families. The validity of the questionnaire is being measured in Nejat' study in Iran (16). This questionnaire included 27 main questions and 6 domains as follows: 1) membership in associations and groups, 2) the social trust rate, 3) contribution in team works and public activities, 4) information and communication, 5) social cohesion, and 6) the political empowerment and activity. Each domain had 3, 11, 3, 2, 10, 5 questions respectively in the form of Likert, multiple choice or yes/no. To assess social capital components of participants in this study, we calculated each person's score in each domain. The attainable score was 0–100 in all domains. Cranach's alpha coefficient of reliability was calculated for all components of social capital, which varies from 0.71 to 0.91 that generally obtained 0.82. A questionnaire completed by trained interviewers and informed consent was obtained from participants after explaining the purpose of the study.

All analysis was performed by confirmation analysis in SPSS 22 and AMOS software (ver 22). To analysis of data, in the first stage, a hypothetical causal model based on previous studies was designed for each of these components. Then, by using the confirmation analysis method direct, indirect and total effects of the components of social capital and correlation among the six components were estimated. Statistical significance was set at $P<0.05$.

III. Results

The mean age of 300 participants was 40.6 ±9.5 years. The majority of WHH (60.3%) were unemployed. The house size average of the participants was 70 square meters and their monthly income average was estimated 120 $. The length's range of stay in place for all participants was 10 to 20 years (table1).

Table1. Demographic characteristics of WHH participants this study

Demographic characteristics	Number	Percent
Level of Education		
Illiterate	67	22.3
Primary	89	29.7
High school	135	45
Academic	9	3
Marital status		
Single	7	2.3
Marital	20	6.7
Widow due to divorce or death	273	91
Employment status		
Employed	119	39.7
Unemployed	181	60.3
Language		
Persian	185	61.7
Kurdish	9	3
Azeri	8	2.7
Lori	8	2.7
Turkic	86	28.7
Balochi	4	1.2
Length of stay in living place		

(yrs.)		
1-7	42	14
8-14	64	21.3
15-20	41	13.7
>20	153	51

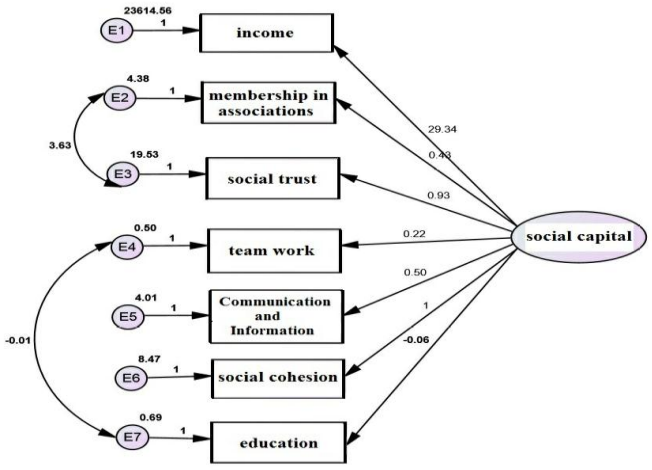

Figure 1. Confirmation analysis diagram of social capital in WHH

In this study, among the 6 components of social capital, all components except the political empowerment in the confirmatory factor analysis were significant and entered the model. Moreover, the model fitness criteria, including CMIN / DF = 1.740; GFI = 0.987; RMSEA = 0.04 and HOELTER = 247, shown that there was approximately a good model fitness (Figure 1).

Table 2 shows the direct, indirect and total effects of components on social capital that indicate the relationship between the five components of social capital (P<0.001).

Table 2. Standardized effects of social capital components on the WHH demographic characteristics

Components	**Effects**		
	Direct	**Indirect**	**Total**
Membership in associations	0.46	0.03	0.49
Social trust	0.21	0.08	0.29
Team work	0.61	0.05	0.27
Social cohesion	0.65	0.00	0.65
Communication& information	0.50	0.000	0.50
Income	0.43	0.000	0.43
Education level	- 0.17	0.03	- 0.14

Table 3. Correlation matrix of components of social capital in WHH

	Membership in associations	Social trust	Team work	Social cohesion	Communication & information	Income
Membership in associations	1					
Social trust	*0.233	1				
Team work	*-0.253	*-0.084	1			
Social cohesion	*0.435	*0.188	*-0.157	1		
Communication & information	*0.452	*0.332	*-0.164	0.346	1	
Income	*-0.110	*-0.253	*0.004	*0.019	*-0.147	1
Education level	*0.169	*0.022	*-0.398	*0.043	*0.043	*0.012

* P-value < 0.05 was statistically significant.

As Table 3 shows, there is a positive correlation between the income component and contribution in team works. In confirmation analysis, the effect of the income variable on social capital and education by participating in-group work was assessed .Among the components of social capital, two components (membership in the community and in groups) had a two-way communication together.

The findings reveal that income effects on social capital and also Level of education effects on the component of Team work. Among the components, Membership in associations and Social trust has a reciprocal relationship. Among all the variables in this study showed the income and level of education have the greatest impact on social capital and its components in WHH (Figure 1).

IV. Discussion

The findings showed that the majority of participant's WHH were middle age, unemployed and high school level, which was consistent with the finding of Akinsola and Popovich [17]. In findings of this study, the level of education had a major impact on the components of participating in teamwork and membership in social associations and groups. In general, low level of education is one of the most important reasons for lack of absorption in the labor market. Also, studies that carried out in the field of employment of WHH showed that due to lower education level the employment opportunities for these women are more limited than male-headed households. Considering to this fact that, the access of supports for WHH are minimal and mainly have no role in empowering of them, consequently these individuals tend to temporary jobs, such as domestic workers and daily laborers. So, they don't have enough opportunities to participate in collective works

(18, 19). Also, in the study of Habib, more than half of the respondents were found to be maids, working in houses or 'mess'/students' hostel (20). WHH has been deprived from continuing their education due to poverty and responsibilities at home, eventually they may less succeed in team works and finally they have less social supports. But in Kassani and et al study, which has been carried out in Ilam, variable of education was not significantly related to social capital (21). The reason for such difference may be back to population in both studies. Since this study has been conducted in the region at Tehran metropolis and individuals with higher education level can get better occupational opportunities which led to get high level of social trust. According to studies carried out in many countries, education is considered as the effective element on social capital. According to these results, the more social activity, trust rate, efforts for resolving the local problems among the persons with higher education may lead to improving the social communication. Also, in some studies, a direct relationship has been observed between years of education in school with social capital that to encourage the persons for social cohesion for cooperation and coordination (18).

In the present research, all components of social capital have a significant relationship except political empowerment. One of the reasons for this fact is the most of the participants in this study refused to answer to the questions in this component because of sensitivity.

Income is another effective element of social capital and its components in WHH. The high income arises from a suitable job or appropriate position in society that will lead to better social communication which rising the sense of cooperation and coordination. WHH has no opportunity for memberships in a group even the membership in local associations because they are working full- time due to special economic problems and multiple responsibilities. As a study by Hosseini and et al shows that 77% of WHH do not have appropriate physical, psychological health, this is caused by anxiety and stress due to the economic status and sponsorship of family (15). Household income is commonly as an important factor on social capital, so that, people in the middle and high-income are more familiar with community activities. Of course, conversely high income may reduce the importance of participating in the associations and communities, and these individuals obtain their requirements through the money instead of participation in the associations. As the Bourdieu believes that money and economic capital can replace with social capital (22, 21).

Social communication is another component of social capital in WHH. Increase in communication and interaction with people led to the health promotion. In studies with a comparative approach between WHH and other women, indicated that WHH has less received health care, which means that an appropriate social communication, increase the awareness and performance of health care in WHH (15). As, in Coleman's study showed that more than half of WHH have the physical problems and suffering from the weakness and disability. One of the reasons for these problems was the lack of the social communication (14). Also, the result is similar to that of Farahmand'study showed a relationship between the reduction in social interactions, emotional-physical insecurity, loss of social support and psychological empowerment of WHH (23). Therefore, the communications components of social capital may play an important role in raising awareness of these women for symptoms of their diseases that is necessary for prevention of diseases.

V. Conclusion

In summary, this study emphasizes the importance of social capital and its components in WHH. Then create the appropriate context and culture building for changing in public opinion towards the presence of WHH in society, providing appropriate jobs with adequate income and creating opportunities for the promotion of education for these strata of society, seem necessary.

VI. Limitations:

One of the limitations of this study was that access to the WHH population limited. It is recommended that similar studies be done in WHH in different regions of Tehran, other cities and in villages.

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