EXPERIENCE OF TIME BANKING IN TURKEY IN THE CONTEXT OF GIFT ECONOMY: ZUMBARA CASE

Abstract

In this study, Zumbara (connotation for time and moneybox), which operates as a time bank in Turkey, is discussed in the context of gift economy and its subcomponents social, cultural and symbolic capital. There are approximately 40,000 members of this system from Turkey and the Turkish Republic of Northern Cyprus. It has been operating since 2009 and is carrying out service exchange with time currency instead of paper money. In the study, this time bank was assessed on the basis of reciprocity principle of gift economy and Bourdieus’s theory of non-economic capital factors. In the study, we methodically used mixed methods and first applied quantitative analysis to the data obtained from the system of time bank, and then we analyzed the findings in depth through e-mail and by face-to-face interview with managers of time bank. However, we have tried to adhere to the definitions in the literature and have discussed cultural capital in the context of education, social capital in terms of activity meetings and geographical framework and symbolic capital in the context of work and graduation qualification. When we consider these types of capital in the context of Turkey, the border between them is very blurry. As a result, it has been determined cultural, symbolic and social capital should be taken into consideration when the time bank is evaluated in the context of gift economy.

Keywords: Time Banking, Gift economy, Social Capital

Anahtar kelimeler: Zaman Bankacılığı, Armağan Ekonomisi, Sosyal Sermaye

1. Introduction

Reciprocity argument in trade has always been a matter of debate in financial accounting theory. Double entry book keeping system which believed to be first introduced by Luca Pacioli and has roots in fourteenth century is also based on this principle. Further investigation showed that this system find places itself even in religious practises. For example Zaid (2004) indicates that accounting system and recording procedures began prior to invention of Arabic numerals in response to religious requirements and played very important role in the various section of the society. Actually, this argument extended to the archaic societies with the works of anthropologists. Mauss (2003) begins obligation of giving gift and donation chapter in his book with a poem from Medieval icelandic literature. Some parts of this poem is about receiving and giving something that contains contradictions about reciprocity nature of gifts. Some parts are emphasising generosity in exchanges while other parts is standing on giving the exact equivalent of taken. However, his main thesis is that archaic societies has different exchange and dealing regimes in the form of gift giving compare to our individualist fully market oriented system. Generosity, prestige and money are considered as prime extensions for these exchanges which conducted as voluntarily in theory but obligatory in practice.

Gift exchanges are not related to the equivalence of exchanged goods or the values of these goods but just the given object has a symbolic exchange value. Symbolic social relationship means consciously wastage of surplus and an unlimited exchange relationship as opposed to unlimited ownership and accumulation law of capitalistic economy politic. This exchange is
based on reciprocity relationship that can be described as competition. In addition, this reciprocity in gift exchange may only exist with social relations in order to integrate with the group and in front of everyone (Baudrillard, 1976). Therefore, society is the other name of affirmation and sharing, but at the same time, it is the power that has been approved and shared with the symbolic capital. Living in the community, acknowledging, sharing and respecting shared is the only way to happiness (Bauman, 2001).

In contrast to the logical status of today’s objects, archaic communities consider gift objects as unified part of the gift-giving soul. This spirit combined with the gift object defined as Hau and it provides mystical and tight control over the person receiving the gift. Although Levi-Strauss (2005) accepts aforementioned goods not just as physical but also respect obligations and privileges. In addition to that, Hau is not the last reason for the exchange; this, understands consciously a cause of problem which is an unconscious obligation elsewhere.

Even gift giving or making a vow to the nature and gods are returns of abundance, peace and gratitude. According to Baudrillard (1981), corruption of this reciprocity principle can be shown as one of the causes of destruction in nature and its counter reaction. Adding value, transformation of nature for better and turning labour into global objective is started with usage value. And value is something that measured by the amount of time required for production.

Time banks claims that they have sustained the gift economy by utilizing labour time as currency. Both, every person’s time is actually equally valued and everybody starts with equals amounts of capital in this system. Infinite nature of time and the hypothetically inability of accumulation in infinite amounts make time banks more equitable and beyond providing urgent requirements of people time banks have power to rebuild the community. Plenty of time, lack of money resources and high amount of trust are the some of the stimulus for exchange in these systems (Eisenstein, 2012: 253). According to Derrida (1992) time and the gift may seem to be a laborious artifice and both of them have a singular relation to the visible. Then he questions the circle of gift exchange and refuses that if there is gift, given of the gift must not come back to the giving and it must not circulate nor exchanged. Therefore, wherever there is time, wherever time as circle is predominant, the gift is impossible. Again, for the gift to be formed there must be no reciprocity, return, exchange or debt.

Nowadays time banks are the institutions that fulfil this function. Time has been used as currency in the system and exchanged with service provided to receiver. Although most of the exchanges conducted are services in this system, goods are also can be exchanged. According to Collom et al. (2012) time banks are one of the most popular transaction systems among community currency. Members of this system accumulate hours which can be spent later on required goods and services equal the amount of service time they provide. Time banking differentiate from other major community currencies like Local Exchange and Trading Systems (LETS) and Hours systems with not using any paper money nor is there any equivalent value for monetary system of country.

Number of countries with active time banks all around the world is 34 and United States and United Kingdom are some of the intense countries with more than 300 registered time banks (Cahn, 2011). Zumbara is one of the local time bank network that operates in Turkey with approximately 40.000 members and more than 8.000 hours of service shared from 17.000 hours of service offered between the years 2009-2016. Zumbara defines itself as a “gift based” social network, which uses time instead of money. Zumbara is defined as a joint stock company on the
terms of use and on the terms of membership on the web site. Unity and centrality of Zumbara distinguish it from peers operates in abroad. The aim of this study is to examine this local time banking system from different perspectives such as symbolic, social and cultural capital theory of Bourdieu, reciprocity principle, wealth (hours) accumulation, congregation and other components of gift economy. First, to accomplish this purpose, review of literature on time banking and gift economy were given in the next section. Afterward, theoretical framework on symbolic capital was given in the third section. Then, methodology used was presented in the fourth section of the study. Findings were given in the fifth section then the study was concluded with general evaluation and further suggestions.

2. Literature Review

Gift Economy

The first studies on the gift economy are found in the work of anthropologists as mentioned before. Malinowski (1926) reveals from a functional paradigm that they have a very precise technical system and a very complex economic system when explaining the economic life of primitive societies. The objects in common property which is used in the production of exchange goods according to mutual needs of parties are linked together on the basis of duties, privileges and mutual obligations of community members. Position and title were determined by rank, age and personal ability. Reciprocity supported by heavy penalties is the main principle behind this exchange of gifts. Sahlins (1972) mentioned of the concept of gift exchange instead of war for social peace. Here, as a rule of the payment, the gift giver is expressed to pay a little more than the equivalence principle. This situation resembles the phenomenon of interest used by contemporary societies. In these structures, the force is not concentrated at a specific center, there is no public and dominant power, the group ownership is the issue, and the material flow is a seamless process that secures social relations. Gifts that are given without any expectation of repayment and which are also regarded as insulting are considered pure gifts. In a broader context, spirit of the exchange swing towards the interest shown to the other side without the expectation of interest, mutual appreciation of interests and a selfish expectation of selfishness.

Bauman (1990) compared the conflicting concepts of gift and exchange of equivalents in his study. Selfishness is the essence of the exchange of equivalents, sides keep the bargain with the other party to ensure the best possible deal and maximize the benefits of its own. Situation is different in the gift giving. According to him, the rights and needs of others here are the primary and only force for gift action. In the purest form, gift is given irrespective of the nature of the recipient. The pure gift is a pure loss and the single achievement here is a moral achievement so as the loss increases, the moral value also increases. Value is measured with the subjective lost for the giver. Some people who escape from these two conflicting principles try to create limited, self-sufficient communities within the commune, where only personal relationships are allowed.

Primitive man, though not in the consciousness of economic reason, acted impulsively in a universal economic behavior, and accepts the gift relation as an ideology of superstructure because of the origin of change. As quoted from Pierre Bourdieu, the gift is regarded as formalism, misleading and deception. Because the meta-relation is nourished in relation to the gift but at the same time rejects the gift. In order to fully understand the function of the gift in today's modern societies, it is necessary to carefully separate the gift from free. Even in France, where meta-relations are very widespread and a large part of the working population is paid, the size of gift
relations almost coincides with the GDP, which is the measure of meta-relations. This conclusion suggests how important gift exchange is in terms of Turkey (Insel, 1995).

Those exchanged in gift form are not only economic goods and contracts, but also consists of many social phenomena such as courtesies, banquets, military services, children and dances performed in fairs and festivals. Potlach and Kula’s are examples to these events in archaic societies. For example, at the pottery ceremonies, the Indian chefs tried to prove their generosity by giving them the most from food and rare goods. Immediate repayment of receivables is considered an insult and kills the gift. Instead, it is expected that a repayment will be made at an interest rate ranging between 30 percent and 100 percent per annum. Therefore, here the goods are used as values of bond creation. The value of creating bonds is also partly the value of the time, as the market is blocking it away from the periodical network. By expressing the value of creating bonds, the gift proves that we are not objects (Godbout, 2000).

Akay (2016) compares the importance of the accumulation of today’s capitalist system with the expenditure on the gift economy of archaic societies. He exploits thinkers and writer who explain capitalism, such as Adam Smith, Max Weber, Moliere and Balzac to explain the approaches based on the accumulation. Time is also investigated in the context of sexuality and showed how the labor time was spent in an efficient and full manner for the sake of production.

**Time Banking**

Edgar Cahn is the first person to use the term time banking and time credit and the founder of Time Bank USA. Cahn (1999) explains the reason behind time banking as failure of market economies to value many type of critical work such as raising healthy new generations, protecting the environment, building strong family ties, better education and contributing the social justice with high democracy. In brief, time banking is considered as alternative to market price for valuing the workforce in a more proper manner. Main target of this system is especially unemployed people who burden society. Cahn (2004) determines people of society as main wealth (assets), redefines works according to the real needs of society with more environment friendly, puts reciprocity to the heart of this exchange system and determines trust and civic engaged social capital as the main requirements of people. These are the four core values of the time banking system.

Participation and roles of vulnerable age groups such as youth in transition (see. Marks, 2012) and elderly (see. Collom, 2006) discussed in the literature. Studies showed that different age group contributes time banking system equally and especially marginalized society members gains benefits like social inclusion and develops civic engagement.

Ozanne (2010) explores the contribution of time banks to the community from the perspective of social, physical, cultural and human capital and excludes economic capital which is not scope of the study. Researcher adds that motives, values, structure and concepts of marketplace make people stay away from time banking system. Thus the author keeps time banking apart from the market system. We understand here the term market as individualistic and price oriented simulation places. Because, on the contrary, Polanyi (1944) states that there is a certain level of market economy in all kinds of societies, but that only market economy understanding in present industrial society is disembedded.

Another term engaged with time banking is co-production. Carroll (2013) defines participation of the parties in the production of something goods or services as co-production and claims that
this active cooperation achieve better outcomes for both parties. This is a form of the reciprocity principle that frequently applied by the time bank and it strengthens the economy of household, neighbourhood and community. In the lack of co-production some problems occurred in organization level such as; less effectiveness and absence of accountancy which resulted dispute between the customers and producers. This co-production redefines the link among market and non-market (Cahn, 2004). Glynos and Speed (2013) examines co-production principle in the context of healthcare under the time banking system and concludes that if it accepted as regime of choice, time banks with its recognition principle is more convenient will be unsuitable places for them. Time banks may not be the appropriate environment to offer health services, but may play a role in increasing the health and belonging of elderly, alone and low income individuals (Lasker et al., 2011).

Collom (2007) studied the motivation behind the participation to the U.S. time banking system with the tool of survey and concluded that diversification of members also provides wide variety of services at the same time. Both community and individualistic values and needs are determined as primary motivations for participation while social motivations are the least. According to this finding of the study, the necessity of meeting periodically and physically in time banks has become controversial.

There are only three studies were carried out that took Zumbara to perspective until today and these studies examined it from different perspectives. For example, Aktas (2013) approached to the topic from the activity theoretical framework to understand the challenges in the system. Author concluded that valuing everyone’s labour equally may result in contradiction because use value and exchange values may separate from each other. Another deficiency in the system is the reluctance of participants to exchange their service that has strong tie with trust of participants to each other. In this regard, the prospect of the members of the system coming together physically arises. The central structure and crowd of this time bank makes such social meetings more difficult. Zumbara is not a volunteer system, so receiving service is required against service provided. This is also a necessity in the context of gift economy. In another study conducted by Tosuner (2011), it was discussed the role of the incentive in reducing consumption behaviour. As a result of the analysis, it has been found that public networks have an alternative structure that can encourage consumption behaviour reduction. Baudrillard (1970), on the other hand, approaches consumption from a commercial perspective and defines the advertisement as a non-reciprocity and continuous for everyone. The author describes the ad here in the context of public relations from the perspective of gift, while it defines it as negating the economic rationality of commercial exchange in the context of non-reciprocity. While advertising is being addressed here, the gift economy has also been defined and characterized as the elimination of economic constraints and a game of festivity, assistance to those who need it, and a social service that does not take advantage of it. Last study on Zumbara conducted by Abiral (2015) and approached to the topic from the perspective of lifestyle activism and permaculture movement.

3. Theoretical Framework

In this part of the study, the symbolic, cultural and social capitals, which are the important factors in the process of the gift economy, are considered as the theoretical basis of the study. Bourdieu (1986) divides the capital into three; economic, cultural and social capital and classified different type of social capitals which is different from economic capital. In his later works, Bourdieu later adds new concepts such as political capital, computational capital, and symbolic
capital. There may be exchanges between the types of capital mentioned. Cultural capital is more concerned with the education status of individuals (Bourdieu and Passeron, 1970) while social capital is related to membership status in a group and relationship between members of the group, which may exist only with material and symbolic exchanges, which have also roots in gift economy. The symbolic capital created by social institutions is reproduced in endless quantities thanks to exchange of gifts. This exchanged things turns into signs that reproduces the group again. As seen here, the symbolic capital is separated from social capital. Bourdieu (1994) explains that the source of symbolic capital is in the state mechanism. And the king or heads of state intensify more symbolic capital (loyalty), and the power to distribute this capital in the form of tasks and titles, which are regarded as rewards, is increasing. In the same study, Bourdieu shows the notion of clarification taboo and time gap between exchanges as to characteristics of the gift economy. According to this clarification taboo, an honorable man does not speak about the exchange of given or maturity of the debt. Thus, such work is carried out by women who are excluded from symbolic exchange. Meeting the collective expectations without making any calculations leads to all the profits of the symbolic commodity market and how conscientious is makes it so blessed by the common conscience.

One of the studies dealing with the symbolic capital concept was taken up in Veblen’s book “the theory of leisure class” and the subject is discussed in the evolutionary and consumption context. Therefore, courage was a determinant of appropriateness in the period of looting, and it required features such as massiveness, cruelty and unscrupulousness. The methods of accumulating tangible assets and the features necessary to retain it have changed since the early days of the spoiler culture. When society is taken as a whole, it can be seen that the competitive and spoilt-taker type does not show continuity and consistency at a high level. Ceremonial activities such as progress, being polite, courtesy and complying with official rules had an important place in men's reputation. Courtesy has only developed in the status regime and is a symbol of leisure life. Accordingly, it is more important than trust (Veblen, 1899).

It has also been seen in the literature that the gift economy is transformed member of tribes exchange into a spending competition like Potlach ceremonies, and showed how much it attaches importance to their social status. This is reflected in the fact that the tribal chiefs behave like bankers and that they are the prototype of today's public finance system and state treasury organizations (see. Sahlins, 1972). Zeitlyn (2003) claimed that successful gifts were boosting fame for generosity. And it is known that this symbolic capital, which is a separate species from the economic capital, helps to increase the other in some circumstances.

The distinction about the symbolic capital arises here. Some thinkers note that the symbolic capital accumulates as a result of your generosity in the spending and giving race while others emphasized that symbolic capital is important in a criminal and warrior societies where every job is not of equal value. In other words, while symbolic capital is a cause in one case, it is a result in another case. This can also be seen as a way for the rich to cover their own misdemeanors.

Symbolic capital may include cultural, social and economic capital and act as a mediator of authority through prestige. Symbolic capital also has the ability to accumulate as it is in economic capital and needs time for it. It is also known that once capital is acquired, it will reproduce itself at certain levels in the direction of increasing or decreasing (Fuller and Tian, 2006). Hypothetically, because of the quantitative nature of economic capital, it can produce itself in
infinite numbers; this situation is becoming more controversial in the symbolic capital, which has more qualitative characteristics and statistically percentiles within the community constitute the exception to this situation.

4. Methodology

The paradigmatic approach of this research is pragmatism. This approach leads to an understanding of the problem through methodological multiplicity. So when evaluating ideas we need to take into account their practical and empirical implications (Johnson and Onwuegbuzie, 2004). Compared with constructivism and post positivism, this pragmatist approach seems to use research methods of the other two approaches together. According to this, Feilzer (2010) indicates, “pragmatism allows the researcher to be free of mental and practical constraints imposed by post positivism and constructivism” and researchers are free to choose from variety of techniques of analysis and data collection.

This is an evaluation study conducted on Zumbara operating in Turkey as a time bank in the context of gift economy. Evaluation studies related to the improvement of the performance of the examined subject or may be assessed by other organizations for reviewability and applicability. Well-designed evaluations also used to influence public perception, shape decisions of decision-makers, and provide momentum for further research and theorizing. (Sart, 2015: 164). In this regard, the first hypothesis of the research is H₁: Zumbara, Turkey's first and only time bank is an institution that operates in the context of gift economy principles. According to this hypothesis, we evaluated whether the time bank operates in the context of gift economy. As the second hypothesis of work, the social, cultural and symbolic capitals that are variants of gift economy and constitute the theoretical framework of this study are considered. Therefore, second hypothesis is set up as H₂: The service exchange performed in the time bank has relation to the symbolic, social and cultural capitals of individuals. As these capitals are sub-factors of the gift economy, we have considered this hypothesis as a sub-hypothesis that supports the first hypothesis.

For this reason, sequential explanatory design was determined as a research design. Sequential explanatory design begins with quantitative analysis techniques in the first stage and continues with qualitative data analysis in the second phase. The quantitative data obtained in the first stage may examined more deeply in the second stage and results that are more comprehensive may obtained with this investigation and the results obtained with these methods are interpreted (Creswell and Clark, 2015). Accordingly, first we analyzed the quantitative data obtained from the database of the time bank. Then, according to the hypothesis of study, we conducted face-to-face interviews with Zumbara directors through the internet.

First, descriptive statistics on service quantities exchanged and categories of these services carried in the time bank of Turkey, presented annually in the study. Then, descriptive information about the demographics, service supply and demands of the members of the system presented. At the next stage, ANOVA and t-test used to analyze whether there is a difference between the demographic variables and the service changes performed on hypotheses of work. Although Bourdieu relates the levels of education to cultural capital, we also considered it in the context of symbolic capital in terms of meeting social expectations when considered in the context of Turkey.
In the second part of the research, we obtained qualitative data from the interviews conducted with the three managers and founder of the time bank. Yıldırım and Şimşek (2013) point out that researchers working on different aspects of organizations, especially the cultural and symbolic dimensions of organizations, use interviews as a basic data collection tool. Interviews carried out unstructured and the questions asked by the interviewer shaped according to the flow. Glesne (2015) classifies types of questions in interviews as experience / behavior, opinion / value, emotion, knowledge, sensory and demographic questions and recommends placing the experience / behavior questions that belongs to the past and present time first in the interview as the most easily answered questions. Therefore, we gave priority to these kinds of experience related questions in the interview.

We evaluated the qualitative data obtained in the second part of the study by discourse analysis. Akar and Martı (2015) present three different definitions of discourse; first, discourse is the use of language that goes beyond sentence level. Secondly, discourse is the use of language in a social context and requires the analysis of science such as linguistics, sociology, anthropology and psychology. Finally, inferred from Foucault, discourse is shaped by power as the way in which ideology is spoken. In addition, discourse and language play a major role in the construction of social reality. Accordingly, we have coded and interpreted the interviews and classified and commented on the important themes. In other words, we conducted content analysis on the data obtained by the interview.

5. Findings

In this part of the study, we first gave descriptive statistics about Zumbara. Then the relevant tests and interviews will be included in the theoretical framework of the study. The time bank first formed in 2009 and only 19 units of service exchange realized in eight different service categories in the second year. The number of registered members in the various cities of Turkey and the Turkish Republic of Northern Cyprus is 40,036. The total number of service exchanges realized in the system over the past seven years is approximately 8,395. Total number of service offered by time bank members is 16,904 while 11,338 hours service demanded during these years. Realized given time for services offered is 8400 while 8,390 hours service taken by Zumbara members. This difference between the receipt and the given time is due to a number of times given to the members of the system as gifts during registration. We also showed the amount of service exchange according to the years on the time bank in the figure below.
There is a significant increase in service exchange during 2012-2013 periods as can be seen from figure 1. In addition, service changes have fallen since peaking in 2013.

In the interviews with Zumbara managers, we asked reason for the increase in interest in the system during these periods. According to that, Zumbara funded by a well-known social media agency during these years and had chance to develop its web site. So, it is indicated that formal currency printed by government is an enhancing tool.

The service categories that have changed over the years also vary. In the first year, when the exchange was very low, there were eight categorical exchanges and this figure reached more than 28 in the following years. In the pie chart below, we showed service categories percentages for 2016 as an example. As can be seen from Figure 2, the service exchanges performed in the time bank vary greatly and subjects such as personal development and experience sharing and self-improvement, which do not directly affect economic life, are of great importance. Figure 2 presents the data for the year 2016, while the proportional distribution of the categories for the other years is similar to this year. Therefore, it is appropriate to give a summarized categorical distribution graph of last year as an example in addition to Table 1. Intensive exchanges in areas such as personal development and life/job experience sharing are examples of the strength of social capital among participants.

Zumbara managers have stated that the exchange of goods cannot be carried out because of difficulties in the measurement of the value of labor put forward in the production of commodities and they focused more on knowledge, skills and talent exchange. Well-known social networks such as Facebook and Twitter also structurally influenced them and experience sharing became the most unutilized function of the system.

**Figure 1.** Number of Service Exchanged Annually
Concentration in the art category on the pie chart should also be taken into consideration in terms of accommodating various artistic branches such as performing arts, cinema, photography, painting music and literature. We presented detailed annual exchanges in the categories below in table 1. When we examine traditional gift economies, it is seen that the food commodities that provide the survival of life are also exchanged while categories in Table 1 shows that the Zumbara members are heavily exchanging services instead of goods. Unfortunately, due to lack of the data, we did not include the categorical records for the first year of Zumbara, 2009, on this tablature.

**Table 1. Classification of Services**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Improvement</td>
<td>1</td>
<td>7</td>
<td>107</td>
<td>293</td>
<td>251</td>
<td>74</td>
<td>104</td>
</tr>
<tr>
<td>Games</td>
<td>-</td>
<td>7</td>
<td>63</td>
<td>90</td>
<td>33</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>-</td>
<td>-</td>
<td>52</td>
<td>48</td>
<td>12</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Sports</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>64</td>
<td>30</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Cinema</td>
<td>-</td>
<td>-</td>
<td>43</td>
<td>72</td>
<td>28</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Photography</td>
<td>-</td>
<td>-</td>
<td>22</td>
<td>47</td>
<td>24</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Literature</td>
<td>-</td>
<td>7</td>
<td>66</td>
<td>112</td>
<td>101</td>
<td>82</td>
<td>50</td>
</tr>
<tr>
<td>Painting</td>
<td>-</td>
<td>2</td>
<td>15</td>
<td>28</td>
<td>8</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>6</td>
<td>81</td>
<td>131</td>
<td>49</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>Handicraft</td>
<td>2</td>
<td>2</td>
<td>22</td>
<td>34</td>
<td>26</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Eating&amp;Drinking</td>
<td>-</td>
<td>-</td>
<td>82</td>
<td>89</td>
<td>39</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Language</td>
<td>5</td>
<td>5</td>
<td>130</td>
<td>161</td>
<td>83</td>
<td>88</td>
<td>86</td>
</tr>
<tr>
<td>Career Planning</td>
<td>4</td>
<td>33</td>
<td>56</td>
<td>56</td>
<td>13</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Chores (Decoration, repairing, etc.)</td>
<td>1 -</td>
<td>9</td>
<td>22</td>
<td>16</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Gardening</td>
<td>2</td>
<td>-</td>
<td>26</td>
<td>82</td>
<td>32</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Travel</td>
<td>-</td>
<td>5</td>
<td>71</td>
<td>48</td>
<td>28</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Technology &amp; Internet</td>
<td>2</td>
<td>13</td>
<td>97</td>
<td>85</td>
<td>48</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>Finance</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>-</td>
<td>-</td>
<td>86</td>
<td>182</td>
<td>81</td>
<td>53</td>
<td>41</td>
</tr>
<tr>
<td>Life Experience</td>
<td>7</td>
<td>102</td>
<td>134</td>
<td>71</td>
<td>78</td>
<td>102</td>
<td></td>
</tr>
</tbody>
</table>
Table 2 provides data on gender distribution of members. Accordingly, we found that there were no significant differences between the rates of male and female members. In addition, 1.1 percent of the members did not provide information about their sex.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Specified</td>
<td>453</td>
<td>1,1</td>
<td>1,1</td>
</tr>
<tr>
<td>Male</td>
<td>21015</td>
<td>52,5</td>
<td>52,5</td>
</tr>
<tr>
<td>Female</td>
<td>18568</td>
<td>46,4</td>
<td>46,4</td>
</tr>
<tr>
<td>Total</td>
<td>40036</td>
<td>100,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

We have excluded this missing data in determining whether there is any difference in the service changes performed by the members according to their genders. We analyzed whether there was a difference in service change according to sex, by independent sample t test in Table 3. We performed the t test at 95 percent confidence interval in two stages. We looked at the Levene test results in Table 3 at the first stage and analyzed the equal variances not assumed line at the second stage because p <0,05. We have seen that the significance (2-tailed) value in the second step is greater than 0.05. Therefore, we could not get a meaningful difference between the amount of service change of men and women. However, anthropological studies on gift-giving economics put the dominant role of man in the forefront. Unlike the economies where men are more dominant, it is thought that this disparity between female and male service change amounts is due to the effectiveness of female entrepreneurs in Zumbara.

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>24.72</td>
<td>0.000</td>
</tr>
<tr>
<td>-2.67</td>
<td>33246</td>
</tr>
</tbody>
</table>
We reorganized many of the participants level of graduation of those who indicated themselves as pupils according to their profession definitions and their ages because of their stated level of education rather than their level of graduation. It should also be taken into account that the data obtained may have changed later with the information entered by the members during their registration. For these reasons we represented the population with a sample of 381 people randomly selected reflecting 95 percent confidence level and 5 percent confidence interval. According to keyword searching, approximately one-fourth of registered members in the system have an ongoing relationship with the education system, which is important for understanding cultural or symbolic capital's impact on participation in the time bank.

Table 4. Exchanges Differences According to Education

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>307,107</td>
<td>5</td>
<td>61,421</td>
<td>3,743</td>
<td>.003</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6169,723</td>
<td>376</td>
<td>16,409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6476,830</td>
<td>381</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We presented the results of our one-way ANOVA test in Table 4. According to this, there is a significant difference between the education levels and the sum of the services exchanged (p <0.05). The homogeneity of the variances tested with Levene in order to choose the post hoc multiple comparison tests that show the difference between the education groups (Saruhan and Özdemirci, 2011: 221). Levene test showed equal variances are not assumed (p<0,05), so Dunnnett’s C test used and test results showed that there is significant difference between high school and university graduates. In order to understand better this difference, we have ordered members according to their service exchange quantities from most to least and used job descriptions as a control variable. According to this, we found that the members who graduated from the top ranked universities of the country and worked in their prestigious professions performed the higher service exchange in quantities.

Zumbara directors indicated that individuals living in low-income areas were also restricted in technology literacy at the same time, as one of the main drivers of this situation. They also expressed that economically self-proving individuals are in search of new ways to satisfaction and that they can allocate time to actualize additional activities.

Figure 3 below shows the distribution of service exchange quantities by cities. Here, the centrality of big cities such as Istanbul, Ankara and İzmir is clearly visible. This situation is very similar to the economic relations carried out at the present capitalistic level and called as time space jam (Harvey, 2010). This also important that Harvey’s (2012) definition of common areas as not a particular object or a property but as a permanent, non-permanent, dynamic form of relationship that open to external influence. This also shows the importance of population density when the capital (in our case at the time) is accumulated.

Since the establishment of the Zumbara, a number of localization initiatives have been carried out in various regions and the managers have stated that this cannot be done and that the Zumbara system has always been perceived as being a superstructure like central banks of governments. This situation shows that there is uniqueness in Turkey when compared to the examples of local time banks abroad.

The distribution of the realized changes according to the cities is plotted with the fusion tables program on the whole of the main mass and is presented in detail in the following figure 3.
According to the findings, social, cultural and symbolic capital affects the level of participation in time bank activity. Nevertheless, it has not been observed that the time bank acts exactly according to the principles of the gift economy. Accordingly, the findings of the study partially confirm the first hypothesis while strongly confirm the second hypothesis.

Conclusions

There are similarities between service exchanges carried out through the time bank and establishing similar relationships with gift economies. However, the fact that this alternative economic system can operate on its own seems difficult at this stage, and an investment from the outside system creates advantage effect. There are also gaps in reaching economically undeveloped households and localization of the system. The system shows the training and professions of the participants, namely the cultural capital defined by Bourdieu, how important it is to participate in this system. Administrative and bureaucratic problems that the time bank meets structurally are also the obstacles to the more active operation of the system.
It has been also found that the complexity of the time bank system used and technology literacy has an effect on the service exchange. Baudrillard (1970) now states that sharing is made by technical means rather than symbolic means. Here, too, the technique is carried out over the internet. Therefore, it is not even shared knowledge anymore. This is a collection of indications and references, describing the shared as a standard package, the blurry memories of the years of education and fashion intellectual marks. It expresses this as a matter of prestige by comparing it with the examinations from the past.

When the issue of service exchange in time banks considered in the context of Turkey, the homogeneous nature of the factors such as cultural, social and symbolic capitals, which we do not economically assessed, is striking. One of the limitations of the study is that a face-to-face meeting cannot be held with time bank members because of the identity confidentially policy of the Zumbara. Despite the fact that the profile of each of the participants is open to public, the information about the owners of the given data was not. In addition, while we investigate the level of participation of the members in the system, we have ignored the economic capital factor due to the mentioned reason. Ongoing studies can be deepened by comparative comparisons between different countries' time banks. This comparison, which will be made between different cultural structures, can reveal more the effect of non-economic factors.

REFERENCES


Harvey, D. (2012). Rebel cities from the right to the city to the urban revolution. (A.D. Ersoy, Trans.). İstanbul: Metis.


Malinowski, B. (1926). Crime and custom in savage society. (Ş. Yeğin, Trans.). İstanbul: İthaki


Polanyi, K. (1944). The great transformation/The political and economic origins of our time. (A. Buğra, Trans.). İstanbul: İletişim Publications


