

Understanding social capital in the sharing economy

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Abstract

The aim of this article is to study the relationship between sharing economy and social capital in the context of sustainability. A conceptual framework SKSE is presented which outlines the links between the behavior of sharing and three types of social capital, namely social network, trust and shared values with respect to environmental sustainability and consumerism. Data generated from 936 structured interviews, conducted in January - June 2017 in Kaohsiung (Taiwan), is used to examine this framework using correlation analysis and one-way analysis of variance (one-way ANOVA). Social networks, value of sharing, and one of the factors measuring trust yields positive results. Both cost-saving and money-earning also yields positive results like suggested in literature. However, the rest of the values, such as frugality, consumerism, sociability and environmental concern do not generate positive influence on taking part in the sharing economy.

Keywords: one-way ANOVA, sharing economy, social capital

1. Introduction

The sharing economy has grown in both scope and scale over the past few years. The sharing economy is also named as collaborative consumption (Belk 2007), collaborative economy, Prosumption (Toffler 1980), and access-based consumption (Bardhi and Eckhardt 2012). Sharing is not a new phenomenon in human interaction. Technologies of the internet and social media have provided some new directions for the business models associated with sharing economy. Belk (2007) defines it as “the act and process of distributing what is ours for their use.” The business models of the sharing economy could have a disruptive impact on supply chains in an industry, as well as to employees and consumers, due to its global relevance and great potential for growth. Despite of some pessimistic viewpoints towards sharing economy (Kalamar 2013, Baker 2014, Belk 2014, Martin 2016), it is often claimed that the developments in these business models have been influenced by the drive for sustainability, such as social connection, in addition to extending products’ life span and decentralizing business opportunities.

Is our society accumulating more social capital beneficial to sustainability with a broad application of sharing economy? Or, the opposite? Evidence shows that social, not physical,

capital drives resilience. How sharing economy affects social capital may play a role in influencing resilience of a society.

What is social capital? Social capital is considered a crucial element of successful cooperation for long-term mutual benefit (Putnam *et al.* 1993). The concept of social capital was popularised by Bourdieu (1986), Coleman (1990) and Putnam (2000). Social capital is defined by Putnam *et al.* (1993) as ‘features of social organisation, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions.’ Trust depends on long-term interaction. Coleman (1988) outlines trust in relation to obligations and expectations: If A does something for B and trusts B to reciprocate in the future, this establishes an expectation in A and an obligation on B. Social networks can be horizontal, connecting people of the same status and power, as well as vertical, connecting unequal people in uneven relationships of hierarchy and dependence (Putnam *et al.* 1993). Horizontal networks are further divided into ‘bonding’ and ‘bridging’ networks. Bonding networks build on intimate connections between individuals who are often similar to one another, such as family and close friends (Granovetter 1973), while bridging refers to formal or informal connections between agents such as acquaintances, colleagues or between organisations (Putnam *et al.* 1993). Norms and values are often associated with placing collective interests above those of individuals. For instance, the unwritten rules stipulating that ‘one should forgo self-interest and act in the interests of the collectivity’ or ‘unattended children will be looked after by adults in the vicinity on the playground’ may exist in certain societies, and may not in others (Coleman 1988).

Ozanne and Ozanne (2011) suggests interactions between children and parents, with other children, or between parents are incentives of participating in toy-rental. Parigi and State (2014) observe a decreasing intensity of socialization over time in the case of CouchSurfing 2003-2011. Friendship between members was stronger at the early stage of CouchSurfing. They suggest that technology offers convenience to making friends but at the same time attenuates intensity of friendship. Tussyadiah (2016) indicates some users of sharing accommodation intentionally choose not to interact with others.

The aim of this article is to study the relationship between sharing economy and social capital in the context of sustainability. A conceptual framework SKSE is presented which outlines the links between the behavior of sharing and three types of social capital, namely social network, trust and shared values with respect to environmental sustainability and consumerism.

Figure 1 presents a framework that outlines the links between social capital and sharing economy.

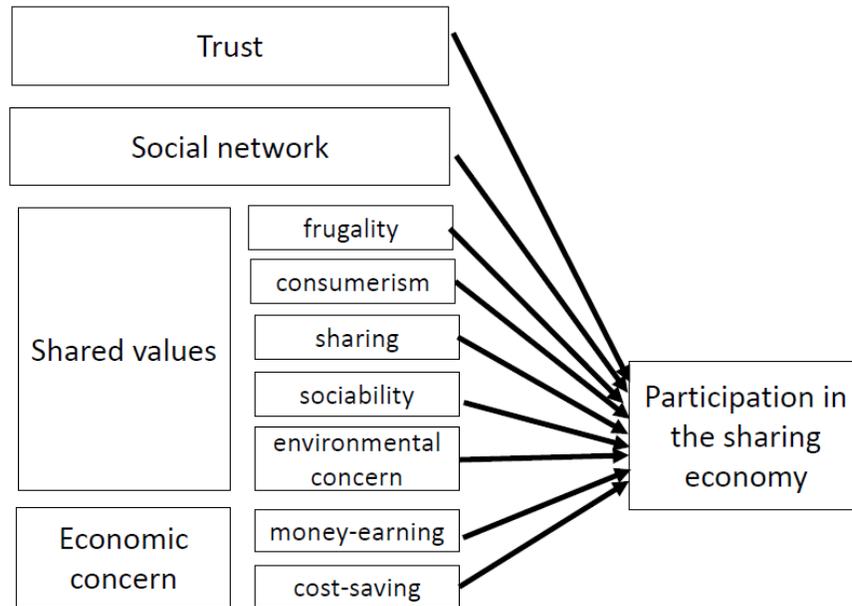


Figure 1. SKSE Framework

2. Methodology

This research is based on a quantitative survey of 936 respondents, conducted at the rail stations, bus stations, metro stations and the international airport at Kaohsiung City in Taiwan from January to June 2017. The main survey was preceded by a pilot survey conducted in January 2015, which led to minor changes to the questionnaire used in the main survey.

The main survey was conducted every week of the month, on different days of the week, and at different times of the day to cover the full range and type of passengers. Passengers were randomly approached in the station to be interviewed by a trained interviewer in order to complete a questionnaire. The interviews were carried out in Mandarin Chinese and therefore only people who understand Mandarin Chinese were interviewed.

The questionnaire focused on both participants' and non-participants' stated attitudes towards the sharing economy business model, including their trust in the counterpart providers/purchasers and data privacy, reasons for (considering) participation, their self-evaluated values on frugality, sociability and environmental concerns, and their income. The questionnaire also collected socio-demographic data. Five-point Likert scales were used in the questionnaire to gauge the level of (dis)agreement with a statement.

Table 1 presents an overview of the sample. The ratio of users/providers to non-users/non-providers is 6: 4.

Table 1. Summary of sample of 936 respondents

Gender (n=933)	Male	48.40%
	Female	51.28%
Age (n=936)	15-19	5.77%
	20-29	51.82%
	30-39	19.98%
	40-49	10.15%
	50-59	9.51%
	60-	2.77%
Children (n=935)	None at all	75.21%
	All independent	10.36%
	With dependent child/children	14.32%
Partnership (n=930)	Single	47.54%
	With partner	51.82%
Work (n=936)	Full-time	59.00%
	Part-time	8.23%
	Retired	2.88%
	Looking for a job	3.31%
	None	26.60%
	(student/housekeeping for one's own family)	
Education (n=896)	College/University	88.14%
	Primary/High school	4.70%
	None	2.88%

3. Results

Among 936 respondents, being both provider and consumer accounts for 12%, merely playing the role of a consumer accounts for 48%, and nearly 40% without experience. Only 0.6% of respondents merely play the role of a provider. The most popular category for providers as well as for consumers is items for leisure purpose such as sports facilities, game sets and toys. Clothes ranks the second.

3.1 Trust

Each interviewee was asked whether they worry about being cheated in the transaction at the platform of sharing economy. A majority of the respondents, 58%, agreed or strongly agreed with the statement. Nevertheless, 19% of the respondents disagreed or strongly disagreed that they worry about being cheated in the transaction at the platform of this sort. However, the experience of interviewees tells something different. Those who have experiences were asked whether the result of the transaction meets their expectation. A majority of the respondents, 75%, agreed or strongly agreed with the statement. Only 3% of the respondents disagreed or strongly disagreed with the statement. This result may serve to argue that even though most transaction meets expectation, consumers and providers might still worry about being cheated using the platforms of sharing economy.

Considering most of the platforms of sharing economy are digital and online, each interviewee was asked whether they prefer shops to digital platforms. A majority of the respondents, 63%, agreed or strongly agreed with the statement. Nevertheless, 21% of the respondents disagreed or strongly disagreed that they prefer shops to digital platforms. This result supports the value of the existence of the both offline option.

Each of the interviewees were asked whether they read the codes and conditions for the users of the platforms. A majority of the respondents, 60%, disagreed or strongly disagreed with the statement. Merely 23% of the respondents agreed or strongly agreed that they read the codes and conditions. Nevertheless, a majority of the respondents, 58%, agreed or strongly agreed with the statement that they often leave real personal details at the platforms. About one fifth, 21%, of the respondents disagreed or strongly disagreed with the statement. Some interviewees expressed that real personal details, including personal ID, contact number, delivering address, and credit card number are essential for specific types of transaction. While being asked whether s/he believes that there is no worry about leak of personal information, a majority of the respondents, 71%, disagreed or strongly disagreed with the statement. Only 12% of the respondents agreed or strongly agreed with the statement. This result shows a need for resolving the worry for personal data protection while embracing the digital platforms employed by most sharing economy transactions.

3.2 Social networks

Each interviewee was asked whether they get the chance to get to know other people via the platform. A majority of the respondents, 62%, disagreed or strongly disagreed with the statement. Nevertheless, 19% of the respondents agreed or strongly agreed that they get the chance to get to know other people via the platform. Similar result is found in the responses to whether using the platform(s) increases the opportunity of socializing with others. A majority of the respondents, 59%, disagreed or strongly disagreed while 22% of the respondents agreed or strongly agreed with the statement.

Those who have experiences were asked whether s/he looks forward to conduct transaction with the counterpart in the future. A majority of the respondents, 52%, agreed or strongly agreed with the statement. However, 23% of the respondents disagreed or strongly disagreed with the statement. A majority of the respondents, 51%, had more than one transaction with the same counterpart while 48%, also a high percentage, had not. Establishing social networks via platforms of sharing economy appears to be difficult without conducting transaction with the same counterpart.

Those who has either ever recommend the platforms to family, relatives and friends, or his/her family, relatives and friends have ever recommended the option were less afraid of being cheated by using the platforms, with a highly significant correlation coefficient of -0.193 . The result demonstrates a positive relation between social networks and trust in using the platforms.

3.3 Shared values

Frugality, consumerism, sociability, sharing and environmental concern are the shared values to be examined in the SKSE framework. Each of the interviewees was asked whether s/he has propensity of saving. A majority of the respondents, 88%, agreed or strongly agreed with the statement. Merely 4% of the respondents disagreed or strongly disagreed that they have propensity of saving. Among those who are experienced, the result is similar. Eighty-six percent of respondents agreed or strongly agreed while 4% disagreed or strongly disagreed with the statement.

Interviewees were also asked whether they considered a decrease in the demand for material consumption is likely based on their current consumption pattern. A majority of the respondents, 51%, agreed or strongly agreed with the statement. However, 25% of the respondents disagreed or strongly disagreed that it is likely for them to cut down their demand for material consumption. Again, similar result is found among those who are experienced. Fifty-two percent of respondents agreed or strongly agreed while 27% disagreed or strongly disagreed with the statement.

Each interviewee was also asked whether s/he paid attention to new model of particular commodity. A majority of the respondents, 64%, agreed or strongly agreed while 14% of the respondents disagreed or strongly disagreed with the statement. Among those who are experienced, similarly, 69% of respondents agreed or strongly agreed while 12% disagreed or strongly disagreed with the statement. While being asked whether s/he purchased new model of specific product, a majority of the respondents, 67%, agreed or strongly agreed with the statement. Twenty percent disagreed or strongly disagreed with the statement. The result is similar among those who are experienced. Sixty-three percent of respondents agreed or strongly agreed while 15% disagreed or strongly disagreed with the statement.

With respect to sociability, each interviewee was asked whether s/he often gathered with his/her family, relatives and friends. A majority of the respondents, 80%, agreed or strongly agreed while only 5% of the respondents disagreed or strongly disagreed with the statement. Among those who are experienced, 78% agreed or strongly agreed while 6% disagreed or strongly disagreed with the statement.

With respect to sharing, each interviewee was asked whether s/he liked to share resource with others. A majority of the respondents, 83%, agreed or strongly agreed while only 5% of the respondents disagreed or strongly disagreed with the statement. Among those who are experienced, 86% agreed or strongly agreed while 3% disagreed or strongly disagreed with the statement.

The experienced interviewees were asked whether they concerned saving resources while using the platform(s). Forty-four percent disagreed or strongly disagreed with the statement while 36% of the respondents agreed or strongly agreed. The result may serve to rebut the statement that environmental concern is the factor of applying sharing economy. Each non-experienced interviewee was asked whether they would consider saving resources a critical factor of using the sharing economy platform(s). The result turns out to be different. Thirty-

five disagreed or strongly disagreed with the statement while 42% of the respondents agreed or strongly agreed. The result coincides with what advocates regarding sharing economy.

Respondents who (expected to) use the platforms in consideration of resource-saving (expected to) purchase more second-hand goods using the platforms, with a highly significant correlation coefficient of .287. The result demonstrates a positive relation between the self-stated resource-saving attitude and (inclination to) purchasing second-hand commodities.

3.4 Economic concerns

Each interviewee with experience of being a buyer was asked whether s/he used the platform for cost-saving. A majority of the respondents, 65%, agreed or strongly agreed that the option helps to save cost. However, 21% of the respondents disagreed or strongly disagreed with the statement.

Each interviewee with experience of being a provider was asked whether s/he used the platform for money-earning. A majority of the respondents, 60%, agreed or strongly agreed that the option helps to save cost. However, 31% of the respondents disagreed or strongly disagreed with the statement.

Each interviewee without experience of using sharing economy platforms was asked whether s/he would use the platform for cost-saving and money-earning, respectively. Less than half of the respondents, 49%, agreed or strongly agreed that they might use the platform for cost-saving. However, 37% of the respondents disagreed or strongly disagreed that they might use the platform for cost-saving. A different result appears in the responses to money-earning. Only 25%, agreed or strongly agreed that they might use the platform for money-earning. A majority of the respondents, 59% of the respondents disagreed or strongly disagreed that they might use the platform to earn money. This result may serve to argue that cost-saving appears to be more attractive to money-earning for not-yet-users of sharing economy platforms.

3.5 Difference between users/providers and non-users/non-providers

The data were subjected to one-way ANOVA to study the role of social capital in sharing economy. Analysis of the dependent variable of being afraid of being cheated yielded an extremely highly significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 112.34, p = 0 < 0.001$). However, analysis of the dependent variable of worrying nothing about leak of personal information does not yield significant main effect for respondents' experience of applying sharing economy platforms.

Analysis of the dependent variable of frequent gathering with family, relatives and friends yielded a highly significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 8.49, p = 0.004 < 0.01$). Analysis of the dependent variable of recommendation to/from family, relatives and friends yielded an extremely highly

significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 391.91, p = 0 < 0.001$).

Results vary in different types of shared values. Analysis of the dependent variable of sharing yielded an extremely highly significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 10.62, p = 0.001$). Analysis of the dependent variable of resource-saving, that of money-saving, that of consumerism, and that of sociability do not yield significant main effect.

Analysis of the dependent variable of cost-saving yielded an extremely highly significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 39.07, p = 0 < 0.01$). Analysis of the dependent variable of money-earning yielded an extremely highly significant main effect for respondents' experience of applying sharing economy platforms ($F(1, 936) = 23.52, p = 0 < 0.01$).

4. Discussion

Figure 2 summarizes the above results of the relationship between social capital, along with economic concerns, and participation in sharing economy. Social networks, value of sharing, and one of the factors measuring trust yields positive results. Both cost-saving and money-earning also yields positive results like suggested in literature. However, the rest of the values, such as frugality, consumerism, sociability and environmental concern do not generate positive influence on taking part in the sharing economy.

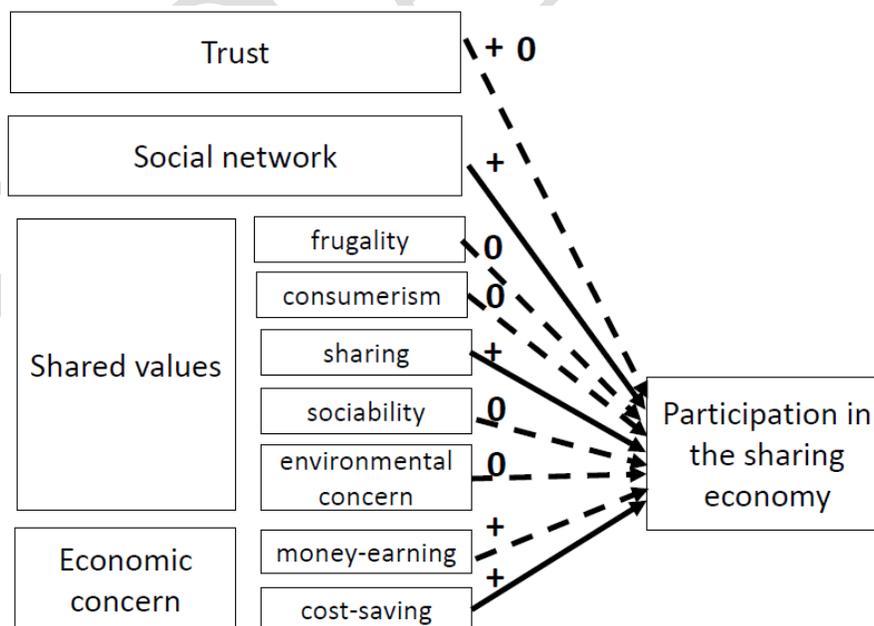


Figure 2. A Refined SKSE Framework - with the Results of the Study

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