MOTIVATIONS OF YOUNG CONSUMERS TO PARTICIPATE TO COLLABORATIVE CONSUMPTION

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Abstract

Collaborative consumption is currently an exciting topic of interest for many debates and controversies being perceived as a fast-growing social phenomenon. Considering the contemporary development processes via sharing economy, there is an interest to prove that the segment of young consumers practices changed from traditional buying and owning behaviour to collaborative consumption stratagems. Thus, the central objective of the present study is to explore the potential young consumer behaviour adjustments and to discuss the motivations behind those changes by considering the emergence of collaborative consumption.

The primary hypothesis of the present article states that intrinsic and extrinsic motivations influence teenager’s attitudes and behavioural intentions regarding participation in collaborative consumption.

Regarding the methodology, the author’s performed confirmatory factor analysis and structural equation modelling. The objective was to determine if previously exposed motivational factors influence positively the young consumer’s behavioural intention and their attitude towards a supposed adherence to collaborative consumption schemes.

**Keywords:** Innovation Resistance, Collaborative Consumption, Confirmatory Factor Analysis, Structural Equation Modelling

**JEL Classification:** C38; D16; E21; O35;

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1. Introduction

Some years ago, people perceived the consumerism system as an immovable fact of modern life, but it turned out not to be so. The decline of the system suggests that we must reshape the existed resources and capabilities to create a healthier, more sustainable system that can respond to the consumer’s requirements.

Collaborative consumption is a fast advancing phenomenon that addresses the new customer profile and describes a reinvention of the old market behaviours. The “sharing” concept entered the market and disrupted the standards based on purchasing by including old models of sharing, trading and bartering in a different light fitted to the current circumstances.

Rachel Botsman (2010) considers that collaborative consumption has at its base four factors: a renewed belief in the value of the community, a torrent in the peer-to-peer social networks and real-time technologies, the influence of unsolved environmental pressures and the 2008\textsuperscript{th} global recession. The last, and possibly the most aggressive factor, the global recession from 2008\textsuperscript{th}, has radically changed the consumer's behaviour. These four factors merged and produced a notable shift away, from the 20th century, described as a hyper-consumption community, to the 21st century, described as a collaborative consumption society (Botsman, 2010).

The main aim of the actual study is to investigate the development of the collaborative consumption phenomenon, as well as to find out the driving forces that have determined young consumers to engage in this trend.

The research hypothesis of the present article claims that intrinsic and extrinsic motivations influence teenager’s attitudes and behavioural intentions regarding the collaborative consumption phenomenon. It was chosen as the representative population the millennials generation because researchers link collaborative consumption to the so-called \textit{Y} generation, individuals’ that exhibit different consumption patterns compared to older generations.

The article starts by exposing the general context of the collaborative consumption phenomenon, its implications and its forms of manifestations. Concerning the adherence to collaborative consumption, it will be detailed about motivational factors, fundamental mindset and drivers that determine individuals to adopt a specific attitude or behaviour.

Regarding the methodology, it will be performed confirmatory factor analysis and structural equation modelling to determine if motivational factors affect positively the young consumer’s behavioural intention and the adopted attitude towards a supposed adherence to collaborative consumption behaviour.

The instrument that was used to measure teenagers’ perceptions regarding the participation in collaborative consumption schemes has at its base a questionnaire that comprises 27 items, previously validated (Hamari, Sjöklint, & Ukkonen, 2016). This contains questions related to the attitude, sustainability, economic benefits, reputation, behavioural intention and enjoyment
The novelty of this research comes from the fact that were investigated young consumer’s motives to engage in collaborative consumption. In this sense were tested the primary consequences of the proposed dimensions on people attitude toward collaborative consumption and the indirect effect of the attitude to an actual behaviour intention.

2. Literature Review

2.1 What describes Collaborative Consumption?

The growing interest in environmental diversity and a wish for social integration by collective consumption (Ertz & Leblanc-Proulx, 2018; Albinsson & Perera, 2012; Botsman & Rogers, 2010) have revealed collaborative consumption as an attractive choice for consumers. The collaborative economy characterised as a social and economic system designed on the notion of sharing material and human resources assume generation, distribution, commerce, consumption of goods and services in common by individuals and organizations.

Botsman and Rogers (2010) split the collaborative consumption phenomenon into three different categories: product-service systems, collaborative lifestyle and redistribution markets.

Product service systems are represented by those policies that permit companies and private individuals to rent or share services, rather than selling them. Collaborative lifestyle represents a form of sharing different sorts of intangible assets. Through a collaborative lifestyle, individuals can rent out their homes and offer to help others by performing various duties. Finally, redistribution markets allow people to sell or swap stuff that they no longer need.

Collaborative consumption refers to the goods that are costly in maintenance or are used periodically. Objects that a person cannot easily afford, that increase personal mobility and flexibility, if the cost and benefit from obtaining periodically that good are convenient and if it increases the user’s reputation, then it is an object predestined for sharing (Frick et al., 2013).

Those previously presented characteristics are mostly applying for car sharing, one of the most advanced and fastest-growing sectors in the latest economic model. Similar changes are in the hospitality services, in the home-sharing format or in the food sector, where people chose to adopt a healthier lifestyle. As the last reference point, the luxury and fashion industry are typical cases of a sharing lifestyle because the temporary ownership aligns well with seasonal business (Lawson, 2010).

2.2 Motivational Factors:

Despite a growing effective impact, there is a need for quantitative studies on motivational factors that influence individuals’ beliefs and intentions towards collaborative consumption. The present paper tries to explore people’s motivation to engage in this type of consumption.
Self Determination Theory representing a broad framework for the study of human motivations and personalities (Legault, 2017; Ryan, Williams, Patrick & Deci, 2009) distinguishes between intrinsic motivation (Cognitive Evaluation Theory) and extrinsic motivation (Organismic Integration Theory). The external motivation arises from the inherent value or satisfaction linked with the assigned activity, whereas external motives are connected to outside influences, such as honour and financial gains. According to Lindenberg (2001), there are two classes of intrinsic motivation: the first-class describes the satisfaction acquired from the activity itself and value acquired from acting correctly, according to standards. Other studies have ranked these motives by the level of association with other people (Nov et al., 2010), which is equivalent to Lindenberg’s conceptualization. For example, enjoying an activity or achieving financial benefits through this activity are not immediately influenced by others’ opinion. On the other side, reputation and acting properly depend in a direct way on how different individuals reflect upon the activity.

While the extrinsic motivations will concentrate on the outcomes and the remunerations of the activity, the intrinsic motivations will focus on the process and details. Deci (1971) points out that outside compensations only increase one’s intrinsic motivation in a short and thus limited way. From here, we can assume that assigned values, ideas and authenticity, help to form inherent motivation, thus people are more inclined to adhere to the sharing economy system.

According to Price (1975), people were born to yield; individuals are social beings, in need of constants dialogue with their surroundings. When sharing people set the human relationship in the foreground, so we do not talk about any financial gain.

Participation in the collaborative consumption system is expected to be highly environmentally sustainable. Thus, this initiative is designed to lead to a sustainable marketplace that optimizes the necessities of consumption both for the present and coming generations (Luchs et al., 2011).

Also, a green consumption perspective determines participation in collaborative consumption. A green consumption behaviour occurs when people behave ethically, when they are motivated by their needs along with the respect and the maintenance of the welfare of the whole society, respecting the consequences of their private consumption over the environment. From economic and environmental perspectives, green consumption is considered an essential factor in the context of collaborative consumption.

On the other side, enjoyment is considered the essential factor, in the sharing-related activities, such as information distribution on the internet (Nov, 2007) or the use of information systems (Van der Heijden, 2004). However, an expressed motivation to collaborate does not explain or predict sustained participation in the future.

Reputation has been demonstrated to be a vital determinant in settling the participation in collaborative communities. Especially, gain in the perceived reputation among people with
similar ways of thinking has been proved to stimulate sharing in online communities or open-source projects (Ter Huurne et al., 2018; Parameswaran & Whinston, 2007). Moreover, studies observed that building of the reputation is the principal incentive in adopting an online collaboration behaviour. Active participation is expected to generate uncertain rewards in the form of higher status within a collaborative consumption community (Hars & Ou, 2001).

In the end, the process of sharing products and services is not entirely about the environmental dimension but also about the economic dimension. In the economic circumstances, cooperation in the sharing systems can prove to be a rational, utility maximization behaviour where the consumer substitutes the ownership of goods with low options from collaborative consumption services. The research in the field revealed that there are signs of positives and negatives impacts of economic incentives on the sharing behaviour. Furthermore, in the peer-to-peer systems, consumption in collaboration works as an incentive for protecting economic resources (Luchs et al., 2011).

3. Methodology

3.1 Data Collection

The method of analysis it is based on an already validated questionnaire constituted of six dimensions related to collaborative consumption (Hamari, Sjöklint, & Ukkonen, 2016). The dimensions are represented by the attitude related to collaborative consumption, economic benefits, sustainability, enjoyment, reputation and behavioural intentions to participate in collaborative consumption in the future.

The data consists of 308 responses of young consumers that are also enrolled in a licence or master program at the moment when they completed the questionnaire. The sample is comprising 217 females and 91 males, predominant with ages between 18-25 years, most of them living in the urban area. Regarding the siblings, 70.13% of the respondents said that they have brothers or sisters. Each construct was measured on a 10 – point Likert scale, 0 – belonging to total disagreement and 10 – to total agreement.

The used analytical techniques are confirmatory factor analysis and structural equation model (SEM). The data were analysed using R statistical software and programming language.

3.2 Data Analysis

3.2.1 Reliability

To conduct a factor analysis, I have tested the reliability of constructs with the Cronbach’s Alpha Metric. In most cases, it was registered a value greater than 0.9 threshold.
Table 1. Testing Alpha and the Correlation between Dimensions

|         | Alpha | Attitude | BE Intention | Enjoyment | Ec. Benefits | Reputation | SUST. |
|---------|-------|----------|--------------|-----------|--------------|------------|-------|
| Attitude| 0.93  | 1.0000   |              |           |              |            |       |
| BE Intention| 0.94  | -0.0019  | 1.0000       |           |              |            |       |
| Enjoyment| 0.91  | 0.1116   | 0.0419       | 1.0000    |              |            |       |
| Ec. Benefits | 0.86  | -0.0625  | 0.0002       | -0.0684  | 1.0000       |            |       |
| Reputation| 0.93  | 0.0554   | 0.0402       | 0.0806   | -0.0331      | 1.0000     |       |
| Sustainability| 0.94  | 0.0048   | 0.0288       | -0.0347  | 0.1603       | 0.0635     | 1.0000 |

Source: Own Calculation

3.3.2 Confirmatory Factor Analysis:

The chosen method, confirmatory factor analysis, evaluates a priori hypothesis, developed usually from exploratory factor analysis, and is mainly driven by theory and is used to test if a measure of a particular construct is consistent with a researcher understanding of the nature of that construct.

The first step will be represented by a graphical representation of the correlations. It is desirable to register most of the values in the interval of 0.3 – 0.7.

From the graphical representation, we can observe that there are some variables that correlate positively, but not in a very significant way, and there are no variables that correlate negatively (figure no. 1).

Figure 1. Graphic Representation of the Correlations between Variables
Source: author’s representation of data
To conduct a confirmatory factor analysis were tested the variables for normality and was checked the presence of outliers in the data set. In the confirmatory factor analysis if the variables do not follow a normal distribution, there are strongly affected the covariances from the analysis, obtaining results that are not in line with the reality.

As we observe, some of the variables do not look normally distributed, but the deviation is not significant (figure no. 2). Normality tests can be applied.

![Figure 2. The Histograms checking the Normality of the Variables](source: author's representation of data)

There was used the maximum likelihood estimator that aims to extract maximum variance, allowing generalizability and computing a wide range of indices of the goodness of fit, computing correlations and confidence intervals among factors. However, this method of factor extraction imposes multivariate normal distribution and requires continuous variables (Druică, 2018).

In what concern the fit indices we have two indicators that must be considered: the first one is the Comparative Fit Index (CFI) and the second one Tucker-Lewis Index. For CFI, the specialised literature recommends a value higher than 0.9. In the proposed model the CFI registers a value of 0.932, we are above the cut-off. The second indicator is the Tucker-Lewis Index, which is like the Comparative Fit Index, but it penalizes overly complex models. As the previous indicator, a value above 0.9 is desired (table no. 2).
### Table 2. Fit Indices and Information Criteria Confirmatory Analysis

| Fit Indices                        |       |
|-----------------------------------|-------|
| Comparative Fit Index (CFI)       | 0.932 |
| Tucker-Lewis Index (TLI)          | 0.923 |

| Information Criteria              |       |
|-----------------------------------|-------|
| Akaike (AIC)                      | 30434.747 |
| Bayesian (BIC)                    | 30792.837 |
| RMSEA                             | 0.077 |
| SRMR                              | 0.058 |

*Source: author’s calculus*

In what concern the Loglikelihood and Information Criteria, we encounter the Akaike’s Information Criterion (AIC) and the Schwarz’s Bayesian Information Criterion (BIC), both attempting to select models that are the most efficient representations of the observed data. Lower values are desired. In this case, the values registered are 30434.747, respectively 30792.837.

Then, it was calculated the root mean square error of approximation (RMSEA) that has a threshold of 0.06, in this case, registering a value of 0.077. The standardized root means square residual (SRMR) (Marsh et al. 2004) registers a score below the 0.08 cut-off (table no. 2).

### Table 3. The Parameter Estimates of the Confirmatory Factor Analysis Model

| LHS                | RHS   | Estimate | Variance | Intercept | P-value |
|--------------------|-------|----------|----------|-----------|---------|
| 1. Attitude        | x1    | 1.815    | 1.203    | 7.159     | 0.000   |
| 2. Attitude        | x2    | 1.836    | 0.838    | 7.536     | 0.000   |
| 3. Attitude        | x3    | 1.947    | 0.607    | 7.419     | 0.000   |
| 4. Attitude        | x4    | 1.755    | 0.990    | 7.614     | 0.000   |
| 5. Attitude        | x5    | 1.762    | 2.573    | 6.581     | 0.000   |
| 6. Behavioural Intention | x6 | 2.201    | 1.334    | 5.821     | 0.000   |
| 7. Behavioural Intention | x7 | 2.306    | 0.908    | 5.841     | 0.000   |
| 8. Behavioural Intention | x8 | 2.244    | 1.388    | 6.292     | 0.000   |
| 9. Behavioural Intention | x9 | 2.227    | 1.717    | 5.627     | 0.000   |
| 10. Enjoyment      | x10   | 1.885    | 1.080    | 6.802     | 0.000   |
| 11. Enjoyment      | x11   | 2.098    | 1.193    | 6.529     | 0.000   |
| 12. Enjoyment      | x12   | 1.619    | 4.147    | 5.536     | 0.000   |
| 13. Enjoyment      | x13   | 1.980    | 1.812    | 6.919     | 0.000   |
| 14. Enjoyment      | x14   | 2.218    | 1.101    | 6.438     | 0.000   |
| 15. Economic Benefits | x15 | 1.839    | 1.743    | 7.279     | 0.000   |
| 16. Economic Benefits | x16 | 1.851    | 2.720    | 6.695     | 0.000   |
| 17. Economic Benefits | x17 | 2.184    | 0.920    | 6.532     | 0.000   |
| 18. Economic Benefits | x18 | 1.785    | 3.354    | 5.666     | 0.000   |
| 19. Reputation      | x19   | 2.152    | 1.112    | 5.682     | 0.000   |
| 20. Reputation      | x20   | 2.325    | 1.094    | 5.354     | 0.000   |
| 21. Reputation      | x21   | 2.265    | 1.436    | 5.412     | 0.000   |
| 22. Reputation      | x22   | 2.087    | 2.316    | 4.890     | 0.000   |
| 23. Sustainability  | x23   | 2.019    | 1.375    | 6.955     | 0.000   |
| 24. Sustainability  | x24   | 1.911    | 1.604    | 6.591     | 0.000   |
| 25. Sustainability  | x25   | 2.099    | 1.678    | 6.610     | 0.000   |
In the previous table, there is a list of the parameters from the specified model. In the estimate column are the loadings for each construct on its factor. For example, the factor loading for $x_{10}$, on the enjoyment factor, is 1.885 and it can be interpreted as a regression coefficient.

Since we work with standardized latent factors, one unit increase in the latent perceived attitude means one standard deviation increase. The variance for each observed variable represents the error variances. All the error variance indicators are significantly higher than zero, suggesting that the latent factors do not entirely predict the observed variable scores.

In the second part of the analysis, it was performed a structural equation model.

The output revealed that the fit indices, Comparative Fit Index (CFI) and Tucker-Lewis Index, register high values, above the cut-off, being a good indicator in measuring whether the model fits the data better than a more restricted baseline model. On the other side, the root mean squared error of approximation (RMSEA) is above the suggested cut-off 0.06, while the root mean squared of residuals (SRMR) register values below the recommended cut-off, respectively 0.08 (table no. 4).

Table 4. Fit Indices and Information Criteria Structural Equation Modelling

|                           | Comparative Fit Index (CFI) | Tucker-Lewis Index (TLI) | RMSEA | SRMR |
|---------------------------|-----------------------------|--------------------------|-------|------|
|                           | 0.932                       | 0.923                    | 0.077 | 0.060|

Structural equation modelling represents a statistical technique used to test the relationships of independent and dependent variables, in expanding the explanatory power and statistical efficiency for parsimonious model testing.

In the present analysis, were run some regressions in which the behavioural intention to participate in collaborative consumption and attitude towards the collaborative consumption were explained by enjoyment, sustainability, reputation and economic benefits that can derive from acceding to these types of schemes. Also, it will be investigated whether peoples’ attitudes towards collaborative consumption reflect their actual behaviour.

Table 5. Regression Estimates for Behavioural Intention and Attitude

| Variable    | Attitude Estimator | Standard Error | P-value | Behavioural Intention Estimator | Standard Error | P-value |
|-------------|--------------------|----------------|---------|---------------------------------|----------------|---------|
| Attitude    | -                  | -              | -       | 0.256                           | 0.090          | 0.005   |
| Sustainability | 0.179             | 0.055          | 0.001   | -0.163                          | 0.063          | 0.010   |
| Enjoyment   | 0.744              | 0.079          | 0.000   | 0.775                           | 0.116          | 0.000   |
As we see, from the previous table (table no. 5), the attitude has a positive impact on behavioural intention. The p-value is very low, meaning that we have a high level of confidence that the independent variable has a significant positive influence on the dependent variable.

Regarding the sustainability dimension, it has a positive impact on the dependent variable, in the sense that when the predictor is increasing with a unit and no other variable is influencing, the attitude improves by 0.179.

In the case of behavioural intention, sustainability seems to have a negative impact, in the sense that, when the independent variable is increasing with one unit, and no other variable is influencing, the behavioural intention to participate in the collaborative consumption schemes, is decreasing by 0.163.

In what concern the enjoyment dimension it has a positive impact, both on attitude and behavioural intention. In the case of reputation variable, it has a negative impact on the attitude dimension, while in the case of the behavioural intention it has a positive influence.

The economic benefits dimension positively influences the attitude improvement regarding collaborative consumption. On the other side, in the case of behavioural intention, the economic benefits register a negative sign. The p-value is slightly higher than the critical threshold of 0.05, we can infer that the independent variable has some influence over the dependent variable, but not entirely. We can add new data or search for the impact of other variables to explain the variance of the dependent variable.

4. Discussion and Conclusions

The structural equation models capture 71.8% of the variance in the attitudes towards collaborative consumption and 74.8% of the variance in the behavioural intention to participate in collaborative consumption. When the path between attitude and behaviour is attached to the initial model, the new one explains 76.0% of behavioural intentions variance, compared to the original 74.8%

Related to the intrinsic motivations, the perceived sustainability positively predicted attitude towards collaborative consumption (0.179), but it did not have a direct relationship with behavioural intentions (-0.163). The perceived enjoyment had a significant positive effect on both behavioural intentions to participate in collaborative consumption and attitude towards collaborative consumption.

In the case of the extrinsic motivation, reputation negatively predicted attitude towards collaborative consumption, however, it has a positive effect on behavioural intention. The expected gains (time and money) did not significantly affect either the attitude towards
collaborative consumption (0.098) or the behavioural intention to participate in collaborative consumption services.

The obtained results show that intrinsic motivations represent a strong determinant of attitude. In the extrinsic motivations case, reputation isn’t a significant predictor of the attitude, but the economic benefits seem to have a positive impact. Related to the behavioural intention to take part in collaborative consumption, in the case of the intrinsic motivations, sustainability is not a prominent predictor, while enjoyment seems to have a positive impact. The reputation, as a part of extrinsic motivations, has a positive impact on behavioural intention while the economic outcomes seem to have a negative impact.

The attitude towards collaborative consumption positively influences people intentions to participate in this type of services, but in a small degree in comparison to the typically observed relation between these two constructs. There exists a discrepancy between the reported attitude and the actual behaviour related to collaborative consumption.

The obtained results are in line with the previous study done in the area by Hamari & Sjöklint and Ukkonen (2016). The model from the original paper accounts for 75% of the variance in attitudes towards collaborative consumption, quite like the result reported in the present analysis. While, concerning the behavioural intention to participate in collaborative consumption, the model accounts 66.3% from the variance of the direct variable, a lower coefficient than the one reported in the present analysis (76%).

To explain the negative impact of sustainability over behavioural intention I tried to find motives why people are not willing to consume sustainably. One of the main reasons may be derived from economic aspects. To consume in collaboration may prove to be costly but not because of financial aspects, but because there exist unstandardized trades between unknown people, there are costs of searching for information, coordination costs or transaction costs.

Related to the enjoyment dimension, results suggested that it represents a fundamental role in attitude formation and behavioural intention. Some people may accede to the collaborative economy because it’s a meaningful method to communicate with other people, some of them will find it entertaining, and others will be curious about what it implies. Even if the motives of each participant differ from altruistic to gain-seeking, the collaborative consumption remains a working system because the gains of each participant were balanced, by the incurred cost of participation to this system.

5. **Limits of the research**

The sample represents the first limit of the existing analysis. In the present article, the sample it’s a convenience sample and the capability to infer the retrieved results to the whole population is diminished.
Another limit of the study comes from the disadvantages that the confirmatory factor analysis presents, such as misleading of precision in less than ideal circumstances. The analysis is driven by the existing theory becoming complicated to notice unexpected outcomes (Trninić, Jelaska & Štalec, 2013). In the present case, it’s difficult to say if other intrinsic or extrinsic motivations derive people attitude toward collaborative consumption and their intention to participate in this type of schemes, without conducting preliminary an exploratory factor analysis.

The last limitation of the applied methodology will be represented by the fact that the model can capture just a portion from the total variance, namely the variance from the shared factors, while the variance from other unique factors can be driven by other factors than those already considered.

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