Consumer Attitudes towards Collaborative Consumption in an Emerging Market: The Case of Egypt

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Abstract

The current paper aims to examine consumer attitudes towards carpooling as a collaborative consumption practice. The paper contributes to academic research through extending the theory of planned behavior to include four main determinants of attitudes and behavioral intentions towards carpooling. These determinants are economic benefits, trust, sustainability, and enjoyment. This study is a conclusive descriptive one using a quantitative survey. The target population for the current study is Egyptian millennials. Results revealed that economic benefits are the most influencing predictor of attitudes towards carpooling followed by sustainability. Subjective norms had the most influential effect on intentions towards carpooling followed by perceived behavioral control and attitudes.

Keywords: Collaborative Consumption, Theory of Planned Behavior, Carpooling

Track: Consumer Behavior

1. Introduction

Collaborative consumption is gaining great attention by academic researchers as it is expected to become a solution to many societal and environmental problems such as hyper-consumption, pollution and poverty. Collaborative consumption is mainly fuelled by technology advancements, rise in consumer awareness and the proliferation of collaborative web communities (Hamari, Sjöklint and Ukkonen, 2015). In recent years, consumer attitudes towards consumption started to change as they became more concerned about their ecological, societal and developmental effect (Hamari et al., 2015). Attitudes and intentions towards collaborative consumption practice are claimed to have an imperative role in encouraging sharing and collaborative activities. However, only a few researches have considered the two variables combined on collaborative consumption behavior (Billows & McNeill, 2018).

1.1 Collaborative consumption defined

Collaborative consumption comprises a system of organized sharing, lending, trading and swapping. It is usually defined as the exchange of used or pre-owned goods moving from someone who does not need it anymore to others who are in need, whether for free or with compensation (Pizzol, de Almeida and Soares, 2017). Collaborative consumption aids in avoiding or delaying wastes by bartering, swapping, renting, gifting or borrowing unused goods between people. It is based on the effective management of collaborative, shared and common products or services (Roos and Hahn, 2017). Sharing between collaborators has various forms; it could be in the form of car sharing through using applications like car2go or Zipcar, bicycle- ride sharing systems such as CitiBike in New York, swapping of books or DVDs could be done through applications like Craigslist, or sharing accommodation (apartments and houses) through online communities such as Airbnb (Mohlmann, 2015).

1.2 Theory of planned behavior

The theory of planned behavior is considered a useful model for understanding collaborative consumption behavior. The theory components are claimed to be primary in collaborative consumption contexts. The variables of the theory are considering social pressure (subjective norms), individual capabilities on one's intention to consume collaboratively (perceived behavioral control) and attitudes that capture consumers' evaluation of the cost savings and other benefits of collaborative consumption (Roos and Hahn, 2017).

1.3 Predictors of attitudes towards collaborative consumption behavior

There are three main motives behind collaborative consumption. The first motive is societal; due to the increase in population size and desire for being more sustainable. The second motive is economic; in which consumers are seeking financial flexibility and lower costs. The third motive is technological; as the emergence of social networking and mobile devices facilitated the collaboration and the engagement of consumers with each other (Tussyadiah, 2015). The first predictor of collaborative consumption for consumers to participate in is finding a better price. It was claimed that collaborative consumption results in saving money and time (Mayasari & Haryanto, 2018). The second predictor is sustainability; as consumers nowadays became more aware of the environmental pressures around that drove them to seek other options of using resources. It is believed that collaborative consumption is environmentally friendly as it helps in reducing the development of new products and the consumption of raw materials (Tussyadiah, 2015).

The third predictor of collaborative consumption is enjoyment. It is defined as an inner pleasure and satisfaction that a consumer perceives in a collaborative consumption activity. Based on what was mentioned by Hamari et al. (2015), enjoyment is one of the significant motivators behind collaborative consumption. The fourth predictor is trust; it is proved to be an important determinant of collaborative consumption behavior (Mohlmann, 2015). Mistrust between participants in a collaborative consumption context and concerns for privacy could be a great hinderer for participation in sharing activities. It is mentioned that collaborative consumption implicates mutual trust between strangers in order to be able to communicate and foster collaborative consumption practices (Mohlmann, 2015).

2. Research Aim , Contribution and Context

The research aims to extend the theory of planned behavior to add the predictors of collaborative consumption as the main determinants of attitudes and behavioral intentions. These predictors are economic benefits, sustainability, enjoyment, and trust. Studies were only focusing on either examining the impact of the theory solely in collaborative consumption contexts or examining the impact of the predictors only without using the theory of planned behavior (Hamari et al., 2015; Billows & McNeill, 2018). The current paper contributes to academic

research through combining both literature streams by analyzing the theory of planned behavior and the main predictors of collaborative consumption.

The current paper will focus on carpooling activity as an example of collaborative consumption behavior. Collaborative transportation is one of the most imperative means of collaborative consumption and could be through carpooling and vanpooling (Ertz, Durif, Lecompte and Boivin, 2017). The research context is Egypt, as it is suffering from over concentration of population and traffic problems in urban areas, leading to emissions of gases and air pollution (Ghorab & Shalaby, 2016). Examples of carpooling applications in Egypt are Uber carpooling, SWVL and Foorera applications.

Research conducted on examining collaborative consumption behaviors has only focused on U.S. and European countries (Hamari et al., 2015; Mohlmann, 2015; Pizzol et al., 2017). Egypt is selected for the application of this research study because it is not highly considering collaborative consumption as a lifestyle and a sustainable way of living as Europe. Also, transportation in Egypt is the fourth expenditure item that Egyptian consumers spend on more than 7.5% of their household budget, directly after their food, housing and health expenditures (Euromonitor International, 2017). Therefore, the current research examines Egyptian attitudes and behavioral intentions towards the idea of carpooling as a sharing practice and how it differs among different societies in different countries.

3. Theoretical Approach and Hypotheses Development

Theory of planned behavior is used as the theoretical base for the current conceptual framework. It is extended to add the main predictors of collaborative consumption as determinants of attitudes and behavioral intentions. Studies that examined the motivators of car sharing practice revealed that economic benefits are a main driver to stimulate behavior (Tussyadiah, 2015). Hamari et al. (2015) proved that economic benefits as an extrinsic motivator can determine behavioral intentions and it was proved by Roos and Hahn (2017) that there is a positive relationship between economic benefits and attitudes towards collaborative consumption. Collaborative consumption is mainly concerned with sharing based on social interaction, therefore, a high level of trust between participants must exist (Pizzol et al., 2017). Trust is an essential and influential factor in encouraging collaborative consumption between peers or

through collaborative consumption services (Mohlmann, 2015). Mistrust between collaborators proved to have a significant negative relationship with attitudes towards collaborative consumption (Roos & Hahn, 2017). Therefore, examining the role of trust on attitudes is important for the current study as it differs according to research contexts.

Hamari et al. (2015) found that sustainability is one of the intrinsic motivators that influence attitudes towards car sharing. It was proven that sustainability is a key motivational factor for accommodation sharing (Tussaydiah, 2015) and was proved that it has a significant and positive relationship with attitudes towards collaborative consumption (Roos & Hahn, 2017). Enjoyment is considered a major motivator for sharing goods, services or information. Mayasari and Haryanto (2018) mentioned that enjoyment is considered one of the emotional aspects of collaborative consumption. Enjoyment is proved to play an important role in attitude formation and intention and it is an important part of the collaborative consumption experience (Hamari et al., 2015). Therefore, the following hypotheses were developed:

H1: Economic benefits significantly impact attitudes towards carpooling

H2: Trust significantly impacts attitudes towards carpooling

H3: Sustainability significantly impacts attitudes towards carpooling

H4: Enjoyment significantly impacts attitudes towards carpooling

Ajzen (1991) mentioned that attitudes are regarded as a major determinant of behaviors. They are produced by beliefs towards the consequences of a certain behavior and they motivate individual conscious decision to perform it. The more favorable the attitudes, the more likely individuals perform the behavior. Hamari et al. (2015) mentioned that attitudes have an impact on intentions towards collaborative consumption, but not to a great extent like other pro-environmental research contexts (Billows & McNeill, 2018). Hence, the current paper attempts to examine the role of attitude on intentions towards carpooling in the Egyptian context. Therefore, the following hypothesis was developed:

H5: Attitudes significantly impact intentions towards carpooling

Regarding the subjective norms, the second component in the theory; it is claimed that pressure from significant others and the perceived social pressure may control intentions to

perform or not to perform a certain behavior. The third component in the theory of planned behavior is perceived behavioral control that refers to the ease or difficulty in doing a certain behavior. Consumers may not be able to have full volitional control over their collaborative consumption intentions in some situations, as they may lack information about technology and the ability to organize other aspects of collaborative consumption (Roos & Hahn, 2017). Therefore, the following hypotheses were developed:

H6: Subjective norms significantly impact intentions to carpooling

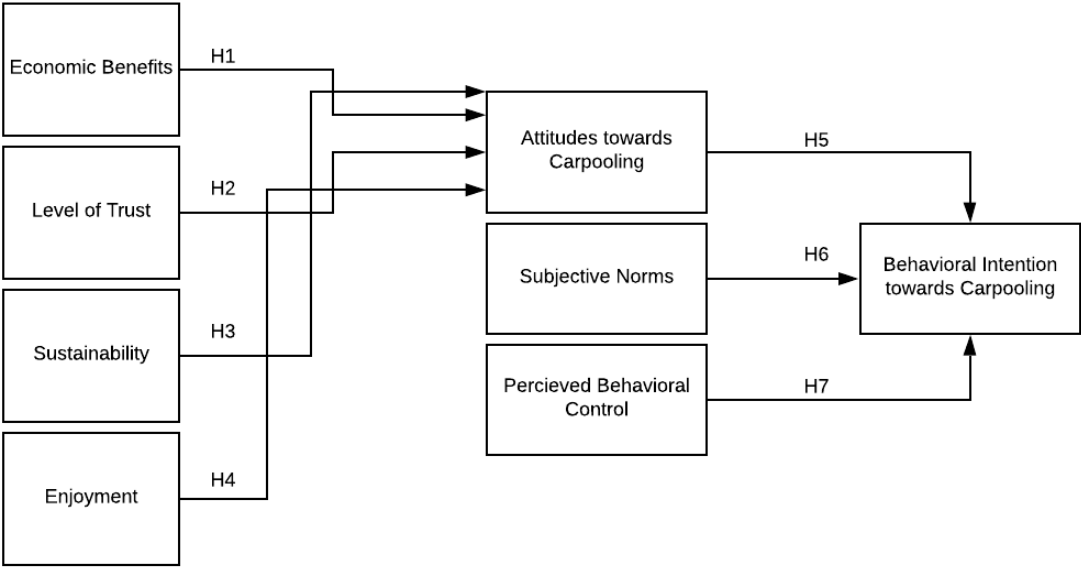H7: Perceived behavioral control significantly impacts intentions to carpooling

Figure 1: Conceptual Framework (Developed by researchers)

4. Research Design and Data Collection

A conclusive descriptive study was applied using a quantitative survey. The scales are adapted from existing prominent studies with responses measured on a five-point Likert scale. The surveys responses were collected through both online and offline means. The sample chosen is Egyptian millennials as they are considered an important segment who is considering collaborative consumption as new mean for accessing products rather than ownership (Pizzol et al., 2017). Of the total sample of respondents targeted (500 respondents); 38.4% were males and 61.6% were females, with the majority of respondents (53%) aging between 23 and 30 years.

5. Results

Reliability of scales was tested using Cronbach's *alpha* through SPSS 24. Cronbach's *alpha* should have values above 0.7 (Henseler, Ringle and Sinkovics, 2009; Hair, Ringle and Sarstedt, 2013) and this threshold was achieved. Convergent and construct validity were conducted using AMOS 24. Convergent validity was tested through the average variance extracted (AVE) and composite reliability (CR). AVE should have a value greater than 0.5 (Henseler et al., 2009). This criterion was achieved hereunder indicating that the measurement model is reliable in measuring the constructs. Composite reliability is achieved when all CR values exceed 0.7 (Henseler et al., 2009) and this threshold was satisfied. Table 8.1 presents the values for Cronbach's *alpha*, AVE and CR. Construct validity was tested through three categories of fitness indexes. These fitness indexes, their respective categories and level of acceptance are presented in Table 8.2. All indexes reached their required levels of acceptance indicating good construct validity and a whole model fit.

Table 5.1: Convergent validity results

Construct	Cronbach's Alpha (Above 0.7)	C.R (Above 0.7)	AVE (Above 0.5)
Attitudes	.934	.933	.738
Subjective norms	.849	.828	.550
Perceived Behavioral Control	.876	.860	.508
Behavioral Intention	.882	.926	.758
Economic Benefits	.848	.931	.818
Sustainability	.948	.935	.782
Trust	.926	.919	.656
Enjoyment	.970	.970	.864

Table 5.2: Categories of model fit and their level of acceptance for the measurement model

Name of Category	Name of Index	Index Value	Level of acceptance
Absolute fit	RMSEA	.025	RMSEA<0.08
	GFI	.931	GFI>0.90
Incremental fit	AGFI	.910	AGFI>0.90
	CFI	.990	CFI>0.90
	NFI	.960	NFI>0.90
Parsimonious fit	Chisq/df	1.305	Chi-square/df<3.0

After testing for the reliability and validity of constructs, a structural model was developed as a second step to test for the relationships between latent variables. Results revealed that the four predictors had significant and positive effects on attitudes towards carpooling. Economic benefit is the most important predictor of attitudes with a standardized beta value of .305, followed by sustainability with a beta value of .262. However, enjoyment and trust were found to be the least predictors of attitudes. Subjective norms was found to be the most important predictor of intentions towards carpooling with standardized beta estimate of .357, followed by perceived behavioral control and attitudes with standardized beta values of 0.246 and 0.177 respectively. This means that all hypotheses developed for the current study were supported as presented in Table 8.3. The coefficient of determination $R^2 = .365$ of the endogenous variable attitudes towards carpooling indicates that 36.5% of the variable's variance could be explained by its predictors. The $R^2 = .427$ of the endogenous variable intentions towards carpooling indicates that 42.7% of the variable's variance could be explained by its predictors. The path analysis is used to determine the fitness of the structural model through the fitness indexes mentioned above. Table 8.4 presents the fitness indexes indicating that the model has an overall good fit

Table 5.3: The Regression Path Coefficients and its significance based on p-value<0.05

Hypothesis			Estimate	P value	Accepted/Rejected
TotalAttitude	<---	TotalEB	.305	***	Accepted
TotalAttitude	<---	TotalTrust	.090	.025	Accepted
TotalAttitude	<---	TotalSUS	.262	***	Accepted
TotalAttitude	<---	TotalEnj	.141	***	Accepted
TotalBI	<---	TotalAttitude	.177	***	Accepted
TotalBI	<---	TotalSN	.357	***	Accepted
TotalBI	<---	TotalPBC	.246	***	Accepted

Table 5.4: Categories of model fit and their level of acceptance for the structural model

Name of Category	Name of Index	Index Value	Level of acceptance
Absolute fit	RMSEA	.070	RMSEA<0.08
	GFI	.998	GFI>0.90
Incremental fit	AGFI	.938	AGFI>0.90
	CFI	.998	CFI>0.90
	NFI	.997	NFI>0.90
Parsimonious fit	Chisq/df	3.471	Chi-square/df<3.0

6. Conclusions and Implications

This paper provides a comprehensive quantitative investigation of the relative importance of the economic, environmental, and social motives for consumers to participate in sharing communities, with respect to the ride sharing/carpooling practice. The paper contributes to the theory of planned behavior to include the predictors of collaborative consumption and examines its impact on attitudes in the Egyptian context.

Results revealed that subjective norms are the most influential predictor of intentions towards carpooling. This result could be supported by what was mentioned by Elbadrawy and Aziz (2011) that Egypt ranked 38 of an average ranking of 64 countries considered collectivist ones. This could explain that individuals in Egypt prefer group interest than individual interest and they can easily influence each other's decisions. Regarding the predictors of attitudes, economic benefits was the most important factor based on standardized beta value. This could be contributed to the economic situation in Egypt. Consumers are now facing various economic and financial problems such as devaluation of currency and high inflation. Hence, their confidence is affected and in turn, household spending decreased (Euromonitor International, 2017).

The results of the current paper could be used as a reference to strengthen consumer attitudes and intentions towards collaborative consumption by emphasizing on the existing evident motives. Marketers could provide coupons and vouchers in certain seasons or rush hours to encourage consumers to use carpooling applications. Awareness campaigns should be done to focus on the benefits of the carpooling applications such as reduction of gas emissions, air pollution and traffic congestion. Transparent review systems should be developed for each application to increase consumer trust to try the applications. The government also plays a major role through changing the education systems. It should highlight the importance of sharing and collaboration and its impact on the society and the environment. Children should be aware that their action could have an impact on the environment, the increase of pollution and global warming.

References

Ajzen, I. (1991). "The theory of planned behavior". Organizational Behavior and Human Decision Processes, 50 (2), 179-211.

Billows, G., & McNeill, L. (2018). Consumer Attitude and Behavioral Intention toward Collaborative Consumption of Shared Services. *Sustainability*, 10(12), 4468.

Elbadrawy, R., & Aziz, R. A. (2011). Resistance to mobile banking adoption in Egypt: A cultural perspective. *International Journal of Managing Information Technology*, 3(4), 9.

Ertz, M., Lecompte, A., & Durif, F. (2017), Dual roles of consumers: towards an insight into collaborative consumption motives. *International Journal of Market Research*, 59 (6), 725-748.

Euromonitor International (2017). Consumer Lifestyles in Egypt. Retrieved from: https://www.euromonitor.com/consumer-lifestyles-in-egypt/report.

Ghorab, H. K., & Shalaby, H. A. (2016). Eco and Green cities as new approaches for planning and developing cities in Egypt. *Alexandria Engineering Journal*, 55(1), 495-503.

Hair, J.,F., Ringle, C., M, & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. Long Range Planning 6(1-2): 1–12.

Hamari J, Sjoklint M, & Ukkonen, A. (2015). "The sharing economy: why people participate in collaborative consumption". *Journal of the Association for Information and Science Technology*.

Henseler, J., C, Ringle, C.,M., & Sinkovics, R., R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319.

Mayasari, I., & Haryanto, H. C. (2018). Motivational factors of the collaborative consumption in the era of sharing economy. *Gadjah Mada International Journal of Business*, 20(3), 331.

Möhlmann, M. (2015). "Collaborative consumption: determinants of satisfaction and the likelihood of using a sharing economy option again". *Journal of Consumer Behaviour*, 14 (3), 193-207

Pizzol, H., Ordovás de Almeida, S., & Couto Soares, M., (2017). "Collaborative consumption: a proposed scale for measuring the construct applied to a car sharing setting". *Sustainability*, 9 (5), 703.

Roos, D., & Hahn, R. (2017). Does shared consumption affect consumers' values, attitudes, and norms? A panel study. *Journal of Business Research*, 77, 113-123.

Tussyadiah, I. P. (2015). "An exploratory study on drivers and deterrents of collaborative consumption in travel". *Information and communication technologies in tourism*, 817-830.