European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

Consumer Intention of Online Food Shopping in India: An Empirical Approach

Dr. C Joe Arun,
Director, Loyola Institute of Business Administration (LIBA), Chennai, India
Email: cjarun@gmail.com

Abstract

Consumers in the recent days utilizes the internet facilities to acquire information for products and services and makes purchase decision. By enhancing the recent advancements in technology on customer interactions, online marketers should grasp the value customers based on their buying behaviour in online. With the existing technology, firms involved in online marketing sells the customers, their respective products and services regularly. The purpose of this paper is to examine the impacts of consumer adoption characteristics towards online food shopping in India. The study also explores the purchase intention of Indian consumers for shopping online food based on consumer segments. A total of 340 participants from Chennai and Trichy were included in the study and data were analysed through Factor analysis and SEM. The two consumer segments on 10 specified food categories: consumer segment 1(online-food-conservative) have weak purchase intention on online food shopping and consumer segment 2 (online-food-pioneer) have strong intention towards online food shopping. The study's findings can provide the marketers to understand the needs and demands of the Indian consumers to have further success in the online retail market in India.

Keywords: Online Shopping, Online foods, Indian Consumer, Structural Equation Modelling, Adoption characteristics, Consumer segments

1. Introduction

Because of important developments in e-commerce, several obstacles to online food shopping that were identified by researchers a years back have been removed, such lengthy website load times, trouble with transactions, payment security difficulties, and the delivery of subpar food products *(Amir et al., 2017; Hansen, 2005). (Shenggen et al,. 2020)* suggested that "The customers are able to evaluate the available food products and their prices from a multiplicity of diverse outlets through the Internet in the privacy of their home instead of battling crowds, standing in long checkout lines, and fighting for parking spaces at a busy mall". The purpose of the study is to explore the driving forces which influences the purchase intention of Indian consumers towards online food market. Marketers in the online segment used to sell their respective products and services to the customers through their website. According to *(Henry, 2020),* "these online stores are important and sometimes highly visible representatives of the 'new economy', yet despite this, they do not enjoy much sound conceptual and empirical research". Firms with better understanding of online consumer behaviour can be benefited through selling their products in the online market. The paper investigates the purchase intention of Indian consumer through online and how they are adopting online shopping with given features and facilities of online marketers' website. Furthermore, the study analyses the perceptions of customers based on technology and trust towards the sellers of food products.

Consumer shopping through online platforms have been studied widely in the literature *(Häubl et al., 2000; Miyazaki et al., 2001; Zhou et al., 2007)*. Several studies have been undertaken to understand the consumer buying behaviour for food through online. *(Hansen 2005)* framed a model for consumer adoption of online for food which is influenced by the five attributes of online adoption such as "perceived social norm, perceived complexity, perceived compatibility, perceived relative advantage and perceived risk". Number of empirical studies were emerged to analyse these factors on exploring their influences over attitudes of customer as well as purchase intention for online food shopping *(Anesbury et al., 2016; Hansen et al., 2004; Hansen, 2008; Kang et al., 2016).* Moreover, past studies examined that product attributes and socio-demographics have a significant influence on online food shopping behaviour of consumer *(Chintagunta et al., 2012).*

(Sreeram et al., 2017) suggested that "there is still a lack of understanding on consumer behaviour in online food shopping in one of the world's largest e-commerce market – India which has different food consumption patterns and cultures from western countries". Only a few studies in the recent past have acknowledged the impact of socio-demographics and consumer intention of Indian consumers on purchasing food products through online platforms *(Kaur et al., 2016).* Furthermore, there is no specific studies to relate the influence of consumer segments and preferences towards the adoption of online food shopping in India. Therefore, the present study aims to provide valuable contribution towards the existing lack of understanding the Indian consumer's adoption of online shopping for food products. The objective of this study can be threefold which include: online adoption characteristics of Indian consumers of online food shopping, examining

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

consumer segments for shopping foods through online in India, and identifying the preferences of Indian consumers towards a particular food products through online shopping.

2. Literature Review

"Internet marketing is a paperless environment where a computer is used as a medium to recognise, reproduce, and store product information that enables online businesses to be operated without limits anytime and anywhere 24 hours a day, 7 days a week and 365 days a year", *(Chen et al., 2019).* "Convenience is the most common factor that motivates consumers to shop online through the Internet", *(Wolfinbarger et al., 2001).* Customers are drawn to customised offerings in online settings. The official site is the network that allows online retailers and customers during the online shopping experience, *(Inderpal, 2019).* Customers' purchases are influenced by well-designed online shopping websites that really are simple to operate and aesthetically striking.

As discussed in the Introduction, *(Hansen, 2005)* framed the characteristics of consumer adoption of online shopping. "Perceived social norm" – refers to the perceptions and opinions of others (for example: family members and friends) towards a consumer's adoption shopping for food products which has a positive influence on consumer purchase intention for online food shopping *(Hansen et al., 2004; Hansen, 2005, 2008).* "Perceived compatibility" refers to the perceived degree to which consumer's present, past values and lifestyles fits with the shopping of food products over online which is positively linked with the consumer's purchase intention for online food shopping *(Hansen et al., 2004; Hansen, 2005, 2008).* "Perceived relative advantage" can be referred as the degree of the dominance of shopping food over online compared to shopping food on offline *(Hansen, 2005).* Past studies recognized that consumer perceives couple of major benefits of online food shopping when comparing with offline shopping such as: shopping convenience (saves time) and pricing (saves money) which has a positive influence on consumer attitude and purchase intention for online food shopping *(Anesbury et al., 2016).*

"Perceived complexity" refers to the perceived degree of complexity being utilized by consumers on shopping food through online, which has a negative influence on attitude and purchase intention of consumer on shopping food through online *(Hansen et al., 2004; Hansen, 2005, 2008; Sreeram et al., 2017; Yeo et al., 2017).* "Perceived risk" refers to the perceptions of consumer about the possible detriment and loss on shopping for food through online. *(Hansen, 2005)* suggested the possible perceived risks such as: "payment security, exchange problems and receiving low-quality food products. *(Mortimer et al., 2016; Ramus et al., 2005)* examined that perceived risk has a negative influence on consumer attitude and purchase intention for online food shopping. Since there is no confirmatory study can be undertaken to test the five characteristics of consumer adoption of online food shopping, specifically regards to the e-commerce market in India. In addition, past studies suggested that the factorial structure of consumer's choices of food differs across population and cultures in India *(Han et al., 2013).* Therefore, the study developed a conceptual model with consumer adoption characteristics can be considered as the factorial structure for the Indian sample in this study. Early studies examined that, "consumer's beliefs, perceptions and motivations had direct influences on consumers' attitudes, purchase intentions, and indirect influences on their purchase intentions and consumption through the attitudes toward a product or service" *(Chiou, 1998; Pieniak et al., 2009; Steenkamp, 1997; Vanhonacker et al., 2010; Wang et al., 2015; Wang et al., 2018).*

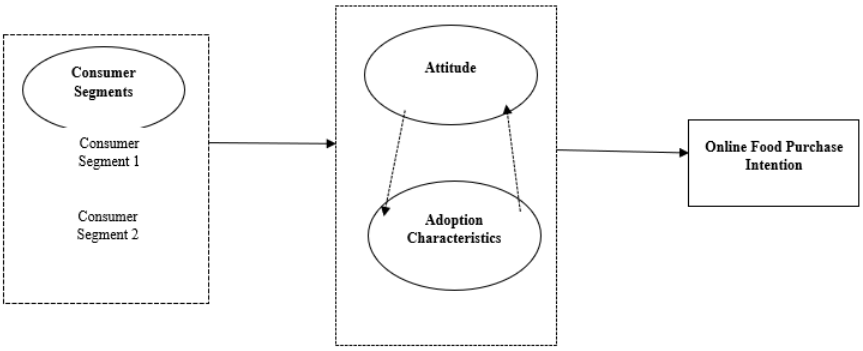
The attributes of consumer adoption of online food shopping such as "social norm, compatibility, relative advantage, complexity and risk of online food shopping *(Hansen et al., 2004; Hansen, 2005, 2008).* These characteristics found to have direct as well as indirect influence direct influence on consumer attitude and purchase intention for shopping foods over the online channels *(Anesbury et al., 2016; Chu et al., 2010; Morganosky et al., 2000; Mortimer et al., 2016; Raijas, 2002; Ramus et al., 2005; Sreeram et al., 2017; Yeo et al., 2017).* According to the conceptual model, it has been assumed that consumer adoption of online characteristics have direct influence on consumer's purchase intention for online food shopping and indirect influence on consumer attitude through purchase intention for online food shopping.

(Morton et al., 2017; Pieniak et al., 2010) suggested that segmentation analysis is widely undertaken to study and examine varied consumer segments on the basis of consumer perceptions, attitude and buying behaviour on food and non-food categories. Past researches identified that the influence of factors such as consumer adoption characteristic and socio-demographics towards the adoption of online shopping of food can vary among different consumer segments. For instance, consumer with higher income have high level of willingness to pay additional or more cost for fresh foods as compared to consumers of lower income in the e-commerce market *(Jin et al., 2017).* Moreover, *(Kang et al., 2016)* indicated that consumer segments with very less attachment to health and taste aspects may show more importance to money saving food categories as compared to healthy and taste foods, whereas consumers who have more attachment on health aspects show more importance to fresh and healthy foods. Therefore in the model, the impact of adoption characteristics of Indian consumers are assumed to vary based on the consumer segments with varied online shopping preferences for specified food categories.

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

3. Conceptual Framework

Figure 1: Conceptual Model of this study



Source: (Wang et al., 2018)

4. Methods

4.1. Procedures and Participants

Online survey was conducted during December 2022 to carry out quantitative data collection method. Two major cities of Tamil Nadu (Chennai and Trichy) were chosen to collect data to have a clear understanding on variations and similarities on online shopping behaviour for food. The study categorized the two cities into first tier and second tier city, as the first tier city (Chennai) is ahead of economies, level of education and societal interaction than the second tier city (Trichy) and as well as any other cities in Tamil Nadu *(Liu et al., 2011).* An online questionnaire was forwarded to the respondents. Furthermore, the questionnaire was distributed using quota sampling method which includes age, gender, education, and locality as major attributes of quota sampling technique *(Wang et al., 2017).* Participants of the study were given with survey questions randomly in order to maximize the study's validity. A total of 340 respondents were recorded from the two selected cities (Chennai – 200 respondents and Trichy – 140 respondents) which can be represented in the following Table 3. The cross-tabulations with $\chi 2$ tests indicated that the samples of these two cities found to have no variations in gender distribution, age, occupation, income, educational qualification, marital status and size of household.

4.2. Measurement Scale

The online adoption characteristics of participants were measured using sixteen within the factorial structure of five attributes which is shown in the following Table1. It was developed from the measurement design and questions of online shopping adoption characteristics used by *(Hansen 2005).* The study used a 'Seven-Point Likert scale' (1 – strongly disagree, 2 – moderately disagree, 3 – slightly disagree, 4 – neither agree nor disagree, 5 – slightly agree, 6 – moderately agree, 7 – strongly agree) to gather response from the participants for the 16 measurement questions *(Wang et al., 2015).* In the measurement of adoption characteristics, participant's intention on online shopping for food can be measured using two items such as: "I expect to purchase food/beverage from online shops (variable code: PI1) and "I am willing to buy food/beverage online" (variable code: PI2). The two measurement items were drawn from the previous studies which examined the consumer intention of online shopping for food *(McElroy et al., 2007; Mortimer et al., 2016).* The online purchase intention of participants toward 10 food categories being measured using single item: "I expect to purchase [food category]". Considering the recent growth rates in the online retail sector of India, the study included 10 food categories such as: "meat (chicken and mutton), dairy products, vegetables, eggs, fruits, fishes, soft drinks, snack, imported food/drink, and local food/drink" *(Blake, 2016; Harkell, 2017; Jenkins, 2016; Tong, 2017; Verot, 2016).*

Table 1: Measurement items of online shopping adoption characteristics

Code	Measurement Item and Factor
PS	**Perceived Social Norm**
PS1	My family members thought it would be a good idea to purchase online food/drink
PS2	Majority of my friends and acquaintances thought it would be a good idea to purchase online food/drink
PC	**Perceived Complexity**

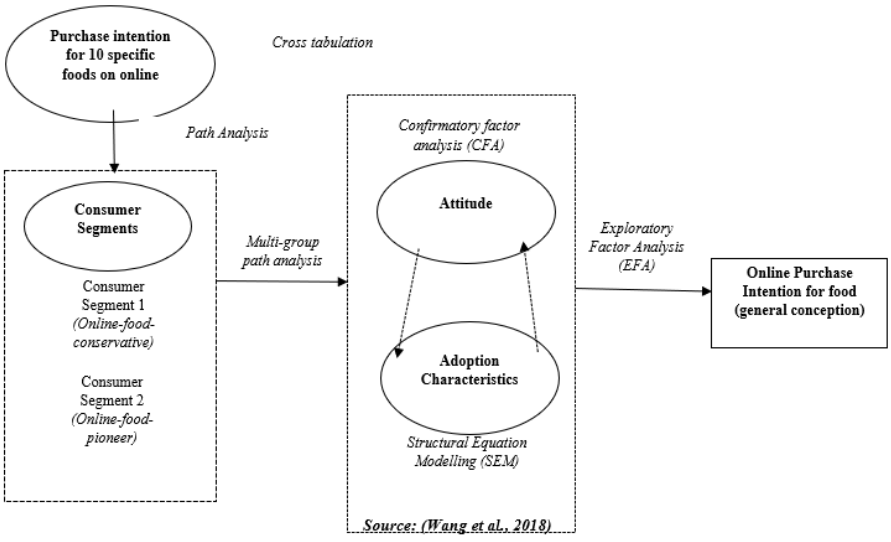
European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

PC1	Online food shopping is complex as I can't see or feel the products
PC2	Generally, online food shopping is a complex process
PC3	It is difficult to order the products with online food shopping
PCB	**Perceived Compatibility**
PCB1	Online food shopping seems to be attractive in my daily life
PCB2	Purchasing online food is more suites for me to shop groceries
PCB3	In general, online food shopping is free of problems
PCB4	For me online food shopping is beneficial
PRA	**Perceived Relative Advantage**
PRA1	Online food shopping ensures time savings
PRA2	Online food shopping is favourable as it provides me less dependency on opening hours of shop
PRA3	Online food shopping saved more money
PR	**Perceived Risk**
PR1	Return and exchange opportunities are not as fair as offline shopping
PR2	Receiving poor quality or incorrect products via shopping through online
PR3	Payment security over the internet is not fair enough
PR4	Existence of several untrustworthy shops on the internet

4.3. Analysis of Data

In this study, statistical software tools such as SPSS and AMOS 24 were implemented to perform data analysis which is shown in Fig 2. Initially, descriptive analyses (with mean) were employed for online purchase intention of 10 food categories among the Indian consumers. Secondly, cluster analysis has been conducted using the purchase intentions of 10 particular online food products as variables of segmentation *(Wang et al., 2015; Wang et al., 2018).* To understand the significant differences among the consumer segments 'Cross-tabulations with $\chi 2$ tests were employed on the basis of socio-demographics. Then Confirmatory factor analysis (CFA) was employed to determine whether the factorial structure of online food shopping adoption characteristics *(Hansen et al., 2005)* had a good fit with the Indian sample employed in this study *(Jones et al., 2002).* As the factorial structure didn't fit well with the Indian sample, explanatory factor analysis was employed to examine the accuracy of the factorial structure of online food shopping adoption characteristics for the Indian sample *(Jones et al., 2002).* Finally, SEM (Structural Equation Modelling) was employed to examine the relationship among the adoption characteristics and consumer attitudes and purchase intention for online food shopping of Indian consumers *(Pieniak et al., 2009; Trainor et al., 2014; Urueña et al., 2016).* Furthermore, Path analysis is conducted for the total sample and multi-group path analysis for sub-samples of the consumer segments to examine significant relationships among adoption characteristics, attitudes and purchase intention.

Figure 2: Procedure od Data Analysis



European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

5. Results and Discussion

The study's participants were clustered on the basis of their purchase intention towards the 10 specific food products in online. A double-segment solution was achieved in this study. The Table 2 represents the mean values and size per segmentation variable of the entire sample. From the below Table 2 it has been identified that Segment 1 accounts for 42 percent and 58 percent for Segment 2 of the total sample which indicates the consumers of Segment 1 have lower level of purchase intention as compared to Segment 2 consumers. In addition, the mean value of all the variables of Segment 1 were found to be lower than that of Segment 2. Specifically, the mean values of four segmentation variables of consumer Segment 1 such as meat, vegetables, eggs and fish were found to be lesser than 4, whereas all the segmentation variables of Segment 2 exceeded 5. In this study, Segment 1 can be named as "online-food-conservative" and Segment 2 was labelled as "online-food-pioneer".

Table 2: Size, mean values and Standard Deviation scores of consumer segments based on their intention towards the 10 specific online food items.

	Segment 1 Online food conservative		**Segment 2 Online food pioneer**			
Category	**Mean**	**SD**	**Mean**	**SD**	***F***	**p-value**
Meat	3.24	1.16	5.35	1.13	530.33	0.000
Dairy Products	4.42	1.35	5.92	0.87	280.376	0.000
Vegetables	3.26	1.21	5.07	1.26	333.340	0.000
Eggs	3.11	1.18	5.22	1.12	481.472	0.000
Fish	4.02	1.25	5.02	1.33	338.814	0.000
Fruits	4.17	1.31	5.74	1.02	344.921	0.000
Soft Drink	4.24	1.28	5.85	0.91	334.574	0.000
Snack	5.10	1.32	6.23	0.74	190.088	0.000
Imported food/drink	4.73	1.31	6.11	0.78	268.086	0.000
Local food/drink	4.56	1.24	5.96	0.81	286.208	0.000
Size of segment		**140**		**200**		
Total Sample in (%)		**42**		**58**		

Cross-tabulations with $\chi 2$ tests indicated significant difference among Segment 1 and Segment 2 for the demographic variables shown in the Table 3. The "online food pioneer" segment have high level of intention than "online food conservative" segment. This shows that Consumer Segment 1 have weak intention towards fresh foods whereas Consumer Segment 2 have greater intention on imported food products. However, there is no significant difference can be found among the two cities (Chennai and Trichy) of consumer segments.

Table 3: Socio-demographic profile of the consumer segment

	Segment 1 Online-food conservative (n = 140) (%)	**Segment 2 Online-food pioneer (n = 200) (%)**	**Total Sample (n = 340) (%)**
City			
Chennai	57.3	58.6	57.95
Trichy	42.7	41.4	42.05
Gender			
Male	46.4	52.5	49.45
Female	53.6	47.5	50.55
Income (INR)			
0 – 15,000	37.4	30.7	34.05
15,001 – 30,000	39.3	40.1	39.07
30,000 and above	23.3	29.2	26.25
Marital Status			

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

Single	43.3	48.4	45.85
Married	56.7	51.6	54.15
Age			
20 – 30	36.6	37.2	36.90
31 – 40	35.1	32.4	33.75
40 and above	28.3	30.4	29.35
Level of Education			
Secondary School and below	21.7	23.2	22.45
UG	49.4	46.4	47.90
PG and above	28.9	30.4	29.65
Occupation			
Private employee	27.4	31.5	29.45
Government employee	23.7	26.4	25.05
Self-employed	15.6	16.1	15.85
Student	22.7	19.7	21.20
Others	10.6	6.3	8.45

5.1. Confirmatory Factor Analysis Test

The following Table 4 represents the Confirmatory Factor Analysis results for the original structure of online food shopping adoption characteristics *(Hansen, 2005).* The standardized factor loadings of the 10 items ranged between 0.556 and 0.905. The goodness of fit indices values lies within the adequate limits: greater than 0.9 for CFI and lower than 0.8 for RMSEA *(Trainor et al., 2014).* Moreover, the correlation coefficients of three factors "perceived social norm, perceived compatibility and perceived relative advantage" were found to be greater than 0.85, which indicates a severe multi-collinearity amongst these factors *(Pieniak et al., 2009).* In addition, the AVE scores of these factors were lesser than the squared correlation coefficients with other factors. Therefore, the discriminant validity was not established the original factorial structure of the consumer adoption characteristics which seems to be not suitable for the contemporary data in India *(Voorhees et al., 2016).*

Table 4: CFA results and Correlation Matrix based on the original factorial structure of consumer adoption characteristics of online food shopping

Factor and Item	Standardized factor loading	Composite Reliability	Average variance extracted (AVE)
Perceived Social Norm		**0.87**	**0.78**
PS1	0.901		
PS2	0.875		
Perceived Complexity		**0.88**	**0.74**
PC1	0.685		
PC2	0.950		
PC3	0.905		
Perceived Compatibility		**0.85**	**0.61**
PCB1	0.813		
PCB2	0.820		
PCB3	0.677		
PCB4	0.785		
Perceived Relative Advantage	0.655	**0.78**	**0.54**
PRA1	0.796		
PRA2	0.763		
PRA3			
Perceived Risk		**0.74**	**0.42**
PR1	0.677		
PR2	0.545		
PR3	0.807		
PR4	0.556		

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

Correlation Matrix			Correlation Coefficient		
Factor	1	2	3	4	5
Perceived Social norm	1				
Perceived Complexity	-0.143**	1			
Perceived Compatibility	0.892**	-0.141**	1		
Perceived Relative Advantage	0.875**	-0.187***	0.960***	1	
Perceived Risk	-0.150**	0.541***	-0.133**	-0.091	1

5.2. Exploratory Factor Analysis

The following Table 5 represents the results of exploratory factor analysis in order to examine the adjusted factorial structure of the 16 items of the adoption characteristics for the entire sample. Three factors were recognized with considerable factorial structure. Because of low factor loading, items such as PC1 and PC3 were neglected *(Jones et al., 2002).* The adjusted factorial structure with the discriminant validity was confirmed by Cronbach's α value (greater than 0.70) and correlation coefficients (0.5) for the three factors such as "perceived social norm, perceived compatibility and perceived relative advantage" *(Reichert et al., 2016).* The EA results indicates that adjusted factorial structure of the three factors have a positive influence on consumer adoption of online food shopping in India *(Anesbury et al., 2016; Hansen, 2005, 2008; Hansen et al., 2004; Raijas, 2002).* In addition, EFA results reflected a new factor named to be "perceived incentive" which drew customers to adopt online food shopping.

Table 5: EFA results and Correlation matrix for adjusted factorial structure of adoption characteristics

Factor and Item	Standardized Factor Loading	Cronbach's α	Percent Explained Variance
Perceived Incentive		0.95	37.934
PS1	0.839		
PS2	0.817		
PCB1	0.802		
PCB2	0.804		
PCB3	0.670		
PCB4	0.767		
PRA1	0.729		
PRA2	0.780		
PRA3	0.645		
Perceived Complexity		0.926	12.001
PC2	0.896		
PC3	0.881		
Perceived Risk		0.719	11.281
PR1	0.541		
PR2	0.795		
PR4	0.680		

Correlation Matrix		Correlation Coefficient	
Factor	**1**	**2**	**3**
1. Perceived Incentive	1		
2. Perceived Complexity	-0.146***	1	
3. Perceived Risk	-0.145**	0.463***	1

5.3. SEM and Path analysis

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

SEM was implemented to diagnose the relationship among the Indian consumer's adoption characteristics (with adjusted factorial structure) and their purchase intention and attitudes for online food shopping with 16 observed variables and 5 latent variables. Considering the Cronbach's α scores, the observed variables found to have good internal reliabilities such as 0.90 for consumer attitude and 0.92 for purchase intention on online food shopping. As the values of "goodness-of-fit" found to be within the limit of acceptance (lesser than 0.08 for RMSEA and greater than 0.9 for CFI) *(Trainor et al., 2014)* which resulted in good performance of the SEM. For the entire sample of the study, path analysis has been conducted. Moreover, "multi-group path analysis" have been carried among the subsamples of the consumer segments using SEM. As per the following Table 6, it has been found that attitude of consumer for shopping of online food had a positive association with the purchase intention for both sub-samples and total sample. Therefore, it shows that consumer adoption characteristics had a direct influence on the consumer attitude and indirectly influence the intention of consumer via attitude. Furthermore, "perceived incentive and perceived complexity" had a positive relationship with consumer purchase intention and attitude towards the online food shopping in India. Whereas, "perceived risk" found to have no significant relationship with consumer attitude and purchase intention of online food shopping for both total sample as well as the sub-samples of the study. Therefore, considering the total sample of the study, perceived incentive found to have positive association with purchase intention and attitude of the Indian consumers, whereas perceived complexity found to have negative influence on attitude and purchase intention which displays the weak intention of Indian consumers toward online food shopping.

Table 6: Results of Path analysis for total sample and results of multi-group path analysis for the two sub-samples

Factor	Path Factor	Total Sample	Online-food-conservative	Online-food-pioneer
Perceived Incentive	⟶ Attitude	0.736***	0.645***	0.621***
Perceived Complexity	⟶ Attitude	ns	ns	ns
Perceived Risk	⟶ Attitude	ns	ns	ns
Perceived Incentive	⟶ Purchase Intention	0.574***	0.591***	0.461***
Perceived Complexity	⟶ Purchase Intention	-0.072**	-0.082*	ns
Perceived Risk	⟶ Purchase Intention	ns	ns	ns
Attitude	⟶ Purchase Intention	0.364***	0.361***	0.370***

6. Conclusion

With the existing literature support, the present have the novelty of exploring consumer segments, online shopping adoption characteristics and preferences of products in the context of online food shopping from India. The five adoption characteristics used in this study has been developed from the past study which depicts the western countries' setting *(Hansen et al., 2004; Hansen, 2005, 2008)*. From the CFA results, it has been found that the original factorial structure doesn't fit with the contemporary data in India. Through EFA results, we found the adjusted and suitable factorial structure for the Indian sample with the three factors "perceived incentive, perceived complexity and perceived risk". Among the three factors perceived incentive (combination of perceived social norm, perceived compatibility and perceived relative advantage) has both indirect and direct influence on purchase intention of both total sample and sub-samples of the study. Whereas, perceived risk and perceived complexity have negative influence on purchase intention of the total and sub-samples of the study. Considering the new factor "perceived incentive" depicts that Indian consumers consider online shopping of food as an integral part of their daily lives *(Harkell, 2017; Tong, 2017; Verot, 2016)*. The study with the results of EFA, suggests that consumer can attain reliable benefits (time and money savings). It is also suggested that additional studies be conducted to investigate consumer behaviour and shopping online trends from all over the world, with higher numbers, rather than from a restricted geographical area of the world, even though distinct factors are involved consumer shopping online behaviours varies from country to country, for example, between developed and developing countries. The greater the number of samples reported, the greater the transferability of the outcomes and the ability to provide further

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

accurate and complete results. Gender, income, and education level differences should be explicitly investigated in order to examine the disparities in consumer Internet shopping partitioned to the adoptive parents and use of information technology and e-commerce.

References

1. Amir, H. and Rizvi, W. (2017), "Influence of perceived risk and familiarity on willingness to transact in online food shopping in developing economies: an (extended) abstract", in Stieler,M. (Ed.), Creating Marketing Magic and Innovative Future Marketing Trends, Springer, Cham, pp. 891-895.
2. Anesbury, Z., Nenycz-Thiel, M., Dawes, J. and Kennedy, R. (2016), "How do shoppers behave online? An observational study of online grocery shopping", Journal of Consumer Behaviour, Vol. 15 No. 3, pp. 261-270.
3. Blake, B. (2016), "The single biggest sale in the world", available at: www.brandbank.com/blog/singleprofitable-day-world/ (accessed June 30, 2017).
4. Chen, T. (2019), "Community group buy – the next billion dollar e-commerce industry", Walkthechat, March 11, available at: https://walkthechat.com/community-group-buy-the-next-billion-dollar-ecommerce-industry/.
5. Chintagunta, P.K., Chu, J. and Cebollada, J. (2012), "Quantifying transaction costs in online/off-line grocery channel choice", Marketing Science, Vol. 31 No. 1, pp. 96-114.
6. Chiou, J.S. (1998), "The effects of attitude, subjective norm, and perceived behavioral control on consumers' purchase intentions: the moderating effects of product knowledge and attention to social comparison information", Proceedings of the National Science Council, Part C, Humanities and Social Sciences, Vol. 9 No. 2, pp. 298-308.
7. Chu, J., Arce-Urriza, M., Cebollada-Calvo, J.J. and Chintagunta, P.K. (2010), "An empirical analysis of shopping behavior across online and offline channels for grocery products: the moderating effects of household and product characteristics", Journal of Interactive Marketing, Vol. 24 No. 4, pp. 251-268.
8. Hansen, T. (2005), "Consumer adoption of online grocery buying: a discriminant analysis", International Journal of Retail and Distribution Management, Vol. 33 No. 2, pp. 101-121.
9. Hansen, T., Jensen, J.M. and Solgaard, H.S. (2004), "Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behaviour", International Journal of Information Management, Vol. 24 No. 6, pp. 539-550.
10. Hansen, T. (2008), "Consumer values, the theory of planned behaviour and online grocery shopping", International Journal of Consumer Studies, Vol. 32 No. 2, pp. 128-137.
11. Han, H. and Hwang, J. (2013), "Multi-dimensions of the perceived benefits in a medical hotel and their roles in international travelers' decision-making process", International Journal of Hospitality Management, Vol. 35, pp. 100-108.
12. Harkell, L. (2017), "Imported seafood sales surge at leading Chinese e-commerce store", available at: www.undercurrentnews.com/2017/05/19/imported-seafood-sales-surge-at-leading-chinese-ecommerce- store/ (accessed June 30, 2017).
13. Häubl, G. and Trifts, V. (2000), "Consumer decision making in online shopping environments: the effects of interactive decision aids", Marketing Science, Vol. 19 No. 1, pp. 4-21.
14. Henry Egbezien Inegbedion (July 2020), COVID-19 lockdown: implication for food security; https://emerald.com/insight/2044-0839.htm
15. Inderpal Singh Arora (May 2019), Customer Perception towards online shopping; International Journal of Management, Technology and Engineering; ISSN NO: 2249-7455
16. Jenkins, L. (2016), "E-commerce driving China's wine sales", available at: www.thedrinksbusiness. com/2016/08/e-commerce-driving-chinas-wine-sales/ (accessed June 30, 2017).
17. Jin, S., Li, H. and Li, Y. (2017), "Preferences of Chinese consumers for the attributes of fresh produce portfolios in an e-commerce environment", British Food Journal, Vol. 119 No. 4, pp. 817-829.
18. Jones, M.A., Mothersbaugh, D.L. and Beatty, S.E. (2002), "Why customers stay: measuring the underlying dimensions of services switching costs and managing their differential strategic outcomes", Journal of Business Research, Vol. 55 No. 6, pp. 441-450.
19. Kang, C., Moon, J., Kim, T. and Choe, Y. (2016), "Why consumers go to online grocery: comparing vegetables with grains", in Bui, T.X. and Sprague, R.H. Jr. (Eds), 49th Hawaii International Conference on System Sciences, IEEE, HI Hawaii, pp. 3604-3613.

20. Kaur, H. and Shukla, R.K. (2016), "Consumer's attitude towards online grocery shopping in Delhi city", International Journal of Multidisciplinary Approach & Studies, Vol. 3 No. 2, pp. 1-40.
21. Liu, S., Smith, J.R., Liesch, P.W., Gallois, C., Ren, Y. and Daly, S. (2011), "Through the lenses of culture: Chinese consumers' intentions to purchase imported products", Journal of Cross-Cultural Psychology, Vol. 42 No. 7, pp. 1237-1250.
22. McElroy, J.C., Hendrickson, A.R., Townsend, A.M. and DeMarie, S.M. (2007), "Dispositional factors in internet use: personality versus cognitive style", MIS quarterly, Vol. 31 No. 4, pp. 809-820.
23. Miyazaki, A.D. and Fernandez, A. (2001), "Consumer perceptions of privacy and security risks for online shopping", Journal of Consumer Affairs, Vol. 35 No. 1, pp. 27-44.
24. Morganosky, M.A. and Cude, B.J. (2000), "Consumer response to online grocery shopping", International Journal of Retail and Distribution Management, Vol. 28 No. 1, pp. 17-26.
25. Mortimer, G., Fazal e Hasan, S., Andrews, L. and Martin, J. (2016), "Online grocery shopping: the impact of shopping frequency on perceived risk", The International Review of Retail, Distribution and Consumer Research, Vol. 26 No. 2, pp. 202-223.
26. Pieniak, Z., Verbeke, W., Olsen, S.O., Hansen, K.B. and Brunsø, K. (2010), "Health-related attitudes as a basis for segmenting European fish consumers", Food Policy, Vol. 35 No. 5, pp. 448-455.
27. Pieniak, Z., Verbeke, W., Vanhonacker, F., Guerrero, L. and Hersleth, M. (2009), "Association between traditional food consumption and motives for food choice in six European countries", Appetite, Vol. 53 No. 1, pp. 101-108.
28. Raijas, A. (2002), "The consumer benefits and problems in the electronic grocery store", Journal of Retailing and Consumer Services, Vol. 9 No. 2, pp. 107-113.
29. Ramus, K. and Asger Nielsen, N. (2005), "Online grocery retailing: what do consumers think?", Internet Research, Vol. 15 No. 3, pp. 335-352.
30. Reichert, F.M., Zawislak, P.A. and Arundel, A. (2016), "Exploring innovation success recipes in low-technology firms using fuzzy-set QCA", Journal of Business Research, Vol. 69 No. 11, pp. 5437-5441.
31. Shenggen Fan and Wei Si and Yumei Zhang (June 2020), How to prevent a global food and nutrition security crisis under COVID-19?; https://emerald.com/insight/1756-137X.htm
32. Sreeram, A., Kesharwani, A. and Desai, S. (2017), "Factors affecting satisfaction and loyalty in online grocery shopping: an integrated model", Journal of Indian Business Research, Vol. 9 No. 2, pp. 107-132.
33. Steenkamp, J.B.E. (1997), "Dynamics in consumer behavior with respect to agricultural and food products", inWierenga, B., van Tilburg, A., Grunert, K.G., Steenkamp, J.B.E. and Wedel, M. (Eds), Agricultural Marketing and Consumer Behavior in a Changing World, Springer, New York, NY, pp. 143-188.
34. Tong, F. (2017), "Online shopping in China grows 26.2% in 2016", available at: www.digitalcommerce360.com/2017/02/06/online-shopping-china-grows-262-2016/ (accessed June 30, 2017).
35. Trainor, K.J., Andzulis, J.M., Rapp, A. and Agnihotri, R. (2014), "Social media technology usage and customer relationship performance: a capabilities-based examination of social CRM", Journal of Business Research, Vol. 67 No. 6, pp. 1201-1208.
36. Urueña, A. and Hidalgo, A. (2016), "Successful loyalty in e-complaints: FsQCA and structural equation modeling analyses", Journal of Business Research, Vol. 69 No. 4, pp. 1384-1389.
37. Verot, O. (2016), "Imported food products: what you need to know about the Chinese consumer", available at: http://marketingtochina.com/imported-food-products-china/ (accessed June 30, 2017).
38. Voorhees, C.M., Brady, M.K., Calantone, R. and Ramirez, E. (2016), "Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies", Journal of the Academy of Marketing Science, Vol. 44 No. 1, pp. 119-134.
39. Wang, O., Gellynck, X. and Verbeke, W. (2017), "Chinese consumers and European beer: associations between attribute importance, socio-demographics, and consumption", Appetite, Vol. 108, pp. 416-424, available at: www.sciencedirect.com/science/article/pii/S019566631630616X
40. Wang, O., Gellynck, X. and Verbeke,W. (2015), "General image of and beliefs about European food in two mainland Chinese cities: Shanghai and Xi'an", British Food Journal, Vol. 117 No. 5, pp. 1581-1595.

European Economic Letters
ISSN 2323-5233
Vol 13, Issue 5 (2023)
https://doi.org/10.52783/eel.v13i5.764
http://eelet.org.uk

41. Wang, O., Somogyi, S. and Ablett, R. (2018), "General image, perceptions and consumer segments of luxury seafood in China: a case study for lobster", British Food Journal, Vol. 120No. 5, pp. 969-983.
42. Yeo,V.C.S., Goh, S.K. andRezaei, S. (2017), "Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services", Journal of Retailing and Consumer Services, Vol. 35, pp. 150-162, available at: www.sciencedirect.com/science/article/pii/S0969698916302855
43. Zhou, L., Dai, L. and Zhang, D. (2007), "Online shopping acceptance model – a critical survey of consumer factors in online shopping", Journal of Electronic Commerce Research, Vol. 8 No. 1, pp. 41-62.