

THE EFFECT OF INTROJECTED PERCEIVED LOCUS OF CONTROL AND TRUST ON INTENTION TO USE ECOMMERCE APPLICATIONS

Mohammed Aref^a, Naema B. AlShahri^b

^a College of commerce and Business Administration, Dhofar University, Oman

^b College of commerce and Business Administration, Dhofar University, Oman

* Corresponding author: mohammed_aref@du.edu.om

ARTICLE HISTORY

Received: 5 February 2021

Accepted: 1 April 2021

Published Online: 29 April 2021

KEYWORDS

Introjected perceived locus

Trust

Ecommerce Applications

ABSTRACT

The aim of research is to determining the impacts of introjected perceived locus of control and trust on intention to use. The primary data has been collected through a questionnaire. The collected data has been statistically analyzed using appropriate statistical test. we used various statistical methods for reliability and hypotheses test such as Cronbach's alpha, multiple linear regression test. After analyzing the data and testing the hypotheses, the study revealed that introjected perceived locus of control have a significant statistical impact on the intention to adopt E-commerce Applications and explains (3.1%) of the variation in the independent variable. Also, the study revealed that trust have a significant statistical impact on the intention to adopt E-commerce Applications and explains (8.3%) of the variation in the independent variable. As Introjected perceived locus of control effect on Intention to use e-commerce applications, the people that use the application should advise to others to use the application. As trust affects the intention to use e-commerce, companies should consider improving services to keep users continues in the future.

1.0 INTRODUCTION

Electronic commerce is participation business information, save relationships, and conducting business transactions by networks and using electronic data. The development of technology has led to the emergence of e-commerce, which plays an important role in the ease of e-commerce transactions as well as connecting with the world and saving the time we need more today than before. Studies show that e-commerce helps companies to expand from the local to the global and reach the largest number of customers and thus increase employment and the economy of the country. (Head et. al, 2002) and (Zwass,1996) according to (Rahayu et al., 2015) found adoption of e-commerce by SMEs in Indonesia is influenced by many factors which are perceived benefits, technology readiness, owners' innovativeness, owners' IT experience and owners' IT ability also individual factors through the online questionnaire but samples for managers of company that mean the area of study was very limited. In addition reduce general costs of operating the business, and expansion into both local and international markets the factors affect the use of e-commerce by small enterprises in Nigeria through observation, interviews and case studies [1]–[4].

In the context of this study many research papers have published in terms of technology, i.e. using digital technology [5]–[12], data mining and neural networks [13]–[21], e-commerce [22]–[29], Entrepreneurial intention to

adopt and use financial technology fin-tech [30], accepting Information Technology in different areas on both individual and organizational levels [31]–[36], as well as transforming to virtual learning environment (VLE) [37]–[39], or in public sector environment as e-government[40]–[44], as well social media [23], [45]–[50].

Trust is the mediating of the relationship between customers' perceived strength of control and e-commerce [51] but the perceived control position were studied social sector and the result was there are indirect effect financial situation of rural households [52].

This research attempts to solve the problems faced by previous research such as increasing the size of samples and not to identify them in one area and to know the factors and reasons for the lack of trust in electronic commerce in addition to studying the variable Introjected perceived locus of control for lack of in the field of electronic commerce. The study will proves Introjected perceived locus of control and trust have a direct positive influence on intention to use and study will Determining the impacts and Identify the availability levels of introjected perceived locus of control, trust, and intention to use.

Trust is Positive expectations and dependence on persons in risky situations [53], and according to (Lu et. al, 2011) found initial trust in m-payment positive affects customers' intentions to use m-payment services through the questionnaire [22]. Also from another point of view same result but e-commerce still weak [1]. However, e-commerce

web sites should have some characteristics in order to be trusted by the online customers [29]. This study measures trust accordingly trust will have a direct positive influence on intention to use.

According to (Malhotra et al ,2008) introjected perceived locus of control is extrinsic motivation spawns perceived reasons for one’s behavior that are related to affective feelings of guilt, and esteem-based pressures to act [54]. Introjected perceived locus of control is often linked with strong self-imposed feelings of coercion that might lead to rejection of the “imposed” behavior. Although both external perceived locus of control and introjected perceived locus of control are primarily associated with feelings of external pressure, they represent distinct psychological states with different behavioral outcomes. Also this study examination the effect of Introjected perceived locus of control related to users’ intentions information technology but introjected state, has received little attention in before research. The

result was the introjected perceived locus of control Introjected perceived locus of control have positive effect related to users’ intentions.

2.0 METHODOLOGY

This study aims to investigate the Omani people attitudes forward using Ecommerce Applications. Data collected using manual administered questionnaire. The questioner items were adopted from already validated models. After completing all validation process and pilot study, the final version of the questionnaire was distributed to people in Dhofar region randomly. The total valid responses for analysis were 124 cases. The collected data was statistically analysed using appropriate statistical test. The study used various statistical methods for reliability and hypotheses test such as Cronbach’s alpha (see table 1), and multiple linear regression test.

Table 1. Reliability Statistics

	Cronbach’s Alpha	N of Items
Intention to use application	0.667	3
Introjected perceived locus of control	0.650	3
Trust	0.785	3

3.0 RESULTS AND DISCUSSION

3.1 Sample Characteristics

The characteristics of the study sample based on gender, Level of education, and age are presented in the following figures 1 and 2). 4.8% male and 95.5% were female respondents.

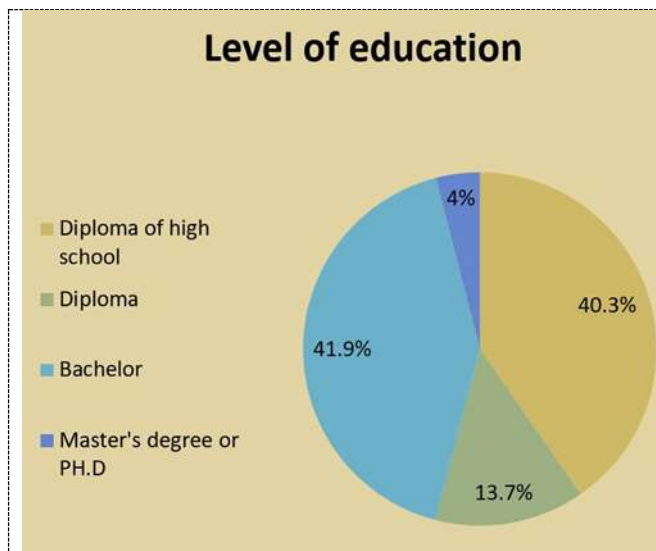


Figure 1. Education Distribution.

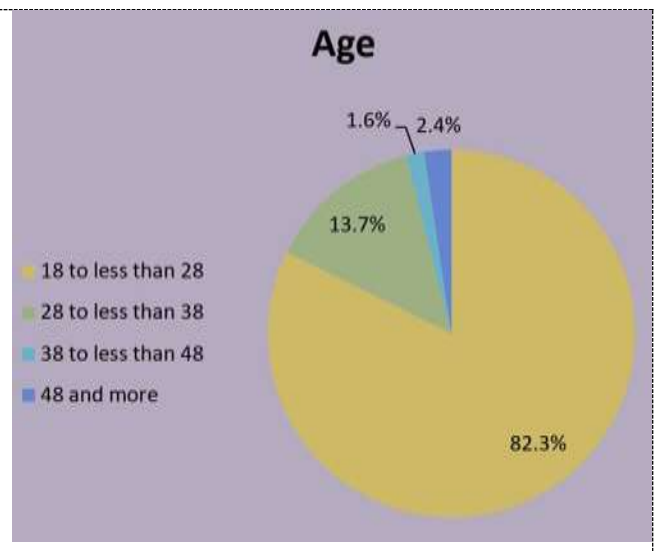


Figure 2. Age Distribution.

3.2 Variables Description

The availability of the study constructs was measured and the results shown in the table (2).

Table 2. Descriptive Statistics

	N	Mean	Std. Deviation
Intention to use application	124	4.12	0.557
Introjected perceived locus of control	124	3.61	0.811
Trust	124	2.84	1.14

3.3. Testing Study Hypothesis

The study hypothesis was tested using Simple Linear Regression.

H1: regression analysis showed that introjected perceived locus of control as it seen in table (5) affect directly ($\beta = 0.175$) on intention to use, as it shown from table (3) ($R^2 =$

0.031) This means that introjected perceived locus of control have been interpreted (3.1%) of the variance in intention to use and also we noted from table (4) that the value of the statistical test ($F = 3.875$) is statistically significant at ($P < 0.05$).

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Standard error of the estimate
1	0.175	0.031	0.031	0.55158

Table 4. ANOVA^a

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.179	1	1.179	3.875	0.05 ^b
Residual	37.118	122	0.304		
Total	38.297	123			

- a. Dependent variable: Intention to use application
- b. Predictors: (Constant), introjected perceived locus

Table 5. Coefficients^a

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. error	Beta		
Constant	124	3.61	0.811	16.217	000
Introjected perceived locus of control	124	2.84	1.14	1.969	0.05

a. Dependent variable: Intention to use application

H2: Regression analysis showed that trust as it seen in table (8) affect directly ($\beta = 0.288$) on intention to use, as it shown

from table (6) ($R^2 = 0.083$) This means that trust have been interpreted (8.3%) of the variance in intention to use and also

we noted from table (7) that the value of the statistical test ($F = 11.08$) is statistically significant at ($P < 0.05$).

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Standard error of the estimate
1	0.288	0.083	0.075	0.53653

Predictors: (Constant), TRU

Table 7. ANOVA^a

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.177	1	3.177	11.038	0.001 ^b
Residual	35.119	122	0.288		
Total	38.297	123			

- a. Dependent variable: Intention to use application
- b. Predictors: (Constant), introjected perceived locus

Table 8. Coefficients^a

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. error	Beta		
Constant	3.721	1.30		28.716	.000
Introjected perceived locus of control	0.140	0.042	0.288	3.322	0.001

- a. Dependent variable: Intention to use application

4.0 CONCLUSION

The study revealed that introjected perceived locus of control have a significant statistical impact on the intention to adopt E-commerce Applications and explains (3.1%) of the variation in the independent variable. This result corresponds to the study of (Malhotra et al ,2008). Also, the study revealed that trust have a significant statistical impact on the intention to adopt E-commerce Applications and explains (8.3%) of the variation in the independent variable. This result corresponds to the study of (Lu et al ,2011) and (Head et al ,2002). The study found (59,6 %)from the sample are educated, which means that they are aware of using the Internet and on the recommendation of the parents, they use the electronic application. we still need to focus on the awareness of people about the applications and how they can get the benefit from using e-commerce with less time and less cost.

References

- [1] M. M. Head and K. Hassanein, "Trust in e-Commerce: Evaluating the Impact of Third-Party Seals," Q. J. Electron. Commer., vol. 3, no. 3, pp. 307–325, 2002.
- [2] V. Zwass, "Electronic commerce: Structures and issues," Int. J. Electron. Commer., vol. 1, no. 1, pp. 3–23, 1996.
- [3] R. Rahayu and J. Day, "Determinant Factors of E-commerce Adoption by SMEs in Developing Country: Evidence from Indonesia," Procedia - Soc. Behav. Sci., vol. 195, pp. 142–150, Jul. 2015.
- [4] I. Ekanem and G. E. Abiade, "Factors Influencing the Use of E-Commerce by Small Enterprises in Nigeria," Int. J. ICT Res. Africa Middle East, vol. 7, no. 1, pp. 37–53, Nov. 2017.
- [5] M. N. Alraja, M. A. Hussein, and H. M. S. Ahmed, "What affects digitalization process in developing economies? an evidence from SMEs sector in Oman," Bull. Electr. Eng. Informatics, vol. 10, no. 1, Feb. 2021.
- [6] E. Chicha et al., "A User-Centric Mechanism for Sequentially Releasing Graph Datasets under Blow_sh Privacy," Trans. Internet Technol. , pp. 1–33, 2020.
- [7] B. T. Sayed, N. Jabeur, and M. Aref, "An Archetype to Sustain Knowledge Management Systems through Intranet," Int. J. Inf. Commun. Eng., vol. 2, no. 638, pp. 634–6, 2008.

- [8] M. N. Alraja, H. Barhamgi, A. Rattrout, and M. Barhamgi, "An integrated framework for privacy protection in IoT — Applied to smart healthcare," *Comput. Electr. Eng.*, vol. 91, p. 107060, May 2021.
- [9] M. Aref, "Fault reporting process of business information systems," *Int. J. Econ. Res.*, vol. 13, no. 5, pp. 2277–2283, 2016.
- [10] M. A. Abdul Rasheed, M. M. J. Farooque, H. S. Acharya, and M. S. A. Quadri, "Mathematical Modelling of the Relationship between Two Different Temperament Classifications: During the Covid-19 Pandemic," *Emerg. Sci. J.*, vol. 5, no. 1, pp. 67–76, Feb. 2021.
- [11] M. A. Khan, M. I. Khan, M. Aref, and S. Khan, "Cluster & Rough Set Theory Based Approach To Find The Reason For Customer Churn," *Int. J. Appl. Bus. Econ. Res.*, vol. 14, no. 1, pp. 439–455, 2016.
- [12] S. Khan, S. Sayyad, and M. Aref, "Performance Based Comparative Study of Sorting Algorithms," *Int. J. Multidiscip. Res.*, vol. 4, no. 7, pp. 49–53, 2015.
- [13] M. A. Abdul Rasheed, "Adoption of Data Mining Technique to find the Condition of an Automobile Machine," *ISSN 2289-7615 Page 13 International J. Inf. Syst. Eng.*, vol. 2, no. 1, pp. 13–19, 2014.
- [14] G. Sable, M. M. Junaid Farooque, and M. Rajput, "Pretrained Deep Neural Networks for Age Prediction from Iris Biometrics," in *Computational Intelligence Techniques and Their Applications to Software Engineering Problems*, CRC Press, 2020, pp. 189–199.
- [15] G. Mulla, M. M. J. Farooque, and H. S. Acharya, "ANN based Dual Convertor Model to Get Ayurvedic Prakruiti from Fuzzy Unani Scores and Unani Mizaj from Fuzzy Ayurvedic Scores," in *Proceedings of National Conference on Data Mining (NCDM-2011)*, 2011, pp. 67–69.
- [16] S. Afrough and M. M. J. Farooque, "Integrating The Process Of Determining Mizaj (Temprament) In A Hospital Management System," *Allana Inst Manag. Sci. Pune*, vol. 2, no. 2, pp. 82–87, 2012.
- [17] M. M. J. Farooque, S. Abidurrahman, and F. Sarkhawas, "Identification of Mizaj (Temprament) Based on Tibbi Fundamentals using Classification as Tool," in *Proceedings of National Conference on Data Mining (NCDM-2011)*, 2011, pp. 94–95.
- [18] M. M. J. Farooque, M. A. I. Khan, M. A. Abdul Rashed, and T. K. B. FarajAllah, "Study Of Web Presence Of Omani Media Houses In Gcc A Data Science Prespective," *Allana Inst Manag. Sci. Pune*, vol. 10, no. 2, pp. 9–13, 2020.
- [19] M. A. A. Rasheed and M. N. Alraja, "Data mining approach to assess condition of rotating machine using sound signal," *J. Theor. Appl. Inf. Technol.*, vol. 80, no. 1, 2015.
- [20] T. S. Mohammed, M. A. A. Rasheed, M. S. Al-Ani, Q. Al-Shayea, and F. B. I. Alnaimi, "Fault Diagnosis of Rotating Machine Based on Audio Signal Recognition System: An Efficient Approach," *Int. J. Simul. -- Syst. Sci. Technol.*, vol. 21, no. 1, pp. 1–8, 2020.
- [21] M. M. Junaid Farooque, M. Aref, M. I. Khan, and S. Mohammed, "Data Mining application in classification scheme of human subjects according to ayurvedic prakruti - temperament," *Indian J. Sci. Technol.*, vol. 9, no. 13, pp. 1–4, Apr. 2016.
- [22] M. N. Alraja and M. Aref, "Customer acceptance of e-commerce: Integrating Perceived Risk with TAM," *Int. J. Appl. Bus. Econ. Res.*, vol. 13, no. 2, pp. 913–921, 2015.
- [23] M. N. Alraja, S. F. Khan, B. Khashab, and R. Aldaas, "Does Facebook Commerce Enhance SMEs Performance? A Structural Equation Analysis of Omani SMEs," *SAGE Open*, vol. 10, no. 1, p. 215824401990018, Jan. 2020.
- [24] M. A. Khan, M. A. I. Khan, M. Aref, and M. Farooque, "E-marketing a boon for SMEs of Oman," *Int. J. Appl. Bus. Econ. Res.*, vol. 14, no. 1, pp. 233–240, 2016.
- [25] S. Sayyad, A. Mohammed, V. Shaga, A. Kumar, and K. Vengatesan, "Digital Marketing Framework Strategies Through Big Data," in *Lecture Notes on Data Engineering and Communications Technologies*, 2020, vol. 31, pp. 1065–1073.
- [26] M. N. Alraja and B. Chikhi, "Perceived Factors affecting Customers Attitudes toward Electronic Shopping: an Empirical Study," *Int. J. Econ. Res.*, vol. 12, no. 3, pp. 815–823, 2015.
- [27] M. N. Alraja, M. M. J. Farooque, and B. Khashab, "The Effect of Security, Privacy, Familiarity, and Trust on Users' Attitudes Toward the Use of the IoT-Based Healthcare: The Mediation Role of Risk Perception," *IEEE Access*, vol. 7, pp. 111341–111354, 2019.
- [28] M. N. Alraja and N. M. M. Malkawi, "E-Business adoption in banking sector: Empirical study," *Indian J. Sci. Technol.*, vol. 8, no. 27, 2015.
- [29] M. N. Alraja and M. A. Said Kashoob, "Transformation to electronic purchasing: an empirical investigation," *TELKOMNIKA (Telecommunication Comput. Electron. Control.)*, vol. 17, no. 3, p. 1209, Jun. 2019.
- [30] M. A. I. Khan, M. A. Abdul Rashid, and M. M. J. Farooque, "Entrepreneurial intention to adopt and use fin-tech financial services during pandemic: case study of entrepreneurs in the gulf cooperation council," *Int. J. Innov. Res. Multidiscip. F.*, vol. 6, no. 12, pp. 286–293, 2020.
- [31] M. N. Alraja, "User Acceptance of Information Technology: A Field Study of an E-Mail System Adoption from the Individual Students' Perspective," *Mediterr. J. Soc. Sci.*, vol. 6, no. 6 s1, pp. 19–25, Nov. 2015.
- [32] F. M. Alkhalidi, S. M. Hammami, S. Kasem, A. Rashed, and M. N. Alraja, "Enterprise System as Business Intelligence and Knowledge Capabilities for Enhancing Applications and Practices of IT Governance," *Int. J. Organ. Collect. Intell.*, vol. 7, no. 2, pp. 63–77, 2017.
- [33] M. N. Alraja, B. F. Salim, M. A. Uddin, and M. Yousoof, "The adoption of internet banking: Clients' perspective in Oman," *Int. Rev. Manag. Mark.*, vol. 6, no. 4, 2016.
- [34] N. M. M. A. Malkawi, M. N. Alraja, and T. Alkhayer, "Information Systems Auditing Applied Study at Banks Listed in the Damascus Stock Exchange Syria," *Eur. J. Econ. Financ. Adm. Sci.*, no. 21, p. 119, 2010.
- [35] M. N. Alraja and N. R. Alomian, "The Effect of General Controls of Information System Auditing in the Performance of Information Systems: Field Study," *Interdiscip. J. Contemp. Res. Bus.*, vol. 5, no. 3, pp. 356–370, 2013.
- [36] M. A. Hussein, H. Ahmed, and M. N. Alraja, "The adoption of information and communication technology by small and medium enterprises in Oman: Case of Dhofar region," *J. Bus. Retail Manag. Res.*, vol. 11, no. 3, pp. 64–71, 2017.
- [37] S. Kasem, S. Hammami, and M. N. Alraja, "Elearning environment as a facilitator for knowledge creation using SECI model in the context of BA," *J. Theor. Appl. Inf. Technol.*, vol. 80, no. 2, 2015.

- [38] M. A. Uddin, F. Ahmar, and M. N. Alraja, "E-Examinations for Management Students in Oman," *Int. J. Appl. Bus. Econ. Res.*, vol. 14, no. 1, pp. 87–95, May 2016.
- [39] V. S. K. Vengatesan, S. A. Sayyad, and M. Arif, "Enhancing Empirical approach in teaching-learning using ICT," *Int. J. Pure Appl. Math.*, vol. 118, no. 20, pp. 2727–2734, 2018.
- [40] S. A. Jamil and A. Mohammed, "Digital Oman-Paradigm Shift for Businesses in Oman. Leadership and Its Role in Preparing the Organization for Unprecedented Change," in *2nd International Conference on Leadership and its Role in Preparing the Organization for Unprecedented Change*, 2015.
- [41] M. N. Alraja, "The effect of social influence and facilitating conditions on e-government acceptance from the individual employees' perspective | Efekt Wpływu Społecznego Oraz Warunków Ułatwiających Akceptację E-Administracji Z Punktu Widzenia Indywidualnych Pracowników," *Polish J. Manag. Stud.*, vol. 14, no. 2, 2016.
- [42] M. N. Alraja, S. Hammami, and T. Alhousary, "FACTORS AFFECTING E-GOVERNMENT SERVICES ADOPTION: FIELD STUDY," *J. Theor. Appl. Inf. Technol.*, vol. 78, no. 1, pp. 65–69, 2015.
- [43] A. Rahman, S. A. Jamil, and M. Aref, "Oman E-Readiness: A Paradigm Shift For Businesses," *Int. J. Econ. Res.*, vol. 13, no. 5, pp. 2223–2233, 2016.
- [44] M. N. Alraja and N. R. Alomian, "The Effect Of Information Technology In Empowerment Public Sector Employees: A Field Study," *Interdiscip. J. Contemp. Res. Bus.*, vol. 5, no. 1, pp. 805–815, 2013.
- [45] M. Gharib, M. M. J. Farooque, and T. Shaikh, "Use of Social networking sites for Academic communication An Informally Formal Mode of communication," *AJANTA*, vol. VIII, no. I, pp. 9–17, 2019.
- [46] M. M. J. Farooque and H. S. Acharya, "Formal Theory of Use of Social Networking Sites in Academic Communication," *Int. J. Adv. Comput. Syst. Softw. Eng.*, vol. 1, no. 2, pp. 1–05, Apr. 2020.
- [47] M. M. J. Farooque and M. S. Kadam, "An Analysis of Views of student, Teachers and Industry Employees On Use of Social Networking Sites (SNS) In Education," *Glob. J. Technol.*, no. 9, pp. 130–137, 2014.
- [48] M. M. J. Farooque and M. A. R. Aref, "Use of Social Networking Sites in Academics: A Review," *Comput. Rev. J.*, vol. 5, pp. 22–32, 2019.
- [49] M. J. F. Murtaza, "A study of problems and prospects of using social networking sites by the students of some management institutes in Pune region," Pune, 2017.
- [50] M. M. J. Farooque, "Make Semantic Analysis of Opinions about social networking using Blog Search Engines," *Comput. Rev. J.*, vol. 2, pp. 296–298, 2018.
- [51] B. Suh and I. Han, "The impact of customer trust and perception of security control on the acceptance of electronic commerce," *Int. J. Electron. Commer.*, vol. 7, no. 3, pp. 135–161, 2003.
- [52] U. Sumarwan and T. K. Hira, "The effects of perceived locus of control and perceived income adequacy on satisfaction with financial status of rural households," *J. Fam. Econ. Issues*, vol. 14, no. 4, pp. 343–364, Dec. 1993.
- [53] D. den Hartog, "Managing people in organizations: Integrating the study of HRM and leadership," *Hum. Resour. Manag. Rev.*, vol. 28, no. 3, pp. 249–257, Sep. 2018.
- [54] Y. Malhotra, D. F. Galletta, and L. J. Kirsch, "How endogenous motivations influence user intentions: Beyond the dichotomy of extrinsic and intrinsic user motivations," *J. Manag. Inf. Syst.*, vol. 25, no. 1, pp. 267–300, 2008.