International Journal of Management, IT & Engineering Vol. 8 Issue 6, June 2018, ISSN: 2249-0558 Impact Factor: 7.119 Journal Homepage: <u>http://www.ijmra.us</u>, Email: editorijmie@gmail.com Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

<u>Understanding Factors Influencingthe Acceptance & Use of Smartphone</u> <u>Based Training Programs by using UTAUT - A Unified model: A Study</u> <u>with Respect to Employees of Selected Organized Retail Stores of</u>

Bangalore

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Abstract

Retail in India is on a growth path with changing lifestyles and demographic patterns of consumers. Retail is emerging as the second largest industry after agriculture in terms of employment. Growing retail industry requires skilled people to manage day-to-day operations. Front-end sales staffs play a vital role in creating happy customers. However, this depends upon the knowledge of product, process, system, and customer service skillspossesed by staffs. This transformation in staffs undoubtedly has to come from what and how the training is imparted to them. Growing real estate cost, price sensitive customers, stiff competition are shrinking the margin on one side, and increasing customer expectations are forcing companies toinnovate and be cost effective.

Training is going digital. Many studies have been conducted to understand the perceptions, attitude, and impact of mobile learning among students and employees. The purpose of this study is to understand factors influencing the intention & use of smartphone based training programs among retail store employees by using UTAUT Model.

This paper uses Unified Theory of Acceptance and Use of Technology (UTAUT) model to investigate and explain retail store employees' intention and use of smart-phone for training. A questionnaire was created and administed

International journal of Management, IT and Engineering <u>http://www.ijmra.us</u>, Email: editorijmie@gmail.com

Keywords:

Retail; Mobile Learning; Smartphone Based Learning;

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among front-end retail staffs. Collected data was analyzed using statistical software, SPSS.

Findings of the study shows that performance expectancy, effort expectancy, and social influence have positive influence on behavioral intentions and facilitating conditions on usage of smartphone based training programs.

Overall employees' acceptance to use depends on what is the content, How is the content and impact on end result i.e. knowledge & sales. This suggests that companies should be careful about the content; it should be such that which has major impact on overall knowledge and sales.

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1. Introduction:

How mobile technology is used as a learning tool depends on user relationship with technologies, views of mobile learners, learning environment created by institutes, and the extent of influence of other limitations (**Daesang Kim, et al, 2013**).

This paper is an attempt to explore employees' intentions to use smart-phone based programs among employees of retail stores. The Unified Theory of Acceptance and Use of Technology -UTAUT (Venkatesh et al, 2003) is a model developed basis the compilation of eight models (Theory of Reasoned Action - TRA, Technology Acceptance Model - TAM, Motivational Model - MM, Theory of Planned Behavior - TPB, Combined-TRA-TPB, Model of PC Utilization - MPCU, Innovation Diffusion Theory - IDT, and Social Cognitive Theory - SCT).

In this context, the Unified Theory of Acceptance and Use of Technology -UTAUT (Venkatesh et al, 2003) was used to assess the employee intention and usage of smartphone for training. Unified Theory of Acceptance and Use of Technology -UTAUT (Venkatesh et al, 2003), was formulated with four core determinants of intention and usage.

Description of UTAUT Variables derived from User Acceptance of Information Technology: Toward a Unified View by Viswanath Venkatesh et al, 2003.



Performance Expectancy: Performance Expectancy is defined as the degree to which an individual believes that using the system will help him or her to attain gains in job performance.

Effort Expectancy: Effort expectancy is defined as the degree of ease associated with the use of the system.

Social Influence: Social Influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system.

Facilitating Conditions: Facilitating Conditions are defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system.

UTAUT helps managers and company to understand the factors influencing the acceptance of new technologies so that they can develop proper interventions for target audience (Venkatesh et al, 2003). In this paper, we did not consider the moderators, viz gender, age, voluntariness, and experience.

2. Literature Review:

Retail in India is the fastest growing industry. It is estimated that Indian retail by 2020 to reach US \$1.3 trillion from US \$672 billion in 2016 (**IBEF, 2017**). In 2008, organized

retail in India was valued at Rs. 96,500, which is 5% share of the total Retail Market in India. Organized retail is poised to grow at a rate of 35%-40% year on year in the last few years (**NSDC Report, 2009**). 76% of the organized retail market is the share of major formats like clothing & textiles, footwear, consumer durables & home appliances, food & grocery, etc. (**NSDC Report, 2009**).

Changing consumer lifestyles, rising income & purchasing power and consumer mindset are the growth drivers for retail in India. Increased urbanization and consumerism has offered great scope of expansion for foreign players (**IBEF**, 2017).

Increasing number of shopping malls, hypermarkets, and retail outlets in different formats has not only given rise to organized retailers but also made the market more competitive. Entry of foreign players, emergence of e-retailers and price sensitive consumers has intensified competition (**IBEF**, **2017**).

Organized retail in India employs 0.3 millions of people. Organized retail process comprises a. Store Operations, b. Back-end Operations. Store operations of organized retail accounts for 75%-80% of the total work force employed. Education profile of people employed in retail industry ranges from SSLC to MBAs (**NSDC Report, 2009**).

Complex / technical nature of products, frequent changes in products, and high involvement of customers, demands continuous product & process knowledge updation, communication skills to provide unmatched customer experience. Considering the growth in retail outlets and changing customer preferences, it is expected that the requirement for employees would increase from current level of 0.3 million to 17.6 million by 2022 (**NSDC Report, 2009**).

This growth in work force would demand for varied skill sets to meet dynamic requirements of customers and company. Front-end sales staffs play a vital role in the survival and success of a retail store. It is because the moment of magic in retail begins with customer interaction with front-end sales staffs. Hence, it becomes inevitable to equip these forefront warriors with all required tools i.e. Product, Process, and Customer Service skills. Though there is huge demand for skilled staffs in retails, which directly influence

the ROI, still many companies rely on one kind of training (Sunil Munshi, CEO – India, Denave, 2016).

Retail training has been mostly through classroom, this mode of training is good for particular training programs. However, for continuous refresher / recall, there is a need for mobile learning(Madhuri Dubey, 2015)

Training retail sales staffs especially frond-end staffs via classroom training methods is costly because of costs attached with it (**Bill Rooney, 2016**). To add to this attrition in retail will not deliver required results. In a study, 'Why retail training is moving rapidly to mobile learning and on the job training' conducted by Bill Rooney, concludes that 'the cost of mobile / e-learning is 10% to 20% of the cost of traditional method of training and also twice as effective" (**Bill Rooney, 2016**).

The rapid growth of information and communication technologies and rising computer knowledge of the students have led to the usage of many innovative technologies in teaching and learning like e-learning, m-learning etc. Though m-learning is used in other developed countries like UK, USA etc. as an effective educational tool, it is not yet being used in India (Neeraj Vyas, Virendra Singh Nirban, 2014).

It seems that the individual who is more highly receptive to innovation (i.e., being an innovator or early adopter) are more eager to use mobile technologies as a learning tool beyond their primary function as a simple communication or entertainment tool (**Daesang Kim, et al, 2013**)

The growing popularity of these smart phones among the youth can potentially revolutionize the way we learn. The introduction of 3G technology is already being pinned as the next big thing in the mobile internet revolution (Manoj Kumar, 2011).

3. Objective of the study:

With this background, this paper developed keeping in mind the following objective-

a. To understand factors influencing the intention to use the smartphone based training programs among retail store employees by using UTAUT Model.

4. Hypothesis of the study:

Hypothesis 1:

Performance expectancy positively influences employees' behavioral intentions to use smartphone based training programs.

Hypothesis 2:

Effect expectancy positively influences employees' behavioral intentions to use smartphone based training programs.

Hypothesis 3:

Social influence positively influences employees' behavioral intentions to use smartphone based training programs.

Hypothesis 4:

Facilitating conditions positively influences behavioral intentions of employees to use smartphone based training programs.

Hypothesis 5:

Employee's behavioral intentions to use smartphone based training programs positively influence employee's use behavior.

5. Research Method and Data collection

In order to study, factors influencing the intention & use of smartphone based training programs among retail employees an explorative research design was adopted.

5.1.Questionnaire:

A questionnaire was created with items validated by Venkatesh et al, 2003in prior research, however with few modifications suitable to our study. We used Likert-type 7 Scale, with one being completely disagree and seven being completely agree.

5.2.Sample:

Front-end store staffs of organized retail were selected as sample points for the study. The data was collected by self-administrating and filling the questionnaire during the interaction with employees of retail stores.Random samples of 50 employees of retail stores were administered with questionnaire.

5.3.Statistical Analysis:

Data collected through questionnaire was processed and analyzed through statistical software SPSS.

6. Analysis and Findings:

The respondents were employees of organized retail stores and were covered for the study spread across Bangalore city, Karnataka. Total 19 questions were asked to the respondents to understand factors influencing the behavioral intention to use smartphone among employees of retail stores. Review of literature shows that many research works have been conducted in this area with majority of them building the correlation with between performance, effort, social influence, facilitating conditions and behavioral intentions. We used Likert 7 point scale in the questionnaire with 1 - Completely Disagree, 2 - Moderately Disagree, 3 - Somewhat Disagree, 4 - Neutral (Neither Agree nor Dis-agree), 5 - Somewhat Agree, 6 - Moderately Agree, 7- Completely Agree. We used the Statistics Package for Social Science (SPSS) to analyze the data using correlation analysis, and regression analysis.

		PE1	PE2	PE3	PE4
PE1	Pearson Correlation	1.00	0.42	0.35	0.39
	Sig. (2-tailed)		0.00	0.01	0.01
	N	50.00	50.00	50.00	50.00
PE2	Pearson Correlation	0.42	1.00	0.56	0.65
	Sig. (2-tailed)	0.00		0.00	0.00
	Ν	50.00	50.00	50.00	50.00
PE3	Pearson Correlation	0.35	0.56	1.00	0.75
	Sig. (2-tailed)	0.01	0.00		0.00
	N	50.00	50.00	50.00	50.00
PE4	Pearson Correlation	0.39	0.65	0.75	1.00
	Sig. (2-tailed)	0.01	0.00	0.00	
	N	50.00	50.00	50.00	50.00

Table No. 1:Pearson correlation analysis of Performance Expectancy

Note. PE – Performance Expectancy

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 2: Influence of Performance Expectancy on Behavioral Intention

		BI1	BI2	BI3
PE1	Pearson Correlation	-0.13	0.56	0.28
	Sig. (2-tailed)	0.36	0.00	0.05
	Ν	50.00	50.00	50.00
PE2	Pearson Correlation	0.21	0.25	0.09
	Sig. (2-tailed)	0.15	0.07	0.55
	Ν	50.00	50.00	50.00
PE3	Pearson Correlation	0.26	0.59	0.28

	Sig. (2-tailed)	0.07	0.00	0.05
	Ν	50.00	50.00	50.00
PE4	Pearson Correlation	0.27	0.38	0.11
	Sig. (2-tailed)	0.06	0.01	0.46
	Ν	50.00	50.00	50.00

Note. PE – Performance Expectancy, BI-Behavioral Intention

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

By comparing PE variables with BI, average significance value is 15%, which is more than

0.05 confidence level (P), Hence hypothesis 1 is accepted.

Table No. 3: Pearson correlation analysis of Effort Expectancy

		EE1	EE2	EE3	EE4
EE1	Pearson Correlation	1.00	0.37	0.39	0.42
	Sig. (2-tailed)		0.01	0.00	0.00
	Ν	50.00	50.00	50.00	50.00
EE2	Pearson Correlation	0.37	1.00	0.47	0.80
	Sig. (2-tailed)	0.01		0.00	0.00
	Ν	50.00	50.00	50.00	50.00
EE3	Pearson Correlation	0.39	0.47	1.00	0.49
	Sig. (2-tailed)	0.00	0.00		0.00
	Ν	50.00	50.00	50.00	50.00
EE4	Pearson Correlation	0.42	0.80	0.49	1.00
	Sig. (2-tailed)	0.00	0.00	0.00	
	Ν	50.00	50.00	50.00	50.00

Note. EE - Effort Expectancy

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 4: Influence of Effort Expectancy on Behavioral Intention

		BI1	BI2	BI3
EE1	Pearson Correlation	-0.14	0.36	0.25
	Sig. (2-tailed)	0.32	0.01	0.08
	N	50.00	50.00	50.00
EE2	Pearson Correlation	0.29	0.46	0.17
	Sig. (2-tailed)	0.04	0.00	0.23
	N	50.00	50.00	50.00
EE3	Pearson Correlation	-0.04	0.46	0.26
	Sig. (2-tailed)	0.79	0.00	0.07
	N	50.00	50.00	50.00
EE4	Pearson Correlation	0.12	0.53	0.47
	Sig. (2-tailed)	0.39	0.00	0.00
	N	50.00	50.00	50.00

Note. EE – Effort Expectancy, BI-Behavioral Intention

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

By comparing EE variables with BI, average significance value is 16%, which is more than 0.05 confidence level (P), Hence hypothesis 2 is accepted.

		SI1	SI2	SI3	SI4
SI1	Pearson Correlation	1.00	0.45	0.43	0.29
	Sig. (2-tailed)		0.00	0.00	0.04
	Ν	50.00	50.00	50.00	50.00
SI2	Pearson Correlation	0.45	1.00	0.24	0.05
	Sig. (2-tailed)	0.00		0.09	0.73
	Ν	50.00	50.00	50.00	50.00
SI3	Pearson Correlation	0.43	0.24	1.00	0.74
	Sig. (2-tailed)	0.00	0.09		0.00
	N	50.00	50.00	50.00	50.00
SI4	Pearson Correlation	0.29	0.05	0.74	1.00
	Sig. (2-tailed)	0.04	0.73	0.00	
	N	50.00	50.00	50.00	50.00

Table No. 5:Pearson correlation analysis of Social Influence

Note. SI – Social Influence

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 6: Influence of Social Influence on Behavioral Intention

		BI1	BI2	BI3
SI1	Pearson Correlation	0.06	0.56	0.51
	Sig. (2-tailed)	0.70	0.00	0.00
	N	50.00	50.00	50.00
SI2	Pearson Correlation	-0.11	0.53	0.33
	Sig. (2-tailed)	0.46	0.00	0.02
	N	50.00	50.00	50.00
SI3	Pearson Correlation	0.29	0.71	0.76
	Sig. (2-tailed)	0.04	0.00	0.00
	N	50.00	50.00	50.00
SI4	Pearson Correlation	0.14	0.53	0.79
	Sig. (2-tailed)	0.32	0.00	0.00
	N	50.00	50.00	50.00

Note. SI – Social Influence, BI-Behavioral Intention

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

By comparing SI variables with BI, average significance value is 13%, which is more than 0.05 confidence level (P), Hence hypothesis 3 is accepted.

Table No. 7: Pearson correlation analysis of Facilitating Conditions

		FC1	FC2	FC3	FC4
FC1	Pearson Correlation	1.00	0.11	0.68	-0.17
	Sig. (2-tailed)		0.44	0.00	0.23
	Ν	50.00	50.00	50.00	50.00
FC2	Pearson Correlation	0.11	1.00	0.18	0.28
	Sig. (2-tailed)	0.44		0.20	0.05
	Ν	50.00	50.00	50.00	50.00
FC3	Pearson Correlation	0.68	0.18	1.00	0.35

	Sig. (2-tailed)	0.00	0.20		0.01
	Ν	50.00	50.00	50.00	50.00
FC4	Pearson Correlation	-0.17	0.28	0.35	1.00
	Sig. (2-tailed)	0.23	0.05	0.01	
	Ν	50.00	50.00	50.00	50.00

Note. FC - Facilitating Conditions

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table No. 8: Influence of Facilitating Conditions on Behavioral Intention

		BI1	BI2	BI3
FC1	Pearson Correlation	-0.15	0.05	0.06
	Sig. (2-tailed)	0.31	0.71	0.68
	N	50.00	50.00	50.00
FC2	Pearson Correlation	-0.15	0.32	0.37
	Sig. (2-tailed)	0.31	0.03	0.01
	N	50.00	50.00	50.00
FC3	Pearson Correlation	0.05	0.17	0.08
	Sig. (2-tailed)	0.75	0.25	0.58
	N	50.00	50.00	50.00
FC4	Pearson Correlation	0.22	0.06	0.03
	Sig. (2-tailed)	0.12	0.70	0.82
	Ν	50.00	50.00	50.00

Note. FC – Facilitating Conditions, BI-Behavioral Intention

**. Correlation is significant at the 0.01 level (2-tailed).

 $\ast.$ Correlation is significant at the 0.05 level (2-tailed).

By comparing FC variables with BI, average significance value is 44%, which is more than 0.05 confidence level (P), Hence hypothesis 4 is accepted.

	Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
			Std. Error	Beta					
1	(Constant)	6.32	1.45		4.37	0.00			
	BL1	-0.11	0.10	-0.16	-1.11	0.27			
	BL2	0.01	0.32	0.01	0.03	0.98			
	BL3	0.08	0.21	0.09	0.39	0.70			
a. Depend	a. Dependent Variable: FC1								

Table No. 9: Influence of Facilitating Conditions on Usage Behavior

	Coefficients									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
			Std. Error	Beta						
1	(Constant)	5.42	0.87		6.22	0.00				
	BL1	-0.10	0.06	-0.23	-1.66	0.10				
	BL2	0.07	0.19	0.07	0.34	0.74				
	BL3	0.22	0.12	0.36	1.74	0.09				

a. Dependent Variable: FC2

	Coefficients														
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.									
			Std. Error	Beta											
1	(Constant)	3.62	1.63		2.22	0.03									
	BL1	0.03	0.11	0.04	0.27	0.79									
	BL2	0.41	0.37	0.25	1.12	0.27									
	BL3	-0.12	0.23	-0.12	-0.52	0.60									
a. Depende	nt Variable: F	C3													

	Coefficients														
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.									
			Std. Error	Beta											
1	(Constant)	5.44	1.28		4.25	0.00									
	BL1	0.14	0.09	0.23	1.56	0.13									
	BL2	0.12	0.29	0.09	0.41	0.69									
	BL3	-0.07	0.18	-0.08	-0.36	0.72									
a. Depender	nt Variable: F	C4													

The result shows that facilitating conditions positively influence employee's use behavior of actually using smartphone based training programs, with average significance value at51%, which is more than 0.05 confidence level (P), hence hypothesis 5 is accepted.

7. Discussions on Findings:

The study was focussed on understanding factors influencing employees' acceptance and use of smartphone based training programs. Hence UTAUT Model (Venkatesh et al, 2003) was used for the study.

- **7.1.**Performance expectancy positively influences behavioural intention to use smartphone based training programs. Employees believe that intention to use smartphone based training programs depends on how the overall modules are useful for their day to day job, how best it helps in completing the tasks and impact on end-results i.e. Sales and some kind of benefit to employees personally i.e. promotion or salary hike or incentives.
- **7.2.**Efforts expectancy positively influences behavioural intention to use smartphone based training programs. Modules which are a. relevant for business, b. new in the market are preferred modules by employees. The content of the programs should be more of benefit oriented if it is product, simple & easy steps if it is process.
- **7.3.**Social influence positively influences behavioural intention to use smartphone based training programs. Since completing assigned modules is important and self-awareness about importance of completing the modules, employees believe that, there is major push from within rather than from external.
- **7.4.**Facilitating conditions positively influences behavioural intention to use smartphone based training programs. Growing lucrative internet packages offered by telecom industries, there is no concern with availability of internet (4G) and cost of internet packages are also within the reach of employee. Employee believe that training modules are going to help him / her in improving product & process knowledge, they intend to use smartphone based training programs during break time, or lean time or whenever they get time.
- **7.5.**Since employees do not find any constraints in terms of time, internet or money, hence they would like to use smartphone based training programs.

8. Further Scope of Study:

During the study, we found the impact of other demographic patterns on behavioural intentions, hence study can be extended or enhanced by using other factors viz Age, Gender, Experience, Qualification, etc.

9. Conclusion:

Basis the analysis, it can be concluded that results support the use of UTAUT model to study the factors influencing the behavioral intentions of employees to use smartphone based training programs. It is found that employees' intention to use smartphone based training programs depends on performance of the application, effort put in by the participants, and influence of people around them. Therefore we suggest, for better performance, companies to focus on training modules which have major impact on the job, which employees perform on daily basis, so that they can see some visible impact on the sales. Also, training modules should be more interactive and help to improve skill sets.

10. References:

- 1. **Bill Rooney**.(2016). Why Retail Training is Moving Rapidly to Mobile Learning and On the Job Training. *LHR Retail*. 1-4.
- Daesang Kim, Daniel Rueckert, Dong-Joong Kim, Daeryong Seo. (2013). Students' Perceptions and Experiences of Mobile Learning. *Language Learning & Technology*October 2013, Volume 17, Number 3, pp. 52–73. Available: <u>http://llt.msu.edu/issues/october2013/kimetal.pdf</u>.
- 3. India Brand Equity Foundation (IBEF).(2017), Retail, IBEF Report.1-51
- Madhuri Dubey. (2015). How mobile learning can speed up skill development in retail industry. Available: <u>http://www.nationalskillsnetwork.in/mobile-learning-retail-</u> <u>training/(July 19, 2015)</u>
- NSDC. (2009). Human Resources and Skill Requirements in the Organized Retail Sector (2022) - A Report, NSDC Report.4-48
- Neerja Vyas, Virendra Singh. (2014). Students' Perception on the Effectiveness of Mobile Learning in an Institutional Context. *International Association of Research in Foreign Language Education and Applied Linguistics ELT Research Journal* 2014, 3(1), 26- 36 ISSN: 2146-9814.

- Sunil Munshi. (2016). Leveraging training to facilitate the retail sector. Available: <u>https://retail.franchiseindia.com/article/operations/hr-operation/Leveraging-training-to-facilitate-the-retail-sector.a5253/</u>. (Aug 25, 2016)
- ViswanathVenkatesh, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. (2003). User Acceptance of Information Technology: toward a unified view. *Mis quarterly vol. 27 no. 3, pp. 425-478/September 2003.*

International Journal of Management, IT & Engineering

Vol. 8 Issue 6, June 2018, ISSN: 2249-0558 Impact Factor: 7.119 Journal Homepage: <u>http://www.ijmra.us</u>, Email: editorijmie@gmail.com Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

11. Annexure:

Table. No. 10. Pearson correlation analysis of four constructs, Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions

									Corre	lations										
		PE1	PE2	PE3	PE4	EE1	EE2	EE3	EE4	FC1	FC2	FC3	FC4	SI1	SI2	SI3	SI4	BI1	BI2	BI3
PE1	Pearson Correlation	1.00	0.42	0.35	0.39	0.57	0.10	0.63	0.18	0.11	0.63	0.19	0.39	0.26	0.72	0.37	-0.06	-0.13	0.56	0.28
	Sig. (2-tailed)		0.00	0.01	0.01	0.00	0.50	0.00	0.20	0.47	0.00	0.19	0.00	0.07	0.00	0.01	0.67	0.36	0.00	0.05
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
PE2	Pearson Correlation	0.42	1.00	0.56	0.65	0.47	0.26	0.16	0.28	0.12	-0.02	0.09	-0.09	-0.12	0.13	0.53	0.21	0.21	0.25	0.09
	Sig. (2-tailed)	0.00		0.00	0.00	0.00	0.06	0.26	0.05	0.42	0.89	0.54	0.52	0.39	0.36	0.00	0.14	0.15	0.07	0.55
	N	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
PE3	Pearson Correlation	0.35	0.56	1.00	0.75	0.40	0.71	0.52	0.51	0.15	0.04	0.49	0.15	0.41	0.37	0.67	0.26	0.26	0.59	0.28
	Sig. (2-tailed)	0.01	0.00		0.00	0.00	0.00	0.00	0.00	0.29	0.81	0.00	0.29	0.00	0.01	0.00	0.07	0.07	0.00	0.05
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
PE4	Pearson Correlation	0.39	0.65	0.75	1.00	0.44	0.49	0.59	0.44	0.09	0.04	0.37	0.22	0.24	0.20	0.59	0.11	0.27	0.38	0.11
	Sig. (2-tailed)	0.01	0.00	0.00		0.00	0.00	0.00	0.00	0.55	0.78	0.01	0.12	0.10	0.17	0.00	0.44	0.06	0.01	0.46
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
EE1	Pearson Correlation	0.57	0.47	0.40	0.44	1.00	0.37	0.39	0.42	0.63	0.61	0.55	-0.03	0.18	0.59	0.44	0.10	-0.14	0.36	0.25
	Sig. (2-tailed)	0.00	0.00	0.00	0.00		0.01	0.00	0.00	0.00	0.00	0.00	0.82	0.21	0.00	0.00	0.48	0.32	0.01	0.08
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
EE2	Pearson Correlation	0.10	0.26	0.71	0.49	0.37	1.00	0.47	0.80	0.29	0.01	0.74	0.20	0.51	0.26	0.40	0.17	0.29	0.46	0.17
	Sig. (2-tailed)	0.50	0.06	0.00	0.00	0.01		0.00	0.00	0.04	0.97	0.00	0.16	0.00	0.07	0.00	0.23	0.04	0.00	0.23

	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
EE3	Pearson Correlation	0.63	0.16	0.52	0.59	0.39	0.47	1.00	0.49	0.26	0.31	0.64	0.70	0.64	0.43	0.43	0.01	-0.04	0.46	0.26
	Sig. (2-tailed)	0.00	0.26	0.00	0.00	0.00	0.00		0.00	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.95	0.79	0.00	0.07
	N	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
EE4	Pearson Correlation	0.18	0.28	0.51	0.44	0.42	0.80	0.49	1.00	0.26	0.18	0.62	0.15	0.52	0.18	0.53	0.31	0.12	0.53	0.47
	Sig. (2-tailed)	0.20	0.05	0.00	0.00	0.00	0.00	0.00		0.06	0.21	0.00	0.30	0.00	0.22	0.00	0.03	0.39	0.00	0.00
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
FC1	Pearson Correlation	0.11	0.12	0.15	0.09	0.63	0.29	0.26	0.26	1.00	0.11	0.68	-0.17	0.11	0.21	0.02	-0.03	-0.15	0.05	0.06
	Sig. (2-tailed)	0.47	0.42	0.29	0.55	0.00	0.04	0.07	0.06		0.44	0.00	0.23	0.46	0.15	0.87	0.84	0.31	0.71	0.68
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
FC2	Pearson Correlation	0.63	-0.02	0.04	0.04	0.61	0.01	0.31	0.18	0.11	1.00	0.18	0.28	0.22	0.72	0.25	-0.02	-0.15	0.32	0.37
	Sig. (2-tailed)	0.00	0.89	0.81	0.78	0.00	0.97	0.03	0.21	0.44		0.20	0.05	0.12	0.00	0.08	0.88	0.31	0.03	0.01
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
FC3	Pearson Correlation	0.19	0.09	0.49	0.37	0.55	0.74	0.64	0.62	0.68	0.18	1.00	0.35	0.39	0.32	0.20	-0.02	0.05	0.17	0.08
	Sig. (2-tailed)	0.19	0.54	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.20		0.01	0.00	0.02	0.16	0.88	0.75	0.25	0.58
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
FC4	Pearson Correlation	0.39	-0.09	0.15	0.22	-0.03	0.20	0.70	0.15	-0.17	0.28	0.35	1.00	0.34	0.12	0.18	-0.18	0.22	0.06	0.03
	Sig. (2-tailed)	0.00	0.52	0.29	0.12	0.82	0.16	0.00	0.30	0.23	0.05	0.01		0.02	0.39	0.22	0.21	0.12	0.70	0.82
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
SI1	Pearson Correlation	0.26	-0.12	0.41	0.24	0.18	0.51	0.64	0.52	0.11	0.22	0.39	0.34	1.00	0.45	0.43	0.29	0.06	0.56	0.51
	Sig. (2-tailed)	0.07	0.39	0.00	0.10	0.21	0.00	0.00	0.00	0.46	0.12	0.00	0.02		0.00	0.00	0.04	0.70	0.00	0.00
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
SI2	Pearson Correlation	0.72	0.13	0.37	0.20	0.59	0.26	0.43	0.18	0.21	0.72	0.32	0.12	0.45	1.00	0.24	0.05	-0.11	0.53	0.33
	Sig. (2-tailed)	0.00	0.36	0.01	0.17	0.00	0.07	0.00	0.22	0.15	0.00	0.02	0.39	0.00		0.09	0.73	0.46	0.00	0.02
	N	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00

SI3	Pearson Correlation	0.37	0.53	0.67	0.59	0.44	0.40	0.43	0.53	0.02	0.25	0.20	0.18	0.43	0.24	1.00	0.74	0.29	0.71	0.76
	Sig. (2-tailed)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.08	0.16	0.22	0.00	0.09		0.00	0.04	0.00	0.00
	N	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
SI4	Pearson Correlation	-0.06	0.21	0.26	0.11	0.10	0.17	0.01	0.31	-0.03	-0.02	-0.02	-0.18	0.29	0.05	0.74	1.00	0.14	0.53	0.79
	Sig. (2-tailed)	0.67	0.14	0.07	0.44	0.48	0.23	0.95	0.03	0.84	0.88	0.88	0.21	0.04	0.73	0.00		0.32	0.00	0.00
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
BI1	Pearson Correlation	-0.13	0.21	0.26	0.27	-0.14	0.29	-0.04	0.12	-0.15	-0.15	0.05	0.22	0.06	-0.11	0.29	0.14	1.00	0.12	0.20
	Sig. (2-tailed)	0.36	0.15	0.07	0.06	0.32	0.04	0.79	0.39	0.31	0.31	0.75	0.12	0.70	0.46	0.04	0.32		0.42	0.16
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
BI2	Pearson Correlation	0.56	0.25	0.59	0.38	0.36	0.46	0.46	0.53	0.05	0.32	0.17	0.06	0.56	0.53	0.71	0.53	0.12	1.00	0.76
	Sig. (2-tailed)	0.00	0.07	0.00	0.01	0.01	0.00	0.00	0.00	0.71	0.03	0.25	0.70	0.00	0.00	0.00	0.00	0.42		0.00
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
BI3	Pearson Correlation	0.28	0.09	0.28	0.11	0.25	0.17	0.26	0.47	0.06	0.37	0.08	0.03	0.51	0.33	0.76	0.79	0.20	0.76	1.00
	Sig. (2-tailed)	0.05	0.55	0.05	0.46	0.08	0.23	0.07	0.00	0.68	0.01	0.58	0.82	0.00	0.02	0.00	0.00	0.16	0.00	
	Ν	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
						*	*. Corre	lation is s	significar	t at the 0	.01 level	(2-tailed).							
						:	*. Correla	ation is s	ignifican	t at the 0.	05 level	(2-tailed)	•							