

The effects of technology acceptance and use behaviour on women's entrepreneurship motivation factors

Effects of
technology
acceptance

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Abstract

Purpose – The purpose of this paper is to determine the effects of factors affecting the acceptance and use of technology on the factors affecting women's entrepreneurship motivation.

Design/methodology/approach – This study was conducted with 156 women entrepreneurs in Turkey in February 2019. A mixed method evaluation design has been adopted in the study.

Findings – The findings revealed that effort expectancy was negatively associated with behaviour intention and push factor and positively associated with pull factor. Performance expectancy was positively associated with balance factor, push factor and behaviour intention. Hedonic motivation was positively associated with behaviour intention and emotional factor. Behaviour intention was negatively associated with use behaviour. Facilitating conditions was positively associated with push factor. Habit was positively associated with behaviour intention and negatively associated with pull, push, balance and emotional factors. Necessities and habit were not motivation factors for women entrepreneurs.

Research limitations/implications – The sample was restricted to women entrepreneurs, limiting the generalizability of the findings.

Practical implications – The practical implications of the study show that effort expectancy, performance expectancy, hedonic motivation, facilitating conditions and habit are the key factors for the women's entrepreneurship motivation. Women's entrepreneurship commissions to be established in chambers of commerce and industry can improve entrepreneurial motivation.

Originality/value – This is the first study that reveals the effects of technology acceptance and use behaviours on women's entrepreneurship motivation. Theoretical background, discussion, managerial implications, limitations and recommendations for future studies are discussed.

Keywords Entrepreneurship, Technology acceptance, Women's entrepreneurship, Technology use, Entrepreneurship motivation

Paper type Research paper

1. Introduction

Women have an important place in the formation of social and family roles of human being, which is the basic building block of society. The fact that women are a pioneer in the transference and protection of cultural values between societies has revealed the importance



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of social values. The unequal status that emerged from the transformation of the matriarchal structure to the patriarchal structure developed against the woman. In this process, the developing economy and changing environmental conditions have caused the decline in the place of women in the society.

In carrying out the entrepreneurship process of organizations, it is necessary to protect the social balance, to adopt the sense of justice, to ensure the belief in the organization. This policy increases the commitment of stakeholders to the organization and increases the contribution to total productivity. Organizations can contribute to the organizational vision with varied views and perspectives via focussing on the diversity management. Individuals with various race and gender contributing to productivity and entrepreneurship within the organization constitute the organizational spirit. Thus, the organization becomes able to increase the total contribution by offering equal opportunities and resources to individuals with various characteristics via a fair management approach. Women's entrepreneurship is one of these approaches.

2. Literature review and hypotheses development

2.1 Women's entrepreneurship

Women's entrepreneurship is not a "female entrepreneurship" as stated by some authors in the literature (Rugina, 2019; Nguyen *et al.*, 2014; Danish and Smith, 2012). Entrepreneurship is not a process that varies by gender or race. In this context, women entrepreneurship is not a type of entrepreneurship. Women entrepreneur identified as an individual who creates business idea, evaluates the best opportunity, producing innovative business ideas, combines the factors of production, considers the possible risks and takes these risks, aims to earn profit, creates emotional difference and transforms this difference into creative design in products and services (Özsungur, 2019). Women's entrepreneurship is an intellectual action, not developed against men's entrepreneurship, but an idea designed to promote entrepreneurship.

The reason why this entrepreneurship is called women's entrepreneurship is that women have emotional motivation, their world views and their creativity are different *vis-à-vis* men. Creative design ideas about implementation reveal the entrepreneurial spirit of women in the process of the evaluation of opportunities. The woman accomplishes her ideas by enriching her own essence with her emotions and considering the details. According to women, mission and vision are not concepts with definite limits. The aim and the target are considered by the woman as a whole. Visuality, presentation, quality and benefit are important for women. Although the main purpose is income, women also take into consideration other objectives. Owing to the biological and physiological structure of the woman, emotional, maternity, family and values are always at the forefront. Therefore, women do not ignore these factors in production, marketing, design and offering service. The service does not end with the service delivery according to the woman. The sustainability of the service after offering and maintaining relations are important issues in women entrepreneurship.

2.2 Technology acceptance and use of women entrepreneurs

Technology is a constantly changing factor that must be taken into account in entrepreneurship. To ensure the sustainability of the enterprises and not enter into the decline process called "rigor mortis", sustainable innovations should be followed (Wright, 1987). The most important innovation required by the era is technology. Technology is a fundamental innovation that helps human power, facilitates daily life and ensures the flow of life in every field. The facilities provided by technology for business life, the international dimension through innovations in communication and transportation via technology demonstrate the

importance of acceptance and use behaviour. Advertising, marketing, production, services, information, communication, transportation and many other fields of technology are indispensable in entrepreneurship. Considering this crucial aspect in women's entrepreneurship is necessary in terms of benefit and efficiency. This process occurs with the adoption and use of technology.

Technology acceptance is the operational output of positive and negative emotions, with the perceived use and ease of use in the process of adaptation to technological devices and technological innovations. The use of a technological device affects the individual behaviour to use and adopt an innovation in a technological instrument (Davis, 1989). Perceptions, expectations, performances and emotions play an important role in the acceptance of a technological product together with its innovations (Venkatesh, 2000). For these reasons, technology acceptance is the sum of cognitive and action processes consisting of perception, expectations and emotions, which have been put forward until the use behaviour of technological products and services and the adoption of innovations by individuals and in the process of adaptation.

It is likely that a woman entrepreneur who can adapt to the changing environment will offer more productive outcomes and contribute to the economy. It is necessary to reveal the importance on the association between the factors that motivate women to entrepreneurship and technology and to understand the women entrepreneurs. It is important for women to contribute to the economy by revealing their creative ideas with their emotional characteristics and to develop their interactions with technology, policymakers and women entrepreneurship.

- H1. Facilitating conditions (FC) subscale is significantly associated with technology use behaviour.
- H2. Behaviour intention (BI) subscale is significantly associated with technology use behaviour.
- H3. Technology acceptance behaviour subscales [effort expectancy (EE), performance expectancy (PE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM), price value (PV), habit (HT), behaviour intention (BI)] are significantly associated with technology use behaviour.

2.2.1 Motivating factors for women entrepreneurs. Women's entrepreneurship has emerged on the basis of social learning theory. The father's entrepreneurship, childhood economic status and the effects of the social environment in the family are the main reasons for the emergence of entrepreneurship. The motive of entrepreneurship, which emerged on the basis of this theory, pushed the woman into action. Environment, emotional and many other factors have pushed or attracted/pulled women to entrepreneurship. These factors are categorized under four main headings: emotional, push, pull and balance. Ismail *et al.* (2012) defined two factors as positive and negative. On the other hand, these factors were also expressed as pull and push factors (Kjeldsen and Nielson, 2000).

Pull factors are the factors that motivate women entrepreneur and provide positive emotions to be entrepreneurs in the cognitive process, which has a positive effect on women entrepreneurs. For instance, freedom and great independence (financial and others) provide opportunities for education, family safety, business opportunity, request for additional income for the family, reputation in traditional family businesses, demand for social status at a high level, creativity, non-complex and high profit (Kjeldsen and Nielson, 2000).

Push factors are the motivations of entrepreneurship in women entrepreneurs as a result of compelling reasons such as perceptions of necessity and social pressure. This motivation

causes women entrepreneurs to undertake the entrepreneurial action. Deprivation and frustration, dissatisfaction with current job, loss of job, tired of job, immigrant, finished training, family pressure/father profession, economic deficiencies are the main examples of this motivation type (Ismail *et al.*, 2012).

It was revealed that emotional motivation factors, such as work commitment, loyalty, workplace commitment, solidarity, need for social networking, family and personal support, discrimination and humiliation, were effective on women entrepreneurs (Fineman, 2000). Emotional factors are a kind of motivation directed towards entrepreneurship by the values and judgments that arise because of the emotional aspects of women.

The woman, who has to redress a balance between family and work, has an important conflict between maternity responsibilities and work life. This situation shows that the woman entrepreneur is under the influence of balance factors. Job–family balance, work at home (flexible working hours), share time between work and family are the examples of this motivation type.

The fact that technology is an indispensable element in the present requires the querying of its association with motivation factors in entrepreneurship. The main purpose of this study is to determine the effects of factors affecting the acceptance and use of technology on the factors affecting women's entrepreneurship motivation. Further, crucial objectives are to reveal the current situation of the thoughts of women entrepreneurs on the basis of gender diversity and discrimination, the services offered by the chambers of commerce and industry to women entrepreneurs. Such studies, which have been carried out to reveal the current situation of women entrepreneurs in developing countries, will provide crucial predictions to policymakers in preparing the way for women's entrepreneurship. The comparison of technology interaction and motivation in women's entrepreneurship has never been studied in the literature before. In addition, the lack of studies in which the chambers of commerce and industry in the previous studies have been proposed in terms of women entrepreneurs also reveal the importance of this study.

- H4.* Technology acceptance and use behaviour subscales are significantly associated with women's entrepreneurship motivation subscales [Pull factor (PF), Push factor (PUF), Balance factor (BF), Emotional factor (EF)].

3. Methods

3.1 Participant

According to the women entrepreneurs' council data obtained from the Union of Chambers and Commodity Exchanges of Turkey, there were 218 women entrepreneurs in Adana and a total of 6,792 in Turkey. Participants' business enterprises ($n = 156$) were affiliated to the Chamber of Commerce and Chamber of Industry in Turkey in February 2019. Surveys were administered in Turkish by two interviewers. The reason why there are not too many interviewers in the research is to reduce the impact of different personal characteristics in the responses to the qualitative questions. Participants were announced to be subject to voluntary participation in the survey. The survey was not conducted with individuals who did not want to participate.

3.2 Measures

The questionnaire consists of 75 items in total. Demographic variables consist of nine items under the heading of "personal/sector characteristics". This first section includes the

following information: age, marital status, education level, grant support, business segment, total number of employees, trademark, patent, utility model.

The second section consists of four parts and 26 items by using five-point Likert scale under the heading “women’s entrepreneurship motivation (WEM)”. (1) strongly disagree, (2) disagree, (3) neither agree or disagree, (4) agree, (5) strongly agree. WEM consists of 4 dimensions/subscales and 26 items in total. “Pull factors” consist of nine items (Kjeldsen and Nielson, 2000), “push factors” consist of eight items (Ismail *et al.*, 2012; Braga *et al.*, 2014), balance factors consist of three items (Mohanty, 2007) and the final subscale of emotional factors consist of six items (Fineman, 2000). The scale was previously conducted by Özsungur (2019) with 132 women entrepreneurs. Validity and reliability of the scale were performed by the author: Cronbach’s alpha values were as pull (0.832), push (0.766), balance (0.819) and emotional (0.738).

The third section consists of eight parts under the heading “unified technology acceptance and use theory 2 (UTAUT2)” developed by Venkatesh *et al.* (2012). This scale consisted of 38 items and eight subscales regarding EE: effort expectancy (4 items); PE: performance expectancy (4 items); SI: social influence (3 items); FC: facilitating conditions (4 items); HM: hedonic motivation (3 items); PV: price value (3 items); HT: habit (4 items); BI: behaviour intention (3 items). The UTAUT2 items were measured by using seven-point Likert Scale, where 1 = strongly disagree and 7 = strongly agree.

The fourth section consists of ten items under the heading “UTAUT2 use behaviour (USE)” developed by Venkatesh *et al.* (2012). The original USE scale consisted of underlying six items: SMS, MMS, ringtone and logo download, java games, browse websites, and mobile e-mail. The current study survey included the following 10 items measuring frequency of mobile internet use: receiving e-mail, reservation (hotels; services), banking operations, web search for health-related knowledge, news and current issues, online shopping, financial transactions, using social media applications (Facebook, Instagram, Twitter, etc.) and chat rooms. Ten popular mobile internet applications in Turkey were provided from Turkish Statistical Institute reports [information and communication technology (ICT) usage in households and by individuals statistics]. Respondents were asked for their mobile internet use frequency for each application. USE measured by using seven-point Likert scale and the frequency ranged from “never” to “many times” per day. (Venkatesh *et al.*, 2012). The original scale items were adapted to mobile internet use.

The validity and reliability of the Turkish version of UTAUT2 was tested by Yilmaz and Kavanoz (2017) with 723 students between 18 and 47 years. The scale was found to be valid and reliable.

The final section consists of two parts and two open-ended questions given as follows:

OEQ1. What is the most important issue that differs according to gender in business life?

OEQ2. What are your important suggestions to the chambers of commerce/chambers of industry for providing quality services to women entrepreneurs?

Mixed method evaluation design has been adopted in the study, which includes quantitative and qualitative analysis methods (Onwuegbuzie and Leech, 2004). Conceptualization, classification and component analysis were applied in data analysis (Spradley, 1980). The validity and reliability of measurement tools were measured by confirmatory factor analysis (CFA). It is necessary to determine the model fit values by analyzing the predicted model revealed by AMOS (Hu and Bentler, 1999).

4. Results

4.1 Demographics

Demographic variables were given in [Table I](#).

A total of 34 per cent of the participants were between 48 and 60, 20.5 per cent were between 42 and 47 and 15.4 per cent were between 30 and 35 age range. 56.4 per cent of the participants were married and 33.6 per cent were single. According to the level of education, 48.7 per cent of the participants had bachelor's degree and 19.2 per cent had master's degree. 71.6 per cent of the participants did not receive grant support. 74.4 per cent of the women entrepreneurs were operating in the service sector. 66.7 per cent of the participants employed 1-9 employees. Of the participants, 62.8 per cent did not have trademark, 77.6 per cent did not have patent, and 85.3 per cent did not have the utility model.

4.2 Confirmatory factor analysis

CFA was used for construct validity of the scales. CFA is a type of analysis that tries to prove that latent variable is measured by the observed variables. Estimated model of CFA is as follows.

During CFA, the model did not show a good fit. Initial model fit values are shown in [Table II](#). The comparison of the fit coefficients of the model according to the threshold values in respect to the literature is given in [Table II](#). When the values in [Table II](#) are examined, it is seen that the model has good fit values.

The model was tested as one factor model, the model fit coefficients produced by two models (initial and modified model) test results were given in [Table II](#). To determine whether there was a significant difference between the one-factor model and the three-factor model, the χ^2 values were tested and the difference was significant ($\Delta\chi^2 = 3835,933; p < 0.01$). This finding indicated that there were no common method bias ([MacKenzie and Podsakoff, 2012](#)) ([Table III](#)).

In terms of discriminant validity, it is expected that the sub-factors' values must be greater than all the correlation values ([Fornell and Larcker, 1981](#)). The model met this criteria. For the discriminant validity of the correlation value found among the factors, the average variance extracted (AVE) values of each latent variable must be less than the square root of AVE value ([Fornell and Larcker, 1981](#)). In the light of these results, it can be said that the observed items have convergent and discriminant validity to measure the research scales. All subscales were found to be valid and reliable.

4.3 Direct effects

According to the findings obtained by structural equation model (SEM) analysis with AMOS, EE was negatively associated with BI and PUF, and positively associated with PF. PE was positively associated with BF, PUF and BI. HM was positively associated with BI and EF. BI was negatively associated with use behaviour. FC was positively associated with PUF. HT was positively associated with BI, and negatively associated with PF, PUF, BF and EF ([Table IV](#)). According to the research findings, other effects were found to be insignificant ([Table IV](#)).

4.4 Qualitative findings

Participants were asked for the basic gender problems in business life. The responses of these questions were examined according to the upper and lower classifications obtained by the traditional method. According to the obtained results, the issues stated are as follows: family (8.4 per cent), arising from men (2.6 per cent), no difference (30.7 per cent), cultural

Demographic variables	f	(%)	Sectoral variables	f	(%)
<i>Age</i>			<i>Business segment</i>		
18-23	11	7.1	Textile	8	5.1
24-29	14	9	Metal-machine	19	12.2
30-35	24	15.4	Building and construction	13	8.3
36-41	22	14.1	Consultancy	24	15.4
42-47	32	20.5	Other (service industry)	92	59
48-60	53	34	<i>Total number of employees</i>		
<i>Marital status</i>			1-9	104	66.7
Single	53	33.6	10-49	28	17.9
Married	88	56.4	50 and over	24	15.4
Divorced	15	9.6			
<i>Education level</i>			<i>Trademark</i>		
High School Graduate	21	13.5	Yes	58	37.2
Associate's Degree	29	18.6	N/A	98	62.8
Bachelor's degree	76	48.7	<i>Patent</i>		
Master's degree	30	19.2	Yes	35	22.4
			N/A	121	77.6
<i>Grant support</i>			<i>Utility model</i>		
Yes	44	28.4	Yes	23	14.7
N/A	112	71.6	N/A	133	85.3

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Table I.
Personal/sector
characteristics

Table II.
Model fit coefficients

Fit index	Initial model values	Modified model values	One factor model values	Acceptable model fit levels	References
χ^2	3399.122; $p = 0.000$	2786.955; $p = 0.000$	6622.888; $p = 0.000$; $\Delta \chi^2 = 3835.933$	Low χ^2 value and $p < 0.01$; $p > 0.05$	Hooper <i>et al.</i> , (2008)
χ^2/df	1.762	1.462	3.393	$\chi^2/df < 3$	Tabachnick and Fidell (2007)
RMSEA	0.70	0.055	0.124	$\chi^2/df < 2$ RMSEA < 0.05–Good RMSEA < 0.08– Acceptable	Hu and Bentler (1999)
GFI	0.596	0.659	0.329	0.95 ≤ GFI ≤ 1 Good 0.90 ≤ GFI ≤ 0.95	Miles and Shevlin (2007)
CFI	0.872	0.923	0.592	Acceptable 0.95 ≤ CFI ≤ 1.00 Good 0.90 ≤ CFI ≤ 0.95 Acceptable	Hu and Bentler (1999)

Notes: χ^2 Discrepancy chi square; χ^2/df (chi square/degrees of freedom); RMSEA (root mean square of error approximation); SRMR (standardized root mean square residual); GFI (goodness of fit index); AGFI (adjusted goodness of fit); CFI (comparative fit index); IFI (incremental fit index); NNFI (non-normed fit index) TLI (Tucker–Lewis index)

CR	AVE	MaxR(H)	BI	PF	PUF	BF	EF	USE	EE	PE	SI	FC	HM	PV	HT
BI	0.981	0.945	0.972 ^a												
PF	0.722	0.329	0.032*	0.573 ^a											
PUF	0.742	0.296	-0.045*	-0.193*	0.544 ^a										
BF	0.811	0.594	0.060*	-0.300*	0.397	0.771 ^a									
EF	0.730	0.383	0.063*	-0.548*	0.206*	0.508*	0.619 ^a								
USE	0.950	0.661	0.974	-0.833*	0.021*	-0.083*	-0.104*	0.813 ^a							
EE	0.871	0.723	0.986	-0.083*	0.011*	0.069*	0.092*	-0.709*	0.851 ^a						
PE	0.996	0.986	0.997	-0.059*	0.040*	0.099*	0.091*	-0.782*	0.941*	0.993 ^a					
SI	0.915	0.783	0.926	-0.004*	0.018*	0.084*	0.079*	-0.626*	0.710*	0.779*	0.885 ^a				
SC	0.957	0.849	0.961	-0.048*	0.018*	0.070*	0.054*	-0.758*	0.936*	0.971*	0.756*	0.922 ^a			
HM	0.970	0.916	0.983	-0.018*	-0.018*	0.067*	0.076*	-0.769*	0.876*	0.884*	0.708*	0.889*	0.957 ^a		
PV	0.707	0.512	0.881	-0.049*	-0.076*	0.066*	0.021*	-0.662*	0.610*	0.637*	0.568*	0.686*	0.675*	0.716 ^a	
HT	0.883	0.670	0.940	0.052*	-0.090*	0.045*	0.012*	-0.822*	0.829*	0.854*	0.736*	0.874*	0.845*	0.824*	0.818 ^a

Notes: CR = composite reliability; AVE = average variance extracted; MaxR(H) = maximum reliability; Square root of AVE value; ^aPearson correlation; AVE is significant over the 0.50 level, the acceptable value of CR is 0.7 and above; EE: effort expectancy; PE: performance expectancy; SI: social influence; FC: facilitating conditions; HM: hedonic motivation; PV: price value; HT: habit; BI: behaviour intention; PF: pull factor; PUF: push factor; BF: balance factor; EF: emotional factor

Table III.
Convergent and
discriminant validity
of the model

Factors	Lower bounds	Upper bounds	<i>t</i> (1560)	β	<i>p</i>	Direct effects
EE → BI	-0.309	0.081	-3.59	-0.118	**	Negative
EE → PUF	-0.442	0.245	-2.86	-0.181	0.004*	Negative
EE → PF	0.018	0.617	5.16	0.357	**	Positive
PE → BF	-0.297	0.597	3.07	0.230	0.002*	Positive
PE → PUF	-0.071	0.665	6.053	0.382	**	Positive
PE → BI	0.532	0.912	23.60	0.776	**	Positive
HM → BI	0.033	0.485	7.343	0.241	**	Positive
HM → EF	-0.176	0.432	2.12	0.161	0.034*	Positive
BI → Use	-0.845	-0.540	-13.2	-0.729	**	Negative
FC → PUF	-0.128	0.584	3.84	0.242	**	Positive
HT → BI	0.204	0.598	11.87	0.390	**	Positive
HT → PF	-0.533	-0.133	-4.90	-0.340	**	Negative
HT → PUF	-0.552	-0.177	-5.65	-0.357	**	Negative
HT → BF	-0.508	-0.046	-3.59	-0.269	**	Negative
HT → EF	-0.464	-0.016	-3.14	-0.239	0.002*	Negative
Use → EF	-0.542	-0.081	-2.39	-0.256	0.017*	Negative

Table IV.
SEM analysis
findings

Notes: **p* is significant at 0.05 (two tailed); ***p* is significant at 0.01 (two tailed); The confidence interval values for direct effects were calculated by bootstrap with *n* = 1560. Bias-corrected confidence intervals: 95%. If zero (0) does not match within the confidence interval values, the direct effect is significant; β , Standard Beta; *t*: Critical ratio

structure/social structure (15.3 per cent), arising from women (10.9 per cent), inequalities in business life (32.1 per cent).

The concepts of financial support (*n* = 2; 1.3 per cent), roles/family–work balance (*n* = 9; 5.8 per cent), training support (*n* = 2; 1.3 per cent) were clustered under the family theme. Women entrepreneurs reported that they subjected to gender discrimination (*n* = 4; 2.6 per cent). Social pressure, cultural structure and treatment as a second-class citizen by the society are the biggest obstacles for women entrepreneurs (*n* = 24; 15.3 per cent). Participants stated that some characteristics arising from women caused inequality (*n* = 17; 10.9 per cent). Personal characteristics such as risk taking, motivation and perseverance are the components that women entrepreneurs must have to eliminate inequality. However, despite these factors, there were also participants who argued that there was no difference according to gender (*n* = 48; 30.7 per cent).

Unfair practices against women in appointments to managers and top executives (*n* = 13; 8.3 per cent), physical power perception (*n* = 8; 5.2 per cent), Sectoral–occupational discrimination (*n* = 10; 6.4 per cent), unfairness in income (*n* = 7; 4.5 per cent) and unfair distribution of resources (*n* = 12; 7.7 per cent) were stated as the most important inequalities experienced by women in business life.

Participants were asked for recommendations of women entrepreneurs on chambers of commerce and chambers of industry. The responses of this question were examined according to the head and sub- concepts obtained by the traditional method. According to the obtained results, the suggestions stated are as follows: knowledge sharing (16 per cent), establishment of a unit (3.2 per cent), support/resource allocation (41.7 per cent), active participation in management (12.2 per cent) and to be considered (26.9 per cent).

Participants suggested enacting entrepreneurship oriented knowledge sharing (*n* = 9; 5.8 per cent) and recognizing the woman entrepreneur (*n* = 16; 10.2 per cent) in the relations of the chambers of commerce and industry with women entrepreneurs. The establishment of

the units ($n = 5$; 3.2 per cent) to provide consultancy to women entrepreneurs in the chambers was suggested by the participants. Supports for education ($n = 22$; 14.1 per cent), financial ($n = 19$; 12.2 per cent) and entrepreneurship (project, legal, innovation etc.) ($n = 17$; 10.9 per cent) were seen as a significant deficiency in the women's entrepreneurship. Women entrepreneurs desire to actively participate in the management of the chambers ($n = 19$; 12.2 per cent). Assembly membership, appointment to the board of directors and women's employment are among the suggestions. Finally, the participants stated that their suggestions were ignored by the authorities of the chambers ($n = 42$; 26.9 per cent).

5. Discussion

According to a study with women entrepreneurs, PE, EE and SI significantly affected the BI to use e-commerce and FC and BI positively affected use behaviour (Goswami and Dutta, 2016). A study in Malaysia conducted with 1,200 entrepreneurs revealed that perceived desirability and perceived feasibility had significant effects on entrepreneurs' intention to adopt and use innovations (Moghavvemi, Salleh and Standing, 2016). Previous studies showed that PE, FC, HM and HT had positive effects on BI (Macedo, 2017; Nägle and Schmidt, 2012). On the other hand, the findings of the study showed that EE had negative effect on BI, while HT had positive effect on BI. These results revealed that EE has an adverse effect on women entrepreneurs' intention for technology use. BI decreases as the degree of convenience associated with the use of the technological system increases. BI increases as addiction, necessity and habit level increase.

According to the research conducted by Nägle and Schmidt (2012), although there were no findings supporting the fact that PE had a significant effect on BI, it was found that FC had a significant effect on BI. According to the research findings of Hoque and Sorwar (2017), while the positive effect of PE on BI was determined, the positive effect of FC could not be determined. However, there is no research relevant to the effects of UTAUT2 and its sub-dimensions on WEM. Macedo (2017) found that EE and SI had a positive effect on BI. According to the study conducted by Nägle and Schmidt (2012), it was found that there was no association between BI and EE. Macedo (2017) found that PV did not significantly predict BI and habit positively affected technology use behaviour. Previous studies found that FC did not affect the use behaviour positively (Macedo, 2017; Hoque and Sorwar, 2017). Further, studies showed that BI had a positive effect on the use behaviour (Macedo, 2017; Hoque and Sorwar, 2017). However, the research findings revealed a negative effect of BI on technology use behaviour.

As the women entrepreneurial behaviour intention increases, the level of technology use behaviour decreases. Considering the spiritual dimensions, willingness and perseverance of entrepreneurship, it is thought that women entrepreneurs who want to get rid of necessities and habits desire innovative behaviour. The main reason why women entrepreneurs cannot perform their behaviours despite the increase in behaviour intentions is that they cannot access the resources sufficiently. The qualitative research data reveal the reason for the negative results of the quantitative study. The lack of support of women entrepreneurs in unfair practices, financial, education and entrepreneurship in business life adversely affects women entrepreneurs' use of technology despite their positive intentions.

According to the results of the study, EE had a negative effect on PUF, had a positive effect on PF. As the degree of ease of use of the technological system increases, the pull factors level that motivate women's entrepreneurship increases and the push factors level decreases. This is because of the push factors involve necessity, pull factors and EE have volunteering.

PE has a positive effect on PUF and BF. The degree to which one believes that the use of the technological system will help women to gain performance in business positively increases push and balance factors. Because according to women entrepreneurs, factors that affect the belief of obtaining business performance in entrepreneurship are associated with balanced and compelling/extrinsic motivation.

HM has a positive effect on EF. The level of perceived use of technology as fun and entertainment emotionally motivates women entrepreneurs. FC has positive effect on PUF. As the degree of believing that there is an organizational and technical infrastructure to support the use of a technological system, women are pushed towards entrepreneurship positively. Technology use behaviour has negative effect on EF. As the technology use level increases, the emotional effects that motivate women to entrepreneurship decrease.

HT has a negative effect on PF, PUF, BF and EF. As addiction, necessity and habit level increase, women entrepreneurial motivation decreases. This finding is actually a reaction. These results show that women entrepreneurs do not want to be obligatory, they want to realize entrepreneurship on a voluntary basis and they desire to execute the behaviour faithfully. These findings are supported by qualitative data. It was determined via the interview that risk taking, motivation and perseverance were the basic gender problems in business life arising from women. According to these findings, women entrepreneurs do not see necessity and habit as a factor to be motivated. In the policies that women entrepreneurship is supported, it should not be included in the practices where women feel unfairness, under pressure by the society, being a second class citizens and weak. Regardless of the type of women's entrepreneurship motivation, it is recommended to undertake the necessary initiatives to transform the negative effects of technology on women entrepreneurs into positive effects. Discrimination, inequality, unfairness, role conflict, social isolation that women have experienced for years can cause negative reactive movements in their behaviours and actions. With this study, it is obvious that women entrepreneurs reflect these reactions to technology use behaviours.

6. Limitations and recommendations for future studies

This study was carried out to determine the effects of factors affecting the technology acceptance and use behaviours of women entrepreneurs on women's entrepreneurship motivation factors. The low number of women entrepreneurs caused the number of samples to be low. Therefore generalizability is the most crucial limitation of this study. In addition, unfair practices that women have experienced may also cause responses to be reactive. To eliminate this problem, each scale was placed in separate sections and tried to eliminate the common method variance as much as possible.

It is recommended that this study model, which is examined in the context of the interaction of women entrepreneurship with technology, should be carried out with mediating variables such as leadership types, burn out or bore out. It is recommended that this study model on mobile internet should be examined in the context of other technologies. Qualitative research results reveal the expectations of women entrepreneurs. These expectations generally focus on financial and social support and fairness practices. For this reason, it is recommended that WEM should be evaluated with various model studies for future research in this regard. Lack of financial and social support and fairness practices issues regarding women entrepreneurs should be considered by policymakers. It is recommended that commissions should be established for the women's entrepreneurship in the chambers of commerce and industry.

References

- Braga, J.C., Proença, T. and Ferreira, M.R. (2014), "Motivations for social entrepreneurship – evidences from Portugal", *TÉKHNE – Review of Applied Management Studies*, Vol. 12, pp. 11-21.
- Danish, A.Y. and Smith, H.L. (2012), "Female entrepreneurship in Saudi Arabia: opportunities and challenges", *International Journal of Gender and Entrepreneurship*, Vol. 4 No. 3, pp. 216-235.
- Davies, P. (2000), "Contributions from qualitative research", in Davies, H.T., Sandra, M.N. and Smith, P. (Eds), *What Works? Evidence-Based Policy and Practice in Public Services*, Policy Press, Bristol, pp. 291-316.
- Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, Vol. 13 No. 3, pp. 319-340.
- Fineman, S. (2000), *Emotions in Organizations*, Sage, London.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Goswami, A. and Dutta, D. (2016), "E-Commerce adoption by women entrepreneurs in India: an application of the UTAUT model", *Business and Economic Research*, Vol. 6 No. 2, pp. 440-454.
- Hooper, D., Coughlan, J. and Mullen, M. (2008), "Structural equation modelling: guidelines for determining model fit", *Electronic Journal of Business Research Methods*, Vol. 6 No. 1, pp. 53-60.
- Hoque, R. and Sorwar, G. (2017), "Understanding factors influencing the adoption of mHealth by the elderly: an extension of the UTAUT model", *International Journal of Medical Informatics*, Vol. 101, pp. 75-84.
- Hu, L. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.
- Ismail, H.C., Shamsudin, F.M. and Chowdhury, M.S. (2012), "An exploratory study of motivational factors on women entrepreneurship venturing in Malaysia", *Business and Economic Research*, Vol. 2 No. 1, pp. 1-13. ISSN 2162-4860.
- Kjeldsen, J. and Nielson, K. (2000), *The Circumstances of Women Entrepreneurs*, Danish Agency for Trade and Industry.
- MacKenzie, S.B. and Podsakoff, P.M. (2012), "Common method bias in marketing: causes, mechanisms, and procedural remedies", *Journal of Retailing*, Vol. 88 No. 4, pp. 542-555.
- Macedo, I.M. (2017), "Predicting the acceptance and use of information and communication technology by older adults: an empirical examination of the revised UTAUT2", *Computers in Human Behavior*, Vol. 75, pp. 935-948.
- Miles, J. and Shevlin, M. (2007), "A time and a place for incremental fit indices", *Personality and Individual Differences*, Vol. 42 No. 5, pp. 869-874.
- Moghavvemi, S., Salleh, N.A.M. and Standing, C. (2016), "Entrepreneurs adoption of information system innovation: the impact of individual perception and exogenous factors on entrepreneurs behavior", *Internet Research*, Vol. 26 No. 5, pp. 1181-1208.
- Mohanty, S.K. (2007), *Fundamentals of Entrepreneurship*, Prentice Hall of India Private Limited, New Delhi.
- Nägle, S. and Schmidt, L. (2012), "Computer acceptance of older adults", *Work*, Vol. 41 No. 1, pp. 3541-3548.
- Nguyen, C., Frederick, H. and Nguyen, H. (2014), "Female entrepreneurship in rural Vietnam: an exploratory study", *International Journal of Gender and Entrepreneurship*, Vol. 6 No. 1, pp. 50-67.
- Onwuegbuzie, A.J. and Leech, N.L. (2004), "Enhancing the interpretation of 'significant' findings: the role of mixed methods research", *The Qualitative Report*, Vol. 9 No. 4, pp. 770-792.

-
- Özsungur, F. (2019), "A research on women's entrepreneurship motivation: sample of Adana Province", *Women's Studies International Forum*, Vol. 74, pp. 114-126.
- Rugina, S. (2019), "Female entrepreneurship in the Baltics: formal and informal context", *International Journal of Gender and Entrepreneurship*, Vol. 11 No. 1, pp. 58-74.
- Spradley, J.P. (1980), *Participant Observation*, Harcourt, Orlando, FL.
- Tabachnick, B.G. and Fidell, L.S. (2007), *Using Multivariate Statistics*, 5th ed., Allyn and Bacon, New York, NY.
-
- Venkatesh, V. (2000), "Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model", *Information Systems Research*, Vol. 11 No. 4, pp. 342-365.
- Venkatesh, V., Thong, J.Y.L. and Xu, X. (2012), "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology", *MIS Quarterly*, Vol. 36 No. 1, pp. 157-178.
- Wright, R.G. (1987), "Life span of management development institutes", *Journal of Management Development*, Vol. 6 No. 5, pp. 31-38.
- Yılmaz, M.B. and Kavanoz, S. (2017), "Teknoloji Kabul ve kullanım birleştirilmiş modeli- 2 ölçeğinin türkçe formunun geçerlik ve güvenilirlik çalışması, turkish studies international periodical for the languages", *Literature and History of Turkish or Turkic*, Vol. 12 No. 32, pp. 127-146.

Further reading

- Byrne, B.M. (1998), *Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Sacchi, M.D. (1998), "A bootstrap procedure for high-resolution velocity analysis", *Geophysics*, Vol. 63 No. 5, pp. 1716-1725.
- Stevens, J.P. (1992), *Applied Multivariate Statistics for the Social Sciences*, 2nd ed., Erlbaum, Hillsdale, NJ.

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