

Analyzing Factors Affecting Users' Behavior Intention to Use Social Media: Twitter Case

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Abstract

Advancement of technology and the Internet proliferation have visible effects in the world. One of the most important effects is the increased social media usage among the Internet users. For this purpose, factors having impacts on users' behavior intention to social media usage are investigated within the scope of the study. A research model based on technology acceptance model 2 is proposed and revised by the taking social media platforms into consideration. The effects of perceived ease of use, perceived usefulness, social influence, facilitating conditions, playfulness, and trust are measured. Data collected from 462 respondents are analyzed by structural equation modeling technique. According to results of the measurement and structural model validities, a fit and acceptable model is achieved to measure the related effects of variables. The results of study reveal the both direct and indirect positive impacts of the factors on users' behavior intention to use social media.

Keywords: behavior intention, social media, structural equation modeling, twitter

1. Introduction

The importance and popularity of social media has risen with the technological developments and high Internet penetration in the world. According to Global Digital Statistics report (2014), the population of the world nearly 7.1 billion and there are approximately 2.5 billion Internet users. About 1.9 billion of the Internet users are active social media users. While the Internet penetration in the world is averagely 35%, social media is used averagely 26% in the world.

Social media refers to online platforms in where people share their own content such as photos, videos, music, comments, and experiences etc. Popular online social media platforms are Facebook, Qzone, Google+, LinkedIn, Twitter, and Tumblr. Global Digital Statistics report (2014) states that there are 1.814 million Facebook users, 632 million Qzone users, 300 million Google+ users, 259 million LinkedIn users, 232 million Twitter users and 230 million Tumblr users. These statistics validate the popularity of the social media platforms among the Internet users. These statistics indicate that people communicate and collaborate through various social media platforms.

This study aims to focus on social media use by analyzing the impacts of relevant factors. In this manner, this study finds answers to the question that why people use social media platforms frequently. Twitter is chosen as a case study for analysis purpose. Twitter is released in 2006 as a microblogging platform in where users share their opinions with texts including 140 characters. Additionally, they can add photos and videos to their tweets. A research model based on technology acceptance model 2 is proposed. The effects of perceived ease of use, perceived usefulness, social influence, playfulness, facilitation conditions, and trust are measured within the scope of the study. In order to test the results, an online questionnaire is shared through social media platforms and data are collected from 462 Twitter users. The proposed model is tested by structural equation modeling technique.

This study is divided into four parts. The first part covers the literature review. The second part deals with the research model and methodology of the study. The third part includes the findings of the study. The last part is the summary part which consists of the important and significant results of the study.

2. Literature Review

It is obvious that social media has become a popular research field with the technological advancements and the Internet proliferation. In this manner, many researchers focus on and conduct studies in social media from different perspectives such as governmental and political, marketing, educational, and individual.

From the governmental and political perspective, both Twitter and Facebook have gained a popularity by governments and adopted by various politicians in order to be in an effective and lasting communication with citizens. Khan et al. (2014) define the governments as social governments in this new era and state that governments should develop their social media strategies to become more efficient and effective in the social media. In their study, Alam and Lucas (2011) conduct a study about Twitter use by Australian government by analyzing the tweets of governmental agencies. They find that these agencies post tweets to share information about news and updates about them or about external agencies. In another study, Alam et al. (2011) focus on the usage of Facebook by the governments. They reveal that social media platforms are great opportunities for governments to communicate and collaborate. Besides, Sobaci and Karkin (2013) analyze the use of Twitter by Turkish mayors and find that Twitter is adopted and is widely used by mayors and so it improves the public relations.

Social media is also widely studied from both students' and educational institutions' perspectives. Ivala and Gachago (2012) measure the students' engagement through Facebook and blogs and they find that these social media platforms enhance the students' performance. Lin et al. (2013) measure how students perceive Twitter as an educational tool and they reveal that students are more interested in information sharing about the courses through social media platforms. Prestridge (2014) also focus on students' Twitter usage and indicates that Twitter support engagement in learning. On the other hand, Palmer (2013) investigates the social media usage of universities. Universities use social media in marketing, learning and teaching, student recruitment, alumni communication, student services, and their libraries.

In the field of marketing, social media is a very popular topic. It is clear that social media platforms are a great source of electronic word of mouth (Koo et al., 2011). Cheung et al. (2013) state that electronic word of mouth is more important than traditional promotional and the Internet advertising tools. In this manner, Dlodlo and Dhulup (2013) conduct a study on consumers to measure their social media usage. They propose a research model based on technology acceptance model (TAM) and they try to test the effects of perceived enjoyment, perceived critical mass, perceived usefulness, and perceived ease of use on intention to use social media and find the positive effects of them except perceived usefulness.

Other than governmental and political, educational, and marketing perspectives, social media usage and analysis of user behaviors are also one of the most popular topics in the academic world. Koçak and Oyman (2012) study social media usage behaviors. They state that individuals use social media for watching videos, listening to music, sharing photos, reading and writing comments, and sharing their own contents. They try to find that how users behave in the social media. The results indicate that users prefer social media more to look at photos, listen to music, and watch videos, read and follow webpages that they are interested in.

Hughes et al. (2012) analyze personality predictors of social media use. They try to investigate effects of personality traits of big-five (neuroticism, extraversion, openness, agreeableness and conscientiousness), sociability, and need for cognition. At the end, they find that personality is related to social media use. Moreover, Ozguven and Mucan (2013) focus on five personality traits as in the study of Hughes et al. (2012). They additionally measure the effects of income, age, gender, and life satisfaction. They find the significant effects of conscientiousness, openness to experience, education, income level, and life satisfaction on social media use. In addition, Rauniar et al. (2014) conduct a study on social media usage based on TAM. They select Facebook as a case and try to find the effects of perceived ease of use, critical mass, capability, perceived playfulness, perceived usefulness, and trustworthiness on social media use. They propose a revised TAM model by taking social media into consideration. They validate the model and find the significant effects of the revised dimensions.

Scheepers et al. (2014) figure out the effects of sense of community which have four sub constructs (information seeking behavior, hedonic behavior, sustaining strong ties, and extending weak ties) on social media use. Sense of community refers to "a sense of affiliation and emotional connection, interaction and identification with a groups of people". They explain that these sub constructs identify the behaviors of social media users. Brooks (2013) investigates both technological and personal characteristics on social media use.

He measures presenteeism and sociality as technological characteristics and information privacy sensitivity, personal involvement, and cognitive absorption as personal characteristics. He reveals that these all characteristics are highly associated with social media usage.

3. Research Model and Methodology

This part includes the proposed model, hypotheses, and the research methodology of the study.

3.1. Research Model

Many research studies that focus on technology acceptance are based on TAM. TAM was proposed by Davis in 1989 (Figure 1). The main dimensions of the model are perceived ease of use and perceived usefulness. Perceived ease of use refers to “the degree to which a person believes that using a particular system would be free of effort”. In addition, perceived usefulness is “the degree to which a person believes that using a particular system would enhance his or her job performance”. Davis (1989) indicates that these two dimensions have effect on intention to use a new technology.

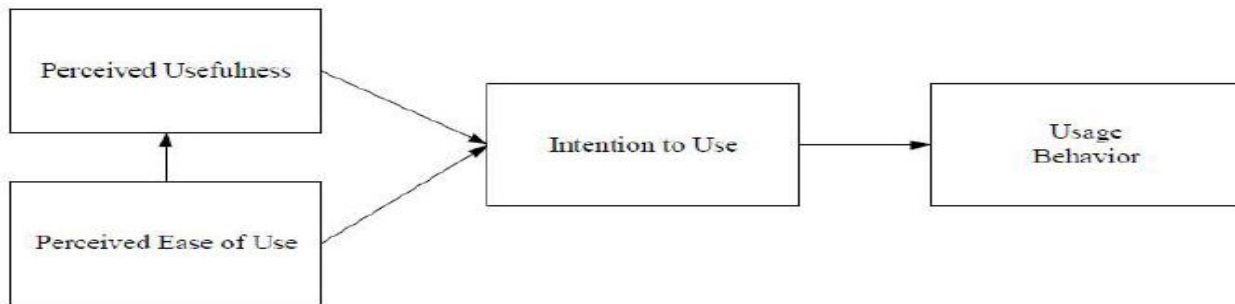


Figure 1: Technology Acceptance Model (Davis, 1989)

After that, Venkatesh and Davis (2000) develop TAM2 model by adding social influence and cognitive processes (Figure 2). While social influence processes include subjective norm, voluntariness, and image; cognitive processes consist of job relevance, output quality, result demonstrability, and perceived ease of use. These all processes have a significant effect on a new technology acceptance by users. In 1996, Venkatesh and Davis developed a model to find the antecedents of perceived ease of use. They tested the effects of computer self-efficacy and object usability. Moreover, Venkatesh and Bala (2008) proposed TAM3 model including external variables to test the antecedents of perceived ease of use. In other words, TAM3 model extends TAM2 model by adding new dimensions which are computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, and objective usability. They find the significant effects of them on perceived ease of use.

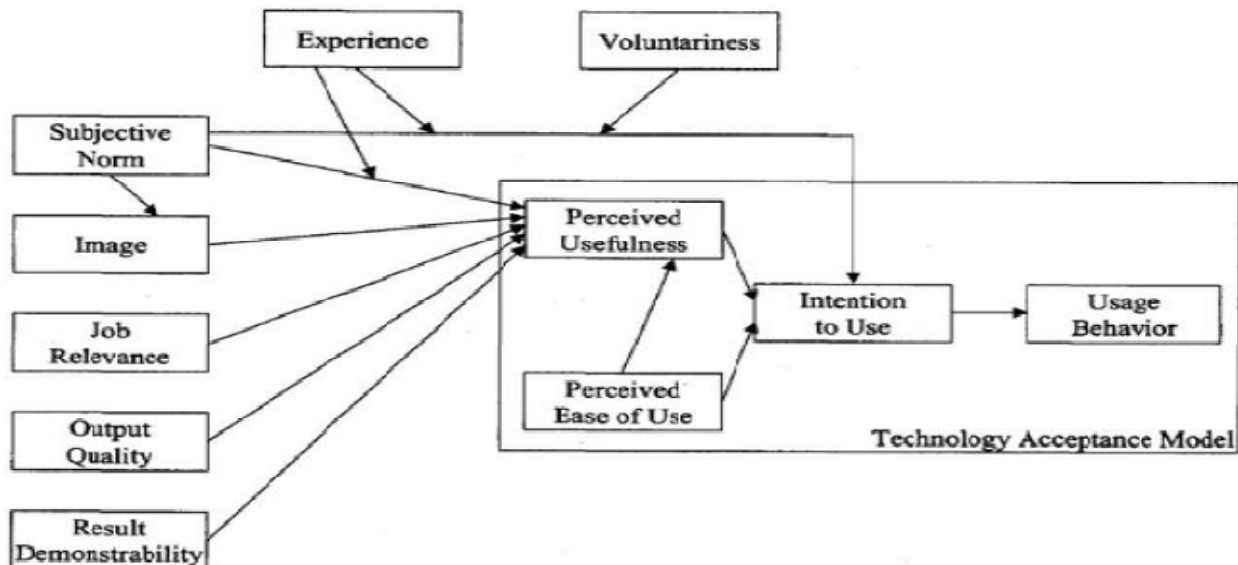


Figure 2: Technology Acceptance Model 2 (Venkatesh and Davis, 2000)

Venkatesh et al. (2003) also develop a model called as unified theory of acceptance and use of technology model (UTAUT). UTAUT includes eight dimensions: performance expectancy, effort expectancy, social influence, facilitating conditions, voluntariness of use, experience, age, and gender. While performance expectancy is the degree of that users believe that they will achieve high performance by using the new system, effort expectancy refers to the degree of how much the using new system requires effort.

Figure 3 shows the proposed research model of the study and it includes the research hypotheses. The research model that is based on TAM2, is revised for social media usage. *Social influence*, *playfulness*, *facilitating conditions*, and *trust* are added as new constructs to the model. Davis (1989) says that perceived ease of use has a direct effect on both perceived usefulness and behavior intention. In addition, perceived usefulness has an effect on behavior intention. They are added as research hypotheses to the model:

H1: Perceived ease of use will have a positive effect on perceived usefulness.

H2: Perceived ease of use will have a positive effect on behavior intention.

H3: Perceived usefulness will have a positive effect on behavior intention.

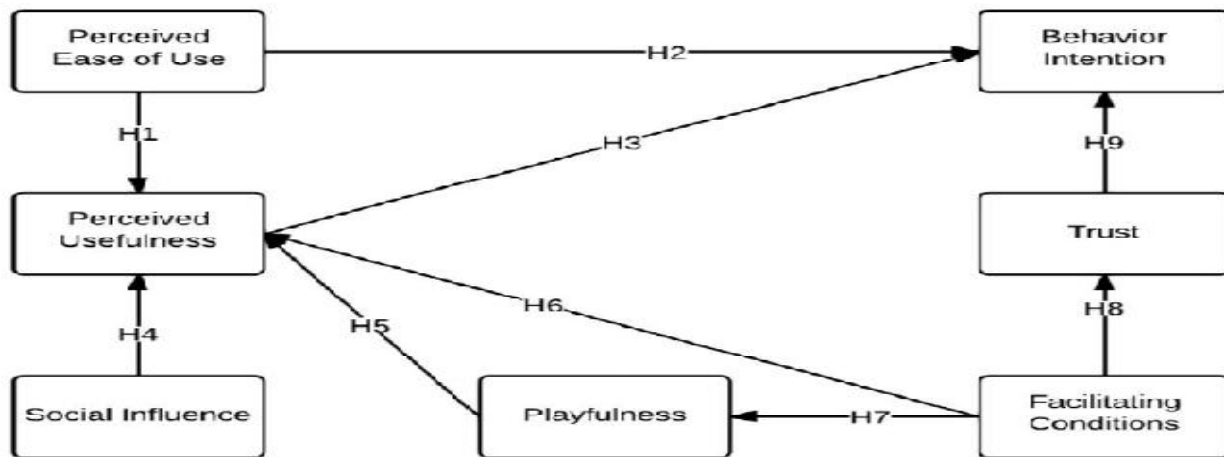


Figure 3: Proposed Research Model of the Study and Hypotheses

Venkatesh et al. (2003), defines the social influence as “the degree to which an individual perceives that important others believe he or she should use the new system.” They also state that social influence is related to subjective norm in TAM2 and they are similar to each other. Venkatesh and Davis (2000) state that if a person suggests that the system is useful, another person can believe that it is useful and have an intention to use the system.

H4: Social influence will have a positive effect on perceived usefulness.

Playfulness is an important dimension for social media platforms. Rauniar et al. (2013) state that if a person enjoys them, he or she finds the service more useful. Moreover, they figure out that interactivity plays a key role in social media platforms, especially for Facebook and Twitter.

H5: Playfulness will have a positive effect on perceived usefulness.

Facilitating conditions is added as other construct to the research model. Venkatesh et al. (2003) define the facilitating conditions as “the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system.” Facilitating conditions refer to that whether related social media platform includes proper and enough instructions for users. Besides, the related social media platform should have enough services and applications for its users. In this manner, facilitating conditions have effects on perceived usefulness, playfulness, and trust. If facilitating conditions satisfy users, users become more playfulness, trust the social platform, and believe that the social media platform enhances their performances.

H6: Facilitating conditions will have a positive effect on perceived usefulness.

H7: Facilitating conditions will have a positive effect on playfulness.

H8: Facilitating conditions will have a positive effect on trust.

Trust is one of the most important dimensions for especially online platforms. It is obvious that social media platforms collect users’ information. Therefore, information confidentiality and not to misuse of information are important for users. Users post tweets and share images and videos on Twitter.

Rauniar et al. (2013) explain that these activities are one of the examples of online behaviors of users. They indicate that users should not be worry about privacy and safety concerns. Therefore, behavior intention to user social media is influenced by users' trustworthiness to the social media platform.

H9: Trust will have a positive effect on behavior intention.

3.2. Research Methodology

In the study, a questionnaire is prepared to collect data, measure the effects of each factor, and verify the research hypotheses. The questionnaire includes nine questions about users' Twitter usage behaviors. Descriptive questions collected data about both users' demographic information such as age, gender, education level, and their follower and following numbers in Twitter. In addition, Twitter usage frequencies of users were gathered.

The last questions includes 26 sub items. It measures the dimensions having effects on users' behavior intentions to use social media. For each sub item, 7-point Likert-Scale is used. Appendix 1 shows the sub items of each construct in the proposed research model. Some of the questions are adapted from the literature and revised for social media. In addition, the questionnaire is designed in Turkish. For this purpose, English version of the questionnaire is translated into Turkish and then Turkish version is translated into English in order to keep the consistency among languages.

Data are collected using an online questionnaire service. Targeted sample is active Twitter users. Online questionnaire is distributed through social media platforms such as Facebook and Twitter. As a result, 462 replies are received. Hair et al. (2010) indicate that it requires minimum 150 sample size with a research model including seven or less constructs, modest communalities, and no unidentified constructs for structural equation modeling (SEM) technique.

4. Findings of the Study

This part of the study includes descriptive findings, results of the measurement and structural model validities.

4.1. Descriptive Statistics

Table 1 shows the descriptive findings of the study. According Table 1, While 60.2% of the respondents are between 19 – 25 years old, there are 131 respondents who are 18 and less than 18 years old. The research sample includes 394 males and 68 females. When the educational level is investigated, many Twitter users are either university student or high school students. It can be concluded that Twitter is more popular among high school and university students.

Moreover, most of the Twitter users have up to 199 followers and followings. 36.1% of the respondents have between 0 and 99 followers and 34% of the respondents have between 100 and 199 followings. While followers are the other Twitter users who follow the tweets of the user, followings are the users who are followed by the user. Lastly, 44.2% of the respondents visit often Twitter and 25.8% spend about 3 – 5 hours in a day.

4.2. Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) is developed by Karl Jöreskog in 1960s. CFA tests whether a set of items defines a construct or not. Moreover, Swell Wright develop the path model with box and arrow diagrams (Wright, 1918, 1921, 1934, as cited in Blunch, 2007; Schumacker and Lomax, 2010). In fact, path model which tests more complex relationships among factors, is the combination of correlation coefficients and regression analysis.

SEM that is developed by Karl Jöreskog, Ward Keesling and David Wiley (Jöreskog, 1969, 1973; Keesling 1972; Wiley, 1973 as cited in Schumacker and Lomax, 2010), is the integration of path and confirmatory analysis. Their model is known as JKW and becomes more popular with the development of linear structural relations model that is also known as the first program to test SEM. In accordance with Hair et al. (2010) SEM have three different characteristics when it is compared with other multivariate techniques. Firstly, SEM makes separate and interconnected multiple regression equations simultaneously. Secondly, SEM measures unobserved variables known as latent constructs by analyzing consistency among multiple indicators known as observed variables. The last difference is that research theory including set of relationships and hypotheses are in a model.

SEM analysis has two parts: measurement and structural model validity. This part of the study includes the results of CFA to test measurement model validity.

These results are obtained by using AMOS 18.0 which is a software tool. Maximum likelihood estimation (MLE) procedure is chosen to do CFA. MLE procedure finds the most likely estimates for the coefficients in an iterative manner (Hair et al., 2010). Hair et al. (2010) state that factor loadings of the indicators should be at least 0.5 and ideally 0.70 or greater. It is important that factor loadings should explain half of the variable even if at least 0.5 factor loadings are significant.

Table 1: Descriptive Statistics of the Study

| Characteristic | | Frequency | Percentage |
|--|----------------------|-----------|------------|
| Age | <= 18 | 131 | 28.4% |
| | 19 - 25 | 278 | 60.2% |
| | 26 - 35 | 45 | 9.7% |
| | >= 36 | 8 | 1.7% |
| Gender | Female | 68 | 14.7% |
| | Male | 394 | 85.3% |
| Education | Primary school | 45 | 9.7% |
| | High school student | 115 | 24.9% |
| | University student | 218 | 47.2% |
| | University graduate | 64 | 13.9% |
| | Master/Ph.D. student | 12 | 2.6% |
| Number of followers | 0 - 99 | 167 | 36.1% |
| | 100 - 199 | 134 | 29% |
| | 200 - 299 | 51 | 11% |
| | 300 - 399 | 28 | 6.1% |
| | >= 400 | 82 | 17.7% |
| Number of following | 0 - 99 | 155 | 33.5% |
| | 100 - 199 | 157 | 34% |
| | 200 - 299 | 73 | 15.8% |
| | 300 - 399 | 26 | 5.6% |
| | >= 400 | 51 | 11% |
| Daily frequency to visit Twitter | Never | - | - |
| | Rarely | 43 | 9.3% |
| | Sometimes | 141 | 30.5% |
| | Often | 204 | 44.2% |
| | Very often | 74 | 16% |
| Hourly frequency to use Twitter in a day | 0 - 2 | 305 | 66% |
| | 3 - 5 | 119 | 25.8% |
| | 6 - 8 | 25 | 5.4% |
| | >= 9 | 13 | 2.8% |

In this manner, indicators of perceived usefulness (PU1), social influence (S3), behavioral intention (BI4), and facilitating conditions (FC1) that have 0.58, 0.06, 0.60, and 0.61 factors loadings respectively, are deleted from the model in order to represent the constructs well and increase the goodness of fit indices of the measurement model. After that a new CFA is done. Table 2 shows the results of new CFA. It includes the name of the constructs, indicators, and their factor loadings, square of factor loadings, measurement errors and p-values. According to Table 2, all indicators are significant with 0.001 p-values. PE3, PU3, BI1, BI2, BI3, and FC2 have 0.66, 0.69, 0.67, 0.68, 0.65, and 0.68 respectively. These values are at least 0.50 and very close to 0.70. They do not violate integrity of the constructs.

Table 2: Results of Confirmatory Factor Analysis

| Latent Variable | Indicator | Factor Loading | Factor Loading Squared | Measurement Error | p- Value |
|-------------------------|-----------|----------------|------------------------|-------------------|----------|
| Perceived Ease of Use | PE1 | 0.79 | 0.62 | 0.38 | -* |
| | PE2 | 0.83 | 0.70 | 0.30 | 0,001 |
| | PE3 | 0.66 | 0.44 | 0.56 | 0,001 |
| | PE4 | 0.77 | 0.59 | 0.41 | 0,001 |
| Perceived Usefulness | PU2 | 0.74 | 0.55 | 0.45 | -* |
| | PU3 | 0.69 | 0.47 | 0.53 | 0,001 |
| | PU4 | 0.75 | 0.56 | 0.44 | 0,001 |
| Social Influence | PU5 | 0.85 | 0.73 | 0.27 | 0,001 |
| | S1 | 0.92 | 0.85 | 0.15 | 0,001 |
| | S2 | 0.82 | 0.67 | 0.33 | -* |
| Playfulness | P1 | 0.82 | 0.67 | 0.33 | -* |
| | P2 | 0.84 | 0.71 | 0.29 | 0,001 |
| | P3 | 0.89 | 0.79 | 0.21 | 0,001 |
| Trust | T1 | 0.83 | 0.68 | 0.32 | -* |
| | T2 | 0.77 | 0.60 | 0.40 | 0,001 |
| | T3 | 0.93 | 0.87 | 0.13 | 0,001 |
| | T4 | 0.81 | 0.65 | 0.35 | 0,001 |
| Behavior Intention | BI1 | 0.67 | 0.45 | 0.55 | 0,001 |
| | BI2 | 0.68 | 0.46 | 0.54 | 0,001 |
| | BI3 | 0.65 | 0.42 | 0.58 | -* |
| Facilitating Conditions | FC2 | 0.68 | 0.46 | 0.54 | -* |
| | FC3 | 0.75 | 0.56 | 0.44 | 0,001 |

*not estimated when loading set to fixed value of 1.0

Table 3 shows goodness of fit indices of the measurement model. Chi-square of the model is 404.468 and degrees of freedom is 188. In accordance with Engel, Moosbrugger and Müller (2003), Table 3 includes the acceptable fit intervals and goodness of fit indices of the measurement model. All goodness of fit indices point out that the measurement model is well-designed and indicators represent the related constructs well.

4.2.1. Construct Validity and Normality

In order to assess the construct validity, convergent and discriminant validities are investigated in the study. Hair et al. (2010) and Bollen (1989) state that for construct validity, standardized factor loadings should be at least 0.50 and ideally 0.70 or greater. All the factor loadings in the measurement model are at least 0.50. In addition to factor loadings, construct reliability should be at least 0.70 and average variance extracted should be at least 0.50 as a rule of thumb.

Table 4 shows the construct reliabilities and average variance extracted results for each construct. All construct reliabilities except for facilitating conditions are at least 0.70. On the other hand, construct reliability value of facilitating conditions is relative to 0.70. Moreover, average variance extracted results for each construct except behavior intention are greater than 0.50. The construct, behavior intention has 0.44 average variance extracted which is close to 0.50 and does not violate the integrity of the measurement model. When these all values are taken together and considered, they all support the convergent validity of the measurement model.

Table 3: Goodness of Fit Indices of the Measurement Model (Engel, Moosbrugger and Müller, 2003)

| Chi-Square | Acceptable Fits | |
|-------------------------|-----------------|------------------------|
| Chi-Square | 404,468 | |
| Degrees of Freedom | 188 | |
| Absolute Fit Measures | | |
| GFI | 0,93 | .90≤GFI≤.95 |
| RMSEA | 0,050 | .05≤RMSEA≤.08 |
| Normed Chi-Square | 2,151 | 2<X ² /df≤3 |
| Incremental Fit Indices | | |
| NFI | 0,93 | .90≤NFI≤.95 |
| CFI | 0,96 | .95≤CFI≤1.00* |
| Parsimony Fit Indices | | |
| AGFI | 0,90 | .85<AGFI<.90 |

*good fit

Table 4: Construct Reliability and Average Variance Extracted Results

| Latent Variable | Construct Reliability | Average Variance Extracted |
|-------------------------|-----------------------|----------------------------|
| Perceived Ease of Use | 0,85 | 0,58 |
| Perceived Usefulness | 0,84 | 0,58 |
| Social Influence | 0,86 | 0,76 |
| Playfulness | 0,89 | 0,72 |
| Trust | 0,90 | 0,70 |
| Behavior Intention | 0,70 | 0,44 |
| Facilitating Conditions | 0,68 | 0,51 |

Venkatraman (1989) defines the discriminant validity that a measure does not highly correlated with another measure. In order to establish discriminant validity, Hair et al. (2010) and Fornell and Larcker (1981) compare AVE estimates for each factor with the squared correlations associated with that factor. When it is compared, all AVE estimates in Table 5 are greater than the corresponding construct squared correlation estimates in Table 6. While construct squared correlation estimates are shown above the diagonal, correlation estimates are shown below the diagonal in Table 5. Results reveal that there are not any problem with discriminant validity for CFA model. In addition to construct validity, normality is checked by Kolmogorov-Smirnov test. The results show that all observed variables are normally distributed with 0,001 p-values.

Table 5: Construct Correlation Matrix

| | PE | PU | S | P | T | BI | FC |
|----|---------|---------|---------|---------|---------|---------|------|
| PE | 1,00 | 0,13 | 0,11 | 0,07 | 0,03 | 0,18 | 0,29 |
| PU | 0,36*** | 1,00 | 0,21 | 0,34 | 0,19 | 0,55 | 0,26 |
| S | 0,33*** | 0,45*** | 1,00 | 0,06 | 0,01 | 0,13 | 0,08 |
| P | 0,27*** | 0,59*** | 0,24*** | 1,00 | 0,24 | 0,56 | 0,27 |
| T | 0,17*** | 0,43*** | 0,09*** | 0,49*** | 1,00 | 0,20 | 0,18 |
| BI | 0,43*** | 0,74*** | 0,36*** | 0,75*** | 0,45*** | 1,00 | 0,15 |
| FC | 0,54*** | 0,51*** | 0,28*** | 0,52*** | 0,42*** | 0,39*** | 1,00 |

Significance level: *** = 0.001

Note: Values below the diagonal are correlation estimates among constructs. Diagonal elements are construct variances. Values above diagonal show the squared correlations.

4.3. Structural Model Validity

Structural model validity consists of hypotheses testing. The first results of SEM indicate that the first hypothesis is not supported. In other words, the effect of perceived ease of use on perceived usefulness is not supported in the model. Moreover, in order to achieve a better model, modification indices are examined. Modification indices figure out that there are high correlations between social influence and facilitating conditions, and between perceived ease of use and facilitating conditions. As a result, hypothesis 1 is removed from the structural model and two correlations are added to the structural model to increase model fit. Figure 4 depicts the path diagram of the final structural model.

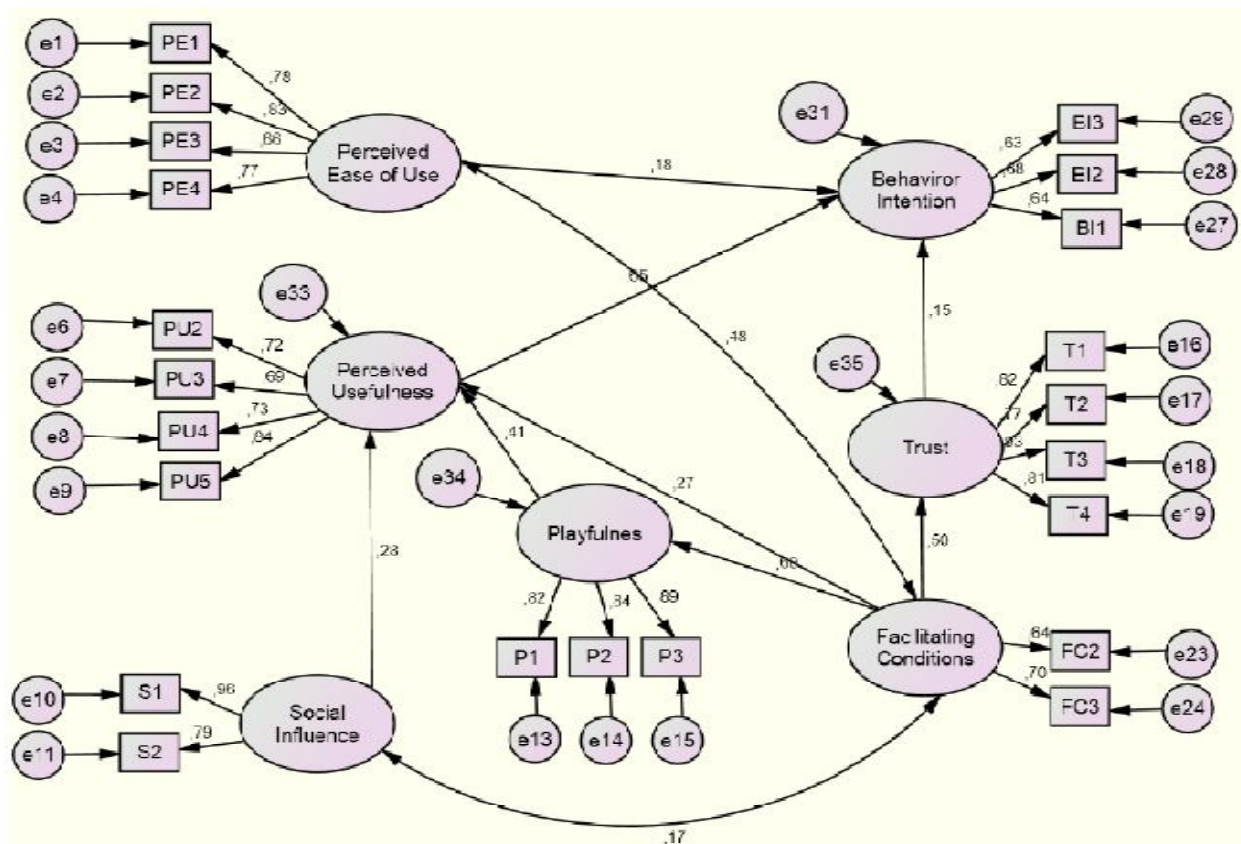


Figure 4: Path Diagram of Structural Model

Table 6 includes regression and correlational weights. According to Table 6, all hypotheses are significant and all p-values except hypothesis 9 are 0.001. These results indicate that hypotheses 2, 3, 4, 5, 6, 7, 8, and 9 are supported in the model. Besides, all correlations are significant, so it is concluded that variables social influence and facilitating conditions, and perceived ease of use and facilitating conditions are positively correlated with each other.

Table 6: Regression and Correlational Weights

| Hypotheses | Regression Weights | p - Values |
|--------------|-----------------------|------------|
| 2 | 0,182 | 0,001 |
| 3 | 0,654 | 0,001 |
| 4 | 0,282 | 0,001 |
| 5 | 0,405 | 0,001 |
| 6 | 0,269 | 0,001 |
| 7 | 0,598 | 0,001 |
| 8 | 0,503 | 0,001 |
| 9 | 0,147 | 0,004 |
| Correlations | Correlational Weights | |
| SI – FC | 0,172 | 0,003 |
| PE – FC | 0,482 | 0,001 |

Table 7 shows the total effects of exogenous constructs on endogenous constructs. Whereas, perceived usefulness, behavior intention, trust, and playfulness are endogenous variables, social influence, perceived ease of use, and facilitating conditions are exogenous variables in the structural model. According to Table 8, facilitating conditions have both indirect (0,242) and direct (0,269) effects on perceived usefulness, so total effects of facilitating conditions is 0,511. In addition, social influence has only direct effect on perceived usefulness. While, facilitating conditions and social influence have only indirect effects on behavior intention, perceived ease of use has direct effect on it. Lastly, facilitating conditions have only direct effects on both trust and playfulness.

Table 7: Total Effects of Exogenous Variables on Endogenous Variables

| | Social Influence | Perceived Ease of Use | Facilitating Conditions |
|----------------------|------------------|-----------------------|-------------------------|
| Perceived Usefulness | 0,282 | - | 0,511 |
| Behavior Intention | 0,184 | 0,182 | 0,408 |
| Trust | - | - | 0,503 |
| Playfulness | - | - | 0,598 |

Table 10 shows the goodness of fit indices of the structural model. It includes the results of the proposed model and acceptable fit intervals. According to Engel et al. (2003), GFI, RMSEA, Normed Chi-Square, NFI, CFI, and AGFI values are in the acceptable fit intervals and all of them indicate that the structural model of the study is well designed and acceptable. In addition, Chi-square of the model is 563,072 and degrees of the freedom is 199.

Table 8: Goodness of Fit Indices of the Structural Model (Engel, Moosbrugger and Müller, 2003)

| Chi-Square | Acceptable Fits | |
|-------------------------|-----------------|----------------------------|
| Chi-Square | 563,072 | |
| Degrees of Freedom | 199 | |
| Absolute Fit Measures | | |
| GFI | 0,90 | .90≤GFI≤.95 |
| RMSEA | 0,063 | .05≤RMSEA≤.08 |
| Normed Chi-Square | 2,830 | 2 < X ² /df ≤ 3 |
| Incremental Fit Indices | | |
| NFI | 0,90 | .90≤NFI≤.95 |
| CFI | 0,93 | .90≤NFI≤.95 |
| Parsimony Fit Indices | | |
| AGFI | 0,87 | .85≤AGFI≤.90 |

5. Conclusion

The popularity of the social media is obvious among the Internet users. People share and express themselves highly from these platforms. In this respect, a study is conducted to analyze the factors having impacts on users' behavior intention to use social media. A research is done by taking the popular social media platform "Twitter" as a case study. Proposed model of the study is based on TAM2 and it is expanded and revised by taking the social media use into consideration. The proposed model includes seven constructs: perceived ease of use, perceived usefulness, trust, playfulness, facilitating conditions, social influence, and behavior intention.

These constructs are measured with an online questionnaire including 26 sub items. The questionnaire is distributed through online channels and the data are collected from 462 respondents. SEM is applied as a research technique to calculate the regression weights simultaneously. First of all, CFA is done to validate the measurement model. According to results of CFA four indicators having less factor loadings are removed from the measurement model. The new measurement results point out that the indicators represent the constructs well. Furthermore, all goodness of fit indices are acceptable and so, the measurement model is valid and acceptable. In addition, convergent validity and discriminant validity are measured. For this purpose, construct reliabilities and average variance extracted values are calculated. All the values indicate a good model.

After that, hypotheses are tested within the structural model. Hypothesis 1 is not supported and removed from the model. Besides, new correlations among constructs are added to model according to modification indices and goodness of fit indices indicate that the structural model is valid. All the hypotheses and correlations are significant.

The results figure out that behavior intent is positively affected by perceived ease of use, perceived usefulness, and trust. It is obvious that the effect of perceived usefulness is greater than the two other constructs. It reveals that if users believe that using social media platforms would enhance their own performances, they are more intended to use these platforms. In addition, social influence, playfulness, and facilitating conditions have positive impacts on perceived usefulness. These results indicate that if a user suggests that the social media is useful, users enjoy it, and facilitating conditions satisfy their needs, then users can believe that social media is useful and have more intention to use it. Lastly, it is concluded that facilitating conditions increase users' trustworthiness to social media platforms and their playfulness.

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