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INVESTIGATING THE INTENTION TO DISCLOSE INFORMATION IN MOBILE BANKING

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Abstract

Purpose: The purpose of this study is to analyze the relationships between User internal stimulus, recognition and behavioral response as three dimensions of MB (MB) adaptation. For this aim, three dimensions of recognition response are introduced based on two theories of Privacy Calculus Theory (PCT) and Expectancy Theory (ET) of motivation.
Design/Methodology/Approach: Data for present study is collected from Electronic company employees. The structural modeling equation (SEM) and SAS 9.2 are used to analyze the relationship among general self-confidence and Cynicism (user internal stimulus), perceived performance, perceived result desirability, perceived risk and intention to disclose information. For this purpose, the theory of Privacy calculus and Expectancy theory of motivation are employed.
Findings: According to the results, all hypothesizes are supported and the significant relationships between variables are proved. Thus, self-confidence has a stronger effect on performance expectancy, perceived risk and perceived benefits than cynicism. Moreover, it was detected that cynicism has a significant negative relationship with perceived benefit which indicate that negative emotions about individuals can lead to less outcomes and rejection of MB applications.
Originality/value: The existing literature on MB emphasizes greatly on the

perception of Technology fit and hardly examines the behavioral aspects of MB adaptations. Specifically, in this study, internal stimulus including general self-confidence and Cynicism is analyzed as a rarely known part. This dimension is affecting on intention to disclose information in virtual space of MB.

Keywords: **Self-Confidence; Cynicism; Intention to Disclose Information; Perceived Benefits; Perceived Risk**

INTRODUCTION

Today, privacy is one of the most important concerns among people throughout the world. While, it is claimed that people are attached to use internet application in their daily communications and financial transactions, MB have created more concerns related to privacy and information disclosure. According to the literature Joseph and Stone, the penetration rate of using mobile technologies is higher than all other technologies. This phenomenon is emerged and spread among developed and developing countries rapidly, which is turning this trend to technological revolution. According to the latest statistics in Iran, more than 60 percent of people are using internet and 40 percent of internet users are among age of 20-29 years old and more importantly, internet connection via mobile is among the most favorite internet connections devices. It is important to note that internet penetration rate is about 43.33 percent in Iran. While there is credible statistics reminding the eye-catching growth rate of using mobile internet among Iranian young mobile users, MB is only caught 5 percent of this population. Clearly, there are strong potential opportunities for different types of banks for catching this target and increase their profitability. This gap shows the need to do more exploration for which factors are impeding people from using MB in their financial transactions. Although, there are several Iranian researches related to MB adaptation factors [1-3], there are few studies which both are concentrating on privacy fields and non-student users. Some of the privacy rules and information protection rights are undeveloped in this emerging economic and some of researchers believe that since using MB is accompanying with data input and output mechanisms, some people might be afraid of making mistake when they are using MB application [4-6]. As a result, it is important to find what items are more important in users' adaptation with MB technology. In present study, we are aimed to explore the origins of Iranians concerns with MB applications. For this aim, we have planned to explore privacy calculus theory, the theory of maximization and Expectancy theory of motivation. Significantly, this paper is organized into five sections. Following the Introduction, Section 2 explains the proposed research model based on the privacy calculus model and presents the research hypotheses. Section 3 describes the research methodology. Section 4 presents the empirical findings and model results. Finally, Section 5 provides the conclusion and remarks with theoretical contributions, management implications, and

suggestions for future research.

LITERATURE REVIEW

MB in Iran

According to the formal report, Iran is among the first thirteen countries in world in using internet. More than 60 percent of people in this country is using internet in their daily works and more significantly, more than 40 percent of this population is young people. While, there is a strong potential opportunity for banks to jump into this commercial innovation, just 5 percent of people are using MB in their daily transactions. Iran as the emerging economy needs to concentrate more on privacy fields related to rules, regulations and security facilities. According to the formal report, there are few banks which are pioneer in providing MB services for example Saman and Sina Banks for private Banks and Saderat and Maskan for governmental Banks. Although, there are several studies related to factors predicting MB adaptation, there is still a gap in exploration in Privacy calculus field. According to Brown, et al. trust of clients is a key factor in success of mobile banking. Hence, the issue of privacy is highlighted in aim of building trust. For taking a better understanding of what factors are considered in MB adaptation in Iran, a review of articles is provided in Table 1. By reviewing these articles, it is detected that almost all of them are concentrating on the field of Technology, social norms and attitude measurement. However, none of these articles focused on the field of information security specifically. Significantly, there is a deep gap related to the privacy protection and security issues. Ultimately, this article aims to fill this gap by covering the role of privacy protection by considering the privacy calculation protection and motivation expectancy theories. In Table 1 a review of Articles focus on MB adaptation in Iran within 2007-2017 is presented.

Table 1: Articles focus on MB adaptation in Iran.

Row	Author	Title	Variables	Remarks
1	Upadhyay and Jahanyan	Analyzing user perspective on the factors affecting use intention of mobile based transfer payment	System and Task Fit Technical Perspective User Characteristics Perceived usefulness Perceived Ease of Use Use Intention Of Mobile Money Externalities	The study finds that factors like perceived usefulness, perceived ease of use, system quality, connectivity, discomfort, task-technology fit, and structural assurance have significant impact on the usage intention of mobile money services whereas factors such as perceived monetary value, Absorptive capacity and personal innovativeness have been found to be insignificant.

2	Mohammadi	A study of MB loyalty in Iran	Attitude Personal innovativeness Subjective norms	System compatibility was found to be the main factor affecting users' attitudes towards use of MB. Resistance showed a significant negative effect on both ease of use and usefulness. Perceived usefulness mediated the relationship between ease of use and users' attitudes. At last, both subjective norms and personal innovativeness moderated the relationships between usefulness and attitude.
3	Hanafizadeh, et al.	Mobile-banking adoption by Iranian bank clients	usefulness, perceived ease of use, need for interaction, perceived risk, perceived cost, compatibility with life style, perceived credibility and trust	It was found that these constructs successfully explain adoption of MB among Iranian clients. Adaptation with life style and trust were found to be the most significant antecedents explaining the adoption of MB.
4	Hanafizadeh et al.	A systematic review of Internet banking adoption	Qualitative study	The findings reveal that the IB adoption literature can be classified according to three main themes: whether the papers seek to describe the phenomenon, whether they seek to understand the interplay between the factors that drive adoption (relational); or whether they seek to draw higher level conclusions through a comparison across populations, channels or methods.
5	Mehrad, Mohammadi [1]	Word of Mouth impact on the adoption of MB in Iran	Word of Mouth Attitude and Intention Initial Trust, social norm, Perceived ease of use, Perceived usefulness	The results revealed that "Word of Mouth" was found to be the main factor affecting users' attitudes toward the use of MB. "Word of Mouth" positive impact on other factors affecting the adoption of MB was also approved.

6	Sarokolaei, et al.	The investigating of barriers of development of e-banking in Iran	Qualitative research	The results show that excluding of financial and economic barriers; other barriers are as an obstacle to the development of e-banking.

MB Adaptation Theories

The literature revealed that different scholars employed different models to detect how different factors affect MB adaptation. There is no doubt that Theoretical foundation is essential for every scholar in each area. It is conventional that researchers use theoretical foundations as a principle to answer research questions with predictive explanatory power. Some scholars such as Oliveira, et al. [7] and Lin, et al. [8], Afshan and Sharif [9] combined two or more theories and models under a single theoretical framework to make the model more comprehensive. Some other researchers like Wessels and Drennan [10] used their own models.

In present study we focus more on the theory of privacy calculus. Wang, et al. [11] used PCT theory to investigate the Intention to disclose personal information via mobile applications. The result of investigation shows that self-presentation and personalized services positively influence consumers' perceived benefits, which in turn positively affects the intention to disclose personal information. Perceived severity and perceived control serve as the direct antecedents of perceived risks that negatively affect the intention of consumers to disclose personal information. Compared with the perceived risks, the perceived benefits more strongly influence the intention to disclose personal information. In another study Zhu, et al. [12] investigated Privacy calculus and its utility for personalization services in e-commerce. They believe that there is a lack of investigations to address the contradiction between personalization and privacy calculus. As the result, they introduced a utility model of privacy in personalization. Li [13] presented an integrated framework by reviewing the theories in online information privacy research. The framework highlights two interrelated trade-offs that influence an individual's information disclosure behavior: the privacy calculus (i.e., the trade-off between expected benefits and privacy risks) and the risk calculus (i.e., the trade-off between privacy risks and efficacy of coping mechanisms). A decision table based on the dual-calculus model was provided to predict an individual's intention to disclose personal information online. Finally, Li [14] investigated the effect of disposition to privacy, website reputation and website familiarity on information privacy concerns. The result of this study indicated that there is a direct relationship between disposition to privacy, website reputation, and personal familiarity and website-specific privacy concerns. The impact of privacy experience on disposition to privacy was also confirmed. Then, in present study, we have explored the word of MB, M-banking and privacy calculus theory within the years of 2009-2017 in Elsevier and Emerald databases. As the result of investigation among more than 60 MB

articles, 34 articles are selected to be analyzed as the foundation for this study. The logic behind this selection was based on the close relevance in abstract, topic and details. The result of this investigation is presented in the following Tables (Tables 2 and 3).

Table 2: Theories employed in 34 selected articles within 2009-2017.

Row	Theory	Author	Definition
1	TAM technology acceptance model	Aboelmaged and Gebba, [15]; Chitungo and Munongo, [16]; Safeena and Kammani, [17] Luarn and Lin [18] Mohammadi [1] Tam and Oliveira [19] Gu et al. [20] Lin [21]; Shaikh et al. [22]; Mehrad and Mohammadi [23]	It is a theoretical model used to explain users' acceptance of a new information technology
2	TPB Theory of planned behavior	Luarn and Lin [18]; Lee [20]	It indicates that perceived behavioral control was added as a third determinant to the existing attitude toward behavior and subjective norm
3	ITM Initial Trust Model	Lin [18]; Oliveira, et al. [7]; Lee and Chung; Sharif and Afshan [9]	It represent that trust is playing a significant role in technology adaptation. Trust is also negatively related with risk.
4	UTAUT Unified Theory of Acceptance and Usage of Technology	Tan et al.; Yu, [24] Baptista and Oliveira; Luo and Li and Zhang and Shim [25]; Oliveira, Faria, Thomas and Popovi˘c [7]; Alalwan, K. Dwivedi and P. Rana [26]; Afshan and Sharif [9]	Venkatesh, Morris, Davis, and Davis (2003) created a unified model called the UTAUT based upon conceptual and empirical similarities across eight different models.
5	TTF Task Technology Fit Model	Tam and Oliveira [19]; Oliveira, Faria, Thomas and Popovi˘c [7]; Afshan and Sharif [9]	In this case, users' performance will occur when the technology meets the users' needs and provides features that support the fit of the requirements of the task.
6	TPC Theory of privacy calculus	Ndlovu, [27]	This theory indicates that an individual's motivation to disclose information is dependent on a calculus of behavior in which potentially competing factors are weighed considering possible outcomes.

Table 3: Related works with Privacy concerns (within 2009-2017).

Row	Authors	Year	Variables	Theories employed in this article
1	Sun, et al. [28]	2015	Perceived benefits, Privacy risks Intention to disclose location information Hedonic benefits, Utilitarian benefits	Privacy calculus theory
2	Gu, et al.	2016	Perceived permission sensitivity Privacy concerns, Permission justification, Perceived app popularity, Privacy victim experience	Elaboration model Privacy calculus theory
4	Wu, et al. [29]	2012	Online privacy policy (Notice, Choice, Access, Security, Enforcement), Privacy Concern, Trust, Willingness to provide personal Information, Power distance,	Privacy–Trust–Behavioral Intention model
4	Kokolakis [30]	2017	This Article presents the results of a review of research literature on the privacy paradox.	Social theory, quantum theory.
6	Li [13]	2012	Privacy concern, Privacy calculus, Risk calculus	Dual-calculus model
7	Hofstra, et al. [31]	2016	Privacy, Social networking sites, Adolescents, Trust, Popularity	Privacy calculus theory
8	Nguyen, et al. [32]	2016	Identity, Privacy attacker identity, privacy premiums, Privacy valuation,	multi-attribute utility theory
9	Mohammed and Tejay [33]	2017	Internet safety perception, willingness to transact online, Ecommerce acceptance, Privacy concern, internet safety perceptions, Personal Interest	Hofstede's theory of cultural differences, Privacy calculus theory
10	Veltri and Vchenko [34]	2017	Cognitive scarcity, information disclosure, ego depletion, working memory load	Privacy calculus theory, Privacy Paradox theory
11	Hirschprung, et al. [35]	2016	Probability of disclosure	Behavioral economics' Prospect Theory, Value of Privacy Estimation, Privacy calculus theory
12	Zhu and Chang [36]	2016	Relevance, Privacy invasion, Self-awareness, Use intentions	Rational choice theory and self-awareness theory.

13	Morosan, DeFranco [37]	2015	Privacy calculus, Emotions, Value, Trust.	Privacy calculus theory
14	Wang et al. [11]	2016	Self-presentation behavior, Perceived benefits, Personalized services, Perceived severity, Perceived control, Perceived risks, Intention to dis-close personal information	privacy calculus theory
16	Li, et al. [38]	2015	Privacy disclosure composition Scope of privacy disclosure Sensitivity of this information	Generalized linear model Privacy calculus theory Communication privacy Management theory
17	Miltgen and Smith [39]	2015	Regulatory knowledge, Perceived privacy regulatory protection, Trust, and Privacy risk concerns, Protection behavior and regulatory preferences	privacy calculus theory
18	Reed, et al. [40]	2016	Gender egalitarianism, Humane orientation, Assertiveness, Performance orientation,	privacy calculus theory, Hofstede's theory of cultural differences
19	Li, et al. [41]	2016	Individuals' decisions to adopt, Perceived privacy risk, Perceived benefit	Privacy calculus theory

HYPOTHESIS AND CONCEPTUAL MODEL

Theory of Privacy Calculus

This theory indicates that an individual's motivation to disclose information is dependent on a calculus of behavior in which potentially competing factors are weighed in considering possible outcomes [42,43]. This theory assumes that an individual perception of risk-benefit analysis influences a person interest to disclose his privacy within a specific information-disclosure context [44,45]. Most of the researches used theory of technology acceptance in their model. According to Hanafizadeh, et al. [46,47], almost 40% of all papers in this section are carried out

via TAM. As a result, it is important to employ the theory of privacy calculus to answer the gaps in technology acceptance and individual desire to share their information in virtual context of MB. This theory is recognized as one of the important predictors of individual's behavior as the person's behavior is predicted by analysis of perceived benefits against risks.

During the literature, there are several studies which introduced factors affecting on privacy calculus including website reputation [48,49], information sensitivity and self-efficacy [50] as factors which might encourage individuals to disclose personal information. Zhu, et al. [12] used PCT as the theory foundation to evaluate personalization services in E-commerce. In this study, Zhu, et al. [12] uses the theory of PCT to address the lack of balanced research that analyzes the contradiction between privacy and personalization service. For this reason, they use multi-attribute utility theory to introduce utility model of privacy in personalization. Finally, this simulation model predicts the significant distinctions of calculating benefits and costs among consumers [51].

In another study, Wang, et al. [11] employed PCT as a foundation theory of their study to disclose personal information via mobile applications. They have investigated the effect of variables of personalized services, self-presentation behavior, perceived control of personal information disclosure, and perceived severity of personal information disclosure on individual disclosure.

Ultimately, the results show that self-presentation and personalized services positively influence consumers' perceived benefits, which in turn positively affects the intention to disclose personal information. Perceived severity and perceived control serve as the direct antecedents of perceived risks that negatively affect the intention of consumers to disclose personal information [11]. According to Li [13] three theories can be related to PCT including utility maximization theory, expectancy theory of motivation and expectancy-value theory in following these two theories are discussed (Table 4).

Table 4: Theories related to Privacy calculus in decision making.

Category	**Theory**	**Construct**	**Research employed this theory**
Expectancy and utility	Theory of utility maximization	Maximum Utility, Maximum satisfaction,	Xu et al [79], Bansal, et al. [49]
	Expectancy theory of motivation	Performance instrumentality, the result desirability	Dinev and Hart [50]

Expectancy Theory of Motivation

This theory suggests that the motivation for a behavior is determined by the desirability of the outcome. It depicts the cognitive process of how an individual processes different motivational element in three stages: expectancy that a certain effort will lead to the intended performance, the instrumentality of this performance to achieve a certain result, and the desirability of this result for the individual. The three stages together determine the desirability and motivation for a behavior [51]. In this study, however, expectancy theory of motivation is viewed through performance expectancy and result desirability. Our ration for choosing this variable is related to theory of reasoned action. Based on this theory, Fishbein and Ajzen [52] asserted that people usually adapt with a technology that give them positive benefits in comparison with perceived risk. Then, it should be asserted that PCT is a kind of trade-off theories.

Moreover, Hanafizadeh, et al. [5] mentioned that perceived usefulness and risk and performance expectancy are related to attitude. Consequently, according to the theory of reasoned action and expectancy theory of motivation, we assume that performance expectancy can lead to the higher level of success values and learning MB implementation. Moreover, result desirability is leading to the higher level of perceived success and learning MB implementation. Since, individual perception of enough desirability of results can motivate individuals to learn how to use MB and success; we will assign higher values to intention to disclose information. However, in this case, based on the theory of reasoned action, we consider usefulness as the favorite result that individual expect MB Apps to provide it. Based on all reason mentioned, we propose the following hypotheses:

H1: Higher perceived performance expectancy is positively related to intention to disclose information.
H2: Higher perceived usefulness is positively related to intention to disclose information.
H3: Higher perceived risk is negatively related to intention to disclose information.

Self-Confidence

As Chuang, et al. [53] stated self-confidence is related to uncertainty and risk perception. White, et al. [54] indicates that self-confidence is an individual belief in his abilities and strength and having the courage to act regarding his goals/skills and values. Moreover, some of researchers believe that people with low level of self-confidence need other's approval and appropriation to feel successful and not to perceive themselves unsuccessful and worthless [55]. Our rationale at choosing this link (self-confidence and cynicism, perceived performance expectancy and perceived usefulness) is originated in theory of performance and theory of privacy calculus. Eraydin and Karagozoglu [56] believe that a person without self-confidence is not

able to express his opinion, convey his emotions or solve problems in everyday life. Several of researchers indicate that low levels of self-confidence and high levels of submissive behaviors among people lead to inability to develop themselves, feeling to unsuccessfulness and worthlessness and lack of assertiveness [57]. Consequently, highly self-confident person assigns more value to success and has a more favorite attitude toward success. Moreover, this person is more motivated to learn how to use MB, since; they perceive learning more pleasant and attractive. It is worthy to mention; higher level self-confident individual is more likely to have a better perception of performance expectancy. Ultimately, it is assumed that because of having favorite feelings, these people perceive results (in present study usefulness) in a better way and would have a stronger intention to disclose information. Based on the above, we propose the following hypotheses:

H4: General self-confidence has a positive impact on perceived performance expectancy.
H5: General self-confidence has a positive impact on perceived usefulness.
H6: General self-confidence has a negative impact on perceived risk.

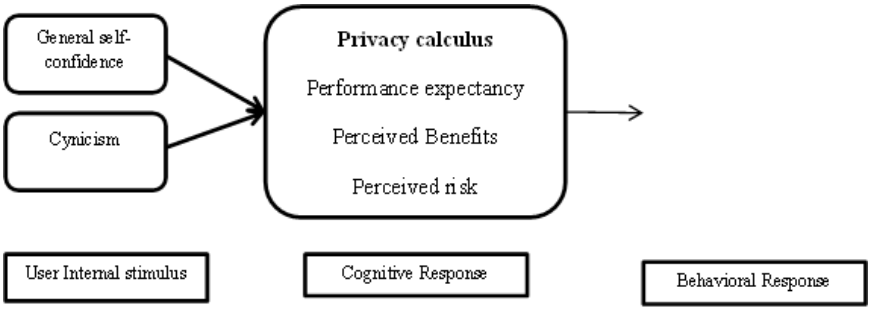
Cynicism

Cynicism refers to the inclination to believe that people are motivated purely by self-interest. Simha, et al. [58] equate cynicism as being the same as depersonalization. Recent theories of cynicism are going beyond considering it as a trait or personality. Cynicism is usually considered as a component of attitudes [59]. Kuokkanen and Sun [60] indicated that there are a few studies related to the role of cynicism in marketing and most of researches devote their focus on the role of cynicism in behavioral science. It is essential to distinguish between two words of skepticism and cynicism. Cynicism is more about personality trait or a habitual disposition of thinking, but skepticism is a special behavioral response to a certain kind of input, event or situation. Kuokkanen and Sun [60] believe that cynicism motives behind communication but skepticism focus more on messages communicated only. As the result, in present study we focus more on cynicism which as a profound effect on consumer surveys. There are several studies associated with the role of organizational cynicism [61-64]. Some of studies in marketing field focus on the role of cynicism on explaining the consumer behavior and their general reactions toward companies advertising or consumer disappointment in company [65-67]. In this study, we assumed that cynicism is presenting the negative side of human behavior and furthermore, it can influence human perception of desirability of results and performance expectancy in MB. It is hypothesized that cynicism is effective in predicting the intention to disclose information by strengthening the cognitive behavior (performance expectancy and desirability of results). Based on all these reasons, we hypothesized that:
H7: Cynicism is negatively related with perceived performance expectancy.
H8: Cynicism is negatively related with MB perceived usefulness.
H9: Cynicism is positively related with MB perceived risk.

Conceptual Research Model

Based on the hypotheses presented in the theoretical framework of the study, the conceptual model is developed in Figure 1. The factors of General self-confidence, Cynicism, Performance expectancy, Perceived usefulness, intention to disclose information in MB are used to test in this model.

Figure 1: Conceptual model of research.



Data Collection

This study was conducted in Iran as a developing country which is moving toward online facilities and exploiting the new forms of information technologies. Iranian bank customers are still reluctant to accept MB services even though it is more than 10 years that Iranian banks are delivering this service to people. As the result, we select Iranian context to analyze the effect of internal traits on recognition response and behavioral response.

The data for this study was collected by the means of a survey conducted in Mashhad Electrical Company in Iran in 2017. The paper-based questionnaire of this study was distributed among 214 people in this company, the returned questionnaire was 190. Table 5 shows the demographics information of respondents including age, gender, experience and education.

Table 5: Demographics of respondents.

Variable		**Frequently**	**Percentage**
Age	18-25	25	13
	25-35	72	31
	35-45	52	27
	45-55	31	16
	Above 55	15	13
Gender	Male	78	41
	Female	112	59
Experience	1 year and less	57	30

	2-3 years	51	27
	3-4 years	22	12
	4 years and more	35	19
	No experience	25	13
Education	Diploma	31	16
	Upper Diploma	56	29
	Bachelor	41	21
	MA	38	20
	PhD	24	12

The Research Instruments

The questionnaire is consisted of 7 parts. The first part is allocated to general information about respondents including age, education, gender, experience and the case of using MB. More details about sociometrist information are reported in Table 5. The rest of article is associated with specialized questions related to research. Self-confidence and cynicism both are adapted from Charolais, et al. which include respectively 10 and 6 items. Then, perceived risk and perceived benefit and performance expectancy and intention to disclose information are adapted from Cheng, et al. [53] which include 4,4,3,2 items respectively.

In addition, all these parts are measured with seven-point Likert scales ranging from totally disagree (1) to totally agree (7). Table 2 provides details on the items used to measure the study constructs and their corresponding psychometrics characteristics.

Table 6, lists the standardized factor loadings and Cronbach alpha values, as it is clear on Table 6, most of factor loadings are greater than 0.7 which showing the minimally accepted construct reliability. Thus, it is detected that the scale has a convergent validity. Moreover, almost all alpha values are more than 0.7 which shows the acceptable reliability of research scale. On the other hand, in Table 7, information disclose, with R2=0.419 is partially predicted by its predictors, and the left 0.581 lies in prediction error. Thus, it seems logic to interpret that 0.419 of the variation in information disclosure is explained by its predictors in model. In addition, perceived risk with R2 of about 0.411 is proven to be well predicted by its predictors (cynicism and self-confidence).

Moreover, performance expectancy with R2 of about 0.330 is predicted well by predictors (cynicism and self-confidence) and the left 0.67 lies in prediction error. However, the only factor, perceived benefit with R2 of about 0.008 is predicted by cynicism and self-confidence weak. According to the Field, it might be rational for human behavior to become unpredictable as it is difficult to be predicted. Hence, path coefficients are better predictors. The numerical value for VIF indicates that (in decimal form) what percentage the variance (i.e. the standard error squared) is inflated for each coefficient [68]. As it is visible on Table 8, Variance inflation factor (VIF) for variables which are information disclose, perceived risk, perceived benefit,

performance expectancy, cynicism and self-confidence are greater than 1 which indicate that they are moderately correlated.

Moreover, in Table 8, the correlation among research variables are presented. According to the result, the linear relationship among cynicism and perceived risk is stronger than other variables. In addition, based on the correlation results, the linear relationship among cynicism and perceived benefit is too weak and vice versa. Hence, there is a weak linear relationship among perceived benefit and cynicism. Moreover, based on Table 8, there is a strong linear linkage among self-confidence and perceived risk which is the strongest relationship.

Table 6: Research instrument.

Variable	**Questions**	**Standardized factor**	**Alpha**
Cynicism	People will tell a lie if they can gain by it	0.806	0.84
	People claim to have ethical standards regarding honesty and morality, but few stick to them when money is at stake.	0.681	0.68
	People pretend to care more about one another than they really do	0.521	0.82
	It's pathetic to see an unselfish person in today's world because so many people take advantage of him or her.	0.645	0.91
	Most people are just out for themselves	0.769	0.96
	Most people inwardly dislike putting themselves out to help other people	0.654	0.89
	Most people are not honest by nature.	0.806	0.9
Self-confidence	I feel capable of handling myself in most social situations	0.584	0.78
	I seldom fear my actions will cause others to have a low opinion of me	0.682	0.74
	It does not bother me to have to enter a room where other people have already gathered and are talking.	0.532	0.076
	In group discussions, I usually feel that my opinions are inferior	0.597	0.77
	I don’t make a very favorable first impression on people	0.631	0.78
	When confronted by a group of strangers, my first reaction is always one of shyness and inferiority.	0.689	0.82
	It is extremely uncomfortable to accidentally go to a formal party in street clothes.	0.727	0.85

	I don't spend much time worrying about what people think of me.	0.834	0.88
	When in a group, I very rarely express an opinion for fear of being thought ridiculous.	0.758	0.84
	I am never at a loss for words when I am introduced to someone.	0.584	0.85
Perceived risk	Providing the mobile applications with my personal information would involve many unexpected problems.	0.79	0.91
	Disclosing my personal information to mobile applications would be risky.	0.738	0.95
	The potential for loss in disclosing my personal information to mobile applications would be high	0.613	0.92
Perceived usefulness	My job would be difficult to perform without mobile financial services	0.62	0.95
	Using mobile financial services gives me greater control over my work.	0.922	0.96
	Mobile financial services enable me to accomplish tasks more quickly.	0.646	0.97
	Mobile financial services support critical aspects of my job.	0.723	0.95
Performance expectancy	Using MB would enhance my effectiveness in using banking services.	0.743	0.89
	Using MB would improve my performance in using banking services.	0.817	0.88
	I found MB useful.	0.999	0.86
Information disclose	I am willing to disclose my personal information	0.587	0.76
	Disclosing my personal information to this application for its product and services is unlikely for me (reverse code)	0.887	0.89

Table7: Main Statistics.

Variable	**R Square**	**VIF**
Cynicism		1.477
Information disclose	0.419	1.563
Perceived benefit	0.008	1.325
Perceived risk	0.411	1.041
Performance expectancy	0.330	1.369
Self confidence		1.477

Table 8: Pearson correlation coefficient, N=190 Probe > |r|, under H0: Rh0=0.

Variable	Cynicism	Self-confidence	Risk	Benefit	Expectancy	Disclose
Self-confidence	-	1.0000	0.56317	0.12340	0.12640	0.41735
Risk	-	-	1.0000	0.25942	0.21359	0.31176
Benefit	-	-	-	1.000	0.57949	0.24771
Expectancy	-	-	-	-	1.0000	0.56549
disclose	-	-	-	-	-	1.0000
Cynicism	1.0000	-	0.52053	-0.01692	0.01114	0.029154

Path Coefficients

Path coefficient is a standard version of linear regression weight which is used to find possible casual relationships between statistical variables in the structural equation modeling. This means multiplying the ordinary regression coefficient by the standard deviations of corresponding explanatory variable which help to assess the relative effect of the variables within the fitted regression model. As listed in Table 9, self-confidence (path coefficient: 0.164, $p<0.05$) shows the greatest significant effect. Among the factors influencing perceived benefit, self-confidence shows the stronger effect (path coefficient: 0.102, $P<0.05$) and cynicism with the (path coefficient: -0.031, $P<0.05$) shows the significant negative effect on perceived benefit.

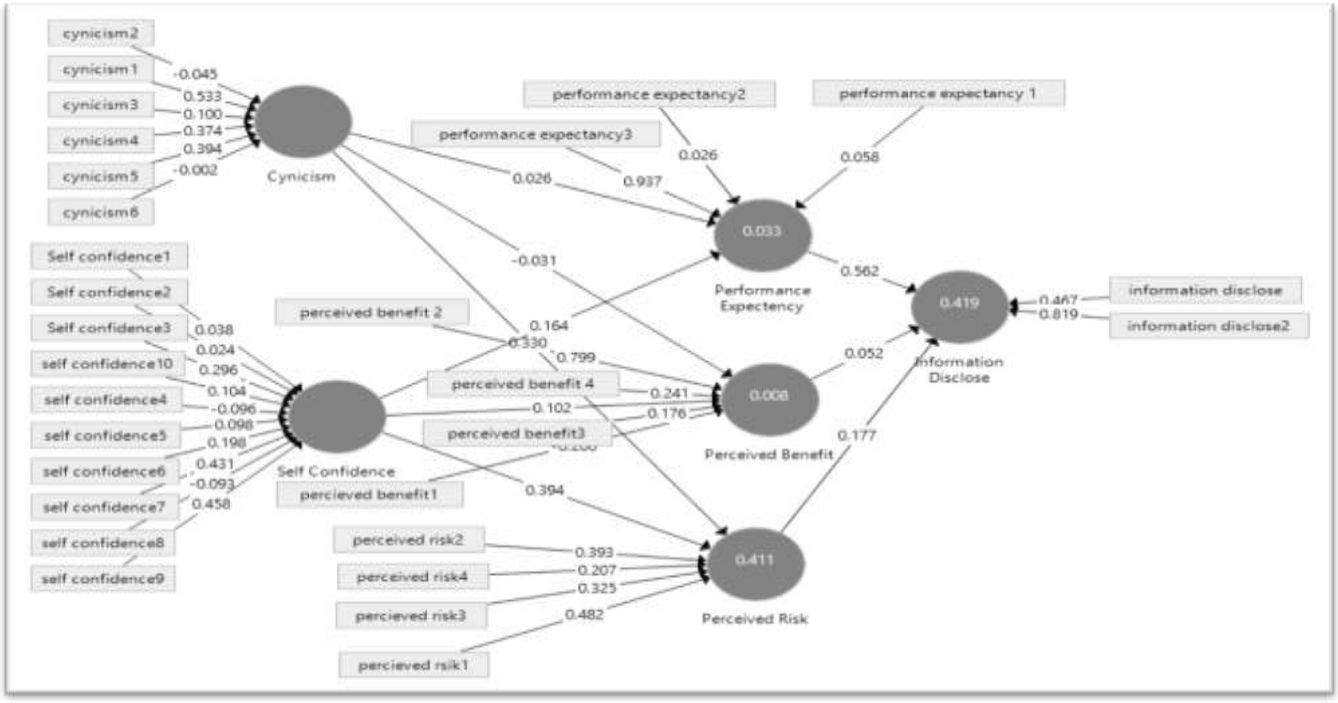
In addition, between factors influencing perceived risk, self-confidence has stronger effect (path coefficient: 0.394, $P<0.05$) and cynicism (path coefficient: 0.164 and $P<0.05$) represents the least positive significant effect. Moreover, according to the statistical results, performance expectancy represents the significant positive effect of information disclosure (path coefficient: 0.56 and $P<0.05$). Whereas, perceived benefit has the least effect (path coefficient: 0.052 and $P<0.05$) which means the least significant positive effect on information disclosure. Path coefficients and their significance are presented in Table 9 and Figure 2.

Table 9: Path coefficient and significance*.

Question	Path	Path coefficient	Supported or not
Q1	Cynicism » perceived benefit	-0.031	Supported
Q2	Cynicism » perceived risk	0.33	Supported
Q3	Cynicism » performance expectancy	0.26	Supported
Q4	Perceived benefit » Information disclose	0.052	Supported

Q5	Perceived risk » Information disclose	0.177	Supported
Q6	Performance expectancy » Information disclose	0.562	Supported
Q7	Self-confidence » perceived benefit	0.102	Supported
Q8	Self-confidence » perceived risk	0.394	Supported
Q9	Self-confidence » performance expectancy	0.164	Supported
*Significance at 0.05			

Figure 2: Path analysis of research model.



DISCUSSION AND CONCLUSION

The result of the empirical study confirmed the conceptual model and the research hypothesis. Since performance expectancy, perceived benefit and perceived risk, have a positive significant effect on information disclosure, it can be concluded that self-confidence and cynicism both have indirect effect on information disclosure. In fact, the mobile banking system needs to pay more attention to self-confidence and cynicism. Among these items, self-confidence shows the stronger effect on perceived risk and information disclosure. This confirms what Chaouali, et al.

concluded in their study that general self-confidence have stronger effect on information disclosure and this results are also corresponded with Luarn and Lin [18] which indicated perceived trust or credibility of users, in relation to Web systems, has a striking influence on their willingness to engage in online shopping, banking and the exchange of money and sensitive personal information. According to the statistical results, cynicism has a significant negative relationship with perceived benefits. It means that higher feelings of skepticism lead to lower benefits perception and lower sense of information disclosure. This is consistent with Ketron, et al. [69] which indicates that higher levels of consumer cynicism have an amplifying effect on the influence of consumer cynicism on perceived deception. Moreover, Scott and Zweig [70] mentioned that cynicism will mitigate the organizational and individual outcomes. Moreover, according to the results there is a positive relationship between self-confidence and performance expectancy which means that people with higher level of confidence have higher level of performance expectancy. When one has a strong confidence, more expect systems to act correctly. These findings also confirm what Chaouali, et al. mentioned in their study that people with higher level of self-confidence are highly likable to disclose their financial information in online systems. This finding is also consistent with Eraydın, and Karagözoğlu, [56] which indicate that self-confidence can convey positive feelings of doing big works to catch positive experience, as the result, it is likable to have positive effect on performance expectancy and information disclosure. Also, self-confident people can perceive more benefit and lower risk related to using MB systems. What makes this research different from other studies is the theory of calculus theory, which is one of the most important theories for using and modifying in online literature. According to Majumdar [70], privacy calculus theory includes the decision-making process of individuals to predict certain behavioral outcome including personal information disclosure and intention to use an e-commerce site. This study is emphasizing on two theories of expectancy and privacy calculus to predict what important factors can influence the intention to disclose information on MB systems [71-75]. In fact, there are far few studies which pay attention on personality attributes to predict which factors play role in individual intention to use MB in their daily financial transactions. Findings can be reported in two parts: first, self-confidence is a more powerful predictor for information disclosure and can also influence perceived risk stronger than other factors. Higher level of self-confidence leads to perceive lower risk from using MB in their daily transactions, which cause individuals to have stronger desire for information disclosure. From another hand, cynicism which includes several kinds of negative emotions toward people is negatively related with perceived benefit which means people with cynicism emotions are more likely to perceive fewer benefits and perceive more risk of using MB in their transactions. Hence, they are highly probable to disclose less financial information via MB applications. Second part of findings emphasizes that performance expectancy, perceived benefit and perceived risk are positively related to information disclose. Finally, this study indicates that what factors from individual personality can be effective and explainable in privacy calculus theory [76-80].

Practical Implication

The existing literature on MB emphasizes greatly on the perception of Technology fit and hardly examines the behavioral aspects of MB adaptations. Specifically, in this study, internal stimulus including general self-confidence and Cynicism is analyzed as a rarely known part. This dimension is affecting on intention to disclose information in virtual space of MB. It is recommended to managers to use some strategies to increase the consumer awareness of how to use MB. It can be done by advertising or manipulating the MB process to make consumers confident and thereby decrease their suspicion. In aim of mitigating the cynicism, it would be useful to ask consumers to send their feedbacks about MB applications (technical, appearance and ethics). From theoretical aspects, two variables of desirability maximization theory including perceived general utility and perceived general risk relate to information discloser. It means that perceived risk causes lower perceived desirability and lower intention to disclose information in MB. On the other hand, perceived general utility is positively related with disclose intention. Hence, it can be concluded in this study that two theories of utility maximization and privacy calculus can be mixed with together. Moreover, personality features and stimulus can play a major role in users' perceived risk and utility and perceived privacy.

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