

## **Theoretical Consideration: Internet Banking Acceptance in Kingdom Of Jordan**

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**ABSTRACT:** *Since the similarities between people across the globe are not easy to measure, it is also not easy to recommend and create rules that explain how all people make buying decisions. The purpose of this study is to examine the applicability of theory of reasoned action (TRA) in a context of internet banking intention using structural equation modeling (SEM). The simplified theory is tested using survey data from 435 respondents. Out of these, only 411 questionnaires are found to be usable whilst the rest are omitted owing to the incomplete responses or due to statistical circumstances. Results suggest that Compared to the TRA model, our generating model can create a much better understanding of actual internet banking behavior among Jordanian consumers in Amman. The results indicated that direct paths from attitude to actual behavior and when adding a path from subjective norm to attitude would improve the predictive power of the model and convincing improvement in fit, more so than what had been established by the original TRA model.*

**Keywords** - *TRA theory, Subjective norm, Attitude, Internet banking, Kingdom of Jordan.*

### **I. INTRODUCTION**

The theory of reasoned action (TRA) [1], originally introduced in the field of Social Psychology, has been widely used to explain individuals behavior. The TRA hypothesizes that behavior is predicted by an individual's intention to engage in a given behavior. Intention, in turn, is predicted by two factors, the individual's attitude towards the outcome of the behavior and by the opinions of the person's social environment, which is called the subjective norm [1]. However, experienced scholars who analyze customer behavior have presented a useful "outline" or set of guidelines of acceptable conduct or procedure regarding how a consumer decides to make a purchase. It is very important to validate and generate TRA theory before it is adopted in relation to consumer behavior in Kingdom of Jordan. "Emic measures of etic latent constructs are required for Theory of Reasoned Action" [2]. In addition, Bang [3] contends that, the TRA model contains Western cultural biases. Researchers agree and state that "TRA should be revised, or extended" [4]. This sentiment has also been expressed by Ticehurst and Veal [5] who state culture can also influence the outcomes of the research. [6] agrees by stating the validity of the TRA theory challenge exists.

In fact, most theories relating to purchase behavior have been created in developed countries such as the USA. As for as TRA theory is considered to be very useful when predicting behavior [7], but is not thoroughly tested in less developed countries or even in non-western cultures such as Jordan [8]. It is clear that great care needs to be taken when extending the findings of studies conducted in developed countries like the USA, to countries such as Jordan. The research findings from more developed countries are not necessarily applicable to organizations in less developed countries – LDC. In fact, according to [5], culture can influence research outcomes. Despite its popularity and usefulness, researchers feel that, with respect to different cultures, the Reasoned Action theory should be modified for the local market. According to the Theory of Reasoned Action (TRA) the strongest and most closely associated predictor of volitional behavior is individual behavior, "intention". In order for behavioral intention to perform both the constructs, "attitude & subjective norms" are needed.

As per the TRA [9], states that the two constructs are control and guided human action. His beliefs are based on certain outcomes of behavior, appraisal of these outcomes (Ab - Attitude), beliefs about the normative anticipation of others and motivation to comply with this anticipation (SN-Subjective norm). As per the TRA, [9], states that the two constructs are control and guided human action. His beliefs are based on certain outcomes of behavior, appraisal of these outcomes (Ab - Attitude), beliefs about the normative anticipation of others and motivation to comply with this anticipation (SN-Subjective norm). Thus, behavioral beliefs and normative beliefs can be the foundation on which to build any further explanation for certain actions toward a certain target.

## I.1 Study Objective

The purpose of this study is to validate and generate a research model that will demonstrate actual purchase behavior towards online banking among Jordanian consumer in Amman, and determine factors that influence an individual's intention to use online banking based on TRA theory using structural equation modeling (SEM). We used online banking as the target technology and Jordanian subjects as the sampling frame. Internet banking has become a major fully-fledged distribution channel of banking products and services in developed world. In line with the increase of users, it has been estimated that e-banking using would also amplify. In spite of the world internet potential, actual number of i-banking users stills a very marginal activity in Jordan, until today we can observe the limitation for using the online banking. As proposed in the theory of reasoned action, we hypothesized that attitude towards online banking and subjective norm positively affect an individual's intention to use online banking which will affects directly the actual use for online banking. The research model for this study is shown in Fig.1. Based on the theory of reasoned action as shown in the research model above, three hypotheses were proposed:

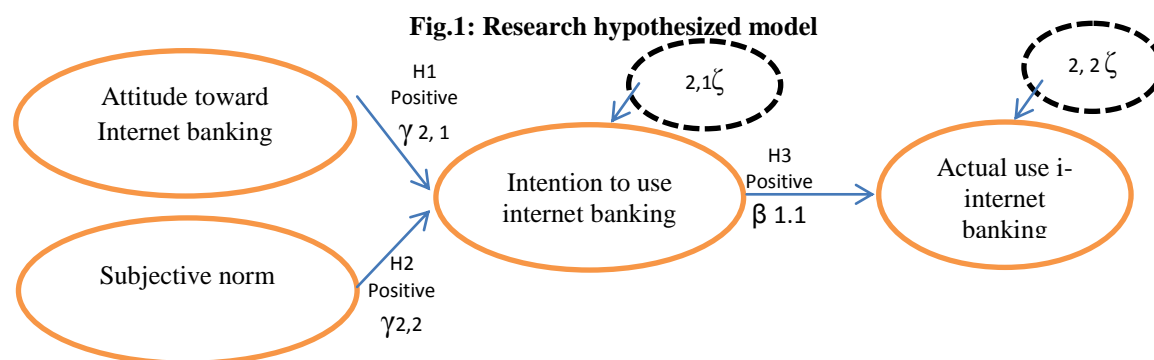
**Hypothesis 1:** Attitude toward Internet banking positively affects the intention to use the technology.

**Hypothesis 2:** Subjective norm positively affects the intention to use Internet banking

**Hypothesis 3:** Intention to use Internet banking affects the actual use Internet banking

**Hypothesis 4a:** Intention is a mediating effect for the relationship between SN and Internet banking

**Hypothesis 4b:** Intention is a mediating effect for the relationship between attitude and Internet banking



## II. LITERATURE REVIEW

Theory of Reasoned Action (TRA) was adopted in several studies and shows a strong predictor of actual behavior in different locations. All these types of behaviors can accounted for by the TRA theory. Furthermore, three meta-analysis studies were found to be supporting TRA [10], [11], and [12].

### II.1 Intentions among Theory of Reasoned Action (TRA)

Intention is the “probability, as stated by the respondent, that he/she will perform the stated action” [13]. This intention is comprised of attitudes (Ab) and subjective norms (SN) as previously discussed. [14] has proposed that there are other variables which could be added to the model of the TRA, but which can only affect intention and therefore, behavior. It refers to the intention to perform the behavior in question (Fishbein, 1967). It represents the cognitive part of the Fishbein and Ajzen theory. Behavioral intentions "capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" [15] Moreover, they refer to "a person's subjective probability that he will perform some behavior" [13].

Theoretically, previous studies have shown the accuracy of intention measurement. According to [16], intention is marginally less than perfect in the prediction of purchase behavior. For example, he listed a number of elements that could affect the strength of the relationship between purchase intention and purchase behavior. These factors include “intervening time, different levels of specificity, unforeseen environmental events, unforeseen situational contexts, degree of voluntary control, stability of intentions, and new information, obviously intention can change over time” [16].

### II.2 Attitude Among Theory Of Reasoned Action (TRA)

Attitude is a stands for a person's general feeling of favorableness or un-favorableness toward a concept. In other words, it represents the amount of affect [13]. The attitude toward behavior considers behavior as a concept, it "represents the person's general feeling of favorableness or un-favorableness for the behavior in question" [13]. Based on TRA, the first determinant of individual intention to act, as mentioned earlier, is the

attitude. According to Ajzen and Fishbein, attitude towards behavior is the estimation of positive or negative self-evaluation in relation to a certain behavior.

This construct depends on whether behavior is positively or negatively esteemed. It is “determined by a total set of accessible behavioral beliefs linking behavior to various outcomes and other attributes” [13]. Thus, attitude is an individual’s salient belief as to whether the outcome of his or her behavior will be positive or negative. Therefore, when a consumer has positive salient beliefs about his behavior then he has a positive attitude in relation to that behavior. The opposite applies when he has negative salient beliefs regarding a certain outcome of his purchase behavior, which is then considered to be a negative attitude.

### **II.3 Subjective Norm among Theory of Reasoned Action (TRA)**

Ajzen and Fishbein mentioned, “Subjective norms are a person’s own estimate of the social pressure to perform or not perform the intended behavior” [13]. It refers to an individual’s perception about what other people think of his or her behavior in question. This encompasses perceptions about what family and friends think about the outcome of the behavior (normative belief), and the degree to which this influences the behavior or action of the person responsible (motivation to comply). In other words, normative belief and motivation to comply create the subjective norm, irrespective of the individual’s opinion. It is the consumer's perception that “the importance of people around him/her and their opinions on how he or she should act will determine the behavioral outcome” [13].

## **III. MATERIALS AND METHODS**

To determine user intention to adopt Internet banking and actual use, a convenience survey using a seven-point scale with a structured questionnaire was conducted during the first half of 2012. The data was gathered on personal banking customers with 5 Jordanian banks.

A total of 411 customers from various Jordanian bank, were requested to complete a questionnaire that contained measures of the constructs of concern. The participants in the main investigation were all customers at the bank where the data collection took place. Participation in the study was voluntary and was limited to customers with at least one bank account. Items from previous studies were modified for adaptation to the internet banking context. The measures of actual use, behavioral intention to use, attitude toward using, subjective norm, were adapted from various studies related to the TRA [17].

The measures were pilot tested on MIS graduate, who were asked to indicate agreement or disagreement with the survey items using a seven-point scale. The wording of the items was then modified based on the pilot test results and advice from MIS professors. The questionnaires distributed were self-administered, which means that there is no interviewer asking or guiding the respondents throughout the questions, instead the respondents will themselves read and answer the questionnaire.

As this survey was executed in Jordan, it was therefore necessary to translate the questionnaire from English to Arabic, and to ascertain that the translation used equivalent language. The questionnaire was translated into the Arabic language by two bilingual Arabian (Arabic/English) lecturers at the Applied Science Jordan University language center.

## **IV. ANALYSIS AND RESULTS**

The data collected were coded and saved into SPSS version 20 and analyzed using AMOS version 20. A confirmatory factor analysis CFA was duly conducted on measurement models and structural models. Measurement analysis, discriminant analysis, composite reliability analysis and direct indirect impact analysis (mediating effect), testing the fit for the hypothesized structural model, revised model, ad competing model. Through modification indices, items that are cross-loaded in more than one dimension were relaxed one at time as proposed by [18], insignificant parameters were excluded and removing or adding items (or parameters) from one dimension to another dimension, which is highly cross-loaded, was also performed. However, any removing, excluding or adding parameters need to be performed based on theoretical, statistical and practical considerations [19]. Nine dataset were deleted due to Mahalanobis (D2) values more than the  $\chi^2$  value ( $\chi^2=67.83$ ;  $n=39$ ,  $p<0.001$ ) leaving a final 411 dataset to be analyzed.

### **IV.1 Demographic Characteristics of the Respondents**

Table 2 shows the results obtained after the recorded demographic variables were analyzed using descriptive statistics. The frequency and percentage for each variable is listed according to the survey categories in this table. A total of 411 usable, complete responses were obtained.

The gender breakdown was (66.7%) male and (33.3%) female; almost all were in twenties or thirties. (34%) had more than one experience with Internet banking, and approximately a total of 411 usable, complete responses were obtained. (15.7%) had no experience with internet banking, and approximately (43.7%) at least once a month. Table 1 gives a detailed description of the demographic statistics for the respondents.

**Table1: The profile of respondents (n=411)**

Demographics Variables		Frequency	Valid Percent %
<b>Gender</b>	Male	274	66.7
	Female	137	33.3
<b>Education Level</b>	High school	135	32.8
	Bachelor Degree	197	48
	Master Degree and above	79	19.2
<b>Age</b>	18 – 25	15	0.30
	26 – 35	227	55.2
	36 – 45	100	24.4
	46 and above	69	16.7
<b>Income</b>	Less than 5000 SAR	111	26.9
	5000-less 10000 SAR	106	25.7
	10000-less 15000 SAR	150	36.6
	15000 SAR and over	44	10.8
<b>Frequency of online banking</b>	Never	65	15.7
	Twice per year	0	0.0
	Monthly	180	43.7
	Weekly	113	27.6
	Daily	53	12.8

#### IV.2 Exploratory factor analysis (EFA):

Tables 2 shows factor analysis was employed to validate both independent and dependent variable constructs. Principal component analysis with Varimax rotation was utilized in all cases. In the current results, the eigenvalues for the independent variables were greater than one, as was the dependent variable. It is likely argued that the used items in the constructs were significant and qualified for the further analysis of the study data. The factor loadings or regression estimates of latent to observe are greater than the recommended level of 0.35, which is based on 411 samples and at the 0.50 percent significance level [19].

**Table 2: Exploratory factor analysis (EFA)**

Variable	Code	Attributes	Factor Loadings
<b>Actual usage</b>	USAGE1	The internet is a reliable way for me to take care of my personal affairs.	0.755
	USAGE2	Usage frequency	0.653
<b>Behavioral intention</b>	INT1	Plan to use IB	0.657
	INT2	Intend to use it within the next three months	0.649
	INT3	Add IB to my favorite links	0.589
<b>Attitude</b>	ATT1	Using IB would be a wise idea	0.755
	ATT2	Using IB is a good idea	0.672
	ATT3	I like to use IB	0.736
<b>Subjective norms</b>	SN1	People important to me would think that using IB would be a wise idea	0.753
	SN2	People important to me would think that using IB is a good idea	0.701
	SN3	My family important to me would think that using IB would be a wise idea	0.684
	SN4	My family important to me would think I should use IB	0.834

The Kaiser-Meyer-Olkin value is 0.936, with variance 90.227 which is higher than the recommended minimum of 0.6. Barlett's test of sphericity was significant ( $p < 0.001$ ), supporting the factorability of the correlation matrix. As shown in Table 3, all items loaded as expected on their respective factor.

#### IV.3 Reliability test;

Tables 3 shows each construct shows Cronbach alpha readings of acceptable values of above 0.60 [21], except for subjective norms which obtained a Cronbach value of 0.541. However, this variable is included in subsequent analysis since composite reliability calculated for subjective norms is 0.779, thus conforming to Nunnally's standard. The research framework consists of two exogenous and two endogenous variables.

**Table 3: Reliability analysis for each construct**

Variable Name	No of Items	Mean (Std. Dev)	Cronbach Alpha	Composite Reliability
Endo 1 Actual usage	2	3.831 (0.795)	0.788	0.940
Endo 2 Intention	3	4.098 (0.823)	0.736	0.919
Exo 1 Attitude	3	3.954 (0.867)	0.748	0.913
Exo 2 Subjective Norm	4	4.190 (1.182)	0.541	0.779

#### IV.4 Normality test;

Tables 4 show univariate normality of the data was performed because the Z-value of kurtosis and skewness did not give a significant value and exceeded 0.05.

**Table 4: Distributional characteristics testing for normality**

Construct	Skew. Stat.	Std. Error of Skew	Z -Value	Kurtosis. Stat	Std. Error of Kurtosis	Z -Value
USAGE1	0.235	0.125	1.880	0.423	0.249	1.69
USAGE2	0.207	0.125	1.6556	0.614	0.249	2.46
INT1	0.199	0.125	1.592	0.836	0.249	3.35
INT2	0.230	0.125	1.840	0.671	0.249	2.69
INT3	0.234	0.125	1.872	0.615	0.249	2.46
ATT1	0.057	0.125	0.456	0.902	0.249	3.62
ATT2	0.053	0.125	0.424	0.878	0.249	3.52
ATT3	0.113	0.125	0.904	0.808	0.249	3.32
SN1	0.029	0.125	0.232	0.919	0.249	3.69
SN2	0.189	0.125	1.512	0.564	0.249	2.26
SN3	0.243	0.125	1.944	0.571	0.249	2.29
SN4	0.204	0.125	1.640	0.658	0.249	2.64

The Z values are derived by dividing the statistics by the appropriate standard error of 0.125 (Skewness) and 0.249 (Kurtosis), Hair et al. (2006).

Particularly, the SEM for the abovementioned demonstrates the distribution of data was normal. Given this evidence, a sample can be considered to be multivariate normally distributed at the 5 percent significance level since the critical ratio is smaller than that of 1.96, indicating that the coefficient of multivariate kurtosis is not significantly different from zero. This means, the assumption of data normality is particularly met. Hence, the data employed in the present study is statistically meaningful and also helps us to improve the understanding of the subject of the study.

**IV.5 Confirmatory factor analysis (CFA) results:**

Evidently, the items may subject to the modifications, although they were statistically significant under EFA. Considering these modifications are of importance in ensuring, the data are free from the outliers and the non-normality of data. From the CFA result in Table 5, indicates that all the constructs conform to the construct validity test.

**Table 5: Confirmatory factor analysis measurements (Goodness-Of-Fit indices)**

CFA Model	df	CMIN	CMIN/df	TLI	NFI	GFI	AGFI	CFI	REMSEA
Actual usage	2	2.265	1.133	0.999	0.999	0.997	0.986	0.999	0.019
intention	2	3.155	1.577	0.997	0.997	0.996	0.979	0.999	0.039
Attitude	2	2.141	1.070	0.999	0.998	0.997	0.986	0.999	0.014
SN	2	2.328	1.164	0.999	0.999	0.997	0.985	0.999	0.021

**IV.6 Test of Convergent Validity:**

The fifth test is average variance extracted (AVE) by each construct, which indicates the amount of variance in the item explained by the construct relative to the amount attributed to measurement error [22]. The Fornell and Larcker criterion, which states that the AVE should be (>0.50),  $AVE = (\sum \text{Standardized Loading})^2 / [(\sum \text{Standardized Loading})^2 + \sum \text{Measurement}]$ , was used to assess the AVE for all constructs. Table 6 shows that all the indicators were statistically significant for the proposed constructs, thereby providing strong evidence for convergent validity [19].

**Table 6: Test of convergent validity of hypothesized model**

Factor	Indicators	Loading	Std. regression estimate	Measurement error	AVE
Actual usage	USAGE1		0.939	0.040	0.988
	USAGE2		0.963	0.034	
Behavioral intention	INT1		0.930	0.049	0.972
	INT2		0.959	0.045	
	INT3		0.879	0.046	
Attitude	ATT1		0.872	0.048	0.978
	ATT2		0.869	0.039	
	ATT3		0.859	0.038	
Subjective Norms	SN1		0.888	0.040	0.979
	SN2		0.922	0.034	
	SN3		0.935	0.049	
	SN4		0.908	0.034	

**IV.7 Hypothesized Model Analysis:**

AMOS 20.0 Graphics was used to run the structural model and test the hypothesized relationship between constructs. Maximum likelihood (ML) estimation was employed to compare structure coefficients between latent variables. Examinations of the goodness of fit indices (GOF), ML are based on the assumption that the observed variables are normally distributed. This assumption has been shown to be met by the data previous section. The hypothesized model in Figures 2, yields a  $\chi^2$  (chi-square) of 371.0, degree of freedom = 185 and P-value = 0.000 which is not significant at the level of 0.050, indicating that the model fits the data very well except the P-value. However, because the chi-square statistic is very sensitive to the sample size it is more appropriate to look at other fit measures. Fortunately, other fit measures also indicate the goodness of fit of the model to the data (CMIN/DF = 2.006, RMSEA = 0.51, TLI = 0.980, CFI = 0.983, NFI = 0.966, GFI = 0.921,

AGFI = 0.901). The resulting statistical estimates of the model are shown in Table 7. All indexes indicate that the model achieves a good level of overall fit

Table 7: Hypothesized model (Goodness-Of-Fit indices)

Measures	Fit Indices	Threshold Values
Absolute Fit Level	RMSEA	0.051
	GFI	0.921
	P- Value	0.000
Incremental Fit Level	AGFI	0.901
	CFI	0.983
	TLI	0.980
	NFI	0.966
Parsimonious Fit Level	CMIN/df	2.006
	SMC (R <sup>2</sup> )	0.720
		Less than 0.08
		0.90 and Above
		P- Value ≥0.05
		0.90 and Above
		0.90 and Above
		0.90 and Above
		Less than 2.0
		Bigger better

#### IV.8 Mediating Effect of Hypothesized Model:

Table 8 shows a mediating effect is created when a third variable/construct intervenes between two other related constructs. For our study, we tested the mediating effects of intention in the relationship between attitude/SN and actual behavior.

Table 8: Direct, Indirect, and total effects of hypothesized model

	Endogenous Variables		
	Actual behavior		
	Indirect effect	direct effect	Total effect
S.N	0.341**	0.041	0.300**
Attitude	0.044	0.719**	0.763**

Intention is a mediating effect for the relationship between SN and actual behavior, and has a significant indirect effect of 0.341\*\*, which support (H4a): Intention mediates the relationship between attitude in travel and actual behavior. Finally, according to mediating effect of intention as for (H4b), is not supported by the relationship of attitude and actual purchase. The direct effect between the relationship of attitude and actual purchase is significant 0.719\*\*.

#### IV.9 Hypothesis Testing of Hypothesized Model

Based on Hair [20] state that regression weights are present each parameter's un- standardized estimate, (S.E.), and (C.R.), where estimation of the critical ratio (C.R.) by divided into S.E. If the result is above (+/- 1.96), (Null hypothesis): C.R is "zero" is rejected. Table 9 shows Estimate, S.E, and each parameter's C.R. Based on the finding, (Table 10) All the hypothesis are acceptable because they are above (+/-1.96) C.R.

Table 9: Regression weight for hypotheses testing result (Hypothesized model)

H	Regression Weights		Estimate	SE	C.R.	P	Hypothesis Support
	From	To					
H1	SN	Intention	0.515	0.069	3.503	***	Asserted
H2	Attitude	Intention	0.358	0.037	7.292	***	Asserted
H3	intention	Actual behavior	0.222	0.051	7.317	***	Asserted

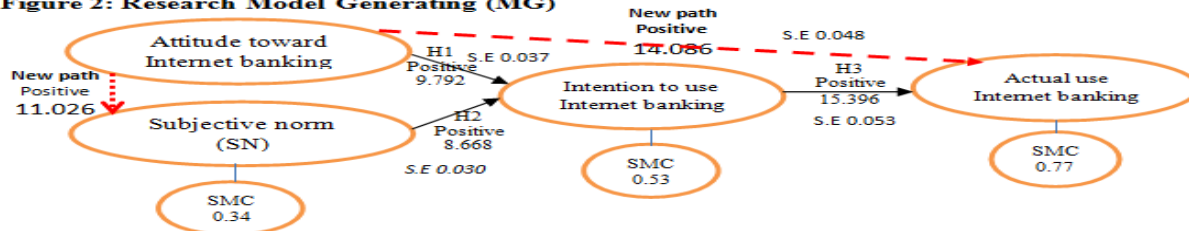
#### IV.10 Model Generating (MG)

Jöreskog and Sorbom [23] noted that, although re-specification may be either theory or data driven, the ultimate objective is to find a model is both substantively meaningful and statistically well-fitting.

##### 4.10.1 Goodness-Of-Fit indices of Model Generating (MG)

The modification indices of the perceived actual purchase suggest adding a path from attitude to actual purchase. Fig. 2 presents the modified model, with standardized estimates. The path coefficient for the adding path is negative, which suggests that if there is more positive attitude, the amount of actual behavior toward internet banking is high. This is logical; the advice to apply this modification meets with the theoretical justification. Thus, we decide to accept the modification. The resulting models fit, with a chi-square of 355.460 and 339 degrees of freedom, and a p-value of the 0.259.

Figure 2: Research Model Generating (MG)



#### IV.11 Hypothesis Testing of Hypothesized Model

Based on Hair [20] state that regression weights are present each parameter's un- standardized estimate, (S.E.), and (C.R.), where estimation of the critical ratio (C.R.) by divided into S.E. If the result is above +/-1.96,



(Null hypothesis): C.R is 0" is rejected. Table 10 shows Estimate, S.E, and each parameter's C.R. Based on the finding;can decide that the entire hypotheses are acceptable because they are above +/-1.96 C.R.

**Table 10: Regression Wight of Model Generating (MG)**

H	Regression Weights		Estimate	SE	C.R.	P	HypothesisSupport
	From	To					
H1	S.N	Intention	0.258	0.030	8.668	***	Asserted
H2	Attitude	Intention	0.348	0.037	9.792	***	Asserted
H3	intention	Actual behavior	0.818	0.053	15.396	***	Asserted
New	Attitude	Actual behavior	0.679	0.048	14.086	****	Asserted
New	Attitude	S.N	0.359	0.039	11.026	****	Asserted

#### IV.12 Comparison between Hypothesized and Model Generating:

Tables 11 show comparison between hypothesized, original and model generating.Using modification indices, the study developed a Model Generating with an attempt to ensure a better fitting and possibly more parsimonious model.

**Table 11: Comparison between hypothesized, original and model generating**

H.	From	Mediation	To	Hypothesized Model (SC)			Model Generating (GM)		
				Estimate	P	hypothesis Asserted	Estimate	P	hypothesis Asserted
H1	SN	--	INT	0.280	***	Yes	0.120	***	Yes
H2	ATT	--	INT	0.420	***	Yes	0.137	***	Yes
H3	SN	INT	ACT	0.517	***	Yes	0.524	***	Yes
H4a	ATT	INT	ACT	0.676	***	Yes	0.679	***	Yes
H4b	INT	--	ACT	0.232	***	Yes	0.225	***	Yes
New Path	ATT	--	ACT	0.227	***	Yes	0.184	***	Yes
<b>Modification Indices</b>									
<b>Goodness-of-fit</b>				<b>Goodness-of-fit</b>			<b>Goodness-of-fit</b>		
CMIN				371.0			355.460		
df				185			339		
CMIN/df				2.006			1.049		
GFI				0.921			0.940		
RMSEA				0.051			0.011		
TLI				0.980			0.999		
CFI				0.983			0.999		
P-value				0.000			0.259		
SMC (R <sup>2</sup> )				0.72			0.77		

The new path is a direct relationship between attitude and actual behavior. This modification need to test by direct and indirect effect to investigate whether mediator effect between the relationships of attitude and actual behavior. Based on finding, this hypothesis is supported. Partial mediation is supported for this relation.According to Hair [20], better nested models are usually evaluated using the difference between the Chi-square (CMIN/df). Because the difference of two  $\chi^2$  distributed values is itself  $\chi^2$  distributed, we can test for statistical significance given  $\Delta \chi^2$  difference value and the difference in degrees of freedom ( $\Delta df = 1$ , meaning the additional path in the MG model), a  $\Delta \chi^2$  of 3.84 or better would be significant at the 0.05 level.

$$\Delta \chi^2 \Delta df = 382.41 - 355.460 = 26.94 (> 3.84)$$

$$\Delta df = 340 - 339 = 1$$

Thus, as shown in Table 11, based on goodness of fit indices, The Model Generating (MG) model has a better fit and larger parsimony compared with hypothesized model Strictly (Confirmatory Model- SC).

### V. DISCUSSION

The study is aimed at explaining the applicability of the TRA in a context of none western culture using survey questionnaire to validate it. The model is simplified by only investigating the impact of the "attitude" and "subjective norm" constructs on the usage intentions and the impact of the intention on actual behavior. The appropriateness of the model's constructs is examined in length using SEM. Since the research is model testing in nature, therefore there is no additional constructs have suggested in the model.

#### V.1 Attitude

In the present study, the attitude was positively correlated to use. Thus, the more positive the attitude is, the more likely that none western culture (Jordanian) is selected by the respondents. The result is not surprisingly as many studies have been found out that attitude was an influential factor for behavioral intentions and actual behavior. This outcome is consistent with the findings from Ramayah&Mohd-Suki [24]. Bentler and Speckarts [25] examined the theoretical results of adding a direct path between attitude and behavior. Their results indicated that direct paths from attitude to actual behavior would improve the predictive power of the model, more so than what had been established by the original TRA model [14].

#### V.2 Subjective norm

The current study's result also concluded that subjective norm was positively associated with use. The findings are in light to that of the previous works [25] and [26]. These authors have documented that the TRA's

subjective norm construct has positive relationship to that of behavioral intentions. The outcome of the current study for subjective norm is also in the direction.

### V.3 Attitudes and Subjective Norms

Ajzen and Fishbein[13] postulated that both attitude and subjective norms are empirically segregated and have unique and different effects on intention. This finding also lends support to the previous argument [27] and [28]. Both of them show a high correlation between subjective norm constructs and attitude construct. “Attitude and subjective norms are correlated because the impact of one’s behavior on another can be stated as either a behavioral belief or normative belief” [29]. This could affect the model fit where “TRA can show statistical problems when strong attitudes exist. This is because the purpose of the subjective norm relationship is to represent the preferences of others in terms of behavioral beliefs rather than normative beliefs” [26].

**Table 12: Studies suggesting modification to TRA theory.**

Authors	Year	Findings
Hansen [30]	2008	Path from subjective norm to attitude better fit
Candan [31]	2008	Strongly suggested external variables to improve the power of the TRA theory
Summers et al.	2006	RA has not been focused enough on external factors in past studies
Park [27]	2000	High correlation between subjective norms constructs and attitude construct
Bagozzi[19]	2000	Norms’ explanatory power was relatively weak, even though significant
Bentler&Speckarts [25]	1981	Direct significant relationship between attitude and actual behavior.
Kim & Hunter	1993	Direct significant relationship between attitude and actual behavior.
Chang	1998	Path from subjective norm to attitude better fit to TRA model

The solution treats the normative component of the TRA as a determinant of attitude [27]. Previous studies show attitude towards intention is stronger than subjective norm towards intention [27], [25], [28] and [31]. Recently, [30] investigated the theories of TRA and TPB and indicated that by adding a direct path from attitude to subjective norm, in both theories; the model fit of the theory is improved compared to models without this path. These findings are supported [25], who conducted a study of unethical behavior and found a convincing improvement in fit when adding a path from SN to attitude, as per the TRA theory. Chang [32]hypothesized that subjective norms positively influence attitudes towards buying organic food.

## VI. CONCLUSIONS

This study is a pioneering effort in applying the TRA to the newly emerging context of Jordanian culture and by adding a direct path from attitude to subjective norm, and from attitude directly to actual behavior; the model fit of the theory is improved compared to models without this path. Compared to the TRA model, our generating model can create a much better understanding of actual internet banking behavior among Jordanian consumers in Amman. Every research comes with contributions. As such, the present study is also contributing primarily to the body of knowledge pertaining to into none western culture context especially among Jordanian. The TRA has been sufficiently addressed the impact of the “attitude” and “subjective norm” factors on the internet banking behavior among Jordanian usage. Secondly, the research is of importance to note that SEM approach is widely scanty among Jordanian context. Practically, this research assists a service provider in understanding the attitude of existing users of Jordanian in which in the future the service provider is of value to set up with “Jordanian culture” in their premises in order to cater Jordanian internet banking needs who gives greater emphasis on the religion matters in financial transactions. The research is also pivotal to assist the existing internet banking based none western culture to pay more attention about the importance of attitude and subjective norm in affecting one’s usage internet banking.

## VII. LIMITATIONS

This study acknowledges two main limitations. Firstly, the present study was conducted in Amman, in which the findings can only be generalized to local people of Amman. The findings and implications drawn from this present study cannot be readily generalized to other cities in Kingdom of Jordan. To overcome the limitation, future works may call to include all Jordanian from various states in Kingdom of Jordan. Secondly, the present study used convenience sampling with the understanding that the current research was self-financed and also owing to the limitation of times. This is only a minor dearth and the authors believe the use of convenience sampling method is able to contribute significantly, at least at exploratory level. In future researches, the selection of different sampling method will be of importance to advance the usefulness of the findings obtained and for the purpose of generalization of findings.

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