



# Designing and Explaining the Trust Model of Students Applying to Virtual Universities

Mohammad Ali Sarlak, University of Payame Noor

Hassan Abedi Jafari, University of Tehran

## ABSTRACT

The current research tries to offer a conceptual model in order to create trust among people for choosing these virtual universities. To this end, the conceptual model of research has been designed with nine factors. The relationship among factors tested by using statistical methods such as factor analysis and path analysis. In the end, five components were established to be among the affecting factors of student trust towards this type of universities. They are: academic reputation of virtual universities, administrative efficacy of virtual universities, size of virtual universities, economical factor of studying in virtual universities and the suitable environmental conditions for virtual universities activity. However, it was established that the role of each of these components in creating trust towards virtual universities were different from those predicted by the researchers. Also it was established that student's willingness toward choosing virtual universities is influenced by the trust factor.

## INTRODUCTION

The emergence of information and communication technologies (ICT's) and their use in training of people has resulted in formation of virtual universities. Most countries with more or less similar goals have acted to establish such universities. Islamic republic of Iran too, as a developing country in Asia has taken such steps. The result of this effort up to present time, has been designing of ten virtual universities in order to satisfy the educational needs of the great number of people requesting to benefit from higher education in Iran (Sarlak and Abedi Jafari, 2004). The Iranian virtual universities includes:

Tehran virtual university	<a href="http://cel.ut.ac.ir">http://cel.ut.ac.ir</a>
Isfahan virtual university	<a href="http://vu.ui.ac.ir">http://vu.ui.ac.ir</a>
Elm va sanat virtual university	<a href="http://www.elearning-iust.com">http://www.elearning-iust.com</a>
Shiraz virtual university	<a href="http://www.shirazu.ac.ir">http://www.shirazu.ac.ir</a>
Sharif virtual university	<a href="http://vu.sharif.edu">http://vu.sharif.edu</a>
Iranian virtual university	<a href="http://iranu.com">http://iranu.com</a>
Azad islami virtual university	<a href="http://www.azad.ac.ir/VU/vu.htm">http://www.azad.ac.ir/VU/vu.htm</a>
Oloome hadis virtual faculty	<a href="http://vu.hadith.ac.ir">http://vu.hadith.ac.ir</a>
Payame noor virtual university	<a href="http://www.aictc.com/pn/">http://www.aictc.com/pn/</a>
Iran internet based university	<a href="http://www.net2university.com">http://www.net2university.com</a>

## Research Problem

At the present time, Iranian virtual universities are operating beside the Non-virtual universities. The problem that virtual universities confront is low recognition level of people applying to these types of universities and the consequent low level of their trust to these universities.

## Research Goals

The current research tries to offer a conceptual model in order to create trust among people for choosing these virtual universities.

## Research Questions

The research questions are as follow:

- What are the affecting factors on students trust towards virtual universities?
- Is there a relationship between student's trust towards virtual universities and their willingness to choose these types of universities?
- Can we show this relationship based on a conceptual model?

## Research Hypothesis

- H1 :** There is a meaningful relationship between people's trust to Virtual Universities and academic reputation of Virtual Universities .
- H2 :** There is a meaningful relationship between people's trust to Virtual Universities and administrative efficacy of Virtual Universities .
- H3 :** There is a meaningful relationship between people's trust to Virtual Universities and the size of Virtual Universities .
- H4 :** There is a meaningful relationship between people's trust to Virtual Universities and Virtual Universities being cost-effective
- H5 :** There is a meaningful relationship between people's trust to Virtual Universities and suitable environmental conditions for Virtual University activity .
- H6 :** There is a meaningful relationship between the academic reputation of Virtual Universities and administrative efficacy of Virtual Universities .
- H7 :** There is a meaningful relationship between academic reputation of Virtual Universities and the size of Virtual Universities .
- H8 :** There is a meaningful relationship between academic reputation of Virtual Universities and Virtual Universities being cost-effective .
- H9 :** There is a meaningful relationship between academic reputation of Virtual Universities and suitable environmental conditions for Virtual University activity .
- H10:** There is a meaningful relationship between administrative efficacy of Virtual Universities and the size of Virtual Universities
- H11:** There is a meaningful relationship between administrative efficacy of Virtual Universities and Virtual Universities being cost effective .
- H12:** There is a meaningful relationship between administrative efficacy of Virtual Universities and Suitable environmental conditions for Virtual University activity .
- H13:** There is a meaningful relationship between the size of Virtual Universities and Virtual Universities being cost-effective .
- H14:** There is a meaningful relationship between size of Virtual Universities and Suitable environmental conditions for Virtual University activity.
- H15:** There is a meaningful relationship between Virtual Universities being cost-effective and Suitable environmental conditions for Virtual University activity.

**H16:** There is a meaningful relationship between a person's trust towards Virtual Universities and perceiving a lower level of risk in studying in Virtual Universities .

**H17:** There is a meaningful relationship between a person's trust towards Virtual Universities and his attitude towards studying in Virtual Universities .

**H18:** There is a meaningful relationship between perceiving a lower level of risk in studying in Virtual Universities and his attitude towards studying in Virtual Universities .

**H19:** There is a meaningful relationship between a person's attitude towards \studying in Virtual Universities and his willingness to choose Virtual Universities for study.

**H20:** There is a meaningful relationship between perceiving a lower level of risk in studying in Virtual Universities and his willingness to choose Virtual University for study .

**H21:** There is a meaningful relationship between a person's trust towards Virtual University and his willingness to choose Virtual Universities for study. (Major hypothesis) .

### Research Backgrounds

In research process we find bellow recourses:

- Fifty three resources were found about Trust and virtual universities in Persian texts.
- More than 500 resources were found about Trust and virtual universities in Latin texts.
- No research were found under the title "trust to virtual universities".
- The research done by Sirkka L. Jarvenpaa and Noam Tractinsky and Michael Vitale in 2001 year under title: Consumer Trust in an internet store were found more related to the present research subject.

### Literature Review

In this research, literature review includes 2 sections:

- 1) trust
- 2) virtual universities

#### 1) Literature review on trust

1.1) **trust etymology:** Trust is a Middle English word, probably of Scandinavian origin; akin to Old Norse *traust*; akin to Old English *trEowe*. Meaning: faithful (Merriam Webster dictionary).

1.2) **trust definitions:** There is no one generally accepted definition of trust between researchers (Creed and miles ,1996). Trust has been defined by researchers in many different ways, which often reflect the paradigms of the particular academic discipline of the researchers (grabner- krauter & kaluscha, 2003).

- **Personality psychologists** traditionally have viewed trust as a belief, expectancy, or feeling that is deeply rooted in the personality and has its origins in the individual's early psychological development.
- **Social psychologists** define trust as an expectation about the behavior of others in transactions, focusing on the contextual factors that serve either to enhance or inhibit the development and maintenance of trust.
- **Economists and sociologists** have been interested in how institutions and incentives are created to reduce the anxiety and uncertainty associated with transactions.
- **Within business schools**, there are different approaches to the study of trust across domains such as finance, marketing and management, partly drawing on trust constructs developed in other disciplines.
- **Stephen P. Robbins** (2001) define trust as: A positive expectation that another will not behave - through words, actions, or decisions -opportunistically.

1.3) **trust dimensions:** New evidence show that trust consist of five dimensions: integrity, competence, consistency, Loyalty and openness (Robbins, 2001).

- **Integrity** includes honesty & truthfulness.
- **Competence**, includes technical, interpersonal knowledge & skills
- **Consistency** includes predictability, & good judgment (congruence between words & deeds).
- **Loyalty** includes willingness to protect & save face for another person.
- **Openness**, include telling the full truth and not just part of it.

1.4) **trust bases:** There are three bases for trust (Robbins, 2001):

- **Deterrence Based Trust:** based on fear and force (most fragile) .
- **Knowledge Based Trust:** based on predictability over time (most organizational relationships).
- **Identification Based Trust:** based on emotional connections and mutual understanding of wants and needs (highest level of trust).

1.5) **Trust components or basic model of trust:** The trust includes three components: trustor, trustee and context (Powers , 2001).

1.6) **Trust types:** there are three types of trust: Personal trust , System trust and institutional trust (Nooteboom & Six , 2003).

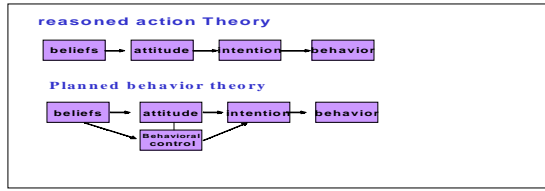
- **Personal trust:** Based on experiences individuals make with each other in the course of frequent interaction over a longer period of time.
- **System trust:** Trust an individual has in the functioning and in the reliability of impersonal social structures.
- **Institutional trust:** Trust between individuals Vis - a -Vis existing impersonal social rules

1.7) **Trust subject:** One can trust to Material objects, Empirical regularities , Laws of nature ,People ,Authorities , Organizations, Institutions and higher powers (Nooteboom & Six , 2003).

1.8) **Theories underlying trust:**

- **Rational choice theory:** This theory based on this idea that all action is fundamentally 'rational' in character and that people calculate the likely costs and benefits of any action before deciding what to do. This approach to theory is known as rational choice theory, and its application to social interaction takes the form of exchange theory.
- **Exchange theory:** Exchange theory derives from economics' rational choice theory and the study of relationships and "exchanges". It argues that individuals evaluate alternative courses of action so that they get best value at lowest cost from any transaction completed. According to exchange theory, individuals form associations on the basis of trust, and try to avoid exchange relationships that are likely to bring more pain than pleasure(Jarvenpaa and others , 2000 ).
- **Balance theory:** Balance theory suggests that people tend to develop positive attitudes towards those with whom they have some prior association (Jarvenpaa and others , 2000 ).
- **Reasoned action and planned behavior theories:** As shown in figure 1, the theories of reasoned action (Fishbein & Ajzen, 1975) and planned behavior (Ajzen, 1985) assert that behavior is influenced by behavioral intention, and that intention is determined by attitudes. Attitudes mediate between beliefs and intention, although beliefs can also have a direct effect on intention.

Figure 1: Reasoned action and planned behavior theories



The theory of planned behavior states that in addition to person’s efforts for acting in a certain way , it states that a set of uncontrolled internal and external factors too can have effects on a person’s behaviors . For example, a person’s perception on the risk of that behavior is one of the controlling factors of behavior that can be effective whether that behavior takes place or not.

2) Literature review on virtual universities

2.1) **definition of virtual university:** From the time of emergence of virtual university various definitions have been offered on this phenomenon, here we refer to a few definitions :

“ **Virtual University**” is a learning environment based on network that has been designed for the transfer of content and expansion of university education ( Harasim , 1997 ) “

“ **Virtual university**” is a university without walls and uses information and communication technologies in order to transfer educational materials to students. (Lindquest, 2002 ) “

“**Virtual university**” is a university based on internet. this university lacks physical structures and uses synchronous and Asynchronous Technologies for transferring of contents and offering educational services to students .( Sarlak and Abedi Jafferi, 2003).

2.2) **Main Characteristics of a virtual university**

The main characteristics of a virtual university are as follow (barjis, 2003):

- The university is completely based on ICT facilities with constant access to the Internet.
- The university provides selectable and flexible study programs anywhere and at any time in the range of its coverage (city, state, country or continent).
- Students, staff and faculty are IT competent...on the desktop, in the classroom and lecture hall, and in the simulation “center.”
- State-of-the-art hardware and software are at hand .
- Institutional IT infrastructure (classroom, lecture hall, campus) is state-of-the art.
- Academic programs are IT-based, “as appropriate” .
- University is a “learning organization”...shared vision...shared situational awareness...everyone contributes...is flat, seamless, tailorable and virtual.
- Students are taught and practiced in the art and science of “thinking in the information age”.

2.3) **virtual university mission:**

The mission of a virtual university (barjis, 2003) is Evolving:

- from an Industrial Age University to an Information Age University

Figure 2: Characteristics of virtual universities

characteristics	From	To
Goal	For profit	Open access to education for all
Size	Niche market	Mega universities
Partnerships	None	Cross sector, regional, transactional
Organizational model	Centralized	Distributed network of autonomous centers
Services offered	Individual courses or modules	Full continuing professional development programs
Accreditation	Digital diploma mills	High academic value qualifications
Quality	Lower than traditional education	Higher than traditional education
Pedagogy	Traditional	Goal based scenario, problem resolution based
Socialization	No or little social interaction	High social interaction among learners and staff
Research	No research	World class research
Technologies	Online text books and video conferencing	Groupware, knowledge management systems, virtual reality.
Workplace integration	Delivery of "bite size" modules	Using naturally occurring learning opportunities at work

Source: The Newsletter of the PROMETEUS Network

- from bricks-based university to electronic components-based university
- from walls surrounded university to wires surrounded university.
- from human professors to digital Professors
- from hard books to electronic books

2.4) **characteristics of virtual universities**

**DESIGNING RESEARCH CONCEPTUAL MODEL**

The conceptual model of research is a research tool that determines research variables and their relationships .the conceptual model of this research shown in figure 3.

The mentioned conceptual model derived from research questions and hypothesis and literature review. This conceptual model is based on 2 following research model.

- 1) The basic model of trust

The basic model of trust shown in figure 4 .

According to this model the trust process includes three components includes :trustor, trustee and trust context which this context trust occur(Powers ,2001).

Figure 3 : Research conceptual model

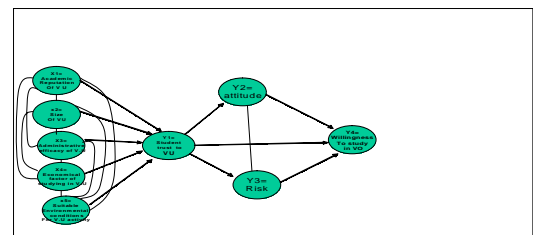


Figure 4. Basic model of trust

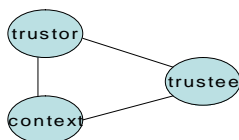
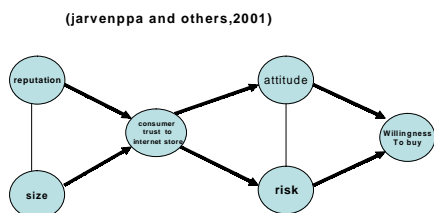


Figure 5. Consumer Trust model in an Internet Store



**2-the Consumer Trust model in an Internet Store**

The Consumer Trust model in an Internet Store(Jarvenppa and others ,2000) shown in figure5.

The focus of this model is the antecedents and consequences of consumer trust in an Internet store. The model hypothesizes that consumers’ trust in an Internet store affects their willingness

to patronize the store. The model is consistent with exchange theory and balance theory ,as well as the theories of reasoned action and planned behavior.

As before mentioned, The conceptual model of research derived from combination of two mentioned models.

According to the basic model of trust, the trust process include 3 components of trustor, trustee and context,. in model of consumer trust to an internet store, 2components are seen. 1) internet store as trustee with characteristics such as reputation and size. 2) consumer person as trustor. In the second model we can see the lack of trust context, which in this context trust occur. with removed this deficiency the conceptual model have been designed .

In present conceptual model 5 factors as antecedents of trust and 3 factors as consequences of trust are used and 2 factors add to characteristics of virtual universities and factor of Suitable Environmental conditions For V.U activity are employed as contextual factor. The three added factors to this model derived based on literature review and getting idea from scholars by used Delphi method. . In this conceptual model  $X_1$  to  $X_5$  variables are research independent variables and  $y_1$  to  $y_4$  variables are research dependent variables.

**RESEARCH METHODOLOGY**

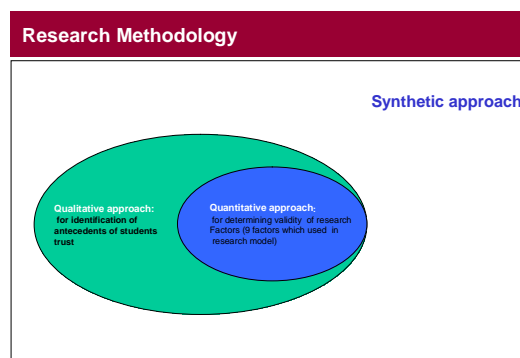
As Hussey and Hussey(1997) described methodology as general approach to research which includes qualitative and quantitative approach, in this research too, we employed a Synthetic approach for gathering necessary information and doing research.

The present research methodology shown in figure 6 .

As shown in figure 6 , we used a Qualitative approach for identification of students trust antecedents and a Quantitative approach for determining validity of research Factors (9 factors which used in research model) and testing research hypothesis.

Statistical community of research is the undergraduate freshmen students of Virtual Universities in the first semester of 2004-2005.

Figure 6. Research methodology



15-25

We are to say there are only 2 virtual universities i.e. Elm va sanat virtual university and Shiraz virtual university to start their systematic activity out of a whole number of 10 virtual universities.

Level of current analysis is concentrated on individual. Subject of trust [person’s trust to organization] is the main center of current analysis and research (Mirzaei , 1992). In this research the unit of analysis is Virtual Universities. According to published statistics, the statistical community size of current research is about 1293 students (1000 students in Elm Va Sanat virtual university and 293 students in Shiraz Virtual University).

The research sample size is 400 students was determined by use statistical formula (Azar, 2001). The Sampling method in this research is classified random method. By employing this method the sample size (400 students) divided to 2 category. 308students from Elm Va Sanat virtual university and 92 students from Shiraz Virtual University were randomly selected.

In pre-test whose goal is the final evaluation of measuring tool , about 50 questionnaires were distributed among the potential respondents, from this number 10 incomplete questionnaire were reject by list wise method, and about the rest of the 40 questionnaires ( about10% of total sample ) became basis of reliability and validity test . the results of reliability and validity test shown in figures 7 and 8 .

The reliability index is alpha and in order to increase alpha in introductory test unstable choices were deleted. The acquired alpha for the whole scale is about 92 percent which has been above 70 percent and is indicative of scale’s stability .

In order to answer this question whether questionnaire has the necessary validity in addition to implementation of expert’s point of views, factor analysis and K-M-O test has been used. Since size of K-M-O of entire research questionnaire is equal to .771 and significant level derived from

Figure 7. Reliability analysis-scale (alpha)

Factor	N of Cases	N of Items	Alpha	Reliability
Academic reputation of virtual university (X1)	40	3 indexes	0.8834	high
Size of virtual university (X2)	40	3 indexes	0.9249	high
Administrative efficacy of V.U (X3)	40	12 indexes	0.9499	high
Economical factor of studying in V.U (X4)	40	3 indexes	0.9094	high
Suitable Environmental conditions For V.U activity (X5)	40	6 indexes	0.8911	high
Student trust to VU (Y1)	40	7 indexes	0.8644	high
Attitude to study in VO (Y2)	40	4 indexes	0.9134	high
Risk (Y3)	40	2 indexes	0.9121	high
Willingness To study in VO (Y4)	40	3 indexes	0.9004	high
Questionnaire	40	43 indexes	0.9287	high

Figure 8. Validity of research questionnaire (measured by K-M-O AND BARTLETT test)

		<b>ESULT</b>  <b>GOOD VALIDITY</b>
<b>KMO</b>	<b>0.771</b>	
<b>BARTLETT (K SQUARE)</b>	<b>4159.215</b>	
<b>DEGREE OF FREEDOME SIGNIFICANT LEVEL</b>	<b>128</b> <b>0.0005</b>	

Figure 9. The underlying indexes of 9 factors of conceptual model

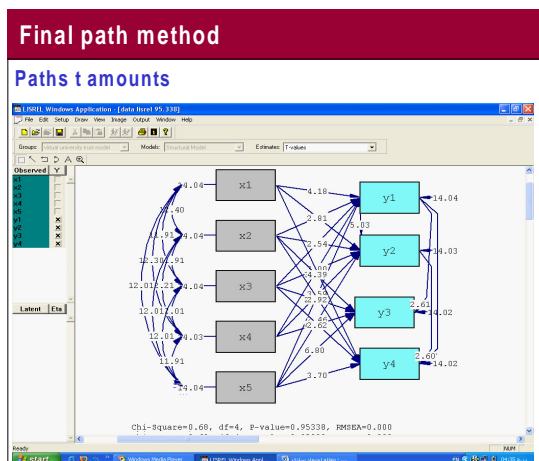
factor	Number of index	K-M-O Results	K-M-O Test	Normality Situation of factors distribution by use K-S test
1) Academic reputation of virtual university	3 indexes	0.579	confirmed	normal
2) Size of virtual university	3 indexes	0.512	confirmed	normal
3) Administrative efficacy of V.U	12 indexes	0.629	confirmed	normal
4) Economical factor of studying in V.U	3 indexes	0.637	confirmed	normal
5) Suitable Environmental conditions For V.U activity	6 indexes	0.839	confirmed	normal
6) Student trust to VU	7 indexes	0.660	confirmed	normal
7) attitude	4 indexes	0.753	confirmed	normal
8) risk	2 indexes	0.510	confirmed	normal
9) Willingness To study in VO	3 indexes	0.724	confirmed	normal

15-28

bartlett test is 0.0005 and is smaller than evaluation level(0.05 ), thus sampling sufficiency and beneficiary of factor analysis were proved and concluded that measurement tool has the necessary reliability and validity.

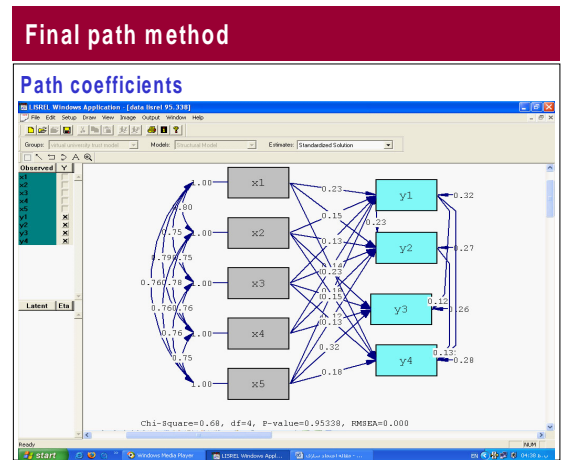
In next stage in order to understand the underlying components variables of research conceptual model , factor analysis was used , after confirmation of components , Normality of confirmed components was tested

Figure 10. Paths t amounts



15-30

Figure 11. Paths coefficients



15-31

Figure 12. Model evaluating indexes

GFI = 1
RMR = 0.0015
CFI = 1
NFI = 1
NNFI = 1.14
RMSEA = 0.000

. in figure 9 we can see , the underlying indexes of 9 factors of conceptual model .

After it has been determined that distribution of components are normal , the derived data from factor analysis was stored to be use in path analysis method .

The result of path analysis method shown in figures 10 And 11 .

The model evaluating indexes shown in figure 12 .

The above indexes indicate model good fitness.

In this section the result of research hypothesis test that derived from path diagrams have been shown in figure 13 .

Figure 13. Results of testing hypothesis by path analysis method

hypothesis	Observed t	Path coefficient	Significant level	Testing hypothesis result
H1	4.19	0.23	SIG< 0.01	CONFIRMED
H2	2.55	0.14	SIG< 0.01	CONFIRMED
H3	3.11	0.16	SIG< 0.01	CONFIRMED
H4	2.85	0.15	SIG< 0.01	CONFIRMED
H5	4.53	0.23	SIG< 0.01	CONFIRMED
H6	12.40	0.80	SIG< 0.01	CONFIRMED
H7	11.91	0.75	SIG< 0.01	CONFIRMED
H8	12.3	0.79	SIG< 0.01	CONFIRMED
H9	12.01	0.76	SIG< 0.01	CONFIRMED
H10	11.91	0.75	SIG< 0.01	CONFIRMED
H11	12.21	0.76	SIG< 0.01	CONFIRMED

15-33

As can be seen, except hypothesis 18<sup>th</sup> and 20<sup>th</sup> whose  $t$  is less than 2, the amount of  $t$  of the rest of the hypothesis are more than 2 and it means that its meaningful level is less than 0.01. It is concluded that H1 hypothesis of all hypothesis except 18<sup>th</sup> and 20<sup>th</sup> hypothesis are confirmed.

Extraction of structural equations:

In order to determine the level of effects on Internal variables (dependent variables:  $y_1, y_2, y_3, y_4$ ) from the rest of research variables, structural Equations have been designed and are shown below.

$$Y_1 = 0.23X_1 + 0.14X_2 + 0.16X_3 + 0.15X_4 + 0.23X_5$$

$$Y_2 = 0.24Y_1 - 0.024Y_3 + 0.15X_1 + 0.13X_2 + 0.15X_3 + 0.19X_4 + 0.13X_5$$

Errorvar=0.32       $R^2 = 0.68$

$$Y_3 = 0.12Y_1 + 0.0014X_1 + 0.17X_2 + 0.12X_3 + 0.23X_4 + 0.32X_5$$

Errorvar=0.27       $R^2 = 0.73$

$$Y_4 = 0.12Y_1 + 0.13Y_2 + 0.030Y_3 + 0.24X_1 + 0.15X_2 + 0.13X_3 - 0.027X_4$$

Errorvar=0.26       $R^2 = 0.74$

Errorvar=0.28       $R^2 = 0.72$

The obtained explanation coefficients for the mentioned variables is indicative that about 68 percent of total  $y_1$  variable changes by five variables of  $X_5, X_4, X_3, X_2, X_1$  about 73 percent of total  $y_2$  variable changes by seven variables of  $y_3, y_1, X_5, X_4, X_3, X_2, X_1$  about 74 percent of total  $y_3$  variable changes by six variables of  $y_1, X_5, X_4, X_3, X_2, X_1$  and about 72 percent of total  $y_4$  variable changes by eight variables of  $y_3, y_2, y_1, X_5, X_4, X_3, X_2, X_1$  have been explained.

In other words about 32 percent of  $y_1$  variable changes, about 27 percent of  $y_2$  variable changes, about 26 percent of  $y_3$  variable changes and about 28 percent of  $y_4$  variable changes have been explained by the variables outside the model.

## DISCUSSION AND CONCLUSION

Discussion about factors affecting applying students' trust to Virtual Universities ( $y_1$  factor):

The theoretical expectation was that the academic Reputation of Virtual Universities ( $X_1$  factor) have a bigger role in creating trust in applying students' in comparison to other factors of the model. The results of present research confirmed this expectation, However what was not expected was the fact that role of suitable environmental conditions (such as: mass media attitudes toward VU, families attitudes to VU, and sufficient IT infrastructures in country) for activity of Virtual Universities ( $X_5$  factor) in creating trust in applying students was the same level as that of academic reputation of Virtual Universities. perhaps the reason for the importance of suitable environmental conditions for activity of Virtual Universities is because if mass media and families have a positive attitudes towards Virtual Universities, then Applying students' due to getting their effects from the mentioned organs would have a positive attitudes and higher trust towards these universities.

Discussion about factors affecting applying students' attitudes toward study in Virtual Universities ( $y_2$  factor):

According to the theories discussed in this research, the theoretical expectation was that applying students' attitudes towards education in Virtual Universities is effected by two factors includes "applying

students trust" and perceiving a lower risk of education in VU ( $y_1$  and  $y_3$  factor). Results showed on the contrary to trust factor which has the most effect on students attitudes, perceiving a lower risk of education in Virtual Universities doesn't result necessarily to a more positive attitude in applying students toward studying in Virtual Universities.

As well as, was determined that there is a relationship between applying students attitudes and five research independent variables include: Academic Reputation, Administrative efficacy, size of Virtual Universities, education being cost effective in V. U. and suitable environmental conditions for virtual university activity., results showed that persons attitude towards education in V. U. gets effects from the mentioned factors.

Discussion about factors affecting applying students' perceived risk to Virtual Universities ( $y_3$  factor):

According to theories and the derived conceptual model from theory, the expectation was that the perceived risk factor ( $y_3$  factor) be only effected by applying students trust factor ( $y_1$  factor), however the results showed that this expectation is not true and this component is effected by 5 components of Academic Reputation, administrative efficacy, size of Virtual Universities, education, being cost effective and suitable environmental conditions.

Evaluations show that two factors of education being cost effective ( $x_4$ ) and academic reputation of Virtual Universities ( $x_1$ ) have respectively the highest and the least role in perceiving a lower risk of education in Virtual Universities from applicant's point of view.

Discussion about factors affecting applying students' willingness choose Virtual Universities for ( $y_4$  factor):

The theoretical expectation was that person's willingness to choose Virtual Universities ( $y_4$ ) is only effected by two factors of attitude and perceived risk.

Results while confirmed relationship between person's willingness to choose Virtual Universities ( $y_4$  factor) with two mentioned factors, but rejected this exclusive relationship and made clear that person's willingness to choose Virtual Universities ( $y_4$  factor) in addition to two mentioned factors is effected by 4 other factors includes: Academic Reputation, Administrative efficacy, size and trust.

Evaluations show that among the 6 effecting factors on persons willingness to choose Virtual Universities the academic reputation factors has the most effect and perceiving a lower level of risk for education in Virtual Universities has the least effect for applications point of view.

## RECOMMENDATIONS

The results of this study provide support for the conceptual model of research and for the hypotheses regarding the directional linkages among the model variables. The model appears to be a reasonable starting point for developing a theory of applying students trust in virtual universities. It is suggested that the following points be taken into consideration for future researches and Iran's virtual universities.

- 1 – With due attention to the fact that acquired explained coefficient for 4 research dependent variables includes: "applying students trust towards Virtual Universities", "persons attitude towards education in Virtual Universities", "perceiving a lower risk of education in Virtual Universities" and "persons willingness to choose Virtual Universities for education are respectively 0.74, 0.73, 0.63, 0.72", thus its suggested that future researches evaluate the affecting factors on these 4 components that were not explained by current research model.
- 2 – In relation to the role of two component "Academic Reputation" and "suitable environmental conditions for Virtual Universities activity in creating persons trust in entering universities",

- country's Virtual Universities are suggested to pay more attention to these two components and help for their promotion .
- 3 – In this research only the effecting factors on person's trust towards education in Virtual Universities got attention , therefore its suggested to future researches that effecting factors on Instructors, trust, virtual university employees trust to this university and also mass media and people in general level of trust towards Virtual Universities be evaluated .
- 4- The current results suggest that the presence of a non virtual structure might have an effect on applying students trust in a virtual universities.

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