Reviewing the communicative variables between university students and the members of Scientific Board in Marvdasht Azad University

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Abstract: The influential elements in relations between students and Professors and educational effecting have been studied. Through stratified sampling, 5100 students were selected from Marv Dasht Azad University and they were given a questionnaire as a data colleting with the survey method. The instrumentation is questionnaire which has been given to 5100 students as a sample. The sample has been chosen through stratified sampling. Variables in the case for improving relations between students and professors are: age, gender, nativity, marital status, family earning rate, social stance of the family, total average, parent's level of education and career, professor's openness, trust toward students, empathy toward students, positivism, professor's supportiveness, forbearance and scientific knowledge. After analyzing the data according to experimental or inferential method, it was proved that student's tendency toward professors' openness was at the average level, but their tendency toward professor's empathy was at a very high level. Whereas their tendency about professor's trust and supportiveness toward students was at medium level, they show a high level of tendency toward professor's forbearance and knowledge.

Keywords: Educational effectiveness, human interaction, students, supportiveness, empathy, equality, possessiveness, Marv Dasht

1. Introduction

Today's human being could not solve his communicative problems in social, cultural, political and economical fields. The gap between static human sciences and improving technologies has caused deficiencies and problems in human interactions(9).University as an educational place can play an important role in removing problems and deficiencies in human interaction in the stated fields especially social and cultural and with noticing that university also has a human making responsibility, the optimum human interaction between parents and employees of the university and professors toward students as the learners of science and culture is very important.(1,10)

This project especially studies the improvement of interaction between professors and students which seems important in two ways: first, it is important for making the students interested in learning and second, they will learn some kind of direct and invisible relation which has a positive impact on their relation with friends, colleagues, family and etc.

Totally, this project is important in improving the relations between professors and students as an effective teaching profession.

In this case, first the outline of hypothesis and population and samples size, sampling method and instrumentation have been stated and then project's theoretical basis as effective elements on human interaction will be studied.

1.1 Theories and variables:

Projects theory has been proposed according to dependent variables which specifies the professor and students interaction quality (honesty, empathy, positivism, supportiveness, openness and professors knowledge) and with affecting of independent variables such as: age, gender, nativity, family earnings, family social stance, total average parents level of education and career, marital status. So it can be proved is there any relations between these dependent and independent variables or not.

2. Material and Methods

Projects has been done with survey method and data collection technique is questionnaire which after testing its validity and reliability will be given to sample students selected through probability sampling and then the data will be analyzed with computer.

1.2. Population and samples:

The students of Azad University of Marv Dasht are the population. For estimating the sample size, first with a premier sampling of 35 students have given the confidence interval (d) of 0/045 and second, the amount of (p and q) were determined in

relation with girls and boys population 0/4 and 0/6. Third, the confidence coefficient was 95 percent and with relates to it, the amount of (t) was 1/96. Forth, via Cochran formula and pre stated sample size was 2999/86.

2.2Instrumentation:

The instrumentation in this research is questionnaire which has been used for evaluating data for useful for variables and testing the hypothesis.

3.2Theoretical debate:

Influential human interaction

Human interaction like other human behaviors, can be placed in the two extremes of fully effectiveness and totally not effective. With high probability, none of human behavior could be totally successful or unsuccessful. It could improve or worsen. In other words, human behavior and also interaction are relative.

In this part the characteristics of an effective interaction will be studies. There are 5 main qualitative characteristics .their quantitative rate should be noticed, too. There is no doubt that these 5 will influence on interaction, but this not necessarily means that, if neglected, the interaction will not happen. Openness, empathy, supportiveness, positiveness and equality will be stated below.

3.3.Openness:

Openness will show its impact on at least 3 main aspects in human interaction. It's and the most obvious is that, for having a useful and open interaction, the sender and receiver of the message should eager to make an interaction. 2nd, the sender should be interested in sending the message .most of the people want the others to have an obvious reaction toward their statements or behaviors. The 3rd dimension owes the feelings and thoughts. With this regard, openness means that the sender who consciously owns the feelings and thoughts transfers it to the receiver of the message.

4.3Empathy:

It means understanding the feelings of somebody. As Bachrach says: "empathy is the empirical ability of understanding what other people experience in a fixed frame with noticing to his opinion (5).

5.3Supportiveness:

An effective interaction beside pre mentioned characteristics relatively have the possessiveness and this at least relies on 3 different factors. 1st by having a positive and certain respect to yourself, an interindividual interaction happens in a correct way and grows up. 2nd, just in the case of transferring the good feelings, the interindividual interaction will happen and grow in the correct way. 3rd, having a good and positive feeling about the

interaction, is very important for an effective interaction. There is nothing worse than having an interaction without good feelings or suitable reaction (4).

5.3Equality:

Equality is an especial characteristic. Every time there could be a non equal situation. One person could be wiser, healthier, richer, more beautiful and powerful than the other one. No two persons are the same from all aspects, nor are the similar twins. Regarding to this inequality, the human interaction is more effective when established on equality. Equality should be in the people attending in interaction, or they should stress on the common points as equality (3).

4. Result:
1.4Data Analysis:

Foe measuring the professor and students interaction which iscosidered a dependent variable, the other variable such as suportiveness, positiveness, trust, empathy, openness have be studied through Likert Scale and then through factor Analysis, its items have been classified.

According to this research, the Average of students age is 21/4 and it Median is 21 and its Mode is 20 years. The Average of their total Average is 14/92 and it's Mode and Median of their average is 15. Also the mean of family earning rate is 329435 Tomans and the Median and totality is 300/000 and 200/000 Tomans respectively. From other side parent's level of education is as follow: 66% of fathers have Diploma degree and less than that and 34% of them have university degrees and also 82/7% of mothers have Diploma degree and lesser and 17/3% of them have university degrees.The summary of student's viewpoint about the communication is as follow:

2.4- Professors openness

Table Number (1) Professors openness toward students

openness	percentage	Reliable percent
Totally closed	4/1	4/3
Closed	34/1	35/9
Medium	41/5	43/8
Open	13/7	14/4
Totally open	1/4	1/5
Total	94/7	100/0
No answer	5/3	
total	100/0	

According to table Number (1) 4/3 percent of students believe that although openness is very important in improving the interaction between

students and professor, but they always are closed. 35/9 percent seem this interaction closed, 43/8 percent which are the most people in the population believe that the range of openness is at average level and 14/4 percent believes it is open and the least of population (1/5%) say that this interaction is completely open.

3.4- Professors authority

Table Number (2) professor's authority toward students

openness	percentage	Reliable percent
Very low authority	2/4	2/4
Low authority	6/7	6/8
medium authority	33/8	34/5
High authority	27/3	27/9
Very high authority	27/8	28/4
Total	98/1	100/0
No answer	1/9	
total	100/0	

According to table Number (2) 2/4 percent of students believe that very low authority of the professor is the best and 6/8 % prefer the low authority and 34/5 % average authority and 27/9% high authority and 28/4% prefer very high authority.

4.4- Professors forbearance

Table Number (3) Professors forbearance toward students

forbearance	percentage	Reliable percent
Very low forbearance	5/3	5/4
Low forbearance	5/0	5/1
Medium forbearance	7/4	7/6
High forbearance	28/3	28/9
Very high forbearance	52/0	53/1
Total	98/1	100/0
No answer	1/9	
total	100/0	

With regarding to table Number (3) 5/4 percent of students believe that the forbearance of professors is very low and 5/1 low, 7/6 percent know it is at medium level and 28/9% is very high and the most people (about 53/1%) say that the forbearance is very high.

5.4- Professors supportiveness

Table Number (4) Professors supportiveness toward students

supportiveness	percentage	Reliable percent
Very low supportiveness	4/3	4/6
Low supportiveness	8/9	9/4
Medium supportiveness	36/2	38/2
High supportiveness	27/3	28/9
Very high supportiveness	18/0	19/0
Total	94/7	100/0
No answer	5/3	
total	100/0	

According to table Number. (4) 4/6 percent of students know the supportiveness of professor very

low and 9/4 low and the most rates (38/2%) between the populations believe it at medium level and 28/9% high and 19 percent very high.

6.4. Professors positivism toward students

possessiveness	percentage	Reliable percent
Very low positivism	0/2	0/2
Low positivism	2/9	3/019/5
Medium positivism	18/7	36/9
High positivism	35/5	40/4
Very high positivism	38/8	100/0
Total	96/2	
No answer	3/8	
total	100/0	

With respect to table Number. (5), 0/2 % of students consider this positivism very low and 3 percent low and 19/5 percent believe this at medium level and 36/9 high and 40/4 percent believe that positivism is the most important factor in the relations between students and professors.

7.4- Trust

Table Number (6) Professors trust toward students

trust	percentage	Reliable percent
Very low trust	11/3	11/6
Low trust	17/7	18/3
Medium trust	45/3	46/7
High trust	17/0	17/5
Very high trust	5/8	5/9
Total	97/1	100/0
No answer	2/9	
total	100/0	

According to table Number (6), 11/6 percent of students believe in very low trust between professors and the students and 18/3 percent believes in low trust and 46/7 % in medium level and 71 person (17/5) high trusts and 24 person (5/9) high level of trust.

8.4. Empathy

Table no. (7) Professors empathy toward students

empathy	percentage	Reliable percent
Very low empathy	0/2	0/3
Low empathy	2/4	2/6
Medium empathy	20/1	21/4
High empathy	32/4	34/4
Very high empathy	38/8	41/3
Total	94/0	100/0
No answer	6/0	
total	100/0	

According to table Number (7) 0/3 percent of students believe in very low empathy and 2/6 low and 21/4 know this rate at medium level.34/4 high and 41/3 very high level of empathy between students and professors.

9.4. Scientific status

Table 8. Professor's scientific status

Scientific status	percentage	Reliable percent
Very low	1/7	1/77/5
Low	7/2	8/0
Medium	7/7	33/7
High	32/4	49/1
Very high	47/2	100/0
Total	96/2	
No answer	3/8	
total	100/0	

According to table number (8) 1/7 percent of students know the scientific status of professor a very low effective factor and 7/5 percent low and 8% at medium level. Also 33/7 percent believe in high and 49/1 very high effective factor.

11.4.Two variable Data Analysis

Through Pearson's correlation coefficient test, the correlation between 5 variables such as age, Total average, date of university entrance, family earning rate and social stance and 8 interaction factors "openness", "empathy", "trust", "positivism", "supportiveness", "professors forbearance", "authority" and "scientific status" were analyzed and in table no. (9), the correlation matrix of "openness" in relation with other variables has been shown and the description of other factor has been stated:

1.11.4. Students age:

As you see in table no. (9), correlation coefficient between two variables (student's age and professor's Openness) is 0/19 which in above 99% is significant and positive. It means elder students prefer the professors who treat openly with them. Also the correlation coefficient between students and Trust is 0/172 which in above in above 99% is significant and positive. It means that as students age goes up, they pay more attention to the Trust as an interaction factor. There is no significant relation between student's age and 8 factors of interaction.

So it can be inferred that elder students prefer a relation with openness and trust with professors.

2.11.4. Student's Average:

According to collected data there is no significant relation between student's average and the 8 factors of interaction.

3.11.4. Year of student's university entrance:

According to table Number (9), the correlation coefficient between year of student's

university entrance and professor's openness is (-0/100) which above 95% have a significant relation and negative. It means that earlier entered university students have more inclination toward openness of the professors.

Also the correlation coefficient between the year of entrance and Empathy is 0/107 and positive.

It means that earlier entered university students have more inclination toward Empathy of their professors.

Also there is no significant relation between the year of entrance and "Trust", "possessiveness", "supportiveness", "forbearance", " authority", " knowledge".

4.11.4 Family earning rate:

The correlation coefficient between family earning rate and professors positivism was (-0/145) which has a significant and negative relation above 95 percent. It means that families with low rate of earning have a more inclination toward professor's positivism. From other hand, there is no significant relation between family earning rate and other factors.

5.11.4. Social stance of the family:

There is no significant relation between family social stance and each of the interaction factors.

Table number. (9) Variables correlation matrix.

Pearson's correlation coefficient		openness	Students age	Students total average	Year of university entrance	Family earning rate	Family social stance
Openness	Correlation coefficient / Significant relation / Population	1 / 0 / 395	0/19** / 0/000 / 381	0/094 / 0/109 / 292	0/100* / 0/049 / 390	-0/071 / 0/270 / 241	-0/044 / 0/384 / 395
Students age	Correlation coefficient / Significant relation / Population	0/190* / 0/000 / 381	1 / 0 / 401	-0/101 / 0/081 / 299	-0/273** / 0/000 / 399	-0/067 / 0/299 / 243	-0/008 / 0/870 / 401
Students total average	Correlation coefficient / Significant relation / Population	0/094 / 0/109 / 292	-0/101 / 0/081 / 299	1 / 0 / 307	0/137** / 0/016 / 305	-0/110 / 0/119 / 201	-0/066 / 0/249 / 307
Year of university entrance	Correlation coefficient / Significant relation / Population	-0/100* / 0/049 / 390	-0/273** / 0/000 / 399	0/137* / 0/16 / 3054	1 / 0 / 412	0/057 / 0/376 / 247	-0/023 / 0/636 / 412
Family earning rate	Correlation coefficient / Significant relation / Population	- 0/071 / 0/270 / 241	-0/67 / 0/299 / 243	-0/110 / 0/119 / 201	0/057 / 0/376 / 247	1 / 0 / 248	0/893** / 0/000 / 248
Family social stance	Correlation coefficient / Significant relation / Population	- 0/44 / 0/384 / 395	0/008 / 0/870 / 401	-0/066 / 0/249 / 307	-0/023 / 0/636 / 412	0/893** / 0/000 / 248	1 / 0 / 417

** Correlation is significant in 0/01
*Correlation is significant in 0/05

6.11.4.student's gender

In table no. (10) Variance analysis test, As it can be seen, student's gender just has a significant

relation with "bilateral trust". The amount of F test is 5/73 which above 95 percent has significant relation. The 7 other factors will not differ through changing the gender of students. It means that both boys and girls have the same preference.

7.11.4 Marital Status:

According to collected data, the married students have different views toward professor's openness, and the amount for test is 4/63 which above 95 percent has a significant relation. But this has no difference in other factors and will not state in the table.

8.11.4student's place of birth:

According to variance analysis, there is a significant relation between student's birth and professor's trust and the F test is 7/68 which above 99 percent has a significant relation. But the student's relativity has no effect on other factors. It means that whether the students were born in cities or villages, have no significance difference in their view toward other factors.

9.11.4.-student's nativity:

The nativity of students has no difference in the factors, whether the students originally from Marv Dasht no not change the factors.

10.11.4. student's field of study:

The relation between student's field of study (telecommunication, computer sciences, biology, natural sciences, sports, nursing and midwifery, microbiology, social sciences) and student's view toward 8 factors has been studied. The amount F test is 9/8 which above 99 percent has a significant meaning. It means that there is a significant relation between openness and other fields of study. And this difference can be noticed on the basis of H.S.D test among different field of study.   According to "Tukey" and "Scheffe" tests, the nursing and midwifery fields have 3/15 and microbiology has 2/37.

From other sides, according to "Tukey" and "Scheffe" tests, the fields can be classified into 3 groups, and in the case of professor's openness, the students studying in the field of the microbiology, telecommunication, biology and natural sciences have almost similar views.

studying in The fields like agriculture, sports, social sciences, nursing and midwifery have almost the same views toward professors openness and will classified in the second group.

There is no significant relation between student's fields of study and professor's empathy and also supportiveness, authority and knowledge. It means that different fields of study will not change the above mentioned factors. But field of study, have a relation with professor's positivism and above 95 percent has a significant relation.

Table Number (10) the relation between student's gender and communicative inclination

Interaction factors	Variance analysis	Sum of squares	Degree of freedom	Average squares	F test	Significant relation level
Openness	Inter groups In groups All					
Empathy	Inter groups In groups All					
Trust	Inter groups In groups All					
Positivism	Inter groups In groups All					
Supportiveness	Inter groups In groups All					
Forbearance	Inter groups In groups All					
Authority	Inter groups In groups All					
knowledge	Inter groups In groups All					

12.4.Poly variable analysis

1.12.4.professors openness toward students

For determining the 8 interaction factors, independent variable from poly variable regression technique has been used. The independent variables entering in the regression model were: family social stance, student's total average, and place of birth, age, father's level of education, mother's career and the openness variable. The method used for this was Back Ward. After deleting the variables having no significance relation with dependent variables, as it can be seen in table no. (11), the amount of R^2 was (0/127) and as it is obvious in table no. (12), the 3 variables age, gender and the level of mother's education for determining the professor's openness were related to the model yet.

The Beta coefficient for student's gender was (-0/197) which above 95 percent has a significant relation. It means that, girls a relation with professor's with a more open behavior. The Beta coefficient for student's age was (0/148) which above 95 percent has a significant and direct relation. It means that elder students prefer professor's openness as a criterion for a good relation. In the case of mother's level of education, the Beta coefficient was (-0/232) which above 95 percent has a significant and negative relation.

It means that students who their mother have a low level of education prefer an open relation with their professors. The intercept is 2/09 which above 95 percent has a significant relation.

2.12.4. Mutual trust:

For explaining the trust, the independent variable for openness has been studied through regression and by using Back Ward test, the independent variables were found. The determination coefficient Was (0/115). There is no significant relation after deleting the variables relating to independent variables. Finally the variables such as social stance of the family, age, place of birth, mother's career, and father's level of education were remained and totally (0/115) of variance of trust.

Beta coefficient for social stance was (-0/290) which above 99 percent has a significant and reverse relation. So students with low level of social stance prefer a relation with more trust with their professors.

The Beta coefficient for student's age is 0/214 which above 99 percent has a significant and direct relation. In that elder students prefer a relation with trust.

The place of birth variable has a correlation with trust above 95 percent and the Beta coefficient was -0/175. It means that students born in village prefer a relation with trust. About the mother career, the Beta coefficient was 0/285 which above 99 percent is significant and direct so, students whose mother has a career are interested in a relation with trust.

Father's level of education has a significant and negative relation in 95 percent and the Beta coefficient is -0/208. It means that students with higher level of education search for a relation with a more trust.

The amount of intercept was 2/475 which above 99 percent is significant.

It should be noted that, the 6 interaction factors including empathy, positivism, supportiveness, forbearance, authority and knowledge were studied separately as a dependent variable, and with independent variables were analyzed through regression. But there were no significant relation which has not been stated here.

Table 11. interaction factors

model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0/406	0/165	0/111	0/81005
2	0/405	0/164	0/115	0/80805
3	0/404	0/163	0/119	0/80609
4	0/399	0/159	0/120	0/80581
5	0/393	0/154	0/120	0/80576
6	0/387	0/150	0/121	0/80541
7	0/380	0/144	0/120	0/80577
8	0/372	0/138	0/119	0/80626
9	0/356	0/127	0/112	0/80933

Table No.(12) regression coefficients

model	Non standard B coefficient		Standardized coefficient	T test	Significant level
	B	STD. Error	Beta		
Fixed amount of a	2/088	0/698	-0/197 0/148 -0/232	3/028	0/003
Gender	-0/343	0/124		-2/772	0/006
Age	0/058	0/029		1/975	0/050
Mother's education level	-0/172	0/055		-3/123	0/002

Dependent variable(y): professor's openness

5. Conclusion:

This project has been done for finding the factors useful for improving the interaction between students and professors to develop the educational environment. 5100 students of Azad University of Marv Dash were the population and the confidence coefficient was equal to 95% and the sampling method is stratified sampling, the sample choosing method is simple random sampling.

Through scaling and by using theory frame, the 8 factors for improving the relation between professors and students such as: "mutual trust", "positivism", "supportiveness", "authority and knowledge" were studied and the below conclusions were received.

1- The student's inclination toward openness was at the average level. But they had a positive view toward empathy. Also, the factor of trust was at medium level but, the positivism was at a high level.

   As supportiveness had a medium level, but forbearance and knowledge was at high level.

2- The conclusion shows that, elder students prefer a relation with more open and trust between students and professors.

3- There was no significant relation between student's nativity, gender, total average and the factors.

4- The collected data reveals that by changing the fields of study of the students, the result will not change.

5- About openness

a) Girls more prefer an open relation with the professors.

b) Elder students prefer an open relation with the professors.

c) Students whose mothers have a low level of education prefer a relation in which professor threat openly.

6- Mutual trust between students and professors

a) Elder students prefer a relation with a mutual trust.

b) The students, who have born in the village, prefer a relation on the base of mutual trust.
c) The students whose mother has a high level of education prefer a relation with mutual trust.
d) The students, whose father has a low level of education, prefer a relation with trust.
e) He students from low level social stance families will prefer a relation on the basis of mutual trust.

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