

Study the Impact of the environmental behavior on educational level of students in College of Health and Medical Technology –Baghdad, Iraq

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Abstract:

Background: A student is a learner, or anyone who attends an academic institution. Student is often used for anyone learning, including early-career adults taking vocational education or returning to college. However, the existence in most countries of noticeable differences in academic achievement in relation to poor educational standards garnered attention in this area. School academic achievement is not only linked to school-related factors, but also to the socio-economic environment in which students are educated. Over this, we study the scientific, social and psychological status of the students in the Health and Medical Technology College in Baghdad and to finding out any association between this variable with the demographical characteristics and socioeconomic status of the study samples.

Subjects&Methods: A descriptive cross-sectional study was carried out to evaluate the scientific and psychosocial status of 200 students involved, selected randomly from the "Health and Medical Technology College in Baghdad". Demographic characteristics and socio-economic status of the study sample were obtained. Using SPSS (Statistical Process for Social Sciences), data were analyzed. Review of the descriptive details, including: Analysis statistics tables ((Score Mean (M.S.), Standard Deviation (S.D.), Relative Sufficiency Percentage (R.S. percent) and Score Cut-off (0.5) according to score 0,1)); Grand mean of score (G.M.S), Person's Correlation Coefficients, and Using graphical presentation (bar charts and cluster bar charts). Analysis of inferential statistics, included binomial test, Chi-Square test (χ^2), testing the person's correlation coefficients, and testing the contingency coefficient.

Result: In total of all participants, those completed the questionnaire, more than half of the respondents 113 (56.5%) were male, 144 (72%) age group (20- 24) years. More than half of participants 105 (52.5%) had moderate Socio-Economic Status. The study sample has failure on the scientific domain assessment while they had positive (pass) in social and psychological domain, the results reveals that main overall assessment domains (scientific, social and psychological status) had a significant different with age groups and grades, gender and marital status, while no-significant different with socio-economic.

Conclusion: There was positive impact of the environmental behavior on the educational level of students in College of Health and Medical Technology –Baghdad.

Key words: Environmental impact, Scientific, Social and Psychological status

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Introduction:

A student is a pupil or someone who attends an institution of learning. In some countries, the English term is reserved for those attending university, while a schoolchild under the age of eighteen is considered an English pupil. In its widest use, students are used by anyone who knows, including mid-career adults who study or return to university ⁽¹⁾. The quality of students is also influenced by socio-economic factors such as attendance in the classroom, family income and education of mothers and fathers, teacher-student ratio, presence of qualified teachers in school, student sex and distance from school ⁽²⁾. The opportunities that education offers individuals and societies put quality and equal opportunities issues in higher education at the forefront. However, the presence of considerable differences in academic achievement as related to poor educational standards in most countries attracted attention to this field. According to the Organization for Economic Cooperation and Development (OECD), academic achievement in college is connected not only to education-related factors, but also to the socio-economic environment in which students are brought up ⁽³⁾. Other study ⁽⁴⁾ indicates that the environment that students come from largely influences their school performance.

The aim of this article was to study scientific status, social status, and psychological status of the participation and to finding out any association between scientific-psychosocial circumstances with some demographical characteristics.

Subjects&Methods:

A descriptive cross-sectional study was carried out to assess the scientific and psychosocial status of 200 participated students selected randomly. Demographic characteristics and socio-economic status of the study sample were obtained.

The interview were based on a well-structured questionnaire, which had been pre-tested on a small pilot scale and subsequently modified from reviewing available questionnaires in the literature. Primary information includes demographic characteristics, which consisted of (12 items): gender, age, grad, parents education level, Father's and mother's job, house, marital status, children, number of family members, and number of rooms, some of these items were scored according to two levels-Likert scale as (1) for Yes, (0) for No. Specialized information which includes three domains: scientific status, social status and psychological status ⁽⁵⁻⁷⁾. Data have been analyzed using SPSS. Descriptive data analysis, which included: descriptive statistical tables ((Mean of Score (M.S.), Standard Deviation (S.D.), Relative Sufficiency percentage (R.S. percent), and their evaluation by cutoff point (0.5) due to score (0, 1)), Grand Mean of Rating (G.M.S), Individual Correlation Coefficients, and graphical display using (Bar charts and Cluster Bar), inferential statistics, included binomial test, Chi-Square test (χ^2), testing the person's correlation coefficients, and testing the contingency coefficient.

Results:

Table (1) shows the frequencies observed and the percentage of variables of demographic characteristics of the study sample, with significant comparisons. The results showed that there was a very significant difference between their levels at $P < 0.01$, except for gender, since statistically a non-significant was accounted for at $P > 0.05$.

Regarding to the subject's "Age Groups", vast majority were reported at the years ranged (20- 24) years, and they are accounted 144 (72%). The majority of the study sample is males 113 (56.5%) and the remaining are females. Fourth grade are accounted greater numbers of study individuals, and they are accounted 87 (43.5%). Rather than marital status of parents are focuses with singles, and they are accounted 179 (89.5%), but married number formed highly numbers 21(10.5%). Relative subjects of asking "Do you have children?" those who are answered with "Yes" are reported 19 (9.5%). Finally the vast majority of the study sample is in the low and moderate categories and accounted for 172 (86%) and the remaining sample is in the high score and is accounted for 28 (14%) that agreed with ZarinaAkhtar⁽⁸⁾

Table 1: Distribution of variables in the study group with demographic characteristics with significant inferences.

Demographics Characteristics	Groups	Count	%	P-value
"Age Groups"	< 20	24	12	$\chi^2=239.7$ P.v=0.000 HS
	20 -24	144	72	
	25 -29	25	12.5	
	30 - 35	7	3.5	
Gender	Male	113	56.5	Binomial test P.v=0.077 (NS)
	Female	87	43.5	
Grade	First	39	19.5	$\chi^2=36.92$ P.v=0.000 HS
	Second	34	17	
	Third	40	20	
	Fourth	87	43.5	
Matrimonial	Single	179	89.5	Binomial test P.v=0.000 (HS)
	Married	21	10.5	
Do you have children?	No	181	90.5	Binomial test P=0.000 (HS))
	Yes	19	9.5	
Socio-economic situation	Low : 89 - & less	67	33.5	$\chi^2=44.47$ P.v=0.000 HS
	Median: 90 - 120	105	52.5	
	High :121 - 150	28	14	

Table (2) shows the summaries subject's responding at the item's responses that were done by using the observed frequencies for the initial responding questionnaire's items, (M.S.), (S.D.), (R.S.), and finally two dichotomous evaluations "Failure – (F)" and "Pass – (P)", due to cutoff point and scoring scale trend towards answering with positive "Yes". It could be observed that the subjects of part 1" Scientific Domain" in light of subjects responses with the first three items, shows pass assessment, while the leftover items were reported failure, then followed with subjects of part 2"Social Domain" in light of subjects responses with the second and eighth items, shows failure assessment, while the leftover items are reported pass. Finally followed with part 3" Psychological Domain" in light

of subjects responses with item named "Do you feel scared during exam?", shows failure assessment, while the leftover items are reported pass.

Table (2): Summary Statistics of the Studied Questionnaire's items in the studied group with assessment.

Questionnaire's items (Scientific Domain)	No.	M.S.	S.D.	R.S. %	Ass.
Do you have a year of failure in the department?	200	0.02	0.14	02	Pass
Do you have a desire to complete the current study?	200	0.90	0.30	90	Pass
Do you have a desire to complete the high study in same college?	200	0.62	0.49	62	Pass
Is there continues meeting between you and the educational staff of the department to solve problems?	200	0.48	0.50	48	Failure
Is there a periodic meeting with the head of the department before exams?	200	0.28	0.45	28	Failure
Is there a periodic meeting with the college Dean before exams?	200	0.07	0.25	6.5	Failure
Do you suffer from the difficulty of study subjects?	200	0.59	0.49	59	Failure
Would you like to extend study in college to five years?	200	0.81	0.39	81	Failure
Do you think that college laboratories fully equipped with their instruments?	200	0.11	0.31	11	Failure
Social Domain					
Have a social connection with your family?	200	0.99	0.10	99	Pass
You have enough money to meet all your needs?	200	0.44	0.50	44	Failure
You have a job during your studies?	200	0.17	0.38	17	Pass
Are you a breadwinner for the family?	200	0.11	0.31	11	Pass
Suffering from family problems?	200	0.21	0.41	21	Pass
Have a positive relationship with parents?	200	0.94	0.24	94	Pass
Have a positive relationship with your brothers?	200	0.92	0.27	92	Pass
You spend most of your time watching TV?	200	0.77	0.43	77	Failure
Are you interested in organizing your time?	200	0.74	0.44	74	Pass
Psychological Domain					
Do you have choice of the department?	200	0.71	0.45	71	Pass
Are you compatible with your friends?	200	0.98	0.14	98	Pass
Do you feel tired and fatigue for no reason?	200	0.42	0.49	42	Pass
Do you often feeling uncomfortable?	200	0.31	0.47	31	Pass
Do you suffer from headaches?	200	0.40	0.49	40	Pass
Suffer from long periods of sadness?	200	0.34	0.48	34	Pass
Do you feel scared during the exam?	200	0.57	0.50	57	Failure
Do you get upset easily and without reason?	200	0.35	0.48	35	Pass
Very hesitant in making decisions?	200	0.49	0.50	49	Pass

Table (3) summaries the subjects at the part's responses that are done by using the compact form through calculating grand mean scores (G.M.S.), (S.D.), (R.S.), and finally the conventional dichotomous responding scoring by (failure and pass) due to cutoff point (0.50). The results shows that scientific domain had failure assessment, since their relative sufficiency are under cutoff point, while the leftover domains are reported pass assessment, since their "relative sufficiency's" were recorded upper / cutoff point. Figure (1) illustrated relative sufficiency's of the studied main domains.

Table (3): Summary Statistics of the Studied Questionnaire's Domains in the studied group with assessment

Questionnaire's Domains	No.	G.M.S	S.D.	R.S. %	Ass.
Scientific domain	200	0.338	0.153	33.8	Failure
Social domain	200	0.812	0.169	81.2	Pass
Psychological domain	200	0.534	0.243	53.4	Pass
Overall Assessment	200	0.561	0.126	56.1	Pass

No.: Number, G.M.S.: grand mean of scores, S.D.: standard deviation, R.S. %: relative sufficiency percent, Ass. : Assessment.

To find out the relationship between demographical characteristic and overall assessments due to compact all main domains according to "Under/Upper" cutoff point, correlation ship through the contingency coefficient of the contingency tables had been constructed in table (4), which were illustrated and testing the distribution's effectiveness among different levels of the predicted variables and the two categories of an overall responding of assessment which were reported (under / upper) cutoff point at score value (50%) for the relative sufficiency of the Global Mean of Score. With regard to the "age groups" of the subject, a very significant difference is recorded at $P < 0.01$, that in light of increasing assess under cutoff point at elderly age. Significant differences are reported between gender at $P < 0.05$, since that increasing of assess due to under cutoff point in male. Highly significant different are reported at $P < 0.01$ within different education grades, and that in light of increasing assess under cutoff point with grade's progressing. Significant difference are reported between parents whom are singles and married at $P < 0.05$, since that increasing of assess due to under cutoff point are assigned with married. Finally, the leftover items are reported non-significant different at $P > 0.05$. Figure (2) illustrated redistribution of socio-demographical Propertiesvariables with an overall assessments due to "Under/Upper" Cutoff point.

Table (4): Association between Socio-Demographical Characteristics variables with an overall assessments due to compact form according to "Under/Upper" Cutoff point.

Main Domains Overall assessment (scientific, social and psychological status)	Demographical Characteristics	Contingency Coefficients	Approx. Sig.	P-value
	Age Groups	0.278	0.001	HS
	Gender	0.150	0.03	S
	Grades	0.354	0.001	HS
	Marital Status	0.156	0.03	S
	Do you have children	0.114	0.1	N.S
	Socio-Economic Status	0.033	0.9	N.S

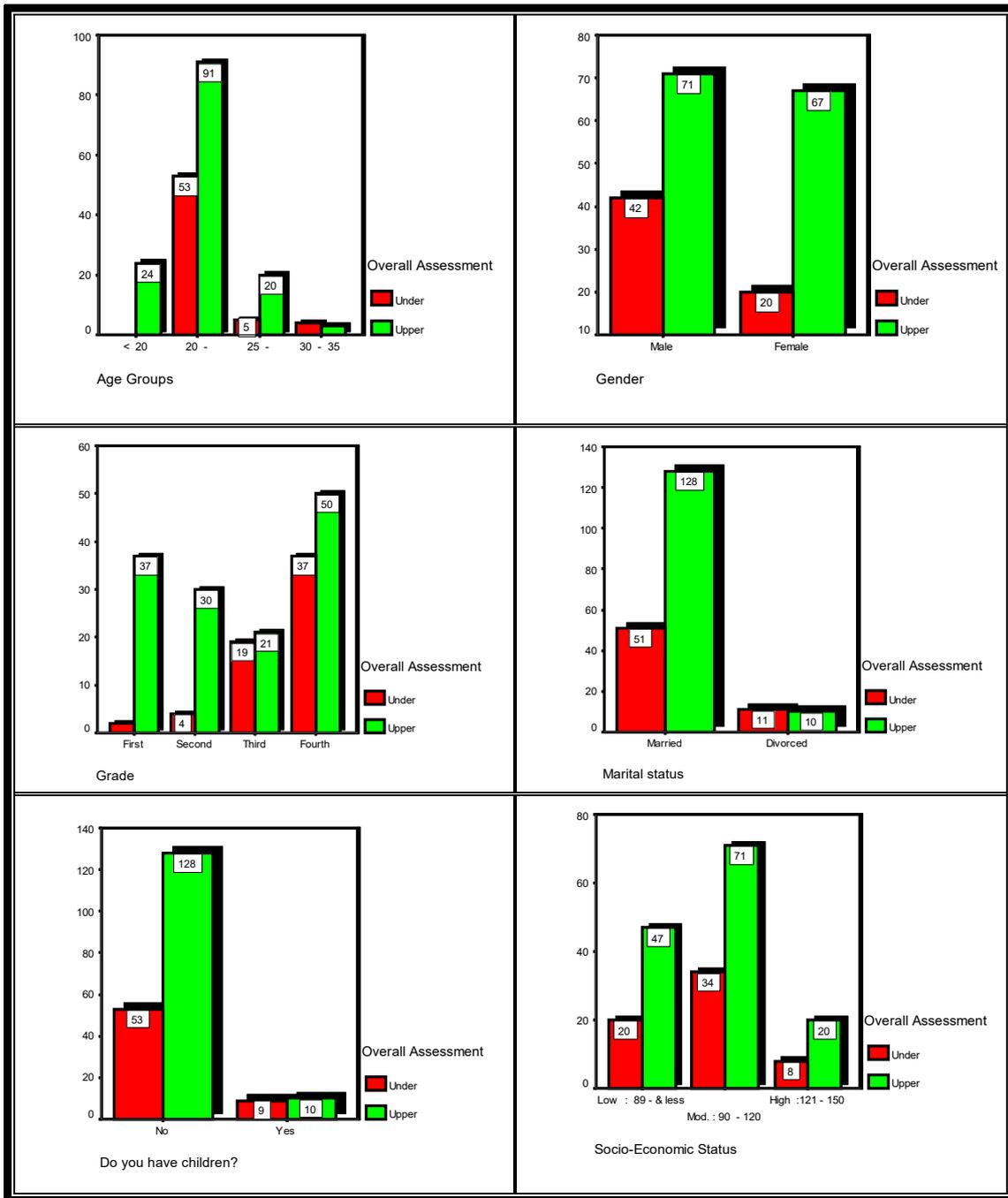


Figure (2): "Cluster Bar Charts" redistribution for Socio-Demographical Characteristics with an overall assessments due to "Under/Upper" Cutoff point

Conclusion

Majority of study sample were males, age group (20-24 years), fourth stage, singles, and within low and moderate categories regarding socio-economic status, with highly significant different among age groups, grade, marital, and socio-economic status. On the other hand the results reveals' that main overall assessment there was positive impact of the environmental behavior on the educational level of students .

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