

## Key Learning Issues: Relationship Between Locus of Control and Study Habits with Academic Achievement

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### ABSTRACT

Academic improvement is a direct outcome of learning. Teaching and progress in learning are principle element that explains the degree of success in activities of every educational institute. Different factors such as individuals learning styles and studying skills can influence academic performance. Whereas students are the main mean for development in any society; this study examined the relationship between locus of control (LOC) and study habits (SH) with academic achievement (AA). In this study a descriptive correlative design were utilized. 220 undergraduate students of Azad University of Jiroft randomly selected from both College of Humanities and Agriculture. Instruments included demographic information, study habits questionnaire (PSSH) and locus of control questionnaire (Rater). Data collected and analyzed via T-test and Pearson correlation using SPSS v.21. The results showed that 71.2% of boys and 28.8% of girls had external LOC and this difference was significant ( $p=0.045$ ). In this study 89% of students take relatively desirable study habits score. A correlation was seen among the three variables (locus of control, study habits and academic achievement). There was a significant positive correlation between SH with AA ( $r=0.175$ ,  $p=0.009$ ) while Scores of LOC had significantly negative correlation with AA ( $r=-0.149$ ,  $p=0.027$ ). Given that variables such as study habits and locus of control have a significant relationship with the academic achievement and can be changed with learning; it is recommended that those involved with education of student and academic culture by teaching to improve the quality of student's education by instructing study techniques.

**Key words:** Study habits, key learning, Academic Achievement.

### INTRODUCTION

Today's magnificent improvements are the consequence of learning. Progress in learning and teaching method is principle elements that explain the degree of success in activities of every educational institute. Validity of an educational system is dependent on quality and quantity of learning in the affiliated students. In fact learning and educational performance is multifactorial. Intelligence quotient, familial factor, gender, age and acquired factors like locus of control (IOC), learning

method and study habit (SH) are effective items (Snelgrove and Slater, 2003, Forrest, 2003).

LOC as a personality related variable is highlighted in researches last two decades (Bagherzadeh R, 2010). It is defined as a person's belief that his or her actions affect the special upcoming out come. The issue of internal against external LOC is rorted in social learning theory, introduced by Ratter in 1966. People are eager to find internal and external reasons for their victories and failures (Rotter, 1966). Internal control present

a person's believe about his ability to manage different situation and external control as opposed states people faith to external rationales for failures like destiny and chance (Tella and Adika, 2008) . The learners who know external factors effective in their own achievement or failure believe in chance or difficulty of their courses and should be encouraged by their trainers or teachers (Schwartz, 2002) but those with internal LOC regularly have a learning plan and are self directed.

Researches in cognitive psychology show that study and learning methods improve student's educational performance (Mohammadpour and Matlabi, 2002). Schwartz showed that student's attendance in academic conferences related to learning skills will help them in best memorizing of the scientific issues (Starke, 1994) . In addition, different studies manifest that collapse in learning skills can negatively impact advantages of an optimal educational circumstance and even personal intellectual capabilities. In contrast, if an efficient milieu exists, it can compensates failures in learning circumstances, educational inspiration and physical and mental health which are very effective in academic performance (Koushan M, 2007) .

Since students are enlightened as proficient and prospective generation of every country and also human resources and essence of development; educational achievement and progress in academic function is a major goal in every institute (Tavakol et al., 2009). Thus, this study designed to assess relationship among control resource and studying habit with educational achievement in Jiroft Azad University.

## METHOD

### Design and participant

A cross sectional descriptive-correlative study was approached in first term 2013. Research population includes all students trained for bachelor degree in Jiroft Azad University. First of all two faculties were chosen among all departments (Agriculture, sociology, sport and technology). Agriculture and faculty were chosen with accidental-stratified method. Justice, literature and

theology from department and cultivate, gardening and biology form agriculture were chosen. Then one entry was selected accidentally and all of students were assessed.

### Tools

Demographic checklist consists of age, genders, subject, marital status, native status, birth order, parent's educational level and previous term mean average.

Living habit questionnaire named PSSHI: this scale is consist of eight dimensions: time management, physical status, reading ability, taking notes, learning provocation, memory, examining and health. Scoring is via Likert scale (0-4). It scores from zero to ninety. Higher scores indicate better studying habit. Total SH score is divided into three sections. Inappropriate study habit was scored less than 30, partial optimal was 31-60 and finally scores over 61 were categorized as desirable situation. Reliability of the questionnaire was estimated 88% and internal stability 65% by split-halve method. Validity reported 74% by Bagherzadeh et al (Bagherzadeh R, 2010) .

Roter locus of control questionnaire: This 29 item questionnaire tests LOC in 23 items and 6 others confuse tester in recognizing the aim of the study. Cut off point is 12. Scores above 12 indicate people with external IOC and scores below 12 expressing internal IOC. Validity and reliability of this test estimated 81% using split-halves method.

### Data Analysis

Data were analyzed using SPSS V.21 and tests like t and Pearson correlation. Significant level considered scores below 0.05.

## RESULT

Finding show that 37.3 percent students were female and 62.7% others were male. 60.9% were single and 39.1% were married. Population's mean age score were 29.35% (SD=8.18) ranging from 18 to 59. Mean average score were 15.28 (from 20) ranging from 11 to 19. Mean and SD of average, LOC and SH score is shown in table 4, detailed with dimensions. 10.4% of students had optimal,

Table. 1: Mean and SD for LOC, SH \*and its dimensions in students of different subject

Students- Field of Study	Total Students	Biology	Agriculture (horticulture)	Agriculture (crops)	Law	Literature	Theology
Academic Achievement	15.28±1.81	15.79±2.23	15.10±1.89	15.21±2.35	15.21±1.64	15.02±2.00	15.80±1.41
Total study habits scores	50.06±7.97	47.86±4.37	52.09±6.27	49.15±6.78	50.11±8.18	51.76±8.85	48.08±9.48
Budgeting Time	5.89±1.66	6.00±1.13	6.09±1.86	6.00±1.77	5.78±1.87	6.10±1.24	5.76±1.30
Physical Conditions for study	6.39±1.74	5.60±2.06	6.54±1.71	5.65±1.18	6.47±1.75	6.86±1.65	6.40±1.87
Reading Ability	8.73±2.07	8.93±1.27	8.63±1.91	9.05±2.28	8.76±2.06	8.90±2.21	8.12±2.02
Note Taking	3.73±1.44	3.20±1.08	3.86±1.20	3.20±1.64	3.32±1.38	3.83±1.51	4.24±1.71
Factors in Learning Motivation	7.88±2.11	7.06±2.15	8.36±2.30	7.50±1.63	7.87±2.17	8.36±2.28	7.68±1.72
Memory	4.40±1.57	4.13±1.50	4.72±1.24	4.60±1.84	4.41±1.64	4.26±1.46	4.24±1.56
Taking Examination	10.18±2.29	9.46±2.13	10.72±2.39	9.80±2.04	10.13±2.32	10.40±2.25	10.36±2.46
Health	3.15±1.39	3.46±1.06	2.86±1.42	3.35±1.72	3.11±1.35	3.16±1.34	3.28±1.51
locus of control Score	9.77±4.60	10.86±2.97	9.09±3.13	9.20±3.17	9.72±3.19	8.93±3.15	11.4±10.42

\* LOC = Locus of control, SH= study habit

89% moderately optimal and 0.6% other bad study habits.

Mean LOC score were 9.77± 4.60. Finding show that there was a meaningful inverse ratio between locus of control score and mean average (r = 0.149, p = 0.072). Mean average score in students with external IOC were 14.80 ± 1.7 against 15.49 ± 1.8. The difference were meaningful through t-test (p=0.003). 66 (30%) students scored above 12 for LOC and 154 (70%) other were scored less than 12. Mean and standard deviation for studying habit and its dimensions and source of control is indicated in table (2). 71.2% of all female students score above 12 in LOC questionnaire whereas 28.8% male had the identical score, using k<sub>2</sub> test. The difference was evident (p=0.045). Mean score in dimensions like time management (p=0.035) memory (p=0.034) and health (p=0.000) for students with internal locus of control were higher than externals, but there was no difference in other dimensions. T-Test indicate that final term average score in female student were 15.89 ± 1.80 and 14.92 ± 1.72 in male (p=0.00).

Native student's average score were 15.26 ± 1.86 and 15.37 ± 1.59 for nonnative students. No difference were seen by t-test (p=0.739). There was neither any difference between single and married (p=0.544) or different student subjects and average score (p=0.907). In compare, a significant negative relation were found between age and mean average score (p=0.544). The older the students the lower was the average marks (p=0.002, r=-0.206) there was also a positive relation between mean average score and student's father education level (r=0.168, p=0.013).

More over results demonstrate that score related to the dimensions of study habit were: 5.89 (from 10) time management, 6.39 (from 12) physical status, 8.73 (from 16) reading ability, 3.73(from 6) taking note, 7.88 (from 12) learning provocation, 4.40 (from 8) memory, 3.15 (from 6) examination, and 3.15 (from 6) health dimensions. There was a positive correlation between total studying habit score with mean average score (r=0.175, p=0.009). It means that the more desirable studying habit the more students' final term average scores. There was also a significant relationship between subject and

the dimension of taking note. Actually students of humanities department wrote down more notes during the study ( $r=0.139$ ,  $p=0.039$ ). There was also a significant correlation between memory and gender ( $r=0.139$ ,  $p=0.039$ ). Female students score in term of memory were higher ( $p=0.043$ ,  $r=-0.136$ ).

Finally no interdependent was seen between average score and other demographic factors. There was also a negative correlation between mean SH score and mean IOC score ( $r=-0.348$ ,  $p=0.000$ ); IOC score decrease when study habit score were increased.

### DISCUSSION

Finding showed that the three variable (IOC, SH and AA) in learning issue are correlative. The more SH score the more achievement can be gained in university and colleges. In fact students with SH score more than 60 had a greater mean average score. Drossis and colleague found that SH and AA are related either (Derossis et al., 2004). Sirohi showed that poor SH was a significant factor in student's educational failing (Sirohi, 2004). Boher also indicated that SH had a meaningful positive relation with AA. Students who used to take notes by their own words had a better function than those who just underlined important parts (Boehler et al., 2001). Funent (De la Fuente and Cardelle-Elawar, 2009)

(Fereidounimoghadam and Cheraghian, 2009) and Khadiv Zadeh (Khadivzadeh et al., 2004) confirmed our result. No doubt, study skills are very important factor on student's academic achievement because people who had better studying skill, active learning and more engagement with subjects would bear far more better memory and recall. On the other hand, this study result show that LOC score is decreasing by progress in academic improvement. Since scores below 12 considered internal LOC; students with those scores had higher AA and vice versa. Karden, Valizadeh and Sheferd (Carden et al., 2004, Valizadeh et al., 2007, Shepherd S, 2006) had identical findings while Heidari, Bagherzadeh and Frary's (Bagherzadeh R, 2010, Heydari and Koushan, 2002, Ferrari JR, 1992) consequences were different. People with internal LOC in spite of those with external LOC have a series of characteristics like higher endurance, independent thinking, self competency perseverance, curiosity, and higher innovation which progress AA (Yazdanpanah et al., 2010) but these divergence in findings can be an outcome of using different research tool or the question that whether average is an appropriate criteria for measuring AA or not.

The majority of male students demonstrated external LOC rather than female. This difference was significant. Mahbob Zadeh and Anderson and colleagues did not find any

**Table. 2: Mean and SD for average, SH and its dimensions and internal and external LOC scores**

Demographic Information	Students with External locus of control Mean $\pm$ SD	Students with Internal locus of control Mean $\pm$ SD
Academic Achievement	14.80 $\pm$ 1.75	15.49 $\pm$ 1.80
Total Study Habits scores	47.65 $\pm$ 8.70	51.09 $\pm$ 7.44
Budgeting Time	5.48 $\pm$ 1.73	6.06 $\pm$ 1.60
Physical Conditions for study	6.33 $\pm$ 1.68	6.41 $\pm$ 1.77
Reading Ability	8.86 $\pm$ 2.08	8.68 $\pm$ 2.01
Note Taking	3.59 $\pm$ 1.35	3.79 $\pm$ 1.48
Factors in Learning Motivation	7.60 $\pm$ 2.27	8.00 $\pm$ 2.04
Memory	4.15 $\pm$ 1.44	4.51 $\pm$ 1.62
Taking Examination	10.03 $\pm$ 2.13	10.24 $\pm$ 2.36
Health	2.66 $\pm$ 1.43	3.37 $\pm$ 1.31
locus of control score	13.74 $\pm$ 5.89	8.07 $\pm$ 2.41

Table 3: Correlation between LOC and study habit dimensions with age, gender, parent's level of education and subject

Variable-Relationship	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Age	1																
2 Sex	0.127	1															
3 Marital	-0.494**	-0.001	1														
4 Father Education	-0.221**	0.075	0.155*	1													
5 Mother Education	-0.194**	0.043	0.086	0.641**	1												
6 Field of study Education	-0.036	-0.064	-0.017	0.097	0.125	1											
7 Academic Achievement	-0.206**	-0.258**	0.041	-0.168*	0.115	0.008	1										
8 Total Scores study habits	-0.056	-0.035	0.002	-0.048	-0.027	-0.009	0.175*	1									
9 Budgeting Time	-0.051	0.006	0.047	0.000	0.013	-0.034	0.111	0.530**	1								
10 Physical Conditions	-0.058	0.038	0.041	0.085	0.085	0.117	0.117	0.516**	0.178**	1							
11 Reading Ability	0.053	0.162	-0.021	0.016	0.035	-0.063	0.021	0.45*	0.345**	0.191**	1						
12 Note Taking	-0.063	-0.072	-0.065	0.017	-0.003	0.139*	0.122	0.384*	0.244*	0.261**	0.039	1					
13 Factors in Learning	-0.121	-0.048	0.013	-0.065	-0.121	0.046	0.025	0.581*	0.158**	0.212**	0.063	0.333*	1				
Motivation																	
14 Memory	-0.049	0.136*	-0.060	-0.058	-0.075	-0.041	0.125	0.375**	0.053	0.115	0.173*	0.090	0.158*	1			
15 Taking Examination	-0.04	0.065	-0.006	-0.020	0.021	0.048	0.064	0.591*	0.303**	0.191**	0.207*	0.132	0.399**	0.070	1		
16 Health	0.053	-0.054	-0.056	-0.069	-0.073	0.004	0.127	0.327*	0.148*	0.190**	0.168*	0.055	0.067	0.154*	0.077	1	
17 locus of control	0.004	-0.05	-0.050	0.105	0.136	0.037	-0.149*	-0.348**	-0.108	-0.117	0.102	0.006	-0.122	-0.026	0.007	-0.080	1

dissimilarity between LOC and gender (Anderson et al., 2005). Higher internal LOC in girls who were almost native prove that self stem is growing among female students. Most of all students had desirable or moderate SH. Concerning that SH is a very important point in learning process; this situation is not ideal and students are not well trained study skills. The problem is not only confined in student's of Azad University but in students of other colleges (Khadivzadeh et al., 2004, Fereidounimoghadam and Cheraghian, 2009). Dorak hold a workshop to measure the effect of educating study skills on learning ability and homework affairs in students and found remarkable positive outcome (Durak et al., 2006). In addition, this research reveal that LOC score were decreasing by increase in SH, that may be due to the reason that people who feel higher control over their living issue behave so that lead to more over coming. This study is limitted in term

of participants and assessed items fitted in our research tool. We suggest that future studies extract optimal studying habit using qualitative methodologies.

### CONCLUSION

We conclude that planning to teach learning skill is necessary; regarding that SH and LOC variable are very important factors in students educational function. As researcher says study skills and habit are learnable; thus it is suggested that study skill lessons incorporate in freshman courses.

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