A Study of Motivation Orientations Used from High School to University

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Abstract: Learning strategies and motivational orientations are important issues that have attracted the attention of many researchers in recent decades. Thus this research was done with the aim of investigation the use of students' motivational orientations compared with them high school. The type of research is applied, descriptive. Students of University of Sistan and Baluchestan the number of 19750 was considered as target population and with use of Krejcie and Morgan (1970) sample size table 375 students were considered as sample. The main components of motivational orientations were measured with using Taylor-Sims (2011) Motivational Strategies Questionnaire (MSQ). Data was examined with using Paired Sample t-test, Friedman test for prioritize the variables, Analysis Variance and Independent-sample t-test. The findings indicated that generally students use less motivational orientation than them high school course and this amount wasn't desirable. The girls more utilized these skills in comparison with boys. Among different educational groups in just a few components was a significant difference. In rate of using of motivational orientations weren't significant differences between educational levels and age.

Keywords: Learning, Motivation, Motivational Orientations, MSLQ

1. Introduction

In reviewing the learning process in general and learning strategies in particular, should be considered two important elements, cognition and metacognition. Cognition is a broad term that mainly is used in reference to mental activities such as thinking, perception and reasoning and metacognition is a term that describes the person's knowledge about cognitive processes and learning strategies are actually standing in the context of cognitive theories (Solso, 2001). Learning strategies also affect the quality of learning. These strategies are procedures and practices that employ students during the learning to achieve the desired learning goals. In fact, learning strategies are techniques that learner in the learning process by using them attempt to selection and acquisition of information and then integrating (Weinstein et al., 1989). One factor that has been approved by its impact on learning is motivation. In training theories, motivational orientation is a fundamental concept which has been used in various interpretations, including student's motivation, learning motivation, academic motivation (Samadi, 2012). In education, achievement's motivation has an outstanding importance; it often depends on the behavior of learners in achieving the goals. Behavior and performance of students in school vary depending on the level of them motivation. Motivation is a very important factor and often is the most important condition for learning and it is often more important than general intelligence (Sheikholeslami & Khayyer, 2006). There are several definitions of the term motivation; this is one of the most comprehensive: motivation is said to the creator, maintainer and driver behavior. In terms of breeding, motivation is both the aim and the means. As target, we want school and university students earn interest towards scientific and social issues. Hence, all curricula that for their intended activities related to the emotional aspects have motivational goals. As a means, motivation as a psychological readiness considered a prerequisite for learning and its impact on learning is quite clear (Seif, 2011).

Motivation can be defined in terms of actual behavior. Those who are irritated than those who are not irritated, try more. But this definition is relative and can't say much more about this. The definition that suggests further content but has less important is: motivation is the desire to do and depends on one's ability that thereby provided a need. In our technical terms, require is typical psychological and physiological deduction and lack that can attractive a particular outcome (Robbins, 2012). Motivational strategies are said to those behaviors that are associated with learning and development. An individual's academic success is dependent on many factors such as motivation and learning strategies (Taylor, 2011). According to what was said this study sought to examine the motivational orientation of University of Sistan and Baluchestan students compared with their high school. Motivation is a concept in psychology

that widely been discussed for at least a century. Motivation is generally called an internal state that encourages the person to be engaged in certain behaviors. From one perspective, it must have a direction, severity and duration of the behavior over time. Direction is referring to select the specific behavior of a wide range of possible behaviors. Severity refers to the amount of effort spent on a task. Duration refers to the continuity of behavior over time. From another perspective, motivation is associated with a desire to learn or gain some objectives. This means that, the motivation stems from the wishes and desires of the individual (Spector & Fox, 2003).

2. Importance and Factors Affecting Motivation

Motivation is a very important factor and the most important condition for learning. It is often more important than general intelligence. In fact, psychologists believe that motivation is an essential source of learning. They believe that in the absence of sufficient motivation for learning, learning in school is unlikely. Motivational issues in learner's teaching and training and its impact on academic performance considered an essential aspect of effective learning. This has been seen repeatedly students are very similar in terms of ability and academic aptitude, and in other words general intelligence but have large differences in academic achievement together. Researchers have found smart children with below expectations compared to children with lower intelligence but with higher expectations had lower scores (Cano, 2006). In general, a set of interrelated factors affect the interest and motivation of students to learn. This category may include: characteristics of the learner, quantitatively and qualitatively of curriculum, characteristics of teachers, conditions and characteristics of the learning environment, learning activities and assignments and other environmental factors. Among the characteristics of the learner the most important factor is required. Need refers to a state of lack or deficiency in human. When human feel the need, it's an uncomfortable feeling. When his need satisfied it is pleasing to him. Hence, it is said his motives, both conscious and unconscious derived from his needs. Relevance and significance of programs and assignments to learners depends on their appropriateness and relevance to the needs, in particular, priority needs (Wang et al., 1990). Type, degree and severity of needs vary in different individuals. Also, need's impact vary in motivating people between different people and an individual in different situations for behaviors. Also environmental factors influence people's perception of what is needed and motivate them to strive for elimination the need. Need led to behavior and in other hand need's satisfaction (behavior) may also be a need and desire to satisfy other needs (Irannezhad & Sasangohar, 1996).

Pintrich and DeGroot's (1990) research results showed that self-regulation, self-efficacy, and test anxiety are the best predictors of academic performance. Also self-efficacy in boys and test anxiety in girls was significantly higher. But in other components wasn't significant difference between boys and girls. Anderman and Young (1994), Linn and Hyde (1989) in a study aimed to investigate the role of gender in the use of learning strategies and motivational strategies found there are no difference in term of use these strategies between girls and boys at each level of education but they differ in terms of learning and how they make progress. When Art and When Week's research results in 1996 showed there were a strong correlation between average grade with motivation, time management, anxiety, concentration, selecting main ideas and test strategies between students of two studied faculty (Quote Wongswadlwat, 2003). Cubukcu (2007) refer to Alexandre research results in 1996, in a study titled compared of learning and study strategies norms Singapore students with American students' norms showed that three areas of information processing, selecting main ideas and Singaporean students study guide were above the 50th percentile of normative table scores for students in America. A study by Kovach & Wilgosh (1999) at the University of Alberta, Canada was conducted as learning strategies and motivational differences between male and female students and their academic average grade. Findings indicated that boys obtained significantly lower scores than girls in motivation, study guide and test strategies while they had less anxiety than girls. Also comparing students with high and low grade point average showed significant difference in the area of time management and motivation and in both areas, lower average grade group had more problems in these two areas. Downing and Shin's research results (2007) indicated the scores of male and female students in self-regulation components and test anxiety had significant difference.

However, in other components were not significantly different between the two groups. Shih et al (2009) drew norms of learning and study strategies in Taiwan's students. Results showed that except two areas of information processing and self-examination that were above the 50th percentile, anxiety was in the 50 percentile, other areas were less than 50th percentile. Three scope of choose the main ideas, attitudes and motivation were lower 15th percentile. The result of research by Serin et al. (2009) that was conducted in

order to comparative analysis of factors affecting on teaching students' learning and study strategies in the International University of Greece implies the existence of significant differences in the areas of motivation, anxiety, selecting main ideas and study guide between men and women. A study by Taylor Sims (2011) conducted titled study of motivational, learning and cognitive strategies used by students compared with high school and university's first semester average grade. The findings suggest that a relationship exists between average grade of first semester of university and strategies used in high school. Also results showed that students used more motivational strategies than them school's time. University allocated the most of the motivational components to itself. But there was no significant difference in terms of learning strategies. According to what was said the main questions of this research are the following questions:

- Is there a significant difference in students' motivational orientation compared to them high school?
- What is the priority of motivational orientation in college compared to high school?
- Is there a difference in students' motivational orientations based on variables such as gender, age, field of study and grade?

3. Methodology

Considering the goal of the research which is investigation the use of student's motivational orientations compared with them high school, quantitative research method was used. The target population of this study is all male and female students of University of Sistan and Baluchestan at the undergraduate and postgraduate in the 2013-2014 academic years as follows:

Table1: Target population

Levels	Number
Female	11850
Male	7900
Undergraduate	13825
Postgraduate	5935
Total	19750

Sample Size and Sampling Method: In this study has been used stratified proportional by size sampling method and simple random sampling because the sample representation is very important for the purposes of generalizability of the sample. The study sample consisted of 375 students from the University of Sistan and Baluchestan that have been determined by using Krejcie and Morgan (1970) table sample size. The details of sample descriptive statistics are displayed in table 2.

Table 2. The details of sample (N=575)						
Variable	Group	Ν	Percentage			
Gender	Female	152	40.5			
	Male	223	59.5			
Age	18-21	160	42.7			
	22-25	118	31.5			
	26-32	97	25.9			
Grade	Undergraduate	282	75.2			
	Postgraduate	93	24.8			

Table 2: The details of sample (N=375)

Instrument: In this study required data in a real environment has been collected with the use of library resources and distribution of the questionnaire in person. Motivational Strategies Questionnaire (Taylor-Sims, 2011) was used to collect data that includes six types of motivational orientation (learning control, Self- Efficacy, test anxiety, work values, external goals, and internal goals). The questionnaire had been adjusted in 45 questions for high school and 45 questions for university. MSQ measurement scale is sequential. Respondents on the basis of a questionnaire guide ranked them answers on a scale of five from 1 (Very low) to 5 (Very much). The purpose of the questionnaire was that collect information on study habits, motivation and learning skills of students. Researcher has provided the questionnaire for consideration and comment to several experts in this field. After the expert opinions and needed reforms, validity was confirmed. Cronbach's alpha was used to determine the reliability of the test. The results of the reliability of the questionnaire, obtained with Cronbach's alpha, as follows:

Table 3: Results of University Questionnaire Reliability

University Questionnaire	Number Questions	of	Cronbach's Alpha
-	45		0.72
Table 4: Results of School Qu	estionnaire R	eliab	ility
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Table 5: The results of the reliability of motivational orientation questionnaire

Components	Number of questions	α
Learning Control	6	0.72
Self- Efficacy	6	0.68
Test Anxiety	6	0.77
work values	6	0.65
External Goals	6	0.69
Internal Goals	6	0.72
Total	36	0.705

Methods of Data Analysis: For data analysis used Paired Sample t-test, Friedman test for prioritize the variables, ANOVA and Independent-sample t-test by using SPSS software, version 20.

4. Results

1) Is there any significant difference in students' motivational orientation compared to them high school? To answer the first question used Paired Sample t-test. The results of this test can be seen in the below table:

Components	Mean	Std.D	t-test	df	Sig
Learning Control (University)	10.7707	2.02674	1 002		0.061
Learning Control (H. School)	11.0267	2.1142	-1.002		0.001
Self- Efficacy (University)	10.5680	1.9306	1 752		0 001
Self- Efficacy (H. School)	10.8080	1.939	-1./52		0.001
Test Anxiety (University)	9.1493	2.5278	2017		0.000
Test Anxiety (H. School)	9.7733	2.46024	-3.017		0.000
work values (University)	9.8293	2.09473	0657	274	0 512
work values (H. School)	9.7333	2.06533	0.037	574	0.312
External Goals (University)	10.2613	2.07248	2 0 7 0		0.000
External Goals (H. School)	10.8507	2.2154	-3.979		0.000
Internal Goals (University)	7.7120	2.15378	2.070		0.002
Internal Goals (H. School)	7.2507	2.3698	3.079		0.002
Total (University)	50.5787	5.1198	1960		0.000
Total (H. School)	52.192	5.6828	-4.000		0.000

Table 6: Results of Paired Sample t test (N=375)

As the above table results shows, t-test for components of learning control, self- efficacy and work values respectively are -1.88,-1.752 and 0.675. Since, significance level (Sig) is more than 0.05, for these components, there is no significant difference between high school and university. But t-test for components of test anxiety, external goals and internal goals respectively are -3.817, -3.979 and 3.079. Since, Significance level (Sig) is less than 0.05; there is a significant difference between high school and university. In general, t-test for motivational orientation of university and school is -4.860. Since, Significance level (Sig) is less than 0.05; overall, there is a significant difference in terms of components of motivational orientation between university and school.

2) What is the priority of motivational orientation in college compared to high school? To answer the second question used Friedman test. According to the below table significant coefficient in the level of 0.95 confidence is 0.001, this indicates that motivational orientation components ranking are different

together. Components in order of preference are given in the table 8.

Table 7: Friedman test					
Numbers	375				
χ^2	1046.691				
Df	11				
Sig	0.000				

Table 8: Motivational orientation components in order of preference

School				University		
Rank	Mean	standard deviation	Variables	standard deviation	Mean	Rank
1	11.02	2.114	Learning Control	2.026	10.77	1
3	10.80	1.939	Self- Efficacy	1.930	10.56	2
4	9.77	2.460	Test Anxiety	2.528	9.149	5
5	9.73	2.065	work values	2.094	9.829	4
2	10.85	2.215	External Goals	2.072	10.26	3
6	7.25	2.369	Internal Goals	2.153	7.712	6
	52.1920	5.6828	Total	5.1198	50.5787	

As the table 8 results shows, components of learning control and internal goals in both high school and college have acquired rating 1 and external goals has acquired final rank. The other components are different ranking among high school and university. In general, results showed that mean of motivational orientations in time of school are more than university.

3) Is there any significant difference in students' motivational orientations based on variables such as gender, age, field of study and grade? To answer the third question used ANOVA and Independent-sample t-test. The results of these tests can be seen in the below table:

Components	Gender	Numbers	Mean	Std. Dev	Т	df	Sig
Learning	Male	152	10.7961	2.1169	0 107		0 262
Control	Female	223	10.7534	1.9675	0.197		0.205
Solf Efficacy	Male	152	10.5921	1.9062	0 200	373	0.610
Sell-Enicacy	Female	223	10.5516	1.9511	0.200		0.010
Test Anxiety	Male	152	8.5987	2.7265	-3.428		0.054
	Female	223	9.5247	2.3168			0.034
	Male	152	9.8224	2.2614	0.052		0145
work values	Female	223	9.8341	1.9783	-0.032		0.145
External	Male	152	10.2237	2.2232	0 202		0 1 2 1
Goals	Female	223	10.2870	1.9678	-0.205		0.121
Internal	Male	152	7.6382	2.3935	0 5 2 9		0 0 2 2
Goals	Female	223	7.7623	1.9778	-0.520		0.025

As the above table shows, in components of learning control and self- efficacy male have bigger mean than female but the difference is not significant at the level 0.95. In components of test anxiety, work values and external goals female have bigger mean than male but the difference is not significant at the level 0.95. But in component of internal goals female have bigger mean than male but the difference is not significant at the level 0.95. Results of table 10 shows that in components of learning control, self- efficacy and work values, internal goals, and in total, according respondents' mean score differences, based on the observed F, the comparison of these components' mean with respect to age in level of 0.95 is not a significant difference and in components of external goals and test anxiety is a significant difference.

Components	Age	Ν	Mean	Std. Dev	df	F	Sig
	18-21	160	10.7875	1.96314	2		.990
Learning Control	22-25	118	10.7627	2.07829	2 272	.010	
	26-32	97	10.7526	2.08682	572		
	18-21	160	10.3500	1.87737	2		
Self- Efficacy	22-25	118	10.6864	1.95111	2 272	1.855	.158
	26-32	97	10.7835	1.97498	572		
	18-21	160	9.4500	2.27593	n		
Test Anxiety	22-25	118	9.2797	2.54157	2 272	4.624	.010
	26-32	97	8.4948	2.80299	572		
	18-21	160	9.6438	2.00423	n		
work values	22-25	118	9.8559	2.16134	2 272	1.469	.231
	26-32	97	10.1031	2.14808	572		
	18-21	160	10.0500	1.99937	n		
External Goals	22-25	118	10.0593	2.01402	2 272	5.511	.004
	26-32	97	10.8557	2.16501	372		
	18-21	160	7.8813	2.12316	n		
Internal Goals	22-25	118	7.6780	2.05431	2 272	1.100	.334
	26-32	97	7.4742	2.31432	372		
	18-21	160	50.2813	4.29153	n		
Total	22-25	118	50.6441	5.13331	2 272	.591	.554
	26-32	97	50.9897	6.25915	312		

Table10: Examination of motivational orientation of students by age

Components	Field of Study	Numbers	Mean	Std. Dev	df	F	Sig
	Humanities	176	10.8409	1.9993			
Learning	Engineering	107	10.7570	2.0551	2	0 264	0 769
Control	Basic Sciences	92	10.6522	2.0618	372	0.204	0.700
	Humanities	176	10.7045	1.9837			
	Engineering	107	10.5514	1.7058	2	1 1 (7	0.010
Self- Efficacy	Basic Sciences	92	10.3261	2.0654	372	1.167	0.312
	Humanities	176	9.1193	2.6191			
m	Engineering	107	9.4019	2.3142	2	0.045	0.000
Test Anxiety	Basic Sciences	92	8.9130	2.5918	372	0.947	0.389
	Humanities	176	9.7955	1.9634			
XA7 X7	Engineering	107	10.1869	2.564	2	2 0 0 2	0.050
work values	Basic Sciences	92	9.4783	2.3274	372	2.903	0.056
	Humanities	176	10.1136	2.1081			
External	Engineering	107	10.3271	2.0083	2	0.055	0.207
Goals	Basic Sciences	92	10.4674	2.0778	372	0.955	0.300
	Humanities	176	7.9602	2.1761			
Internal	Engineering	107	7.7944	2.0034	2	45(2)	0.011
Goals	Basic Sciences	92	7.1413	2.1968	372	4.562	0.011
	Humanities	176	50.5739	4.77915			
Tatal	Engineering	107	51.2243	4.89572	2	1 0 2 4	0.1(2)
IULAI	Basic Sciences	92	49.8370	5.90265	372	1.024	0.103

As the above table shows, in components of learning control, self- efficacy, test anxiety, work values, external goals, and in total, according respondents' mean score differences, based on the observed F, the comparison of these components' mean with respect to field of study in level of 0.95 is not a significant

difference. And in component of internal goals is a significant difference.

Components	Grade	Numbers	Mean	Std deviation	Т	df	Sig
Learning	Undergraduate	282	10.7376	1.9844	0.527	373	0.957
Control	Postgraduate	93	10.8710	10.1580			
Self- Efficacy	Undergraduate	282	10.5213	10.5213	-0.761		0.233
	Postgraduate	93	10.7097	10.7097			
Test Anxiety	Undergraduate	282	9.3404	9.3404	2.567		0.010
	Postgraduate	93	8.5699	8.5699			
Work Values	Undergraduate	282	9.6950	9.6950	-2.259		0.612
	Postgraduate	93	10.2366	10.2366			
External	Undergraduate	282	10.0638	1.9882	-3.082		0.421
Goals	Postgraduate	93	10.8602	2.2145			
Internal	Undergraduate	282	7.6844	2.0724	-0.402		0.283
Goals	Postgraduate	93	7.7957	2.3936			

As the above table shows, in components of learning control, Self- Efficacy, work values, external goals and internal goals Postgraduate students have acquired most mean and Undergraduate students have acquired lowest mean but in level of 0.95 is not a significant difference. In components of test anxiety Undergraduate students have acquired most mean and Postgraduate students have acquired lowest mean and in level of 0.95 is a significant difference.

5. Discussion and Conclusion

To answer the first question used Paired Sample t test. According to the results, in general, there was a significant difference between students' motivational orientations compared with them school time. Results showed that students in college had less motivational orientations than school time. Given that students decide with authority to enter the university and study and usually have reasons for them studies, it can be said the need for education encourage them to enter the university and study, so having the proper motivation to learn in them seems logical. This result is in line with the study by Shih et al (2009). And with Taylor Sims' research (2011) which showed that most of the motivational components are allocated to the university have inconsistent. To answer the second question used Friedman test. Components of learning control and internal goals in both high school and college were acquired rating 1 and external goals were acquired final rank. The other components had different ranking among high school and university. In general, results showed that mean of motivational orientations in time of school were more than university. To answer the third question used ANOVA and Independent-sample T Test. Components of learning control, Self- Efficacy and work values, external goals and internal goals, according respondents' mean score differences, based on the observed F, the comparison of these components' mean with respect to age in level of 0.95 had not a significant difference and in components of work values and test anxiety had a significant difference.

In components of learning control and Self- Efficacy male had bigger mean than female but the difference was not significant. In components of test anxiety, work values and external goals female had bigger mean than male but the difference was not significant. But in component of internal goals female had bigger mean than male but the difference was not significant. This result is in line with the study by Jalali and Arefi, (2009), Serin et al (2009), Kovach and Wilgosh (1999), Downing and Shin(2007) and Pintrich and DeGroot (1990). And have inconsistent with researches by Anderman and Young (1994) and Linn and Hyde (1989). Components of learning control, Self- Efficacy, test anxiety, work values and external goals, according respondents' mean score differences, based on the observed F, the comparison of these component of internal goals had significant difference. This result is in line with the study by Wongswadlwat (2003). In components of learning control, Self-Efficacy, work values, external goals and internal goals Postgraduate students were acquired most mean and Undergraduate students were acquired most mean and Undergraduate students were acquired most mean and Undergraduate students were acquired most mean and Indergraduate students were acquired most mean and Postgraduate students were acquired lowest mean and in level of 0.95 were a significant difference.

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