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*Original Article*

## The Qualitative Analysis of Effective Elements in Decrease of Academic Motivation in High School Students of Hormozgan Province

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### ABSTRACT

The present qualitative study analyzed influential factors in reducing the academic motivation in high school students of Hormozgan province and presented some strategies to improve it. In this regard two issues are discussed. First, which factors cause *decrease in academic motivation* students and other which strategies improve their motivation for more educational achievements in four areas: mental and cognitive; needs and talents; social-Value; *academic* planning and classroom management. The research methodology is descriptive-analytic in a form of studying available documents and papers which has been analyzed and concluded in a qualitative manner. The research findings include important factors affecting decreasing educational motivation of students such as lack of understanding and proper knowledge of students due to education goals, pursuing study at high school courses and wrong believes and mentality exist in the society, economic poverty of many of rural students studying at high school courses, adverse impact of inappropriate classroom environment, behavior of teachers, family members, peers, multimedia and cultural invasion; students unfamiliarity with proper principles of planning and problem-solving methods; teachers inadequate skills on the principles of cooperative and active teaching methods and techniques at classroom and lack of skilled manpower. Main strategies to improve *academic* motivation of the students include efforts and plans of cultural organizations in order to change attitude and insight of society due to actual nature and objectives of Islamic educational and holding training workshop in this respect, building standard classroom spaces and providing educational facilities and instruments required for students to study in high school courses, deepening and developing educational-cultural activities, holding students competitions and festivals and providing positive emotional atmosphere and mutual receptiveness at school and home, continuing training of consultants, solving problem of skilled teachers and consultants shortage and holding the training course during fulfillment of their service commitment period, coordination between content of textbooks and classroom environment in order to conduct active and cooperative teaching methods.

**Keywords:** qualitative analysis, academic motivation, academic *achievement*, high school students, Hormozgan province

### INTRODUCTION

Always, one of the usual questions in educational environment regarding the rate of effort and also progress of students is that why some of students pay more attention to their educational affairs in comparison to others and why some other students are not so interested to the issue. Answer to this question has a lot to do with students' motivation and the factors affecting it. Motivation refers to the creating, maintaining and guiding force of behavior. Motive is defined as the special need or desire which causes motivation. As a mental fitness, motivation is considered a prerequisite of learning and its impact on learning is quite clear [1].

The motivation of students in classroom indicates why they behave in a particular way. If students do not do their homework it may be that they lack enough motivation. On the other hand, if they act diligently in doing their homework and try to overcome problems, they are probably motivated [2].

The subject of motivation has been examined in numerous studies. For example, Jamshidi [3] has noted that there is a meaningful relationship between the issue of internal control and the parameters of educational progress motivation such as having a goal, attention to work and duty, tendency to progress, social cooperation, fame-seeking and self-esteem. Rafiiian [4] has also reported a positive and meaningful relationship between motivational parameters (auto-efficiency, inborn values, anxiety of examination, and talent) and educational performance. In another study, Hasanzade [5] has shown that there is a meaningful relationship between internal motivation and educational progress and also between the source of self-control and educational progress.

In a study performed on the high school students of Bandar Abbas, Sheykhi Fini [6] has concluded that there is a meaningful relationship between motivation and students' educational progress. The researchers' findings show that the internal motivation of children decreases during the period of preschool to high school, and they become increasingly uninterested of learning.

On the other hand, the educational and psychological researches about reinforcing and weakening factors of motivation have provided a large amount of psychological and social information about motivation in classrooms [7].

As an example, Harter's study [8], emphasizing the role of internal motivation, shows that the students who get internally motivated do their educational assignments in a better way than those motivated externally. One of the justifying reasons for the increase of students' tendency towards external motivation during high school is that, assessment rules and regulations and evaluation of school activities reinforce the orientation of external motivation. It means that when students enter into higher levels of high school, the emphasis on scores and grades increases and internal motivation decreases and an atmosphere of lack of confidence is made gradually among teachers and students, and students develop increasingly negative attitude towards school [9]. In Husent's encyclopedia of education [10] progress motivation is exclusive more to that dimension of motivation which is called internal motivation of students. On the basis that human beings understand themselves having needed efficacy and desirable self-control. Pintrich and Pe-Groof [11] assume the relationship between educational progress motivation and training environment this way: 1. person's belief in his own ability to do assignments relevant to his expectations. 2. Reasons and purposes students have for doing their homework. 3. Types of emotional reactions students show to assignments (such as anxiety, rage, pride, shame and sense of being sinful). Furthermore, they have examined the belief of self-effectiveness as one personality variable along with educational progress motivation and obtained a meaningful relationship between educational progress motivation and self-effectiveness. The role of needs in motivation is also mentioned to in numerous theories and researches. For example, regarding needs and motivations, Maslow [12] believes that motivation derives from one's desire to satisfy his expected hierarchy of needs. When all basic needs are satisfied, one thinks of self-flourishing, i.e. he tries to discover his abilities and faculties and to implement his ideals.

Another important source of motivation for students is being with others and having a friendly and mutual relationship with others. Social motivations are needs and desires which are learned through experience in the social world. Woolfolk, [13] has asserted that people participate in activities in order to preserve their identity and relations with others. Therefore, if students are members of a school classroom or an educational institution that show respect for learning, then their motivation for learning would be high. In this respect, he has presented the formula of motivation= expectation  $\times$  value. Santrock [14] also says that this is the need for being connected or related that increases students' motivation for spending time with friends, making intimate friendships, dependence to parents, and enthusiasm about making intimate relations with teachers. In the framework of the theory expectation  $\times$  value, Anderson [15] have asserted that to make students motivated for learning, teachers should both help students to value scientific and educational activities and make them certain that if they try adequately they will be successful in the activities. Based on the background mentioned and the investigations performed by the researcher and his colleagues, one of the main difficulties of Hormozgan Education in high school division, is the decrease of students' educational motivation and its negative effects on educational collapse especially in grade3. With regard that the average of written mean scores of high school grade 3 students of Hormozgan province in recent years has been in fluctuation between 8.5 to 9.5-lower than state average- and has had a negative and direct influence on the results of universities' entrance examination, and from the other hand, one of the researcher colleagues- for ten years as in charge of high school education in the province- has followed the subject of collapse and its relationship with educational motivation at high school time and through interviewing and negotiating with managers and inspecting the schools has presented various designs and plans and performed them in the province Education administration, therefore the subject of examining the reasons of decrease in educational progress motivation has been the focus of attention for the researcher and colleagues, and the main issue of the present study is the qualitative analysis of effective elements in decrease of educational progress motivation in high school students of Hormozgan province- in four fields: mental and cognitive, tastes and needs, morale-social, educational programming and class management has been discussed. In this study, efforts have been made to bring about and examine these two basic questions.

**A) What are the influencing factors of the decrease of educational progress motivation in high school students of Hormozgan province?**

**B) What are the most important approaches to improve the educational progress motivation of high school students of Hormozgan province?**

## MATERIALS AND METHODS

With regard to the goals and questions posed, the research has been performed in a qualitative- descriptive method with predicative analysis. With regard to the research method, the statistical society of the research includes all available relevant documents, evidences and resources with the same subject under study in the province. Since in the present study, all existing resources and references has been written on note cards and used in the line of research aim, sampling has not been performed and all the available resources and references has been analyzed.

Also, because the gathered data is in qualitative form, qualitative analysis has been used for final analysis of the data and summing them up.

## RESULTS

### **Examination of the First Research Question:**

What are effective factors in educational progress motivation of high school students of the province?

#### **a. Mental and Cognitive Background:**

Cognition is the flows by which learning, remembering and thinking take place. In other words, cognition is said to internal mental processes and the ways by which we pay attention to information and understand and use them [1]. According to this viewpoint, the scientists believe that behaviors are developed and conducted by one's aims, plans, expectations and associations, and the students' thoughts guide their motivation. One of the main factors of learning process which emphasizes the formulation of aims and thoughts and the effort to reach them is the existence of favorable cognitive and mental backgrounds in students.

Based on the documents and evidences gathered by the researcher and colleagues, one of the most important reasons of the decrease of educational motivation in high school students of the province, is the lack of students' knowing and insight about education and its real aims. Therefore, to illustrate the issue, the researcher has investigated the aim of education from the point of view of students and then has dealt with the examination and explanation of real aims of education system from the viewpoint of experts and people of view.

#### **Educational Aims from Students' Point of View:**

Results of predicative examinations and interactions with students have shown that the main purposes of education from the viewpoint of high school students are:

- a. To obtain high scores in university entrance exam to continue education in a field required by market job.
- b. To gain a suitable job and high economic income in future.
- c. To acquire social status and a position proportional to their own (and their parents') aims and wishes in future.
- d. To marry and make a comfortable life in future.

What students think about is the sign of a need that is called the driving force or educational motivation in them. Now, if continuing education cannot meet these needs, the stimulus or motivation for effort will reduce and fade.

There are numerous factors which hinder meeting these needs in students. The most important of these factors are:

- a. The bad effects of students' failure to move over konkur (university entrance exam) to continue education in favorable fields.
- b. Existence of false jobs and the lack of success of university graduates in finding suitable and education-related job.
- c. Existence of obvious examples of those reached to a luxurious, painless life.
- d. Existence of obvious examples of rich uneducated people like sportsmen and etc.
- e. Lack of balance between the income and rights and advantages of educated people who work in state administrations with those uneducated or less educated in private section.
- f. Being faded the social position and status of educated people in comparison to wealthy people.
- g. Lack of efficacy and congruency of what students have learned in solving daily life problems and issues.

And this is in a situation that students have little familiarity and knowledge about the real aims of educational system. Therefore, the teacher needs to ask students to consider their own learning aims because to have aims increases the level of motivation provided that the aims could be reached. Certainly, all of these aims derive from inherent and natural needs of the people in the society including students; among these aims the economic ones are only a little portion. However, unfortunately, the wrong attitude and deficient acquaintance of students has caused that they think of education as a tool to reach a luxurious life so that if he cannot implement that aim the other purposes are also overshadowed, and so the educational motivation reduces in students.

#### **b. Grounds of Tendency**

One of the most important humanistic theorists, Maslow [12], described motivation as paying attention to the needs. "Need is said to a state caused by shortage or deprivation in living being, and the term dependent to

need is called drive. Drive is the energy or the tendency resulted from the need." He divides needs into two categories which are a. Living needs and b. Psychological needs.

Some of students' living needs are met by school and some others are satisfied by the parents. For example, providing table and chair and proper class is by school, and supplying the need of hunger and clothes is by parents and families.

Therefore, it is necessary that the managers and trainers pay attention to basic needs of students so that these needs will not be reinforced as the resisting factors of educational progress and motivation. The psychological needs are: one's needs to achieve what s/he has the maximum talent and power in. Efficacy of students' operations also depends on the quality of programs and the use of advanced educational methods at schools for the purpose of knowing students and providing them with living, psychological and personality needs and also flourishing these needs. With regard to negotiations and interactions the researcher and colleagues have carried out with the managers of boarding high schools, and with regard to participation in designing and performing operational programs for 30 high schools which had the most problems in ground of the shortage of above-mentioned needs, it was recognized that the most suitable way to develop motivation in that students is to provide basic needs and improve learning conditions and increase the level of healthy competition and educational quality through absorbing experienced teachers in these schools; by doing so, the learners achieved more success in learning- teaching process and this success increased their interest and motivation to learn more new materials in the classroom and school.

Also the examination of existing documents and evidences of province Education shows that the province high school education has 45% of convertible and nonstandard atmospheres, and lacks suitable physical condition and equipments; also, more than 30% of requirements of experienced human force is in the form of extra teaching, and there is more than 15% of unrelated forces in high school education and also 60% of staff are non-remaining teachers or inexperienced ones of low work-record; and there is a shortage of more than 1500 specialized forces- especially in basic sciences- along with the low level of family income in the deprived areas of province and their disability in providing living needs for children and existence of false jobs and cultural and social difficulties from being placed in the coastal borders, such as cultural invasion, all of these have caused to affect the issue of providing living and psychological needs in family, society and school and finally to reduce their educational motivation level.

### **c. Social- moral grounds**

To be approved by teacher and classmates could be an important social motivation for most students. Students' relationship with their parents, peers, teachers, trainers, and others can affect intensely their social motivation and progress. Therefore, the teachers' sayings and doings, and their attitude and mannerism can be effective in motivating students. Some of characteristics of a teacher which can help him with his significant role are:

1. Teacher's behavior and personality
2. His mental and physical condition
3. His dominance to teach
4. His attitude towards his work

There are also some factors which have unfavorable effects on performing the role of being a teacher; the most important of which are:

1. teachers' problems in life
2. shortage of time and opportunity for teaching
3. being low the social status of teachers
4. dissatisfaction of job

The above factors reduce the motivation to teach. The studies performed on the reasons of educational collapse in the country also indicate the relationship of above-mentioned factors such as teaches' dissatisfaction of job with educational collapse. Also, family attitude towards education and the lack of right interaction between home and school, and too high expectations of parents from students are from factors which affect behaviors of students such as educational motivation.

The kind of attitude and the interest of peer group in education, how to fill spare time in friendly associations, the rate of one's acceptability among peers and mass media advertisements especially seda va sima (Iran National TV) have a significant role in conducting all social events such as education in society. One of the researcher colleagues has proposed and performed some programs, festival of privileged students, diligent teachers, celebration of stars and successful managers, for 5 years in all regions of the province with cooperation of relevant managers and experts, and caused that in addition to the development of qualitative indexes, the students' attitude towards acquisition of science and knowledge and also the sensitivity of teachers and managers to their own performances before parents and students, due to self-evaluation through above programs, have been increased.

Thus, school are required that in addition to the introduction of successful patterns provide the condition for developing interaction between students in spite of different capabilities they have, and allow them to make use of appropriate feedback and take advantage of evaluation of those peers who play an important part in their life and accompanied by the development of a peaceful environment with respect and freedom by the family result in

appearing different capabilities of students in different dimensions and changing their attitude toward themselves and finally increasing their motivation.

#### **d. Grounds of planning and managing classrooms**

##### **Planning**

Many of high school students assume that education and studying are very difficult tasks and in spite of showing a great deal of effort are always in a condition of stress and worry and do not have a good performance either; on the other hand, there are a lot of students who in spite of making use of recreations and entertainments such as sports, internet etc. have a good performance in education too. Appropriate planning is a map that helps and guides students through the winding road of education and paves way for their success which results in saving time and money and reduces the time of study and adds the time of keeping and recalling materials in the mind.

Counselors, with teaching life skills and presenting guide and counsel services and communicating information in educational, training and occupational grounds and simplifying the process of satisfying students' basic requirements such as flourishing faculties and abilities, the sense of self-value and self-reliance, self-knowing and improving mental health, play an important part in educational programming of students and also increasing their motivation in education; whereas teaching in the province high schools lacks 400 counselors, which affects the issue of appropriate educational programming for students; beside this, being low the skill level and experience of current counselors and basic weaknesses in the supervision and control of their performances and also reduction of their occupational motivations have doubled the problem.

##### **Classroom Management**

Classroom management is conducting classroom affairs such as: formulating class curriculum, organizing work stages and resources, organizing environment to improve the task of supervision on students' progress and predicting potential issues [16]. Using favorable methods for keeping classrooms orderly is very effective in developing the motivation of students' learning. Some of important and effective factors in managing classrooms are: teacher's features of personality, his teaching methods and his teaching techniques. Examination of documents and evidences from province specialist sessions of province high school heads with the teachers of all courses in the regions and the analyses of the reviews and examinations of books and their typical teaching methods in recent years and also conducting provincial training workshops with the subjects of active teaching methods and asking opinions of those relevant, it was determined that the criteria of active teaching methods have been implemented just in only less than 40% of the books of this educational time. The existence of more than 60% of young inexperienced working staff and the employment of more than 2000 people of free and paid-for-teaching and soldiers forces for teaching in the province high school classes in the recent years who have not passed education time in training teachers and are less acquainted with the general features and ways of teaching techniques and psychology and assessment and measurement (just they have participated in course of within-service training) has made it difficult the desirable performance of teaching techniques proper to the condition and content of educational material in the province; that this has had unfavorable effects on teaching quality, maintaining classroom, and conveying materials and teaching-learning process and at last on the educational motivation of the students.

##### **Examination of the second research question**

What are the approaches of improving progress motivation of high school students?

###### **a) The approaches of mental and cognitive grounds:**

1. Being helped from the press, national TV and cultural sets in terms of establishing attitude and positive subjectivity to the issue of education and training in society.
2. The continuous training of teachers and trainers with various methods such as internal publications, conducting in-between services classes.
3. Conducting local-training workshops with the presence of experienced counselors in and outside the province for high school students of grade one in order to justify, train and develop the motivation of continuing education in them.
4. Setting up the classes for family training and explicating educational aims for parents and making use of tribunes of mosques and cultural centers for highlighting and improving the position of science and knowledge and its holiness in society.
5. Inviting researchers to perform extensive research.
6. Introducing the distinct examples of success and providing the grounds for exchanging views among successful, committed and pious students at universities with other students through holding student festivals- such as the festival for privileged students- and celebration for konkur (universities' admittance test) and Olampiad (scientific contest) stars.

###### **b) Approaches of Tendency Grounds**

1. Institutionalizing the endowment culture and using the strength of the clergy, experts, and the charitable to meet the requirements of schools and students.

2. Implementing extensively the program of distributing clothes, stationary and free diet between the identified deprived students in high schools with the help of state institutions and charities.
3. Developing the boarding schools and village centralism to provide conditions for deprived students to continue their education.
4. Doing the project of coming and going services for peasant students.
5. Building new standard schools in deprived areas with participation of the charitable.
6. Well- balanced distributing of human force, fields and branches of high school education in the deprived areas of province.
7. Pursuing continually by province authorities to absorb and employ the specialist and relevant forces needed for high school education.
8. Holding in-service classes for high school teachers especially the new- employed teachers in order to teach psychological problems and teaching techniques and teaching the ways of developing motivation in students.

### **c) Approaches of Social- Moral Grounds**

1. Reviewing and modifying indexes for selecting people for teaching with emphasis to scientific and religious abilities.
2. Providing the grounds of healthy scientific- cultural, sport, religious competitions and encouraging students to do activities and participate in these kinds of programs by presenting gifts and deepening religious and national identity of them.
3. Setting up the reward system for all students in order to develop positive beliefs toward their own abilities.
4. Developing effective relationship with students and using verbal rewards.
5. Reinforcing the sense of curiosity and investigation in students and valuing their experiences and attitudes.
6. Reinforcing the morale of citizenship, teaching the concept of democracy, peace and friendship and providing the desirable ground for exchanging experiences, sympathy and creating right mutual communication between students at schools.
7. Improving the students' level of insight and awareness toward their national- religious identity and developing positive attitude in them about abilities, honors and cultural values of their society.

### **d) Approaches of Grounds of Programming and Classrooms Management Approaches of Programming Ground**

1. Providing the appropriate opportunity for students to self- know and learn the methods of problem-solving and decision- making at schools by counselors and educational trainers.
2. Helping students to reinforce and develop intellectual, spiritual powers to guide them in selecting fields of education and occupations and presenting required information to them in ground of job opportunity of the society, so that in congruency with it they can plan and decide.
3. Teaching the right methods of concentration, study, nourishment and sports to students at schools.
4. Teaching them to observe the main points and principles of designing and educational planning by experienced teachers.
5. Providing the required grounds for exchanging experiences between successful school and university students in grounds of planning, education and improving self- confidence and will-power of them.
6. Writing and distributing brochures and pamphlets and wall newspapers at school or educating institution with the subject of planning.

### **Approaches of Ground of Classroom Management**

1. Formulating the in-service educational classes in order to acquaint all high school teachers with various methods of teaching.
2. Paying attention to active methods of teaching and presenting content on the basis of divergent thinking rather than convergent one to involve students with matters and improving cooperative teaching methods.
3. Writing and explicating indexes and characteristic of a successful high school teacher and introducing the successful figures based on the indexes mentioned in society.
4. Providing and duplicating films and CDs of successful teaching and sample teachers and respecting and encouraging them at associations with the purpose of formulate motivation and healthy competition between colleagues.
5. Announcing call to paper and research about the proper methods of class management in high school time and publishing and distributing the best articles, and research results among teachers.
6. Reinforcing the continuous reviews of educational head groups of the province and region of teachers' activities in classroom and interviewing teachers with the purpose of enhancing teaching condition.

## DISCUSSION

The results of present study, in addition to being congruence with the results of previous researches, due to the mining and deriving influencing factors of the decrease of motivation of educational progress in high school students of the province in the four grounds: subjectivity and understanding, needs and tendencies, social values, educational programming and classroom management which have been performed by using the existing provincial and regional documents and evidences and experiences and interactions of the researcher and colleagues with managers, teachers, experts of high schools have presented an innovative approach in the discussion of students' educational progress motivation, that the background of the study approves the lack of performances of such studies in this style. Also, with regard to the notice ability of educational collapse in high schools of the province (based on available documents) and its effect on students' motivation of educational progress in above-mentioned four grounds it could be effective for managers and officials of province high school education to make use of approaches presented in programming of provincial and regional levels because some of these suggestions have been implemented experimentally in special periods of time at schools and province Education administrations, which has shown favorable effects.

Therefore, it is required that the provincial schools- in addition to identification and encouragement and introduction of privileged and active students- provide the ground of interaction and movement, scientific and cultural hilarity of the students in the society and by supplying living and psychological needs of them and improving the level of their awareness and general knowledge along with the cooperation of responsible institutions and families, provide a peaceful and favorable environment for flourishing students' different faculties and creating a desirable and positive attitude and subjectivity towards themselves and acquiring science and knowledge in them, and at last cause to motivation of educational progress of students.

It is also necessary for Education administrations that with the cooperation of provincial and regional responsible institutions perform different programs proposed in detail in discussion about approaches- in addition to supporting the mentioned executive programs to preserve the status and prestige of teachers in society and at schools, and increasing the effectiveness coefficient of the sayings and doings of teachers in the formation of personality and attitudes of children in harmony with schools and in a higher level to cause to improve the status of teachers and enhance acquiring science and knowledge and developing managing skills and classroom programming in them.

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*Original Article***The Study of Domestic Violence Factors among Women in Abhar City, Iran****Ghadimi Mahdi<sup>1</sup> and Sadeghi Mehri<sup>\*2</sup>**

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**ABSTRACT**

The purpose of the present study was to explore the relationships between lack of understanding in life, cultural and belief differences of couples, patriarchal culture, and the feeling of relative deprivation with men's violence against women. So, One hundred and twenty-five working women of Abhar city (Zanjan Province in Iran) were selected using simple random sampling. The participants completed researcher-made questionnaire. The results indicated that there were significant positive relationships between lack of understanding in life, cultural and belief differences of couples, patriarchal culture, and the feeling of relative deprivation with men's violence against women.

**Keywords:** lack of understanding in life, cultural and belief differences of couples, patriarchal culture, feeling of relative deprivation, domestic violence

**INTRODUCTION**

Domestic Violence is defined as a pattern of abusive behaviors by one partner against another [1], or domestic violence as a "pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over another intimate partner [2].

Men's violence against women in families is influenced by psychological, social, and economical factors. In elaborating on theories such as the functionalism theory, there are such theories as the social construction theory (tension and opposition), feminist theory, Relative deprivation theory, necessity theory, and frustration-aggression theory [3].

Domestic violence is related to the issues and problems of women's health in a majority of cases. A large proportion of attacks against women ranging from body bruise to bone crack [4]. The victims of domestic violence report symptoms such as depression, anxiety, and stress [5]. In this people, behaviors such as , unhealthy eating habits, misbehaving, alcoholism, and suicide [6] and involuntary pregnancy, and baby loss at childhood [7]. Despite of the common policy for controlling domestic violence in numerous countries, the prevalence of such misbehaviors are still high in both industrial and developed countries. According to a quantitative research performed on 48 members, between 10-69% of women are the victims of domestic violence [8].

There are different reports of violence and in developed countries such as Canada, Japan, New Zealand, Switzerland, England and America. For example, in a survey on American nation, 28% of women had report to at least one of the violent behaviors from their husbands [9]. Alcohol consumption plays a main precipitating role in the incidence of domestic violence [10].

Research on domestic violence against women is difficult .Many women are reluctant to disclose abuse because of perceptions of shame, fear of blame or reluctance to be 'disloyal' to their partner [11]. Thus this study focuses on Examine of the causes and reasons for domestic violence in working women of Abhar city (Zanjan Province in Iran).

**Research hypotheses:**

1. There is a relationship between lack of understanding in life, and men's violence against women.
2. There is a relationship between cultural and belief differences of couples, and men's violence against women.
3. There is a relationship between patriarchal culture, and men's violence against women.

4. There is a relationship between the feeling of relative deprivation, and men's violence against women.

## MATERIALS AND METHODS

The method of the present research is *descriptive* (Causal-comparative research). One hundred and twenty-five working women of Abhar city (Zanjan Province in Iran) were chosen for this study. The subjects were selected and tested through simple random sampling. The measurement tool for this research is a researcher-made questionnaire. This questionnaire involves factors contributing in domestic violence (e.g. Cultural Differences, Understanding in life, Patriarchal culture, Relative Depravity). The validity of this questionnaire via content validity gained. The value of the reliability coefficient for the whole scale via Cronbach's alpha was reported 0.75 and for sub scales was reported between 0.65 to 0.78.

## RESULTS

For data analysis in this research, the descriptive statistical test, mean, standard deviation, higher and lower extremes was used. In the infernal statistics, different statistical tests such as Pierson's correlation test, was performed. The descriptive data findings on the working women are presented in table 1.

**Table 1.** Descriptive data findings in variables

| Variables                    | Mean  | SD   | Lower Extreme | Higher Extreme | N   | Alpha Index | General Alpha Index |
|------------------------------|-------|------|---------------|----------------|-----|-------------|---------------------|
| <b>Violence</b>              | 23.13 | 1.58 | 17            | 24             | 125 | 0.70        | 0.75                |
| <b>Cultural Difference</b>   | 17.19 | 2.84 | 8             | 24             | 125 | 0.65        |                     |
| <b>Lack of Understanding</b> | 19.10 | 2.34 | 11            | 24             | 125 | 0.78        |                     |
| <b>Patriarchal Culture</b>   | 21.57 | 2.98 | 12            | 27             | 125 | 0.75        |                     |
| <b>Relative Deprivation</b>  | 14.19 | 2.94 | 6             | 18             | 125 | 0.72        |                     |

The findings related to the analysis of the simple relationship between the violence variables and its sub measures are presented in table 2.

**Table 2.** Correlation findings in variables

| Variables   | Statistical Indexes | R     | P       | N   |
|---|---------------------|-------|---------|-----|
| <b>Lack of Understanding in Life</b>              |                     | 0.57  | < 0.001 | 125 |
| <b>Cultural and Belief Differences of Couples</b> |                     | 0.35  | < 0.001 | 125 |
| <b>Patriarchal Culture</b>                        |                     | 0.23  | 0.008   | 125 |
| <b>Feeling of Relative Deprivation</b>            |                     | 0.320 | < 0.001 | 125 |

As shown in table 2, there is a meaningful relationship between lack of understanding in life, and the violence against working women, with the correlation index of 0.57 and  $p < 0.001$ . There is a meaningful relationship between cultural and belief differences of the couples and the violence against working women, with the correlation index of 0.35 and  $p < 0.001$ . There is a relationship between patriarchal culture, and the violence against working women, with the correlation index of 0.23 and  $p = 0.008$ . There is a meaningful relationship between Relative deprivation, and the violence against working women, with the correlation index of 0.32 and  $p < 0.001$ .

## DISCUSSION

Adducing to the cultural theory [12], there is a relationship between the cultural and belief differences of the couples and the violence of men against women. In explaining the relationship between cultural and belief differences of the couples, and the violence of men, the reduction of violence statistics requires a long-term cultural activity with its starting point in the family institution, that is performable by women. Women, with their training role, by educating the future men, can create a change in the view about women. This way the next generation can survive the dangers of violence against women. The mass media with its critical role in educating and informing can become an important band to the structural violence against women in the society. According to the theory (tension, conflict) of Darendrov, and regarding the concluded results from the present research, there is a relationship between lack of understanding in life and men's violence against women. In explaining the relationship between lack of understanding in life, and violence, the couple should prevent further growth of this

important issue in the family by improving their skills of verbal relationship, respecting the mutual opinions and values, the culture of listening to each other's speech, recognizing each other's needs and feelings at a suitable moment. Unfortunately, most of the nowadays conflicts and tensions in families are due to the lack of understanding between the couples. It is offered that the authorities try to form the workshops before marriage, and inform the couples on this issue.

According to the patriarchal theory and regarding the resulted findings of this research, there is a relationship between the patriarchal culture and men's violence against women. In explaining the relation between patriarchal culture and men's violence, parents can play a training role by participating their girls and boys in the problems and hardships of life. Teach their children that the power of one person does not give him the right to be more dominant over others indecision making. The patriarchal culture in families causes the family members to lose their self-confidence. It is offered that the authorities and the mass media programmers present more information to the families in this regard.

According to Festinger's theory, and adducing to the results of the present research, there is a relationship between relative depravity in life and men's violence. In explaining the relationship between relative depravity in life and men's violence, with the existence of technology, in different areas of life and the increase of needs in different quantitative and qualitative dimensions, results in the creation of emulation among families, that this issue spreads further (Rafi pour, 1986). It is offered that the authorities and programmers provide facilities for the work and marriage of the youth.

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## Positive and Negative Conception of God and Its Relationship with Student's Self-Esteem and Mental Health

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### ABSTRACT

The objective of this study is investigation of the relationship of positive and negative conception of God with self-esteem and mental health among high school students. The sample of this research includes 300 students (149 girls and 151 boys) in grade two at high school in different fields of study. The students were selected by the use of simple random sampling method and were evaluated through three instruments, mental health questionnaire (GHQ, 28), Cooper self-esteem questionnaire and the questionnaire of conception of God. For analyzing the collected data, three statistical methods of correlation coefficient, multi-variable variance and step by step regression were used. The findings of the research showed that a significant positive correlation is seen between positive conception of God with mental health and self-esteem. Moreover, the results of the findings have shown that a significant positive correlation is seen between self-esteem and mental health. Additionally, the result of step by step regression test showed that the first factor having a determining contribution in predicting mental health is self-esteem factor and the second factor is negative conception of God.

**Key words:** Positive conception of God, Negative conception of God, Self-esteem, Mental health.

### INTRODUCTION

Mental health is in fact a general aspect of health concept. In spite of the attempts that have been made for providing more health by pioneers of mental health in the world, still, it can be said that we have taken the first step [1] and the problems of mental hygiene is one of major increasing troubles of societies.

On the other hand, every day the number of people who believe "spirituality" is the treatment of psychoneurosis and mental helplessness, also the experts who focus on beliefs and religious behaviors for treatment of psychological diseases and mental hygiene is increased [2]. Tendencies have flourished among psychologists. They say there is an extraordinary energy in belief in God and it gives a religious man a kind of spiritual power and helps him tolerate hardships of life and protects him from worry and anxiety, from which lots of people in our century suffer. One of the first people who proposed this issue was Williams James. He says: "There is an inseparable relationship between us and God. If we accept the dominance of God and surrender to him, all our wishes and aspirations will be fulfilled [3]. But one of the factors affecting man's relationship with God is his conception of God [4]. God of the Quran shows two different complexions which fundamentally oppose each other. However to the pious intellect of a believer, the two complexions are not but two aspects of one God; but for logic of normal intellect, they seem contradictory. In fact for adjusting these two complexions to each other, some thinkers have experienced discomfort. In one of these two complexions, God presents himself as the God of endless benevolence and the God of infinite love and kindness and generous and forgiving God. Elsewhere, God is the strict God in spreading justice, the inflexible judge on the Day of Judgment and severe in punishment and vindictive. The one on whom his wrath comes down is succumbed [5]. Thus for logic of normal intellect, the formed conception of God is divided into positive and negative conception. In positive conception of God, God is imagined kind, protective and guide. This concept can give tranquility. And in negative conception of God, God is imagined with negative expressions such as rejecting, unkind and strict. This concept causes

people to experience hopelessness, hatred and negative mood [6]. Of course, considering this point is important that, in general, the term “conception of God” can be defined as man’s emotional cognition of God and is mostly on the base of an individual’s emotional and affecting experiences [7]. Firmly accepting religion as an effective factor in achieving mental health, Pargament [8] also writes: “What should be regarded important and focused on is the type of conception and definition that individuals have of their religion and God”. He emphasizes when we get very close to people, we see they have specific and multiple perception of and inferences about religion in their mind and heart. Some of them are helpful and useful and some disappointing and harmful. He found that people’s almost all definitions and perceptions of God are embodied in two general models. In the first model, people know God as a source of sheer anger, violence and vengeance, and imagine human as a guilty person suffering from descent and a prisoner in this angry God’s hands. Understanding God in this model willingly or unwillingly is frightening and distressing. Those who communicate with God according to this model are taken away more from their relative mental health every day. In contrast to this group, there are people who obey the second model in communicating with God. In this model, they consider God forgiving and as their friend and communicate sincerely and warmly with him through making a loving relationship. In this model, God is very close to man. This group regards most of hardships and sufferings in fact as opportunities for growth and excellence. Those depending on this model experience more sustainable mental health and enjoy their lives more. On the other hand, most experts consider having self-esteem as the central and basic factor in an individual’s emotional-social adjustment; and as the level of self-esteem has a great contribution in mental health, they emphasize its importance. Some people like Brown, [9] claim that positive self-esteem is our most valuable psychological need and is a prerequisite for mental health. This is while Spilka, Odinson and Ruzonson [10] propose that concept of God has a relationship with self-esteem. On the base of cognitive coordination theory, individuals’ conception of themselves has an impact on how they see God.

The assumption of this theory is that the data which oppose implicitly with individuals’ perception of actual self-create cognitive disharmony. To reduce psychological derangement created by such disharmony, individuals may use techniques such as denial, distortion or selective comprehension for ensuring that the data is compatible with their perception. Therefore, conception of individuals’ selves can have an impact on individuals’ ability for seeing God as the fosterer, the acceptor, the rejecter and the maintainer. In addition, in researches investigated in relation to religion and attributive styles, it has been observed that when people involve in critical events, in relation to normal events, they attribute these events more to God and His vengefulness aspect [11] Now, given that thought of God is one of basic religious thoughts [12], the issues of love and punishment in communication with God have been constantly repeated in Holy Books and both issues are quite fundamental and important. For this reason, these two dimensions have been selected for this study. It has not been assumed that these conceptions of God are completely bipolar but relative priority of each of these conceptions in the mind of the respondents at this time and its relation with mental health and self-esteem have been examined; and accordingly, the following hypotheses have been formulated and investigated: The positive conception of God has a positive and significant correlation with mental health. The positive conception of God has a positive and significant correlation with self-esteem. Self-esteem has a positive and significant correlation with mental health. And conceptions of God and self-esteem have a determining contribution in predicting mental health.

## MATERIALS AND METHODS

Statistical community of this research includes all students of state high schools in Minab. The students were studying in three fields of human sciences, experimental sciences and mathematics. Through the use of the table of sample size estimation on the base of Krejcie and Morgan, 300 students (149 girls and 151 boys) were selected through simple random sampling. In the present research, the following instruments have been used.

Goldberg mental health test (GHQ-28): This test was offered by Goldberg in 1972. It can be considered as a series of cases which consist of the lowest levels of common symptoms of illness that exist in different mental disorders. This test mainly means to create distinction between mental illness and health [13]. The data concerning the scale of physical symptoms, anxiety, impairment in social function and depression can be achieved from this questionnaire. On the base of Likert method, test grading has 4 options from 0 to 3. In this grading method, the higher grades are indicative of poorer general health and the lower ones indicative of better general health. Yaqubi [14] has reported 0.88 as the total reliability coefficient of this test. He has reported the retail reliability coefficient between 0.50 and 0.81. In test-retest method, Taghavi [15] achieved 0.73 as the total reliability coefficient of this test and the retail reliability coefficients of the tests were between 0.57 and 0.68. In the present study, Cranach’s alpha coefficient for the entire questionnaire was achieved 0.90 and for subtests of physical symptoms, anxiety and insomnia, impairment in social functioning and depression, the coefficients were achieved 0.77, 0.80, 0.63 and 0.85 respectively. Also, correlations between these subtests with general grade of mental disorder were achieved 0.80, 0.84, 0.70 and 0.85 respectively.

Cooper Smith self-esteem test: Cooper Smith formulated self-esteem test on the base of the revision he made on Rogers and Diamond’s self-concept scale. This scale includes 58 cases. Eight cases of its test are lie detectors. This test

consists of 4 subscales of general self-esteem, social self-esteem, familial self-esteem and educational self-esteem. Grading this test is done in the form of zero and one. That is for test items indicating high self-esteem, the positive answer gets one and the negative answer zero, and other test items are graded vice versa. In investigating the construct validity of the questionnaire with correlating this questionnaire with its homonymous questionnaire; that is, Aizant questionnaire, Zolfaghari [16] reported correlation coefficient of 0.84. In the second method, factorial analysis method was used. For doing factor analysis in this research, first, they reported the level of KMO equivalent to 0.83 which is the indication of adequacy of sampling. Then, Bartelt test was used and its amount was achieved equal to 6363.07 which statistically was significant and justified doing factorial analysis. In factorial analysis, they made use of two analyzing methods of main components (PC) and probability record (ML). Given the PC method, the dominance of a general factor on the questionnaire was confirmed. This general factor is the same self-esteem construct. Alpha coefficient of this questionnaire was achieved 0.85. In the present study, Cranach's alpha coefficient of Cooper Smith self-esteem test was achieved 0.80.

Conception of God test: In this test, special items concerning God have been selected from the questionnaire of religious status (RSI) and have been used [6]. This test has 27 items and 3 subtests of presence of God in life, God's care and negative conception of God. Finally, subtests of presence of God in life and God's care are combined and form the scale of positive conception of God. In this research, Farsi translation of this test, done by Khosravi in 2005, was used. Grading this test is according to Likert method and the items 4, 6, 8, 9 and 11 are graded from 1 to 5 from right hand side and the rest are graded in reverse. Kline quoted by Grinvi et al, [6] has achieved the internal reliability of the three subtests of presence of God in life, God's care and negative conception of God 0.86, 0.82 and 0.69 respectively and regards it as the sign of the good internal reliability of this test. Through the use of Cranach's alpha coefficient Alavi [17] achieved the test reliability in case of the factor of presence of God in life 0.77, God's care 0.89, positive conception of God 0.86 and negative conception of God 0.57. In the present research, through the use of Cranach's alpha coefficient, the test reliability was achieved in case of the factor of presence of God in life 0.60, God's care 0.64, positive conception of God 0.61 and negative conception of God 0.58. In addition, correlations of the factor of presence of God in life and God's care (subsets of positive conception of God) with positive conception of God were achieved 0.77 and 0.72 respectively.

Through the use of Cranach's alpha coefficient, Khosravi and Feiz Abadi [18] report the test reliability for subsets of negative conception of God 0.76, positive conception of God 0.85, presence of God in life 0.83 and for the entire test 0.79 and they report the retest 0.79. Also, for investigating the test validity, simultaneous validity method was used. They calculated the test correlation of conception of God with the test of the individual's religious attitudes concerning God's help. They reported the correlation coefficient equal to 0.67 which is significant. Moreover, the face and content validity of the test of conception of God have been confirmed by 3 experts of psychology.

## RESULTS

In this research, Pearson correlation coefficient and step by step regression have been used. Given the test hypotheses, the achieved results of the present study are presented as follow.

The results of table 1 show that there is a significant correlation between the grade of positive conception of God and the total grade of mental health test and the subsets of mental health except for anxiety subset. That is, the more positive conception of God is, the higher mental health is and the probability of outbreak of mental disorders becomes less. There is also a significant relationship between the grade of positive conception of God and the grade of self-esteem; that is, the higher positive conception of God is, the higher the grade of self-esteem also becomes. There is also a significant positive relationship between self-esteem and mental health. In other words, the higher the level of individuals' self-esteem is, the higher the level of mental health gets and the lower the rate of mental disorders becomes.

The achieved results of variable correlation coefficients of mental disorders, self-esteem and negative conception of God in the first and second steps As it is noted in table 2, the correlation between mental disorders and self-esteem has been 0.53 and the correlation between mental disorders with self-esteem and negative conception of God 0.54.

The achieved results from the coefficient concerning regression of mental disorders on the base of self-esteem and negative conception of God Based on the results of variance and statistical indicator of step by step regression between mental disorders and self-esteem and negative conception of God, the amount of t achieved in table 3 is significant.

The results achieved from variance analysis concerning prediction of mental disorders on the base of self-esteem and negative conception of God. As it is observed in table 4, in the second step, when both predicting variables, that is, self-esteem and negative conception of God entered regression, the achieved f was significant at the level of 0.01. It can be concluded that self-esteem and negative conception of God can predict mental disorders.

**Table 1.** Correlation matrices between study variables

|                 | self-esteem | negative | positive | God care | God     | mental disorder | depression | social function | anxiety | physical | correlation     |
|-----------------|-------------|----------|----------|----------|---------|-----------------|------------|-----------------|---------|----------|-----------------|
| self-esteem     | 1           |          |          |          |         |                 |            |                 |         |          |                 |
| negative        | -0.34**     | 1        |          |          |         |                 |            |                 |         |          | physical        |
| positive        | -0.40**     | 0.15**   | 1        |          |         |                 |            |                 |         |          | anxiety         |
| God care        | -0.147**    | 0.13**   | -0.06    | 1        |         |                 |            |                 |         |          | Social function |
| God             | -0.148**    | 0.11**   | -0.15**  | -0.07    | 1       |                 |            |                 |         |          | depression      |
| mental disorder | -0.53**     | 0.23**   | -0.16**  | -0.03    | -0.20** | 1               |            |                 |         |          | Mental disorder |
| depression      | 0.22**      | 0.20**   | -0.18**  | -0.05    | -0.22** | 0.85**          | 1          |                 |         |          | God             |
| social function | .09         | -0.26**  | 0.77**   | 0.12*    | 1       | -0.22**         | -0.20**    | 1               |         |          | Care God        |
| anxiety         | -0.21**     | 0.101    | 0.72**   | 1        | 0.12*   | -0.05           | -0.03      | -0.16*          | 1       |          | Positive        |
| physical        | -0.19**     | -0.1     | 1        | 0.72**   | 0.77**  | -0.18**         | -0.16**    | -0.15**         | -0.06   | 1        | Negative        |
| correlation     | 1           | -0.19**  | 0.31**   | 0.09     | 0.22**  | 0.53**          | -0.48**    | -0.47**         | -0.4*   | -0.34**  | Self-esteem     |

N = 300 \*P < 0.01\*\*P < 0.001

**Table 2.** The result of step by step regression in predicting mental health by self-esteem and negative conception of God

| Steps       | Dependent variable | Independent variable                      | R      | R <sup>2</sup> | R <sup>2</sup> | Std error |
|-------------|--------------------|---|--------|----------------|----------------|-----------|
| First step  | Mental disorder    | Self-esteem                               | 0.0053 | 0.0279         | 0.277          | 10.44     |
| Second step | Mental disorder    | Self-esteem of negative conception of God | 0.54   | 0.0289         | 0.284          | 10.39     |

**Table 3.** Analysis of regression variable self-esteem and negative God conception on predictors mental disorder

| First Step  | Dependent Variable |                            | Standardized Coefficients |           | Standardized Coefficients | T       |
|-------------|--------------------|----------------------------|---------------------------|-----------|---------------------------|---------|
|             |                    |                            | B                         | Std Error |                           |         |
| Second Step | Mental Disorder    | Intercept                  | 43.8                      | 4.28      | -                         | **10.2  |
|             |                    | Self-Esteem                | -0.90                     | 0.08      | -0.50                     | **10.17 |
|             |                    | Negative Conception Of God | 0.33                      | 0.16      | 0.10                      | *2.04   |

**Table 4.** Analysis of variance variable self-esteem and negative God conception on predictors variables mental health

| Steps  | Dependent variable | Independent variable                    | SS                     | Df  | MS       | F        |
|--------|--------------------|---|------------------------|-----|----------|----------|
| First  | Disorder Mental    | Self-Seem                               | Regression<br>12576.48 | 1   | 12576.48 | 1150.302 |
|        |                    |   | Residual<br>32503.76   | 298 | 109.073  |          |
|        |                    |   | Total<br>45080.250     | 299 | -        |          |
| Second | Disorder Mental    | Self-Esteem And Negative God Conception | Regression<br>13027.74 | 2   | 6513.87  | 60.358   |
|        |                    |   | Residual<br>32052.51   | 297 | 107.921  |          |
|        |                    |   | Total<br>45080.250     | 299 | 12576.48 |          |

\*\* P &lt; 0.001

## DISCUSSION

In the present research, a significant correlation was achieved between conception of God (positive and negative) and mental health. The results of correlation tests show that there is a positive and significant correlation between positive conception of God and mental health. They show that the results of this test are also in the direction of the work of researches such as Phillips [19] who found in a research that when individuals considered God as a rejecting and strict God and an applicant of negative conception, this factor was related to low mental health. The results of this test are also in the direction of Pargament's viewpoints which stated, those who know God as a source of sheer wrath, violence and revenge and consider man as a guilty person suffering from descent and a prisoner in the hands of this angry God, experience fear and anxiety and are taken away from their relative mental health every day. But in the model in which individuals know a merciful God and regard him as their friend and communicate with him through a loving relationship, they consider God as the first helper who helps them in hardships. Those depending on this attitude experience more sustainable mental hygiene. Thus, it can be concluded that when individuals have negative conception of God, fear of punishment and rejection by God are implicitly considered. These individuals consider God more as a source of pain and punishment than a source of love and affection. While, when there is a positive conception of God, there is also a meaning, based on a loving relationship with God, associated with it. The one who sees himself in the aura of the grace of the beneficent and merciful God and constantly feels him near himself and even, according to the Holy Quran, nearer to himself than his neck vessel, never has a feeling of helplessness and rejection. Such an attitude induces man to feel relaxed and protects him from mental balance and internal security disturbance. In examining the second hypothesis based on the relationship of positive conception of God and self-esteem also, correlation test was used. The result of investigation is an indication of the existence of a significant positive correlation between positive conception of God and self-esteem. Given the results of this research, the individuals who mainly show positive conception of God, have higher self-esteem and who show those more negative conception of God, have lower self-esteem. Additionally, Benson and Spilka, quoted by Francis et al [20], stated that high self-esteem has a positive correlation with perceptions of the kind God but a negative correlation with negative conception of God such as rejection, coolness, revenge and control. Roberts [21] also showed that an accepting attitude of self and others is related to the belief in one accepting God. Richter [22] also found some evidence that conception of God is highly affected by self-esteem and self-conception. Like Spilka and Benson quoted by Spilka et al [10] in stating the findings, cognitive coordination theory can be used. According to this theory, individuals' conception of themselves has an impact on how they see God. The data implicitly opposing real self-conception of individuals create cognitive disharmony. To reduce psychological derangement created by such disharmony, individuals may use techniques such as denial, distortion or selective comprehension for ensuring that the data is compatible with their perception accordingly, if individuals' conception of themselves is negative, positive conception of God creates psychological derangement for them. For this reason, they either deny this conception or resort to distortion and selective comprehension for coordinating the data with self-conception. In case the individual has high self-esteem, cognitively speaking, this is compatible more with kind and accepting conception of God in relation to punishing conception of God. On the other hand according to Rogers' view quoted by Clough [23], the individuals who evaluate themselves from the viewpoint of the other side of the relationship, in case they feel they are not loving and the other side of the relation does not accept them, they are made to distort real self-conception. And if an individual's conception of God is the God who accepts man unconditionally and the God who loves him, it is natural that he considers value for himself and forms a desirable self-conception and has higher self-esteem. Moreover Eltois [24]

proposes that defect in self-esteem leads to pride, selfishness and arrogance and causes deviation from acknowledging love of God towards himself. In the third hypothesis, the relationship between self-esteem and mental health is raised. According to this hypothesis, high self-esteem results in higher mental health. This hypothesis was reviewed through correlation test and the results of the test showed that a significant positive relationship is seen between these two variable. It can be referred to Rogers' view in stating this result. Rogers believe that for having good mental health, everyone should answer the question "Who am I?" with maximum satisfaction. Therefore, this concept as an important determining construct in people's behavior has been regarded important in many viewpoints such as the views of Freud, Fromm, Horney, Maslow, Rogers and saliva. Individuals, who have positive self-concept, have a feeling of adequacy and have ability in adaptation and compatibility with their environment. They feel they are lovely, respected, useful and free. The existence of these feelings in a person brings self-esteem and feeling of being valued [25]. in the fourth hypothesis, the determining contributions of conception of God and self-esteem were investigated in predicting mental health. This hypothesis was reviewed through regression test. The results of the test showed that although both variables of self-esteem and negative conception of God are significantly important in predicting mental health, but the first factor having a more important contribution in predicting mental health is self-esteem which has allocated more variance to itself. The second factor can be negative conception of God. In stating the finding that self-esteem has a predicting role in mental health of individuals, it can be referred to the importance many theorists have cared about for self-esteem discussion. Rogers quoted by Clough [23] believes the root of many neurological disorders is in an individual's experience that he is worthless and no one accepts him. Brown quoted by Kramer and Moore [9] states that a good and desirable understanding of self, that is, positive self-esteem is our most valuable psychological need. A good feeling concerning self is a prerequisite for mental health, while lack of self-esteem is the result of psychological conflict. In this hypothesis also, the predicting role of negative conception of God in mental health has been considered and confirmed. In stating this finding, it can be said that when a person has negative conception of God, that is, he feels God does not take care of him, He has no role in life improvement, he does not receive any guidance from Him, He is punishing and strict and not interested towards him, the relationship between man and God in the atmosphere of such a fearful experience is the relationship of master and peasant. God is the absolute owner who has man's everything in His violently captured grip. He can do whatever He prefers with this weak and worthless man and this can be an introduction for directing him towards mental disorders.

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*Original Article*

## The Study of the Relationship between Sensation Seeking and Type A Personality with Doing Deliberate and Unintentional Violation in Driving

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### ABSTRACT

The main purpose of this study was to investigate the relationship between sensation seeking and type A personality with doing deliberate and unintentional violation in driving. Statistical population comprised of all drivers of intercity transport stations of Ahvaz. The sample included 121 people, selected randomly by accessible sampling manner and response to the Manchester driving behavior questionnaire, Zuckerman sensation seeking questionnaire and type A personality questionnaire. Results indicated that there is a positive significant relationship between sensation seeking and deliberate violation. The relationship between sensation seeking and unintentional violation and relationship between type A personality with deliberate and unintentional violation was not significant. The results indicated that sensation seeking was able to predict deliberate violation and considering this personality characteristic can play a great role in reduce of driving accident.

**Keywords:** deliberate violation, unintentional violation, type A personality, sensation seeking

### INTRODUCTION

It is estimated that two million people are killed in road accidents each year. Apart from loss of life, the costs of these road accidents plus the economic value of a low quality life uses up 5% to 7% of the gross national product of the countries [1]. Most of these accidents are directly caused by human factors which are either the only cause or one of the most profound causes of accidents [2]. Human factors in driving can be viewed as a combination of two other distinct factors: driving skills and driving styles or in other words performance and the behavior of the driver [3, 4, and 5]. Driving skills include processing data and motor skills that are able to be developed through training and instruction. Driving style is the methods drivers take in practice to which they are accustomed. Examples are the speed which the driver drives, the average level of accuracy, overall attention and observing the standard distance between cars [3]. Due to the existence of an obvious relationship between the driving style and the danger of accidents, there are a lot of self-reporting tools in order to measure the driving style. One accident occurs every 2 seconds and one person dies every 5 seconds as a result of accidents. It is estimated that by the year 2020 the third biggest cause of death around the world will have been road and traffic accidents [6]. According to statistics driving accidents has had a rising trend in Iran, so that it has increased by 10%; in Iran the death rate caused by driving accidents is 15 times more than the developed countries [7].

According to the latest statistics, 27,000 people are killed and 250,000 people are injured in accidents each year in Iran. According to the deputy of Iran's traffic police, proportionate to its population and the number of its cars, Iran is the first in the world in the number of people being killed in accidents, with 72 killed every 24 hours. Analysis into the road accidents in Iran shown that among the four factors of human beings, roads, vehicles and

environment, human beings are the most important factor in the occurrence of accidents in Iran; that is to say human beings are the biggest cause of driving accidents in Iran [8]. Researches show that a specific group of people has more reputation for driving accidents; this group is different from other people in some personality traits [9]. Sensation-seeking (also called excitement-seeking) is the desire to experience new and diverse sensations and willingness to risk for the sake of such sensations. Individuals with a high level of sensation-seeking will most probably drive fast and are most likely to be accused of reckless and drunk driving [10]. In an investigation about the relationship between the personality and personal differences, it is illustrated that the score for sensation-seeking trait is the most which proves it to be the most favorable trait for doing reckless driving [11].

Pointing to the fact that individuals drive the same way as they live, Tileman and Hobbs, quoted by Juna, Tiesen and Jung, [12] helped to heighten the role of driver's personality as an important variable in dangerous driving and included it into the researches. The analysis of the relationships among one's personality, dangerous driving and involvement in accidents is indicative of factors that are directly related to driving [13]. A lot of researches have been carried out in this respect; for example Amado, Conch and Kakaro [14] noted that personality traits affect the manner of driving and the number of accidents. Perry [15] pointed that individuals with personality type A cause more accidents and are fined more due to reckless driving. The results of the researches carried out by Nabi et al [16] have also proven that the personality type A abides less by the driving rules and that the dangerous driving factors are more likely to be found in personality type A than in the personality type B.

## MATERIALS AND METHODS

This research is of the relationship kind and its subjects are all the drivers of the terminals of Ahvaz; according to the available sampling method, 150 of these drivers were chosen and the questionnaires were filled out by them. In this research the data were gathered via field methods and through three questionnaires including questionnaire of the personality type A and B, Zockerman questionnaire of sensation-seeking and Manchester driving questionnaire.

Questionnaires of the personality types A and B: It includes 25 items to which the subject answers either Yes or No and the value of which has been reported to be 0.70 to 0.80 in most researches. The average score in this test is 13; more than 13 is partial to the personality type A and less than 13 is oriented toward the personality type B; more than 20 represents an extreme partiality to the type A and less than 5, an extreme partiality to the type B [17]. The internal consistency of these questionnaires has been reported by the original researcher as between  $r=0.70$  and  $r=0.80$ . [18]. One of the tools used in the present research is the sensation-seeking questionnaire of Zockerman, the abridged form of which includes 14 items used in the present research. This scale includes items for assessing the individual's willingness to engage in hazardous or adventurous activities, seeking new sensations, enjoying the excitement of societal movement and avoiding boredom. The abridged form of this test includes 14 items each consisting of two parts (a and b); the subject should choose the option that is illustrative of his or her interests and feelings. The scoring method is according to zero and one system. Kaveh [19] has reported in a research the validity coefficient for this scale as being from 0.83 to 0.86. Also, in order to determine the consistency of the mentioned scale he used the two methods of Cronbach's Alfa and classification and calculated the coefficients 0.73 and 0.73 respectively. In a research that was carried out individually, the validity part of this scale was calculated through combining it with the scale of personality-behavioral type A. the correlation coefficient of the two scales was calculated as 0.55 and was significant in 0.05 which shows a favorable validity of this scale. To determine its consistency the Cronbach's Alfa and the classification methods were used and the results were respectively 0.81 and 0.71 which represents a favorable consistency [20]. Driving behavior questionnaire was prepared and edited by Rizen et al in the psychology center of Manchester University in the year 1990 [21]. This scale was executed and evaluated in different countries such as England [22], Australia [23], China [24], and Finland [25]; this idea is based upon the ground which believes faults and violations have different psychological reasons and reform methods and we need to distinguish between them. Today, this questionnaire has become a common tool in assessing the driving behaviors [25]. This questionnaire includes 50 items which are graded in a Likert range from 0 to 5 (0=never, 1=seldom, 2= sometimes, 3= most of the time, 4= frequently, 5= always). The items are different from one another in two aspects: one is the kind of behavior and the other one is the extent of danger that behavior could have for other drivers. Abnormal behavior is categorized under four columns: inadvertent errors, mistakes, intentional violations and unintentional violations. Also there are three levels concerning the extent of danger these behaviors could have: a) bad behaviors with a possibility of danger for other drivers, but only to the extent of disrupting their peace and comfort (low risk potentiality). b) Behaviors those are likely to endanger others (medium risk potentiality). c) Behaviors that are certain to endanger other drivers (high risk potentiality). MDBQ has acceptable psychometric components. Parker, Reason, and Manstead [26] in investigating the reliability of the retesting of 80 drivers within a 7 week interval calculated the correlation coefficient as 0.81 for errors and 0.74 for violations. Westerman, and Haigney [27] have also calculated the coefficients of internal consistency as 0.76 for the errors and 0.74 for the violations. These results are in accordance with the results of other researches such as those of Dobson, Brown and Ball [28] and Parker, Stradling, and Lajunen [29].

## RESULTS

The target sample consisted of 103 people all of whom were males. The minimum age of them was 19, the maximum age was 64 and the average age was 34.02. Sixteen of them (15.5%) had diplomas and higher degrees 87 (84.5%) had not got a diploma.

**Table 1.** Correlation between variables

| Variables                       | Unintentional Violation In Driving | Deliberate Violation In Driving | Type A Personality |
|---------------------------------|------------------------------------|---------------------------------|--------------------|
| Sensation Seeking               | 0.39                               | 0.10                            | 0.26               |
| Type A Personality              | 0.015                              | 0.01                            |                    |
| Deliberate Violation In Driving | 0.44                               |                                 |                    |

The hypothesis number one represents that there's a significant relationship between sensation-seeking and intentional violations. As illustrated in table number 1, the correlation coefficient between sensation-seeking and intentional violations is 0.39 and this relationship is significant at the level of  $p \leq 0.01$ . therefore hypothesis number one will be confirmed. Also, according to the results illustrated in the table number one the correlation coefficient between sensation-seeking and unintentional violations is equal to 0.10 which is not a significant relationship. Therefore the hypothesis number two will not be confirmed. The hypothesis number three represents that there's a significant relationship between the personality type A and the intentional violations. As the results contained in the table number 1 can show the correlation coefficient between the personality type A and the intentional violations is equal to 0.01 which is a very weak and insignificant relationship. Therefore the third hypothesis is not confirmed. Also, according to the table 1 the correlation coefficient between the personality type A and the unintentional violations is equal to 0.11 and this relationship is not significant. Therefore the fourth hypothesis is not confirmed either.

**Table 2.** Analysis of stepwise regression (dependent variables is deliberate violation)

| Statistical Index | R     | R <sup>2</sup> | B     | T    | P     |
|-------------------|-------|----------------|-------|------|-------|
| Variable          |       |                |       |      |       |
| Sensation Seeking | 0.393 | 0.154          | 0.393 | 4.28 | 0.001 |

According to the results shown in table 2 the multiple correlation coefficient between the predictive variables and the occurrence of intentional violations is equal to 0.393 which is significant at the level of  $p < 0.001$ . Analysis of the regression shows that from the two predictive variables, only the sensation-seeking variable has the ability to predict intentional violations; this variable can also explain 10% of the variance of the criterion variable. In respect to the unintentional violations none of the variables have a predictive ability.

## DISCUSSION

The aim of the present research is to analyze the relationship between sensation-seeking and the personality type A through doing intentional and unintentional violations in driving behavior. The results showed that there's a significant relationship between sensation-seeking and intentional violations; this finding is also in accordance with the results of the previous researches [11] however other relationships are not confirmed. The occurrence of a relationship between sensation-seeking and doing intentional violations can be due to a high level of sensation-seeking in individuals. These people have a desire to experience sensations and adventures and doing driving violations can be a way for them to achieve the level of sensation they are seeking. Also, because these individuals act independent of ethics and customs [10] they are more prone to violate the traffic laws; this fact is in accordance with their main aim which is experiencing excitement. It is likely that there wouldn't be a relationship between sensation-seeking and violating laws unintentionally, because individuals with a high level of sensation-seeking perform such acts consciously and in line with fulfilling their need for sensation; consequently it seems likely that their violation of the laws be intentional, not unintentional. The lack of a relationship between the personality type A and violating laws intentionally and unintentionally can be due to the fact that a lot of the questions posed in the questionnaire of this personality type used for the drivers of the present sample is more indicative of a style of life than a long-standing personality type; therefore the individuals' affirmation of these questions will probably propel the results in an insignificant direction. On the other hand, the difficulty of some of the questions in the questionnaire of the driving behavior has made the results insignificant due to the low educational level of the subjects in the sample ; this issue should be taken into account in the future researches.

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## The Evaluation of Effective Factors Failing to Learn English in High School Male Students in Minab

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### ABSTRACT

This research was to explore English learning troubles of the high schools located in Minab. This is the reason why 240 high school male students in Minab were chosen by purposive sampling, who were studying in 2011-12 with their marks in English module less than 10 out of 20, they then filled in academic self-perception questionnaire (made by researcher) and Psychological climate classroom questionnaire made by Frazer and others, asking for the reasons of not being successful in learning English in relation to the climate atmosphere in the classroom. Last researches suggest elements such as Family, one's self-perception, climate classroom and level of difficulty in home works for academic failure. Statistical analysis of regression shows that this model explains 74.9% of effective elements in learning languages' variance. The correlation coefficient demonstrated that the elements below respectively are related to English learning at high schools: Family 73%, psychological classroom atmosphere 69%, one's self-perception 51%, the perception of school and the teacher 31%. The multiple correlation coefficient R was 87% and the coefficient of determination (R<sup>2</sup>) was 75%. Final evaluation of the model was confirmed analysis of significant level.

**Key words:** learning, English language, high school, students

### INTRODUCTION

Students' educational (academic) failure in a special lesson or their total act and the elements related to this is a common subject worked on in Educational sciences. The attribution theory and family processes hold the most important places amongst others to show the academic failure reduction rate in Educational sciences. Therefore this research shows the influence of student's self-perception and the way family members behave towards academic failure, besides the research is to show how school elements, social and psychological atmosphere in the class and the course books' attractiveness relate to academic failure in English module at high schools. Monitoring high school students' act and finding the reasons why they succeed or fail in this field is significant; because this could help us recognize effective elements on academic failure and make a suitable decision about it. Paying attention to these effective elements on teenagers' success or failure could help us improve their power of thinking and mental ability; this would be a basic and necessary condition to consolidate future thoughts and talents in a society. Education today is linked with human's destiny and the future life. A great deal of funds and human resources have been put to improve education and a lot of countries consider this as a long-term investment that would be worth it even if we withdraw short-term growth of some other facilities. Therefore, if the society could not educate its human powers in special needed fields thus, it could not play its role to flourish the talents in it, this way, the facilities and the abilities are wasted. As a result, logically thinking we need to organize the powers and resources in education and have a plan for them the way that we could recognize the reasons for academic failure and do our best to stop wasting main inside facilities. So the main purpose of this research is to explore what factors affect education failure amongst high school students in English module. To explore this target, there are some assumptions as follows:

The family's attention to their offspring and the children's success are related to one another. Student's self-perception is related to their success in English. The way students feel about the class affects their learning abilities. There is correlation between social-psychological atmosphere and the students in learning English. The level of difficulty in homework and the students' perception of this are important in learning English. Children and teenagers gain either positive attitude or the negative attitude towards their entourage; this highly depends on their successful or unsuccessful experiences while studying at school [1]. School makes the path for them to grow up and flourish. In fact, they interact with different elements which affect cognitive, emotional and social evolution including: the family bed, the way the family bright up its children, the mate group, the teachers and the school are the most important factors [2]. Thus, being educated and learning more could help us be psychologically healthy as well as gaining a specialty. On the contrary, if there is no educational success with stress along, they would lose their mental health and so it could endanger the student, his/her family and the society.

One of the lessons the students are not interested in the most is English and this could make them feel negative about it and they would think they haven't got the ability to learn a language. Gradually, while passing through the academic year if they don't get good scores in the first examination, they would think that learning English is not easy because he/she hasn't got the ability to handle this level of difficulty in the lesson mentioned above, this feeling will soar if the family do not pay attention to their offspring and continue as if this failure does not matter. On the whole, subjective learning is complicated and depends on internal and external elements. Internal elements such as: enthusiasm, unwillingness, the level of previous knowledge, the sense of coercion and denial and external elements like: the level of difficulty or simplicity of home works and the ability of the teacher is important while learning. A purpose of education is to grow the thinking and cognitive ability in the students. One of the elements to consolidate the thinking power in students is significant learning [3]. Therefore, the new process of learning should get started by the previous knowledge, this way the new knowledge could be logically organized in the memory while it is closed to the previous one, this knowledge could be used in the future and students will be in touch with it. Slavin [4] believes that the teachers step forward along their pupils and their level of comprehension; they go for one to one teaching whenever necessary and pass through the way their students' progress. Bad teaching could discourage good students and make bad students even lose their little interest in learning. There are a great number of definitions for Learning but here in this research Learning indicates gaining new skills which you couldn't learn before, it is the way in which you can handle all your capabilities and change them the way you want [2]. In the learning process the person changes his behavior but this change is upon the experience so learning is kind of an action that the person needs to get involved with.

High academic motivation and this belief that you are going to be successful makes you try to reach the success. Martinez [5] is of the opinion that high academic motivation is related to the educational success at school. Thus students who have positive thinking towards their educational background and the school they are studying in expect to succeed therefore they put all their energy to end up with success, because they believe that one condition to reach their purpose is perseverance. The cognitive theory is assumed that how people react towards incidents and various affairs depend on the way they perceive them and once they are not pleased with something and have a negative perception of this, they will get a wrong cognition of that [6]. In conclusion, unfavorable feelings would weaken self-perception as well as the individual's spirit which is important in the functions of students' cognitive structure, as a result they might think that they are not talented and they are not capable of doing anything, so there is no difference between trying and not trying to get something, it is better to surrender the target. Motivation is not only one of the most important pre-requisites of learning but also an effective variable on the learning progress and the intrinsic interest of individual. Motivation is a factor that makes the student resist failure so students who are interested in their targets will even try more after their first failure, therefore, no obstacle and trouble can let them down but students who are not interested; they will give up by no more trying and will easily accept the failure [4]. A basic variable which is important in the learning process is how students value the subject of learning. In other words, it depends on their intrinsic interest and how much they think it's worth it to reach the target. Based on anthropological theories, students themselves should choose and look for new things, in this situation external factors do not affect the significant and sustainable learning [7]. The theorists believe that the supportive atmosphere, in which students do not feel committed, increases the possibility of learning. Once students are finished with basic needs, they will be interested in schooling. Therefore, when the student's purpose is valuable and the way to reach it is neither way difficult nor very easy, students will progress, in other words, they should be realistic in choosing purposes which are accessible and satisfactory [8]. Another important factor affecting the individual's success or failure is their self-perception. Self-perception is the way the individuals think about themselves and this comment gradually formulates specially depending on parents' perspective towards their offspring [9]. So others' feedback and how the individuals interpret those comments would be a source of self-perception for them. Researches show that there is a relation between students' self-perception and the purpose they choose [10]. Students who know themselves as academically unqualified (a part of a general assessment of self) do the same way as this attitude (like avoiding doing home works) and they feel they are not capable of doing home works. Thus after every failure they feel bad about the considered lesson [11]. So the teachers affect the whole educational function such as helping students try or try not to get good scores in next exams. Once students who suffer from learned helplessness, they will lose their self-confidence, educational function and the perseverance to study more [12].

Rashidi [13] found in a research that students do not have enough motivation to learn English, and this factor is assumed as basic in educational system in Kurdistan Province.

Content, concept, text, number of words and the time to study are the effective factors in learning English. For instance, every student must work on spelling, pronunciation, conception and the meaning of the word otherwise there will be no opportunity to compensate it. A lot of students, studying English at high schools feel disappointed once they get low marks, they lose their interest and motivation and a reason for this is that they have to memorize a great deal of new words during the academic year, the words which are about the peoples who are not from the same culture as them. And this makes it more difficult. When the process of learning English vocabularies are engaged with students' daily life in an atmosphere based on very English culture, this could be considered as a new experience to students and they will be more attracted in learning so that they will be more interested in English module and then will learn the words far easier [14].

## MATERIALS AND METHODS

This research is both descriptive and survey by referring to subjects and getting information on questionnaires. The statistical population of the current research was male students in Minab who was occupied with studying in 2011 at one of the schools of this city. The considered sample includes 240 people of male students who were chosen randomly- deliberately from the ones with low marks in English. The tool used here is Questionnaire asking for the reasons why students do not succeed in English, with 36 articles of 5 choices (options) and 4 subscales such as the family's affection, self-perception, the level of difficulty and perception of school and the teacher. Each sub scale includes 9 articles and the subject gets a mark between 9 and 45. Higher marks show that those factors affect the unsuccessfulness in learning English more. The reliability of the test by Cronbach's Alpha on 97 high school students was 0.79. The validity of the test is confirmed by specialists in the field of attribution and educational sciences. To explore the psychological classroom atmosphere used psychological classroom atmosphere designed by Fraser, Malone and Neale [15] is used. This questionnaire encompasses 20 articles of 3 choices and has four components as: Friction, Correlation, Discipline (task-oriented) and competition. Each sub scale gets a mark between 5 and 15. Higher mark shows the social-psychological atmosphere in the class. Maddad [16] has recorded the reliability coefficient as 0.77 for the entire test in two weeks interval 0.60-0.68 for the subtests in the same interval via Test- Retest. Besides, Formal validity has been recorded as 0.52 – 0.76 via Factor Analysis which could demonstrate a relatively suitable validity. In the current research, The Confirmatory Factor Analysis is used in order to investigate the validity of the scale so that it could approve the Test's power in assessing the social-psychological atmosphere of the class. In addition, Cronbach's Alpha method is used in order to evaluate the reliability of the test; the result was 0.81 for the entire test, 0.59 frictions for the sub scale, 0.67 for competition and 0.71 for discipline.

## RESULTS

Regression and correlation coefficient are used in this research to examine the effective factors on the causes not ending up with success in English. Following table 1, the relation between family's affection, perception of school and the teacher, self-perception, the level of difficulty in homework and the social-psychological atmosphere of the class with the score in English is respectively as follows: 0.73, 0.51, 0.70, 0.31, and 0.69. Therefore, the assumptions of the research according to family's affection, perception of school and the teacher, self-perception, the level of difficulty in homework and the social-psychological atmosphere of the class with the score in English are confirmed.

**Table 1.** Correlation matrices

| Variables              | 1     | 2     | 3     | 4     | 5     |
|------------------------|-------|-------|-------|-------|-------|
| <b>Family</b>          | 1     | 0.489 | 0.659 | 0.289 | 0.738 |
| <b>School</b>          | 0.489 | 1     | 0.220 | 0.441 | 0.613 |
| <b>Self-perception</b> | 0.659 | 0.22  | 1     | 0.663 | 0.729 |
| <b>Level</b>           | 0.289 | 0.441 | 0.663 | 1     | 0.621 |
| <b>English grades</b>  | 0.738 | 0.613 | 0.729 | 0.621 | 1     |

**Table2.** Analysis of stepwise regression according to predictor factors for learning English

| Model | R | R Square | Adjusted R Square | Std. Error | R Square Change | FChange            | df1   | df2   | Sig.  |
|-------|---|----------|-------------------|------------|-----------------|--------------------|-------|-------|-------|
|       |   |          |                   |            | 1               | 0.868 <sup>a</sup> | 0.753 | 0.749 | 4.586 |

This model explains 74.9 percent of causes' variance of not succeeding in English and every five variable in the table possesses the power of forecasting.

**Table 3.** Analysis of regression the variable grades on predictors variables grades

| Model               | Sum of Squares | Df  | Mean Square | F       | Sig.              |
|---------------------|----------------|-----|-------------|---------|-------------------|
| 1 <b>Regression</b> | 15057.365      | 4   | 3764.341    | 178.977 | .000 <sup>a</sup> |
| <b>Residual</b>     | 4942.635       | 235 | 21.032      |         |                   |
| <b>Total</b>        | 20000.000      | 239 |             |         |                   |

**Table 4.** Predicting English grades according to predictor variables

| Predictor variables          | Unstandardized Coefficients |            | Standardized Coefficients | T       | Sig.  | Correlations |        |           | Collinearity Statistics |
|------------------------------|-----------------------------|------------|---------------------------|---------|-------|--------------|--------|-----------|-------------------------|
|                              | B                           | Std. Error | Beta                      |         |       | Partial      | Part   | Tolerance | VIF                     |
| level of difficult task      | -0.655                      | 0.132      | -0.297                    | -4.954  | 0.000 | -0.307       | -0.161 | 0.292     | 3.427                   |
| perception of school and ... | -0.875                      | 0.063      | -0.697                    | -13.946 | 0.000 | -0.673       | -0.452 | 0.421     | 2.377                   |
| Self-perception              | -0.843                      | 0.071      | -0.512                    | -11.930 | 0.000 | -0.614       | -0.387 | 0.571     | 1.753                   |
| family atmosphere            | 0.862                       | 0.038      | 1.731                     | 22.850  | 0.000 | 0.830        | 0.741  | 0.183     | 5.457                   |
| class climate                | 1.900                       | 0.096      | 0.826                     | 19.897  | 0.000 | 0.826        | 0.826  | 1.000     | 1.000                   |

## DISCUSSION

According to table 1, the assumptions of the research are confirmed, In other words, family, self-perception, school, teacher, book and class are important in learning English at high schools. The conclusion of this section is aligned with Ortiz's findings [17]. He concluded in a research that the school's syllabus, type of training, teacher's attention on students, providing a suitable atmosphere for learning in the family, school and class are of the most important effective factors in learning English.

The conclusions in table 1, consider a positive and significant relation between the amount of paternal neglect, parents' low level of education, parents' failure to provide their children with the facilities to study, parents' failure to be in touch with the school and getting low marks in English module (two-tailed test,  $r = -0.73$ ,  $N = 240$ ,  $p < 0.0001$ ) so there is a positive relation between family's affection for their children and the amount of successful learning.

Contents in table 1 demonstrate a significant and positive relation between a negative self-perception and decreasing power of learning in English module. According to the research's finding, lack of motivation in individuals, negative self-perception, English module and the institute, low self-confidence as well as lack of persistence and effort hold a significant and positive relation with low learning process (two-tailed test,  $r = -0.70$ ,  $N = 240$ ,  $p < 0.0001$ ). It means that if a student gets high scores in lack of motivation, intrinsic interest and perseverance, their learning ability would be lower.

Based on table 1, factors such as reprimanding and reproaching parents, noisy classes, holding lecture classes, irregular syllabus, and lack of audio-visual facilities at school play an important and effective role in loss of learning in English at high schools. In other words, Student's perception of the class and the teacher has a positive relation with their score in English (two-tailed test,  $r = -0.51$ ,  $N = 240$ ,  $p < 0.0001$ ).

Table 1 shows the correlation between the score in English and factors like a huge amount of vocabularies, unattractive texts, the huge amount of lessons to study in comparison with a little time to do so, as  $-0.31$  (two-tailed test:  $r = -0.31$ ,  $N = 240$ ,  $p < 0.0001$ ).

The outcome of this part of the research is similar to the ones by Hosseininasab, Farokhi and Morsali [14]. They concluded that the texts in English books do not attract nor motivate student to study this lesson and this is a factor causing loss of learning in this module at high schools.

Statistical analysis suggests a relation between family, institution, and self-perception, social-psychological atmosphere of the class as well as the book and the score in English module. Family holds the highest power of forecasting amongst other variables, after that there are self-perception and social-psychological atmosphere holding the most important places, consecutively.

About the first assumption, this assumption is guaranteed as significant. Based on the findings in the current research, family's attention to their children particularly once they fail and feel helpless, family's education, parent's relationship with the teachers and how they react once their offspring fails, how they try to find a suitable solution and generally parents' care for English module at high schools has a positive relation with student's successfulness or failure at school. According to table 1, the amount of correlation is  $+0.73$ , in other words, family is the most influential variable for loss of learning in English according to current research.

An important concept in interpreting and changing the first assumption is the family which holds the most important place in consolidating or weakening student's interest and perseverance in overcoming daily problems and troubles particularly troubles and obstacles in learning. Thus, parents who have emotional relationship with their offspring, they care for the children's educational status and once they fail, they try to find the reason why this happened and they would help their children by exploring the reasons of failure. The results of this part also conform to Stewart's findings [18]. In a research about structural characteristics of the school, student's effort as

well as the interaction between parents and their children, he found that a trouble, students suffering from loss of learning, are having is that the parents are not aware of their children's educational situation and they do not care for it because they do not know their offspring's needs. This part of the research is in accordance with Kim and Rohner's findings [19]. They found that the children brought up in neglectful families, are almost weak in educational function and ability. They also found in a research that the families who avoid interacting with their children or the families who command their children to do home works will make them uninterested in school and perhaps they will end up with educational failure while there are other factors causing them stress and psychological pressure. Kim and Rohner [19], concluded in a research about family atmosphere and academic achievement that there is a strong positive relation between these two elements and the families who do not provide their children with appropriate fields of behavior and emotion, these children's failure in a lesson or two will not surprise us. According to the schools there are few parents coming to the school and the majority of children think they are forgotten and their educational status does not matter. Adler [20] believes that, the abandoned, rejected and forgotten children could grow inferiority complex inside and it makes them less valuable, and will strengthen lack of self-confidence, pessimism and this expectation to fail in them so they will not be encouraged to be successful in life.

To examine the second assumption, correlation coefficient is used. According to table 1, there is a negative significant relation between students' self-perception and their score in English (two-tailed test,  $r = -0.70$ ,  $N = 240$ ,  $p < 0.0001$ ). Self-perception holds the second most important place after family. To interpret this assumption, we shall say a student not having enough motivation to learn English and doesn't feel good about it or does not bother studying at home, will not try to succeed, the only result would turn out as failure and so several failures will make students think that they are not talented to learn English and this is out of their capabilities therefore, their books and pamphlets will get piled up during the year and once for the final tests, there is not enough time to learn, as a result, students have no choice but accepting this failure. In Ryan's opinion [9], the most effective factor on learning would be cognitive drive. He believes there is a bilateral relation between the individual's motivation and the success, as far as this motivation will make them curious about their area of interest, so it would lead them to success and learning. He also believes that learning will be along with the significant motivation and this would be somehow rewarding for the learner.

This part of researches could be conforming to Martinez's findings [5] as well. He found that students, who find the reason of their failure as not being talented, will not succeed in the considered field in the future, thus they will no longer try and this confirms the assumption that this feeling would make the students feel negative inside. Apparently, students who believe that they are weak in English, will not get excited and put enough time to study this lesson, this will cause other failures and make students feel disappointed while attending English classes thus they would have no expectations to succeed. One of Barber, Munz, Babsby and Grawitch's findings [21], was that the most important factor to forecast academic achievement after having the capability to do so is controlling. Therefore, students who blame external factors such as chance, fraud in exams, or the teacher's will, for their failure, will not try for significant learning, because based on this negative perception they do not know themselves as successful. This part of the research is again in accordance with those researches of Schank and Pajaris [11]. They found that the type individual's self-perception is related to their academic achievement and this is the major difference between students with positive self-perception and students with negative self-perception. To interpret the concepts mentioned above, we could say: students with positive self-perception as well as the core inner control, feel responsible towards their behavior and once they fail a lesson, they will try to find the reasons of this failure and will consult experts so that they could compensate their failure and this is because they won't easily succumb to external obstacles. But students with negative self-perception and failure would see no relation between attempt to succeed and its result and they believe incidents happening are out of their control. Hence the way students think of themselves and their capabilities in learning English, has a significant role in their success or failure. In other words, the way students look at learning English is vital in their success or failure in the considered lesson.

According to table 1, there is a negative and significant relation between social – psychological atmosphere and the scores in English (two-tailed test,  $r = -0.69$ ,  $N = 240$ ,  $p < 0.0001$ ). It means that normal and strict rules held in the class by the teachers are parts of the students' failure, for instance, having lecture classes without using audio-visual facilities and not paying attention to 4 main skills (Listening, Speaking, Reading and Writing). Holding crowded classes without enough time for the teachers to interact with all students each session as well as lack of audio-visual facilities and not well-organized curriculum are some of the factors relating to the school and the teacher for students' failure in English module. Høglund and Leadbeater [22] concluded a research as follows: factors like: family's affection, social-psychological atmosphere, a huge amount of students in the class, not using extra training aids like laboratory and failure to meet the learning stages (Listening, Speaking, Reading and Writing) are some of the troubles in learning English. In the current research, English learners' responses conform to the mentioned factors and seemingly this trouble exists at all high schools in Iran.

To examine the fourth assumption, first correlation coefficient is used to find the relation between students' perception of lessons and book materials. Based on current research learning English and students' perception of the text book are correlated (two-tailed test:  $r = -0.31$ ,  $N = 240$ ,  $p < 0.0001$ ). As far as the book had the least correlation amongst 4 available variables in the research, to determine the real importance of the variables (family, self-perception, institution, social-psychological atmosphere of the class and perception of the book)

regression coefficient is used. According to table 2, the level of difficulty in home works is of less forecasting power. Although the book has the least correlation amongst other variables, on the other hand it possess a significant power of forecasting, this does not imply that factors like unattractive English texts at high schools, authorities' failure to care for the student's troubles and learning-cognitive problems, lessons not conforming to the determined time to teach the lessons, lack of continuity and connection between courses and books to the next stage and the previous, high starting age of learning English at high schools in Iran, do not play a role in lowering the level of learning. This variable is considered after student's self-perception, their perception of school, and then once they all are brought together deprives all student's interests and this make their educational failure. Schank and Pajaris [11] in a research about self-perception and academic achievement concluded that students' self-perception, the level of difficulty in home works, and the tendency to learn are important factors in learning. Teaching and learning English at high schools as well as the huge volume of irrelevant text books written by the native people encompass some of the troubles at schools in Iran. Hence, it seems that authors' failure to care for the problems mentioned above which will lower students' interest in studying English at high school, particularly students in remote areas, students from illiterate, populated and low-income families, makes English less attractive to learn. So revising text books and lowering the starting age of learning in these regions, are the factors should be considered seriously.

Based on table 2, the multiple correlation coefficient is  $r = 0.868$  and shows that family, institution, self-perception, text book and social-psychological atmosphere hold 75.3 percent of failure in scores in English.

To interpret what we said above, we can mention each of the factors as family, school, and individual itself affect learning English. It seems that each variable without interacting with the other one could affect failure in English module. For instance, although students have their family attention and affection, they are disappointed with their academic performance as well as learning English, so educational failure will likely happen for them.

When an independent variable will cause educational failure and the other variable somehow affects it, the interaction between these elements will cause a more serious educational failure.

According to the findings of this research, it is possible to handle the variables which cause educational failure in English module. One of the basic variables was the family and the relationship between parents and their offspring. So if schools could organize the programs about children's education, this could solve a part of this problem and then students' negative self-perception and their hopelessness will turn out to be hope and change. On the other hand if text books' authors pay attention to these researches and try to solve the cognitive and educational problems, it would decrease the percentage of educational failure. Also the text books' authors should use all new findings related to learning theories, psychology and linguistics so the teaching methods will be improved. Therefore, learning and educational failure are complex and multivariate that without paying attention to the set of their factors, solving the problems mentioned above would consider as difficult.

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## Hard Corals Fauna of Larak Island (Persian Gulf, Iran)

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### ABSTRACT

The coral reefs areas in Iranian part of the Persian Gulf are very extensive, but despite its vast shoreline in its southern border very little research has been conducted on coral reefs. In the present study, the coral reefs in the station (i.e. northern east) and the station (i.e. west) was surveyed using Manta Tow Technique and GPS. Specimens of hard corals collected and photographed in the Larak Island for identification. The percentage cover of coral reefs was assessed using Reef Check and Manta Tow Technique. 22 species of hard corals belong to 14 genera and 7 families were identified in northern east Station and in west Station 14 species of hard corals belong to 10 genera and 8 families were identified. Faviidae was the diverse corals in stations. *Acropora* corals (90 %) were the most abundant family in the northern east station and *Favia* corals (45 %) were the most abundant family in the west station. Comparison of these two selected stations show that station is located in north east of Larak Island with 22 species was more richness in comparison with station of west of Larak Island with 14 species. Comparison of the coral community at the study area with other Iranian Islands showed that corals of Larak Island bear the low diversity.

**Keywords:** Coral Reef, Biodiversity, Larak Island, Dominant Species, Hard Corals.

### INTRODUCTION

The Persian Gulf has a complex and unique tropical marine ecosystem, especially coral reefs, with relatively low biological diversity and many endemic species [1] In this area, the coral reef communities are occurred in the form of non-reef setting [2] and surrounded by some of the driest landmasses in the world, such that continental influences are limited [1]. While large parts of the region are still in a pristine condition, several anthropogenic threats notably habitat destruction, over-exploitation and pollution are ever-increasingly disturbing the coral reef communities; The coral reef communities in the Persian Gulf are less diverse than that of Indian Ocean [1]. The knowledge of coral reefs distribution on the Iranian waters of the Persian Gulf is very limited. Coral reefs are found encircling Iranian Islands [3] with fringing reefs being the dominant reef structure along the coastlines [4, 5].

The distribution and status of the coral reefs in Iranian waters are poorly known. Early study by Rosen [6] recorded only 15 genera of hard corals in the northern part of the Persian Gulf and Saudi Arabia. Harington [7] reported the presence of corals at the Sheedvar Island. Harger [8] noted 19 coral species at Hormuz Island. Rezai [9 and 10] examined the corals around different islands and identified 35 species of hard corals around Larak, Farur, Banifarur, Tonb-e-Kuchak, Tonb-e-Bozorg, Hendourabi and Kish islands. Rezaei [9 and 10] reported the presence of soft coral (*Sacrophyton sp.*) and hard coral (*Seratopora sp.*) for the first time around Larak Island. Sadat Sadeghi [11] surveyed hard corals around Kish Island and identified 19 species. Acroporidae were found to be the most diverse family, while Faviidae and Poritidae occurred most frequently. Otherwise, Agariciidae and Dendrophyllidae occurred rarely. Fatemi and Shokri [12] identified 27 species of hard corals belonging to 9 families and 20 genera from Nayband Bay, Kish and Farur islands. They found that Faviidae with 6 genera and 8 species was the most diverse family. Poritidae was the most abundant corals in all areas with 2 genera and 4 species. Shojae et al. [13] recorded

three species of hard corals including *Echinopora gemmacea*, *Leptoria irregularis* (Faviidae) and *Montipora incrassate* (Acroporidae) from north-east of Larak Island (Persian Gulf, Iran).

Given the paucity of information on species inventory of hard corals in Larak Island, the present study was undertaken to explore the species diversity and abundance of hard corals in this area.

## MATERIALS AND METHODS

The survey of coral reefs around Larak Island was conducted using Manta Tow Technique described in the Methods for Ecological Monitoring of Coral Reefs [14]. A diver equipped with snorkel and fins was towed around the island over the depths of 2-5 m at an approximate distance of 200-250 m from the shore. The geographical position of starting and ending points were 26° 53' 21.86"N, 56° 21' 45.37"E and 26° 53' 14.25"N, 56° 23' 59.69"E, respectively (Fig. 1). The diver was towed at a speed of 3-5 km per hour, equivalent to a slow walk for two minutes.

The pattern of coral distribution around the island was recorded. The coral specimens were collected from two sites where corals were abundant. The specimens were carried to the boat and preserved in 70% Ethanol. The coral specimens were bleached using hydro peroxide. The specimens were photographed showing the whole specimen and the corallite structures.

Identification was done using Veron [15] and communication with Prof. Charles Sheppard at the Dept. of Biological Sciences, Warwick University. The materials are deposited in the Faculty of Marine Biology, University of Hormozgan, Iran.

## RESULTS

According to the present study, a total of 25 species of coral reefs belong to 8 families and 15 genera have been identified. 22 species of hard corals belong to 14 genera and 7 families were identified in northern east Station and in west Station 14 species of hard corals belong to 10 genera and 8 families were identified. Faviidae was the diverse corals in stations. *Acropora* corals (90 %) were the most abundant family in the northern east station (table 1). And *Favia* corals (45 %) were the most abundant family in the west station (table 2).

## DISCUSSION

The species of hard coral identified in this study, numbering 25 Scleractinian species, occurs in two reefs form, patches and fringing reefs in Islands Larak. The species composition of the Persian Gulf corals is typically Indo-Pacific, with most species occurring in a wide geographical area [2].

The closest faunal proximity to other coral areas of the Indo-Pacific is to the Red Sea [2 and 5] due to the shared pale oceanographic history of restriction during the last sea-level low stand and simultaneous flooding during the Holocene transgression [12]. The coral species of Iran and those of the Gulf in general, are similar to those at the geographical periphery of reefs. Comparing the diversity of Larak Island with other studies in Islands of the Persian Gulf, showing that biodiversity in this Island is highest than from Island Qeshm with 22 species [16] and Nayband Island with 5 species and 21 species in Island Kish, Faror Island with 16 species [12] but comparing with other study at south of the Persian gulf show that the Iranian coasts have a lower coral species richness than the southern part of the Gulf, where 34 coral species are reported in Kuwait [17], 50 [18] and 55 [19] species in Saudi Arabia, 34 species in UAE [2] and 53 species in Oman [20]. While a more complete survey in Iran would result in more species, environmental conditions prevailing in central waters of the Gulf, such as stronger waves and currents, low-nutrient waters and especially pollution in recent three decades [21], may cause lower diversity. Riegl [2] points out those species-specific tolerances to low or high temperature are highly likely to be a deciding factor in community differentiation all over the Gulf [12]. Comparison of two stations shows higher species coral reefs in Lark's north east station to Larak west station. From other effective factors can point to Seabed nature in mentioned stations. Sea bed in Lark's north east station has more extensive natural hard Structures of hard sediments genus by organic origin in comparison to bed sea Located in west of Larak. Coral Larvae after free live as pelagic Larva need to natural hard beds for positioning in seabed and starting benetic level [22].

Acroporidae Family by 7 species has high variety and large numbers in comparison of 1 species Kish Island, 2 species Qeshm [16]. *Acropora* genus is dominate coral reef of Larak Island. Rezaie [9], Shokri and Fatemi [12], Contributed reason of large variety of Coral reefs especially *Acropora* genus in Larak Island to Location of this Island in Hormoz strait and also Coral feeding of ocean waters rich of nutritious material.

Based on Riegl in 1999, *Acropora* corals grows in area with lowest stressed. Then we concluded that Lark has low stress level and it cause large variety coral and high density of *Acropora* family.

**Table 1.** Identified Hard Corals in North East at Island Larak of the Persian Gulf

| Families       | Genera              | Species  |
|----------------|---------------------|--|
| Mussidae       | <i>Acanthastrea</i> | <i>maxima, echinata</i>                          |
| Acroporidae    | <i>Acropora</i>     | <i>downingi, arabensis, clathrata, valida</i>    |
| Acroporidae    | <i>Montipora</i>    | <i>tuberculosa, aequituberculata, incrassata</i> |
| Faviidae       | <i>Goniastrea</i>   | <i>peresi</i>                                    |
| Faviidae       | <i>Favia</i>        | <i>pallida, speciosa</i>                         |
| Faviidae       | <i>Plesiastrea</i>  | <i>devantieri, versipor</i>                      |
| Faviidae       | <i>Platygyra</i>    | <i>daedalea</i>                                  |
| Faviidae       | <i>Leptoria</i>     | <i>irregularis</i>                               |
| Faviidae       | <i>Echinopora</i>   | <i>gemmacea</i>                                  |
| Agariciidae    | <i>Pavona</i>       | <i>Diffluens</i>                                 |
| Poritidae      | <i>Porites</i>      | <i>compressa</i>                                 |
| Siderastreidae | <i>Psammocora</i>   | <i>Digitata</i>                                  |
| Pocilloporidae | <i>Stylophora</i>   | <i>subseriata</i>                                |
| Pocilloporidae | <i>Pocillopora</i>  | <i>damicornis</i>                                |
| 7              | 14                  | 22   |

**Table 2.** Identified Hard Corals in west at Island Larak of the Persian Gulf

| Families        | Genera              | Species                               |
|-----------------|---------------------|---------------------------------------|
| Mussidae        | <i>Acanthastrea</i> | <i>Echinata</i>                       |
| Acroporidae     | <i>Acropora</i>     | <i>Downingi, Arabensis, Clathrata</i> |
| Faviidae        | <i>Favia</i>        | <i>Speciosa</i>                       |
| Faviidae        | <i>Plesiastrea</i>  | <i>Devantieri</i>                     |
| Faviidae        | <i>Platygyra</i>    | <i>Daedalea</i>                       |
| Poritidae       | <i>Porites</i>      | <i>Compressa</i>                      |
| Siderastreidae  | <i>Psammocora</i>   | <i>, Digitata, decussata</i>          |
| Pocilloporidae  | <i>Stylophora</i>   | <i>Subseriata</i>                     |
| Agariciidae     | <i>Pavona</i>       | <i>Decussata</i>                      |
| Dendrophyllidae | <i>Turbinaria</i>   | <i>Peltata</i>                        |
| 8               | 10                  | 14                                    |

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*Original Article***Compare the Effectiveness of Task-Process Training and Effectiveness of Task-Process Training Coupled with Reinforcement of Motor Skills in the Academic Performance of Spelling in Students with Learning Disabilities in Bandar Abbas****Azam Bidaki, Hossien Zainalipour<sup>1</sup>, Eghbal Zarei<sup>1</sup> and Fatemeh Moridi<sup>2</sup>**

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**ABSTRACT**

Purpose of the present study is to compare the effectiveness of task-process training and effectiveness of task-process training coupled with reinforcement of motor skills in the academic performance of spelling in students with learning disabilities in Bandar Abbas city. This study (quasi-experimental) is important because today children with learning disorders are considered as the biggest group of exceptional children. The study population includes all students admitted in learning disability centers of Bandar Abbas and total number of available samples in this study is 60 (30 in the control group and 30 in the experimental group). One of these centers is considered randomly as the control group and the other one is experimental group. Both experimental and control groups were matched in terms of spelling pre-test using the IQ test, Wechsler motor skill tests of Oseretsky for testing intelligence and motor skills and also by using t-test for independent groups. In addition, t-test of other independent samples was performed on the pre-test and post-test results of two groups (separately) in order to determine the effect of their trainings on academic performance. Moreover, t-test of other independent samples was performed on post-test of each group. Results showed that both training methods have had an impact on academic performance of spelling, but task-process trainings coupled with reinforcement of motor skills have had more impact on academic performance.

**Key words:** task-process, learning disabilities, motor skills and academic performance

**INTRODUCTION**

According to scientists [1] view on balanced development of motor abilities as basis of the next learning and considering a number of children with learning disorders who have much slower motor development than normal children, despite their normal intelligence, it seems that these people have a weak cognitive component to receive motor skills. Because motor skills especially fine motor skills, require a cognitive level of activity. Therefore, some people learn and develop motor activities very slowly. Many scientists believe that some mild brain disorders are the main cause of such problems. Whatever the cause, it is essential to correct their motion problems before they start training of other skills. In this study by considering the effect of reinforced motor skills on the memory, it is attempted to reinforce motor skills in order to examine its effect on memory and academic performance of spelling.

According to various theories in the field of training and remedial methods for treatment of these children, Kirk [2] provided the training-remedial programs of these students by the three following methods: 1) task training 2) process training 3) task-process training.

1-Task training method: the emphasis is on making a chain and simplifying the task that must be learned.

2- Process training method: focuses on training and remedying of specific disability such as perception, memory and attention. This emphasis is on remedial efforts for correction of specific disability hindering the child progress.

3-Task-process method: This method includes main concepts of both previous methods in which psychological processes are not considered as the mental abilities that can be taught separately, rather processes are considered as a set of learned mental functions, conditional behaviors or responses to specific tasks.

Kajyaf, Darkhani, Moulavi and Amiri [3], in an article titled "effectiveness of process training and task-process methods on dictation performance of elementary school children found that there is a difference between average of post-test scores of the first experimental group (process method) and that of the second experimental group (task-process method) ( $P=0.01$ ). Also findings showed that there is a significant difference between post-test scores of the first experimental group (process method) and the second experimental group (task-process method) in terms spelling improvement ( $P < 0.01$ ).

The research result shows that the process training and task-process training for students with disabilities in spelling is effective in improvement of spelling and writing ( $P = 0.01$ ). Moreover, LSD post hoc test results show that among two methods of training, the task-process training method is more effective ( $P < 0.01$ ).

Results of a research conducted by Babapooore [4] entitled "Comparison of motor skills of dyslexia and normal students" showed that there is a significant difference between normal and dyslexic students in terms of general and fine motor skills and also delay in motor behaviors ( $P < 0.01$ ). However, there was no significant difference between these two groups in terms of their gross motor skills and IQ. Also it was indicated that there is a significant difference in the mean scores of gross and fine motor skills in the dyslexic group ( $P < 0.01$ ).

Honjany [5], in his study investigated the effect of accuracy training on spelling ability to help students with learning disabilities in the exam. Results indicated that training-remedial considerations could significantly increase the average of test scores in the dictation ( $P \leq 0.01$ ). There was also a significant difference between average scores of spelling test of boys and girls ( $p \leq 0.05$ ). The estimated average spelling scores for the girls was 15.14 and for boys was 11.35 and this showed that girls had better spelling ability in writing than boys.

ShehnyYeilagh, Karami, Shokrkon, and Mehrabzadeh honarmand [6] in a study investigated the epidemiological spelling learning disabilities among the elementary students and multi-sensory effect of remedial methods in reducing the disability. Findings of this study suggest that the amount of epidemiology of spelling disability is 7%. Results of performing the multi-sensory remedial method showed that spelling disability reduced significantly after using this method.

Abedi and Arizi [7] attempted to investigate and compare the effectiveness of the mathematical training methods to children with learning disabilities in primary school in Isfahan. These methods included task, process and task-process training methods. Results showed that there are significant differences between the average of the scores in control and training groups. ( $P \leq 0.01$ ). It means that the mathematic performance in training group was better than the control group due to performing the training methods.

Stoeger and Ziegler [8] in a study investigated the relationship between children's fine motor skills and level of academic achievement and their concentration in two groups of clever school students with academic achievement and without academic achievement. They considered deficiencies in fine skills as an important factor in identifying clever children without academic achievement.

In a study by White, Merrill, and Wright [9] titled, Relationship between processing, motor skills and sensory profile scores, performed on 68 children with motor impairment, there was a significant relationship ( $P < 0.05$ ) at the level of sensory- motor process skills and individual's daily performance levels. It was observed that children with abnormal scores on sensory profile had more function problems.

Research results of Krokman and Pesonen [10] and Rama [11] showed that problems of students with learning disabilities in the sequence of visual memory are more severe. Niemejer and Galen [12] investigated performance of 125 students in fourth and fifth grades of the schools in the Netherlands who had problems in writing and other fine motor disabilities. Results showed that 34 percent of 125 students had handwriting problems and these problems were associated with serious programming problems. Children who received physiotherapy had improved their handwriting.

Vlachos and. Karapetsas [13] showed that children with dysgraphia were acted significantly slower than normal children in reconstruction of complex shapes of Re Ostrit and memory replication. They concluded that Dysgraphia children might suffer more cognitive problems that may affect visual memory.

Isaki, Spaulding, and Plante [14] compared the performance of people with learning disability and normal people in verbal short-term memory and verbal working memory. Results showed that performance of groups with learning disabilities is more serious than control group in terms of processing and saving of information. These results support limited memory capacity of people with learning disability.

According to results of various studies, it can be concluded that students with learning disabilities have deficiencies in sequence of visual and auditory memory problems. Their problems in even more serious in the visual memory [10, 11 and 13].

## MATERIALS AND METHODS

The study is a quasi-experimental study that uses the pre-test and post-test indices with control group. (Factor analysis at two levels). In this study the first group is trained with task-process training methods and the second group is trained with the task-process training coupled with the process of learning motor skills.

First a number of students with learning disabilities in the first, second and third grade of primary school (in the 2010-2011 school years) attended in a center of disorder problems were selected in the first and second region of Banda Abbas that are considered as an available random sample. Then all of them tested by Wechsler test in order to be matched in terms of intelligence in the two groups.

In the next stage, all of them tested by Oseretsky Test, that is a motor skills test and again students of two centers were matched in terms of unique motor skills and eventually all of them tested by the same spelling test (according to the related case).

When 60 students were matched in terms of intelligence and motor skills and a group of students (30 students) with educational problems were considered randomly as experimental group, student's motor skills in these students reinforced by work therapy tools and counseling with treatment centers in a three months period by using task-process training method. (Work therapy is a physical therapy method that is used to strengthen the weak muscles. Weak muscles will be strengthened by a series of active and appropriate resistance exercises. Also, effects of this treatment on stress reduction are mentioned).

Another group that is the center of learning disorders in area one is considered as a control group (30 people) trained by task-process training without reinforcement of learning motor skills. Finally, based on a post-test in both groups it will be determined whether enforced motor skills cause improved mental function and consequently academic performance or not?

## RESULTS

Findings of this study are presented in two sections. In this section, descriptive indicators of the average and standard deviation and mean of standard error are given for pre-test and post-test academic achievement.

**Table 1.** Mean and standard deviation and mean of standard error of pre-test and post-test scores of academic achievement in control and experimental groups in all samples.

|           |                    | N  | mean  | Std.m | Std. Error Mean |
|-----------|--------------------|----|-------|-------|-----------------|
| Pre-test  | control            | 30 | 10.53 | 5.663 | 1.034           |
|           | Experimental group | 30 | 12.03 | 4.123 | 0.753           |
| Post-test | Control            | 30 | 13.33 | 3.325 | 0.607           |
|           |                    | 30 | 16.07 | 2.067 | 0.377           |

As it can be seen in Table 1, mean of the academic achievement pre- test scores in the control group is calculated as 10.53 and in the experimental group is 12.03. In addition, the mean value of academic achievement test scores in the control group is calculated as 13.33 versus 16.07 in the experimental group.

Moreover, in the inferential findings section the t-test method is used to confirm or reject study hypotheses for independent and dependent groups.

Independent variable was task-process training method coupled with enforcement of the motor skills and the dependent variable was academic achievement is (it is noteworthy that in the control group there is a daily training for learning disorder centers). Because the study design is considered as pre-test and post-test with control group, both groups are matched in terms of preliminary academic developments by using Leuven Test in order to meet the is homogeneity assumption in both groups to ensure homogeneous variance of experimental and control groups in the dictation pre- test.

**Table 2.** Results of study on homogeneous variance in the investigated groups

| Levene's Test for Equality of Variances |       | Test equality for mean |        |       |                 |                 |
|---|-------|------------------------|--------|-------|-----------------|-----------------|
| F                                       | Sig.  | T                      | Df     | P     | Mean Difference | Std. Error Mean |
| 3.186                                   | 0.079 | 1.173                  | 58     | 0.246 | 1.500           | 1.279           |
|   |       | 1.173                  | 53.001 | 0.246 | 1.500           | 1.279           |

According to the above table, we can conclude about the homogeneous variance. If these interactions are statistically significant, the data do not support the hypothesis of homogeneous variance. However, there is no significant interaction. In fact, there is no significant difference between them. Therefore, the hypothesis is confirmed ( $P \leq 0.05$ ).

There is a significant difference between mean value of pre-test and post-test scores of the group that is used task- process training.

The statistical t-test of dependent group is used to test this hypothesis. Results showed that the after task-process training, the difference between pre-test and post-test scores will be significant significantly. ( $P < 0.05$ ). Therefore, the study hypothesis is confirmed and the null hypothesis is rejected. Detailed results are presented in Table 3.

There is a significant difference between pre-test and post- test scores of the task-process coupled with enforcement of motor skills. The statistical t-test of dependent group is used to test this hypothesis.

**Table 3.** Summary of t-test results of dependent groups in the pre-test and post-test of task- - process

|   | Paired Differences |         |                | T      | df | P     |
|---|--------------------|---------|----------------|--------|----|-------|
|   | Mean               | Std     | Std Error Mean |        |    |       |
| <b>Pair 1<br/>task-process training</b> | -2.80000           | 2.93199 | 0.53531        | -5.231 | 29 | 0.000 |

Results showed that the after task-process training coupled with enforcement of motor skills , the difference between pre-test and post-test scores will be significant significantly ( $P < 0.05$ ). Therefore, the study hypothesis is confirmed and the null hypothesis is rejected. Detailed results are presented in Table 4-6.

**Table 4.** Summary of t-test results of dependent groups in the pre-test and post-test of task- process training coupled with enforcement of motor skills.

| P     | Df | t      | Paired Differences |                |          |          |
|-------|----|--------|--------------------|----------------|----------|----------|
|       |    |        | Std. Error Mean    | Std. Deviation | Mean     |          |
| 0.000 | 29 | -7.201 | 0.56014            | 3.06800        | -4.03333 | Pre-test |

There is a significant difference between pre-test and post- test mean scores of the task-process training group and task-process training group coupled with enforcement of motor skills.

**Table 5.** Summary of t-test results of independent groups in the pre-test and post-test of task- process training coupled with enforcement of motor skills

|                             | Levene's Test for Equality of Variances |       | t-test for Equality |        |       |                 |                 |
|-----------------------------|---|-------|---------------------|--------|-------|-----------------|-----------------|
|                             | F                                       | Sig.  | T                   | df     | P     | Mean Difference | Std. Error Mean |
| Equal variances assumed     | 8.148                                   | 0.006 | 3.824               | 58     | 0.000 | 2.733           | 0.715           |
| Equal variances not assumed |   |       | 3.824               | 48.495 | 0.000 | 2.733           | 0.715           |

The statistical t-test of independent group is used to test this hypothesis. Also Leven Test is used to test the hypothesis of the lack of homogeneity of variances of experimental and control groups in the dictation post- test.

Results showed that the after task-process training coupled with enforcement of motor skills , the difference between pre-test and post-test scores will be significant ( $P < 0.05$ ). Therefore, the study hypothesis is confirmed and the null hypothesis is rejected. Detailed results are presented in Table 5.

## DISCUSSION

According to findings of this study, we conclude that task- process training is effective in improving writing skills, spelling. However, the effect of task- process training method coupled with the motor skills of spelling is more impressive. Therefore, the research hypothesis was confirmed and those with reinforced motor skills had better improvements than those who have not received it. This means strengthening motor skills improves memory and enhances learning and academic achievement because scientists believe that the balanced ability of motor skills is basis of the next learning.

Therefore, it is necessary to reform movement difficulties' people. Therefore, it is concluded that teachers need to investigated both process problems of these children (perceptual skills, visual memory, auditory memory, visual perception, attention) and assess student's step by and chain training methods beside task-process training for increasing of their motor skills.

In this study some qualitative findings was also obtained one of the most important ones is that individual and remedial training can improve children's problems in terms of spelling disabilities. In the individual training plans, different training methods are used including combined sensory training, perceptual and motor skills, cognitive and Meta cognitive skills, visual memory, auditory memory and auditory perception, and rehabilitation models using multi-sensory improvement methods trained to children individually. Effectiveness of this method is confirmed by man studies.

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## Accumulation of Heavy Metals (Pb, Cd, V) in Sediment, Roots and Leaves of Mangrove Species in Sirik Creek along the Sea Coasts of Oman, Iran

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### ABSTRACT

Sirik mangrove forests harbour two species, *Avicennia marina* and *Rhizophora macronata* living in Azini Creek. Because of a fishing port at Azini Creek, this study was conducted to determine heavy metals concentrations in the Sirik mangrove forests along the Oman Sea coasts. Substantial component analysis of heavy metal concentration in sediments surrounding roots zones of mangrove species showed that Cd and V were negligible, while the Pb concentrations were higher than those found in leaves and roots. Concentrations of Cd and V in the leaves and roots also were negligible.

**KEY WORDS:** Coasts of Oman; Iran; heavy metals; Mangrove species; Sirik Creek

### INTRODUCTION

Mangrove forests are one of the most productive ecosystems in the world. Hence, they bear many advantages, such as coastal water enrichment, commercial production, coastlines preservation and increasing fisheries production [1]. Mangrove forests cover 162,000 Km<sup>2</sup> of the land area of the world [2]. Mangrove forests in Iran are located in three provinces along the Persian Gulf and the Oman Sea coasts, Bushehr province [3], Hormozgan province [4], Sistan and Balouchestan province [5]. A portion of the mangrove forest of Sirik has been developed in the Azini Creek area [6]. Azini Creek has two species of mangrove trees, *Avicennia marina* and *Rhizophora macronata*. *Rhizophora macronata* only was developed in the Azini Creek.

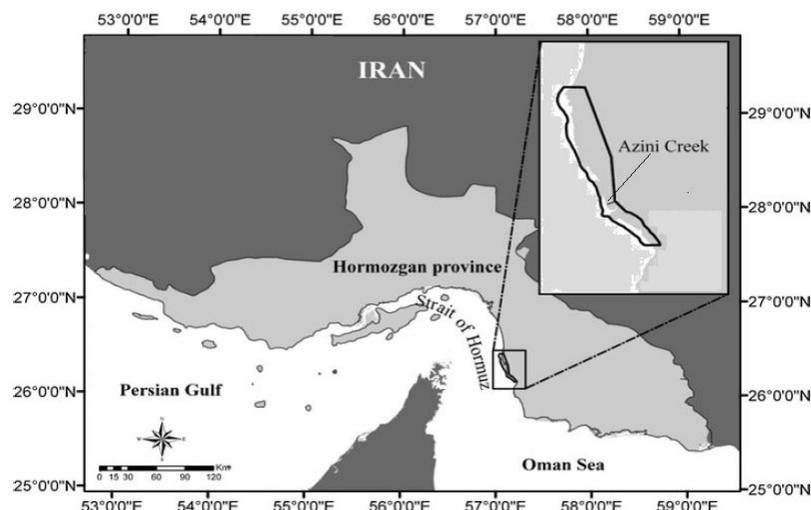
Several factors threaten mangrove forests, human actions, including fishing ports and dams, invasion of sand dunes, camels grazing on mangrove leaves [7], heavy metals [8], and sewage [9]. Because heavy metals are retained in mangrove forests through plant uptake [10], they subsequently move through the organic matter cycle and are transported by tidal current to the coastal waters [11].

Despite the importance of the mangrove ecosystem, a few studies have been conducted to determine the accumulation of heavy metals in mangrove plants and their environment in Iran [12, 6, 3, 13 and 14].

This study has been accomplished to determine the concentration of heavy metals, including Pb, Cd, and V in sediment, leaves and roots of mangrove trees in Azini Creek, Sirik, Iran.

### MATERIALS AND METHODS

The survey was performed in the Azini Creek area of the Sirik mangrove forest. The Sirik mangrove forest is located in an arid environment (26° 19'N, 57° 05' E) along the Oman Sea. The studied location is next to a fishing port (Fig 1).



**Figure 1.** Location of Sirik Azini Creek

In fall, three samples of leaves and roots of *Avicennia marina* and *Rhizophora macronata* were collected along with sediment samples surrounding root zones of mangrove species from Azini Creek. While being transported to the laboratory, all samples were stored in clean acid-washed plastic containers. In the laboratory, sediments were removed from the roots. Afterward, samples were dried, grounded and homogenized. Analyses of samples were initiated after being digested in a concentrated nitric-perchloric acid solution. Metal concentration analyses were performed using flame atomic absorption spectrophotometry (Khak Azma Negin Co, Tehran, Iran).

The Mann-Whitney Test was used for comparing the heavy metals concentrations between mangrove species.

## RESULTS

Lead (Pb) had the highest concentration of the measured metals. Cadmium (Cd) and Vanadium (V) had the lowest concentration among the metals. Table 1 shows mean concentrations of Pb, Cd and V in the sediments in the definite areas; Table 2 provides mean concentrations of Pb, Cd and V in the leaves mangrove species; and, Table 3 delineates mean concentrations Pb, Cd and V in the roots mangrove species.

**Table 1.** Heavy metals concentration in sediment surrounding of mangrove species

|                             | Pb        | Cd    | V     |
|-----------------------------|-----------|-------|-------|
| <i>Avicenna marina</i>      | 13.8±4.25 | <0.01 | <0.01 |
| <i>Rhizophora macronata</i> | 6.90±3.60 | <0.01 | <0.01 |
| Fishing Port                | 8.77±3.21 | <0.01 | <0.01 |
| Away FP and MF              | 14.1±1.90 | <0.01 | <0.01 |

FP: Fishing Port, MF: Mangrove Forest

**Table 2.** Heavy metals concentration in leaves mangrove species

|                             | Pb        | Cd | V  |
|-----------------------------|-----------|----|----|
| <i>Avicenna marina</i>      | 8.21±0.37 | ND | ND |
| <i>Rhizophora macronata</i> | 6.36±0.00 | ND | ND |

ND: Not Significant

**Table 3.** Heavy metals concentration in roots mangrove species

|                             | Pb        | Cd | V  |
|-----------------------------|-----------|----|----|
| <i>Avicenna marina</i>      | 6.09±1.12 | ND | ND |
| <i>Rhizophora macronata</i> | 6.89±0.74 | ND | ND |

ND: Not Significant

Mann-Whitney Test indicated that Pb concentrations were significantly different among sediment and leaves of *A. marina* and *R. macronata*, while there was no significant difference in Pb concentrations in the roots of *A. marina*

and *R. macronata*. Maximum and minimum Pb concentrations in the sediments around *A. marina* and *R. macronata* were 7.45, 16.3, 4.35 and 9.45, respectively.

## DISCUSSION

Nutrient and metal cycling can be affected by mangrove ecosystems [15 and 16]. Trace metal accumulation levels depend on the season [17 and 16]. In addition, the difference in salinity is affected by the apparent difference in uptake in plants [16]. Heavy metal concentrations in mangrove species tissues are associated with the concentration in sediments [10]. For this reason, lower concentrations of Cd and V in our results may be associated with the negligible concentrations in the surrounding sediments.

Based on the soil critical concentration value of Pb [6], the recorded concentrations in the sediments in our study area were not significant. The Cd concentration in our study was lower than the soil critical concentrations value, while the Cd concentration was higher than soil critical concentrations value when measured in the fall 2009 [6]. This event may result in improved management of Azini Creek. Another survey conducted in the Bushehr mangrove forest showed the heavy metals concentrations in the roots of mangrove species were higher than those in the sediments [3], but our data did not agree with that.

Industrial activity in every area, led to the accumulation of metal pollution, including Cu, Zn and Cr in the sediments. Heavy metals pollution in Iranian waters is mainly derived from the ships carrying chemicals and oil [12]. Except for the presence of the fishing port, no industrial activity currently exists on Azini Creek. Low concentrations of heavy metals were associated with it. Furthermore, a huge amount of fine sediments are washed into the Sirik mangrove forest by the Gaz River, where places receiving the fine sediments have a high potential for absorbing heavy metals [6]. Compared to findings by Parvaresh et al. [6] in Azini Creek, Cd concentrations were higher than our concentrations in leaves mangroves species. However, the amount of Pb concentration was nearly the same mean in leaves. Despite the findings of Parvaresh et al. [6] of higher concentrations of Pb in sediments than our findings, the mean concentration of Pb has not differed in both studies in the leaves *A. marina* ( $P>0.05$ ). It shows that however the metals in sediments are increased, capacity of the leaves in *A. marina* is restricted.

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*Short Communication*

## Comparative Study of the Distribution the Marsh Crab, *Sartoriana Rokitanskyi* in Hormozgan Province

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### ABSTRACT

The study was conducted in 2009 in order to investigate the marsh crab, *Sartoriana rokitanskyi* from Hormozgan, Iran. The *Sartoriana rokitanskyi* is found in the mud in the Geno and Rudan marshes. The findings showed that the distribution of the marsh crabs in Rudan marsh is wider than Geno. On the other hand, the crabs in Geno marsh are bigger than those in Rudan.

**Keywords:** Distribution; Marsh crab; *Sartoriana rokitanskyi*; Hormozgan Province

### INTRODUCTION

Crabs are the most advanced member of the phylum Arthropoda. The marsh crab, *Sartoriana rokitanskyi*, belongs to family Gecarcinucidae, which is related to true crabs. These crabs also fall into the class Crustaceans, infraorder Brachyuran from order Decapoda. Brachyuran crabs exhibit the most diversity in tropical regions [1] which principally have a very short projecting "tail" as well as a reduced abdomen that is thoroughly hidden under the thorax. So far, 6700 species of Brachyuran crabs are known to science, of which only 1300 species live in fresh waters. Freshwater true crabs are differentiated from marine crabs since they spend their entire lives fresh waters. Eight freshwater families Brachyuran crabs exist such as: Trichodactilidae, Pseudothelphusidae (in Mexico, Central American and Southern American), Potamonatutidae (African), Deckenidae, Platythelphusidae (eastern African), Potamidae (Northern African, Southern European), Gecarcinocidae (Asian), Parathelphosidae (Asian, Australian) [2].

The family Gecarcinucidae has 25 genera, as 5 species are included in genus *Sartoriana*. The all live in tropical and subtropical habitats such as marshes, wetlands, rivers and pools [3].

Since the specific distribution of the *Sartoriana rokitanskyi* in Iran is not known, the present paper describes the distribution of the species in the Hormozgan Province.

### MATERIALS AND METHODS

Sampling was accomplished monthly throughout the year of 2009 in the Geno and Rudan marshes (Fig 1). The crabs were caught using a trap (Fig 2). Beat bread was used to lure the crabs into a hand net. After collection, the specimens were deposited at laboratory of Islamic Azad University, Bandar Abbas Branch. The specimens were identified according to identification valid key by Alcock [4].

### RESULTS AND DISCUSSION

Crabs from Decapoda are accounted for as predominant organisms in intertidal areas as well as adjacent ecosystems related to the Persian Gulf and Oman Sea. The limited distribution of freshwater crabs has made it difficult to conserve them. Fortunately the species was predominately found in supralittoral between rocks and craves, which may reduce the likelihood that they are preyed upon by other animals [5 and 6].

At present, crabs of the family Gecarcinucidae are found in Asian countries such as India, Afghanistan and Bangladesh [7]. The marsh crab, *Sartoriana rokitanskyi* (Fig 3) . Until now, in Iran known the species found in marshes of Geno and Rudan in Hormozgan province. Kamrani et al. [7] described the characteristics of the marsh crab, *Sartoriana rokitanskyi*. Our finding of the study showed that the distribution of the marsh crabs in Rudan marsh is wider than Geno. On the other hand, the crabs in the Geno marsh are bigger than those in Rudan. Bott in 1955 demonstrated that stress can affect distribution as well as the crabs' size. In Rudan, the crabs' smaller size may be due to the development of human activities when compared to Geno.



**Figure 1.** Location map of sampling areas. Right: A view of sampling area



**Figure 2.** A view of the trap used to catch the crabs

**Figure 3.** A view of the marsh crab, *Sartoriana rokitanskyi* in Hormozgan Province

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*Original Article*

## Study Relationship between Life Skills, Competency, Perceived Self-Efficacy, Mental Vitality, Adjustment to University and Psychological Well-Being Components in Undergraduate Students of Islamic Azad University of Ramhormoz

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**ABSTRACT**

The aim of this study is to examine the relationship between life skills, competency, perceived self-efficacy, mental vitality, adjustment to university and psychological well-being components. For this purpose, 360 junior students of Islamic Azad University (first and second semester) of Ramhormoz were Chosen in a Simple random method. Findings proved that there was a positive Correlation between life skills, self-efficacy, perceived efficiency, adjustment to university and student's psychological well-being. The result of regression analysis showed that, these variables explain 41% of the student's psychological well-being variance. Also, life skills, self-efficacy, perceived competency, adjustment to university, correlate positively with meaning fully to satisfaction.

The results of step by step regression showed that the above mentioned variables explain %11 of satisfaction variance, finally a positive and meaningful Correlation was seen between the variables of life skills, efficiency, perceived self-efficacy, adjustment to university and vitality of the students. Of these 3 variables, the step by step regression analysis showed that only life skills and adjustment to university enter the regression equation, and explain 28% of mental vitality variance of the students. The results of this study, together with theoretical principles and the studies done earlier, show that variables such as life skills , self-efficacy, perceived efficiency and adjustment to university have a leading role in the components of psychological well-being of college students.

**Key words:** life skills, Efficiency, perceived self- Efficacy, adjustment, psychological well-being, mental vitality.

**INTRODUCTION**

The aim of training life skills, first introduced by Botvin et al. [1] is to bring about self-efficacy and (to cause low self-esteem to disappear) which has a basic role in many disorders like disorders like drug abuse, through enhancing individual's coping resources. Other than drug abuse, other problems such as social mal adjustment, violence, and risky behaviors are being more and more attended to by researchers, programmers and executive authorities; because of the their extensive Consequences, particularly in instructional environments like schools and universities. Therefore, since it is an important matter, the world health organization programmed what was called "Training life skills" and introduced it in UNICEF to enhance mental health and prevent psychological damages. Ever since, this program has been tested and used in money countries.

According to the researches, such factors as self-esteem, interpersonal skills, building desirable relationships, goal setting, decision making, problem solving, setting and recognizing values are very effective in preventing or reducing behavioral abnormality in teenagers and enhancing their mental health. Lacking these skills causes a person to try ineffective, maladaptive behaviors when facing pressure.

These skills make children and teenagers feel competent, effective in overcoming problems, capable of planning and having a purposive and due behavior against the problem.

Allen [2], believes that to interact with others we should permanently show adjustment. Kafetsios [3], reports that many of maladjusted and problematic behaviors are due to factors like feeling of low efficiency, negative self-concept, low self-esteem, and low social skills; He showed that training social skills increases mental health and self-esteem. The effect of training these skills on teenager's mental health has also been examined. Rain and Deci [4], for the first time indicated a kind of mental health which is very remarkable and noteworthy.

This mental health is called mental vitality and is defined as a life-giving force. A vital person is happy and strong, and is always enthusiastic, spirited, and spontaneous. These researchers stated that vital individuals always feel efficient and strong; this energetic feeling not only guarantees their mental health but is also an intrinsic motivation for their actions, it can even set the ground for more difficult activities.

Researches show that training interpersonal and personal skills reduces maladaptive behaviors and increases feelings of efficiency, positive self-concept and self-esteem.

Velchio, Gerbino and Pastorly [5], indicated that enjoying self-efficacy lowers affection (affectability) and motivates a person to challenge difficulties. In their study, Ganji Arjani and Farhani [6], showed that there is a positive relationship between self-efficacy and being content. When an individual enjoys sufficient and due life skills, by keeping cool, motivated and assured of his/her ability, he/she will manage to solve the problem.

Shordfagr et al. [7], conducted study about self-efficacy and health in female teachers. The study showed that self-efficacy can be a supportive factor for mental well-being. In their study, Shokri and colleagues [8], noted that compared to boys, girls received higher scores in some subtests of psychological well-being scale, including individual development and building positive relationships with others. In another study Loradamo and Narim, showed that attachment and relationship with school has an important role on teenager's mental health and well-being. In this direction, Karut and coworkers, pointed out that adjustment to university is a basic variable for the mental health and emotional adjustment of college students [8]. If one enjoys psychological well-being, then will consider himself worthy and honor himself, is happy with himself, feels that he has a positive and close relationship with others, he is purposive in his life, believes in a promising future and life, he imagines that as time goes by, not only he loses nothing, but also will develop and have interesting, new experiences. Such an individual must have sufficient life skills so that he is a mentally healthy person.

The results of Ulcer's study [9], showed the positive and meaningful relationship between contentedness and mental health. In Kardmas's study [10], the expectancies of self-efficacy, as a representation of the ability, form optimism. Optimism predicts different aspects of mental health effectively, and finally leads to contentedness. Providing a model, Robert Lent and colleagues showed that psychological well-being and contentedness in college students is predictable by means of some variables related to university, like adjustment to university. This variable, along with others like self-efficacy and probable environmental support has considerable effect on the components of psychological health of college students.

## MATERIALS AND METHODS

The current study is descriptive. The correlation between the variables has been investigated. Other than the correlation between the variables, the direct and indirect relationship between them has been examined.

The statistical universe was all university students of Azad University (Ramhormoz); it was based on Morgan table. The samples were 360 college students who were elected randomly from among different majors.

Development scale of life skills: This instrument was formed by Daren, Ginter and Guzda [11], It contains 65 questions and evaluates. The extent to which college students enjoy life skill, including 4 domains, namely, interpersonal relationship, problem-solving, the skill to keep healthy and the skills healthy being purposive in life. The reliability coefficient of the instrument Alpha Cronbach's for sub scales of this study was respectively 0.69, 0.87, and for the whole scale was 0.77.

Mental vitality scale: This was formed according to Rian and Deci's self-appointing theory, by Ryan and Fredrich [17], it measures individual's energy and enthusiasm for of this instrument Alpha Cronbach's in the current study is 0.94. The intrinsic consistency of this scale Ryan and Fredrich's study [12], has been reported to be 0.96. This scale contains 7 questions which and scored in a range of 7 likert degrees.

Perceived self-efficacy scale: The perceived self-efficacy test, used in this study has been introduced by Crowell et al. [13]. The items of the test have been written to evaluate the expectations of public self-efficacy like: social skills and vocational efficiencies. The reliability coefficient of Alpha Cronbach's method for self-efficacy and the social subscale was 0.86 and 0.71 respectively. Each item in self-efficacy questionnaire is scored 1-5. Items 8, 3, 1, 9, 13, 15 score higher from right to left. The rest of the items are scored vice-versa, that is, from left to the right.

Psychological well-being: This inventory contains 17 questions, which in turn are divided into T1 test and T2 test. T1 contains the first 5 questions and the exact translation of satisfaction scale [14]. This test has been applied in many intercultural studies and is highly reliable and valid.

The next 12 questions which derive from psychological health scale, from T2 test. In this scale, there are 6 categories, namely, self-acceptance, positive relationship with other, independency, controlling and managing the environment, good of life and personal development; For each category there are 2 questions [15].

The inventory of student adjustment to university (SACA): This inventory includes 67 questions and measures the student's adjustment to university; it was introduced by Baker & Siryk [16], it has been formulated in the form of Likert's 7 degree scale. It consists of 4 subscales: analytic adjustment, social adjustment, emotional adjustment, and academic attachment. High scores indicate positive adjustment to university; Low score indicate problems in adjusting to university.

## RESULTS

Hypothesis 1: There exists a relationship between life skills, efficiency, perceived self-efficacy, adjustment to university environment, and psychological well-being of students in Islamic Azad university of Ramhormoz.

**Table 1.** Correlation matrix of variables

| Variables                    | Life Skills | Efficiency & Self - efficacy | Adjustment To University | Psychological Well - being |
|------------------------------|-------------|------------------------------|--------------------------|----------------------------|
| Life Skills                  | 1           | 0.41                         | 0.36                     | 0.59                       |
| Efficiency & Self - efficacy | 0.36        | 1                            | 0.32                     | 0.43                       |
| Adjustment To University     | 0.36        | 0.32                         | 1                        | 0.33                       |
| Psychological Well - being   | 0.59        | 0.43                         | 0.39                     | 1                          |

Table (1) shows that there is positive correlation between life skills and psychological well - being ( $r = 0.59$ ) which is meaningful at the level of 0.01.

The correlation is rather strong and noticeable. Also there exists a positive correlation among student's life skills ( $r = 0.43$ ), adjustment to university and psychological well - being ( $r = 0.39$ ) which is statistically meaningful at the level 0.01. Therefore, hypothesis 1 is approved.

Hypothesis 2: There exists a multiple correlation between life skills, perceived efficiency and self - efficacy adjustment to university environment, and psychological well - being of students in Islamic Azad university of Ramhormoz.

**Table 2.** Analysis for psychological well - being regression, based on predictive variables

| Source of changes      | Total Squares | Degree of Freedom | Mean Squares | F       | Sig   |
|------------------------|---------------|-------------------|--------------|---------|-------|
| 1. regression Of total | 5828.864      | 1                 | 5828.864     | 183.320 | 0.001 |
|                        | 10683         | 336               | 31.796       |         |       |
|                        | 16512.43      | 337               |              |         |       |
| 2. regression Of total | 6518.607      | 2                 | 3229.303     | 109,255 | 0.001 |
|                        | 9993.736      | 335               | 29.832       |         |       |
|                        | 1612.34       | 337               |              |         |       |
| 3. regression Of total | 6912.047      | 3                 | 2304.014     | 80,158  | 0.001 |
|                        | 9600.302      | 334               | 28.743       |         |       |
|                        | 16512.34      | 337               |              |         |       |

According to table (2) the observed rate of F ( $p < 0.01$ ) for the regression analysis of step by step model is meaningful in 3 steps. Therefore, we can say that psychological well - being is predictable in students through life skills, perceived efficiency and self - efficacy, and adjustment to university environment. Thus, hypothesis 2 of this study is approved.

**Table 3.** Model and the square of multiple correlation coefficients for predictive variables

| Predictive variable | R    | R <sup>2</sup> | Adjusted R <sup>2</sup> |
|---------------------|------|----------------|-------------------------|
| Life skills         | 0.59 | 0.35           | 0.35                    |
| Life skills & SE    | 0.62 | 0.39           | 0.39                    |
| Life skills & SE    | 0.65 | 0.41           | 0.41                    |

The results of table (3) shows that modified R<sup>2</sup> square indicates that the model used, has taken into account %41 of the change in students psychological well - being so, it is a great model. In other words, life skills, perceived efficiency and self - efficacy, adjustment to university environment, in a linear combination, explain %41 of student's psychological well - being variance.

**Hypothesis 3:** There is relationship among life skills, perceived efficiency and self - efficacy, adjustment to university environment and student's satisfaction.

Table (4) indicates that there is a positive correlation between life skills and satisfaction, which is meaningful at the level 0.01. This correlation is not strong, but it is noticeable. Also there is correlation strong, but it is noticeable. Also there is correlation among perceived efficiency and self - efficacy and student's contentedness ( $r = 0.25$ ). This correlation is important, and a positive one is observed between adjustment to university environment and student's satisfaction, which is meaningful at the level 0.01.

**Table 4.** Correlation among variables

| Variables                    | Statistical Indices    | Life Skills | Efficiency & Self - efficacy | Adjustment To University | satisfaction |
|------------------------------|------------------------|-------------|------------------------------|--------------------------|--------------|
| Life Skills                  | Regression correlation | 1           | 0.41                         | 0.35                     | 0.29         |
|                              | Sig.(2-tailed)         |             | 0.001                        | 0.001                    | 0.001        |
|                              | N                      | 338         | 338                          | 338                      | 338          |
| Efficiency & Self - efficacy | Regression correlation | 0.41        | 1                            | 0.322                    | 0.25         |
|                              | Sig.(2-tailed)         | 0.001       |                              | 0.001                    | 0.001        |
|                              | N                      | 338         | 338                          | 338                      | 338          |
| Adjustment To University     | Regression correlation | 0.37        | 0.32                         | 1                        | 0.22         |
|                              | Sig.(2-tailed)         | 0.001       | 0.001                        |                          | 0.001        |
|                              | N                      | 338         | 338                          | 338                      | 338          |
| satisfaction                 | Regression correlation | 0.29        | 0.25                         | 0.22                     | 1            |
|                              | Sig.(2-tailed)         | 0.001       | 0.001                        | 0.001                    |              |
|                              | N                      | 338         | 338                          | 338                      | 338          |

**Hypothesis 4:** A multiple correlation exists among life skills, perceived efficiency and self - efficacy, adjustment to university environment and student's satisfaction.

**Table 5.** Analysis for satisfaction regression, based on predictive variables

| Source of changes     | Total Squares | Degree of Freedom | Mean Squares | F      | Sig   |
|-----------------------|---------------|-------------------|--------------|--------|-------|
| 1.Regression of total | 658.755       | 1                 | 658.755      | 32.564 | 0.001 |
|                       | 6797.044      | 336               | 20.229       |        |       |
|                       | 7455.799      | 337               |              |        |       |
| 2.Regression of total | 813.912       | 3                 | 406.956      | 20.526 | 0.001 |
|                       | 6641.886      | 335               | 19.827       |        |       |
|                       | 7455.779      | 337               |              |        |       |
| 3.Regression of total | 894.159       | 3                 | 298.053      | 15.171 | 0.001 |
|                       | 6561.640      | 334               | 19.646       |        |       |
|                       | 7455.779      | 337               |              |        |       |

According to table (5) the observed rate of F ( $p < 0.01$ ) for regression analysis of step - by - step model is meaningful in 3 steps. Then, it can be said that student's satisfaction is predictable through life skills, perceived efficiency and self - efficacy and adjustment to university environment; thus, hypothesis 4 shall be approved.

**Table 6.** Model and multiple correlation coefficient square ( $R^2$ ) for predictive variables

| Predictive variable | R     | $R^2$ | Adjusted $R^2$ |
|---------------------|-------|-------|----------------|
| Life skills         | 0.297 | 8.8   | 6.8            |
| Life skills & SE    | 0.33  | 10.9  | 10.4           |
| Life skills& SE     | 0.346 | 12    | 11             |

The results of table (6) indicate that modified  $R^2$  square shows that the model used, accounts for %11 of change in students' contentedness, thus, is a very good model. In other words, the variable of living skills, perceived efficiency and self - efficacy, adjustment to university environment, in a linear combination, explain %11 of student's satisfaction variance.

**Hypothesis 5:** There is relationship among life skills, perceived efficiency and self - efficacy, adjustment to university environment and student's mental vitality.

Table (7) shows that a positive correlation ( $r = \%50.5$ ) between life skills and student's satisfaction, that is meaningful at the level 0.01. Although this correlation is not so strong, but it is remarkable. Also, among perceived efficiency and self - efficacy and student's vitality, positive correlation ( $r = 0.27$ ) has been observed, which is important. Finally, between adjustment to university environment and student's mental vitality, a positive correlation ( $r = 0.33$ ) is observed, which is meaningful at the level at the 0.01. Therefore, according to the reported results in table 7, hypothesis 5 is approved, which states that a relationship exists among life skills, perceived efficiency and self - efficacy, adjustment to university environment and student's satisfaction.

**Table 7.** Correlation among variables

| Variables                    | Statistical Indices    | Life Skills | Efficiency & Self - efficacy | Adjustment To University | mental vitality |
|------------------------------|------------------------|-------------|------------------------------|--------------------------|-----------------|
| Life Skills                  | Regression correlation | 1           | 0.41                         | 0.35                     | <b>0.50</b>     |
|                              | Sig.(2-tailed)         |             | 0.001                        | 0.001                    | 0.001           |
|                              | N                      | 338         | 338                          | 338                      | <b>338</b>      |
| Efficiency & Self - efficacy | Regression correlation | 0.41        | 1                            | 0.32                     | <b>0.27</b>     |
|                              | Sig.(2-tailed)         | 0.001       |                              | 0.001                    | 0.001           |
|                              | N                      | 338         | 338                          | 338                      | <b>338</b>      |
| Adjustment To University     | Regression correlation | 0.35        | 0.32                         | 1                        | <b>0.33</b>     |
|                              | Sig.(2-tailed)         | 0.001       | 0.001                        |                          | 0.001           |
|                              | N                      | 338         | 338                          | 338                      | <b>338</b>      |
| satisfaction                 | Regression correlation | 0.50        | 0.27                         | 0.33                     | <b>1</b>        |
|                              | Sig.(2-tailed)         | 0.001       | 0.001                        | 0.001                    |                 |
|                              | N                      | 338         | 338                          | 338                      | <b>338</b>      |

**Hypothesis 6:** There is a multiple correlation among life skills, perceived efficiency and self - efficacy, adjustment to university environment and student's mental vitality.

**Table 8.** Analysis of variance for mental vitality regression through predictive variables.

| Source of changes     | Total Squares | Degree of Freedom | Mean Squares | F       | Sig   |
|-----------------------|---------------|-------------------|--------------|---------|-------|
| 1.regression of total | 2355.107      | 1                 | 2355.107     | 114.904 | 0.001 |
|                       | 6886.731      | 336               | 20.229       |         |       |
|                       | 9241.837      | 337               |              |         |       |
| 2.regression of total | 2592.368      | 2                 | 1296.184     | 65.302  | 0.001 |
|                       | 6649.469      | 235               | 19.849       |         |       |
|                       | 9241.837      | 337               |              |         |       |

According to table 8, the observed rate of F ( $p < 0.01$ ) for regression analysis of step - by - step model is meaningful in 3 steps. Then, it can be said that student's mental vitality is predictable through life skills and adjustment to university environment; thus, hypothesis 6 shall be approved.

**Table 9.** Model and multiple correlation coefficient squares ( $R^2$ ) for predictive variables.

| Predictive variable        | R     | R square | modified amount of $R^2$ square |
|----------------------------|-------|----------|---------------------------------|
| 1-Life skills              | 0.505 |          | 25.3                            |
| 2-Life skills & Adjustment |       |          | 27.6                            |

The results of table 9, point that the modified amount of  $R^2$  square shows that the applied model take into account %28 of change in student's mental vitality ; then it is a great model. In other words, the above mentioned variables, in a linear combination, explain %28 of student's mental vitality variance.

## DISCUSSION

In the current study, life skills included several domains. It included the ability and ways of relating to others, the ability to make decision is different, challenging situations, skill to get along with pressure, and stress due to being in difficult situations, and how to take care of one self, and keep healthy. Findings of the study in hypothesis 1 show that between life skills and student's psychological well - being, a strong correlation and relationship can be seen. Loradamo and Narim, cited from Ganji[6], showed that attachment and relation to school have a key role in teenager's mental health and well - being. Also the results of multiple correlation in hypothesis 2 , other than the studies mentioned to prove hypothesis 1 , are homo lateral with results of studies led by Engelburg and Sjoburg , cited from Ganji[6], The results of hypothesis 3 and 4 indicated that in addition to meaningfulness of simple correlation among life skills, perceived efficiency and self - efficacy, adjustment to university, and student's contentedness, in the step - by - step regression, these entire three variables are capable of predicting student's satisfaction. This finding is homo lateral with the studies of *Bandura and colleagues, shaver and crower* [13]. Results of these studies show that those who enjoy high levels of self - efficacy enjoy better psychological well-being and satisfaction.

Hypothesis 5 arrived at the conclusion that there is a relationship between student's life skills and their mental vitality, and that the levels of correlation is very high and important. It is obvious that a vital individual must enjoy some characteristics, abilities and skills. Ryan and Deci [4] pointed out that vital individuals enjoy high efficiency and skills, they are self – directing and can manage their lives and personal affairs. Then, it is supposed to be a correlation between life skills and mental vitality; the results of this study support this idea.

Multiple regression analysis in the step – by – step method for hypothesis 6 showed that the model is meaningful in two steps; in other words, from among the 3 predictive variables, only life skills and adjustment to university have entered the regression equation; therefore, it can be said that student's mental vitality is predictable through these two variables. In a total summation, this study, together with many of the studies in this domain, indicate that the variables in the study have relation and correlation and can predict one another. The effect, role, strength, and predictions of life skills are very important and standing.

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## Evaluation of The Impact of Dinder National Park Project (DNPP) on the Local community in Dinder Area, Sudan

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### ABSTRACT

This study was conducted in Dinder National Park to evaluate the impact of Dinder National Park Development Project (DNPDP). The project, benefiting from the Area Development Schemes (ADSs) experiences had established about 25 VDCs among the communities surrounding the Dinder Park. The DNPP main objectives were conservation of biodiversity of the park and interaction of the surrounding communities in the conservation and sustainable use of biodiversity in the Park through the application of concepts of Biosphere Reserve management. The questionnaires were distributed local communities to know their perceptions towards the DNPDP. Most of the Community members i.e. about 74.7% said that the project was successful whereas in the opinion of 25.3% respondents the project was not successful.

**Key words:** Dinder National Park Project (DNPP), Local community, Village

### INTRODUCTION

Dinder National Park (DNP) overlaps three different states. Administratively, DNP falls under the General administration for National Parks and Wildlife Conservation, which is part of the unified police force of Ministry of Interior. Consequently, national parks in Sudan have been managed with a strong emphasis on patrolling programs and enforcement. Poaching control has been the main objective, resulting in increased enmity between the park administration and local communities. DNP has staff of 280; 17 officers and the rest game scouts. The park administration is stationed in Dinder town, 150 km from the park, whereas the rest of the personnel including the game Scouts are stationed within DNP at the main camp and at 12 game posts along the boundaries.

A (GEF) Global Environment Facility project was implemented jointly through the Higher Council for Environment and Natural Resources (HCENR) and Wildlife Conservation General Administration (WCGA). HCENR housed the project implementation unit; an effective national NGO, the Sudanese Environment and Conservation Society (SECS); was involved as an interested stakeholder and service provider to undertake the environmental public awareness campaign and to assist in establishing and training the Village Development Committees (VDCs) [1].

#### Project components:-

**1-Core Zone:** Management plan, provides all basic information to help design an appropriate that assist in designing an appropriate scientific management program for park resources and the involvement of local communities in the management of the park. The Plan also gives the guidelines for training of officers in wildlife sciences and proper approaches towards involving the local communities. Development of infrastructure including the provision of drinking water, construction of permanent buildings, establishment of permanent camp sites, maintenance of the Mayas and provision of appropriate maps and fire breaks network. The project also encourages research, specifically in the ecological and biological fields, that could be supportive of the sustainable use of the biodiversity of the park [2].

**2-Buffer Zone:** This component aims to promote the local people's understanding of the park and its importance. The management prescriptions for this zone include: the enhancement of living standards of local communities, capacity building of the local communities in various related aspects, drawing of land use plans in

the buffer zone, establishment of revenue generating projects that assist the local communities, and rehabilitation of forests in areas that have been deforested/degraded [2].

**3-Transitional zone:** This zone extend along the western bank of the river Rahad(except Daleib Mugdi core area), including the 10 villages within existing boundaries of the park, areas along the river Rahad are treated in a two-dimensional perspective. The first dimension concerns the ten villages within the boundaries of the Park, the second dimension concerns the 28 or more villages on the Eastern bank of the river that depend partly for their livelihood on the resources of the Park for this reason five kilometers on each side of the boundary line are included in for this zone [2].

#### **Project Implementation:**

The project, implemented between 2000 -2004, adopted a two-pronged strategy to address the threats. One component focused on biodiversity conservation through the strengthening the Park management. The second targeted development assistance to the communities living within the park and in the buffer zone immediately adjacent to the park boundaries [1 and 3].

A key activity was preparation and implementation of a management plan, which entailed a large number of studies, including an assessment of the water resources in the Park, a census of wildlife populations, and vegetation surveys. Park infrastructure was improved, including improved water supply and sanitation at game posts and visitor accommodation at Galagu main camp; demarcation of Park boundaries; rehabilitation of roads and firebreaks; and rehabilitation of wetlands to reopen feeder streams and create prime wildlife habitat. Improved patrolling protocols, provision of vehicles and camels for patrol, training in wildlife census techniques, and scheduling home visits boosted the morale of the scouts after prolonged duty in remote locations. Training of game scouts in conflict management and awareness and outreach campaigns was designed to improve relations between the Park staff and the local communities. Research programmes were supported to conduct surveys and produce ecological base-line reports wild animals birds, habitat, rangeland forest and Mayas, and fire incidence. Fish and insects were also surveyed. A mini-museum was established to display key species. DNP was also declared as a Ramsar site [2].

#### **Villages Development Committees VDCs:**

Development activities were focused on promoting sustainable utilization and management of natural resources, and enhancing livelihoods through the community-focused project in selected target villages and communities inside and outside the Park. Socio-economic surveys were undertaken, environmental and health awareness campaigns implemented by Sudanese Environmental Conservation Society, which led to the election of Villages Development Committees (VDCs) in 25 villages in the three states. A central element of the strategy to support the VDCs was the establishment of revolving funds to provide credit to households to fund micro-projects such as alternative fuel sources (butane gas), and village water pumps. The project held training session to build the capacity of the members of the VDCs in areas such as bee-keeping, plant nursery design, agro-forestry techniques, credit procedures, and management [2].

## **MATERIALS AND METHODS**

#### **Questionnaires for the local community:**

**1-Villages inside the Park:** Villages selected inside the park included: Aen Algamel, Hilat Bilo(NoorElmadina), Umkakar, Umsalala, Elkhiraat, Umkora (Umalkhir), and Hilt Ramadan.

**2-Villages outside the Park:** Villages selected outside the park included: Bandighew, Afrush toobk, Aradibt Eltigani, Rogab, Elebeek, Daleeb, Khashm Elbatta, Karsh Elfeel,Elfzraa,Umbagraa, and Mangalagh,Menza, Gabel Elnoor. Three hundred (300) copies of the questionnaire were distributed to inhabitants of above villages. Permission was first obtained from the Chief (Sheikh or Sultan) and leader of youth of each village. Questionnaires aimed to derive information on the tribes, level of education, distance of the village from the park, Dinder National Park Project (DNPP), Villages Development Committees (VDCs), services provided by the wildlife conservation general administration for the local community and also the services not covered by the project. Details of the questionnaire are included in Appendix 1.

#### **Statistical analysis**

The questionnaire data were analyzed by frequency percentage as descriptive statistic were used to analyzes the questionnaires (Local community), inform of the percent frequency.

## **RESULTS AND DISCUSSION**

Dinder National Park Development Project (DNPP), a GEF (Global Environment Facility) funded project through the United Nations Development Programme (UNDP) and was implemented by the Higher Council for Environment and Natural Resources (HCENR), Wildlife Conservation General Administration (WCGA) and the Sudanese Environmental Conservation Society (SECS). The project, benefiting from the experiences gained by

implementing the Area Development Schemes (ADSs) established about 25 Village Development Committees (VDCs) among the communities surrounding the Dinder National Park. The main objectives of the DNPP are conservation of biodiversity of the Park and encouraging the positive interaction of the surrounding communities in the conservation and sustainable use of biodiversity in the Park through the application of Biosphere Reserve concepts.

The tribal structure shows a multiplicity of tribes and groups. The most dominant groups are the tribes of western Sudan, constituting 43% of the village's populations, followed by Arab tribes (20%) West African tribes, accounting for 13%, and Nilotic tribes accounting for about 8% [4].

The Massaleet come first among the tribes, making up to 30.5% of the population; then follows the Bargo (17.5%) the Dago (11.9%), Falata (6.9%), Hossa (5.4%), Selyhab(3.8%), Halaween(3.1%), Rezaigat(2.1%), Dagal(2.1%), Dinka(1.3%), Noba(1.2%), Messerya (1.2%) and Rawashda (1.2%) [2].

Adel and Nimir [5] reported that the main threats facing the Dinder National park could be summarized as; the absence of proper land use practices surrounding the park, ever increasing size of human population in the Dinder area; and the trespassing of pastoralists, the pastoralists forcefully enter the park though large number of herds are caught inside the park and fined. Management activities serve to improve the status of the wildlife resources and address the needs of people who utilize this resource to the benefit of all. Changes in demographics and economic conditions need to be addressed and new foundations lay down. The management of natural resources can be adjusted towards improved balance between man and nature, in and around the Dinder National Park. This balance will create new solutions for the needs for domestic energy, creation of jobs in rural areas, sustainable use of natural resources, improving and modernizing agricultural production methods and setting up stable forms of co-existence with animal's production [6].

**Table 1.** Distribution of the local community in DNP by tribe

| Tribe                | Distance of the village around the park |         |                  |         | Total Frequency |
|----------------------|---|---------|------------------|---------|-----------------|
|                      | Inside the park                         |         | Outside the park |         |                 |
|                      | Freq.                                   | Percent | Freq.            | Percent |                 |
| <b>Massaleet</b>     | 30                                      | 33%     | 81               | 38.8%   | 111             |
| <b>Foung</b>         | 1                                       | 1.1%    | 45               | 21.4%   | 46              |
| <b>Falata</b>        | 15                                      | 16.5%   | 16               | 7.5%    | 31              |
| <b>Brgo(selehab)</b> | 2                                       | 2.2%    | 20               | 9.5%    | 22              |
| <b>Rawashda</b>      | 10                                      | 11%     | 5                | 2.4%    | 15              |
| <b>Hossa</b>         | 0                                       | 0%      | 9                | 4.3%    | 9               |
| <b>Dago</b>          | 5                                       | 5.5%    | 5                | 2.5%    | 10              |
| <b>Dagal</b>         | 12                                      | 13.2%   | 1                | 0.5%    | 12              |
| <b>Foor</b>          | 0                                       | 0%      | 12               | 5.7%    | 12              |
| <b>Others</b>        | 16                                      | 17.5%   | 15               | 7.4%    |                 |
| <b>Total</b>         | 91                                      | 100%    | 209              | 100%    | 300             |

Others consist of one or two frequency and these represented in Zaghawa, Kenanna, Ben Amir, Marareet, Salamat, Noba, Halaween, Gemer, Brnoo, Tungr, Tama, Rezygat, Messerya, Roufaa, Hamadi, Mimawe and Kjaksa.

**Table 2.** Educational level of the local community

| Education Level         | Freq. | Percent |
|-------------------------|-------|---------|
| <b>Illiterate</b>       | 33    | 11%     |
| <b>Quran (khalwa)</b>   | 162   | 54%     |
| <b>Primary school</b>   | 80    | 26.7%   |
| <b>Secondary school</b> | 23    | 7.7%    |
| <b>University</b>       | 2     | 0.7%    |
| <b>Total</b>            | 300   | 100%    |

**Table 3.** Assessment the impact of DNPP from the stakeholders

| Is the project was successful | What is the reason |       |                           |      |
|-------------------------------|--------------------|-------|---------------------------|------|
|                               | Services provided  |       | No services were provided |      |
| <b>Yes</b>                    | 224                | 99.6% | 0                         | 0%   |
| <b>No</b>                     | 1                  | 0.4%  | 75                        | 100% |
| <b>Total</b>                  | 225                | 100%  | 75                        | 100% |
| <b>Over all Total</b>         | 300                |       | 100%                      |      |

P-value=0.000 (there is association)

Comments made by respondents who gave negative answers suggest that the apparent antagonist towards the government wildlife management authorities stems from the perceptions that department of wildlife employees are unfairly privileged in terms of their access to the wildlife resources which villagers are denied, and that the Department Game Scout are over-zealous in terms of harassing local people unnecessarily, while failing to catch the real poachers. From the table 4, it is clear that (74.7%) of the stakeholders said that the project was success and the (25.3%) said not success.

**Table 4.** The success of the project

| Is the project was successful | Freq.      | Percent     |
|-------------------------------|------------|-------------|
| Yes                           | 224        | 74.7%       |
| No                            | 76         | 25.3%       |
| <b>Total</b>                  | <b>300</b> | <b>100%</b> |

**Table 5.** The kind of training

| Kind of training       | Is the project has trained the local community |             |           |            |
|------------------------|--|-------------|-----------|------------|
|                        | Yes  |             | No        |            |
|                        | Freq.  | Percent     | Freq.     | Percent    |
| Awareness              | 93   | 38.4%       | 0         | 0%         |
| Bee keeping            | 43   | 17.8%       | 0         | 0%         |
| Women and child health | 77   | 31.8%       | 0         | 0%         |
| Strategic planning     | 29   | 12%         | 1         | 1.7%       |
| No training            | 0  | 0%          | 57        | 98.3       |
| <b>Total</b>           | <b>242</b>                                     | <b>100%</b> | <b>58</b> | <b>100</b> |

P-value=0.000(there is association)

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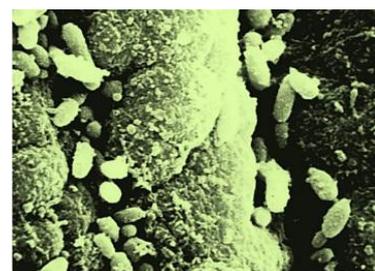
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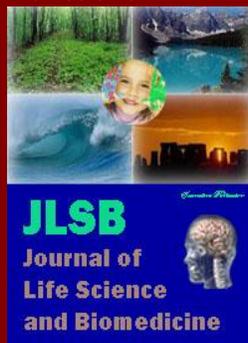
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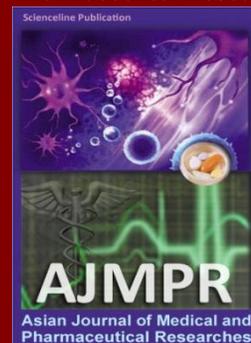
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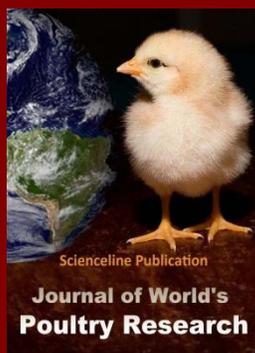
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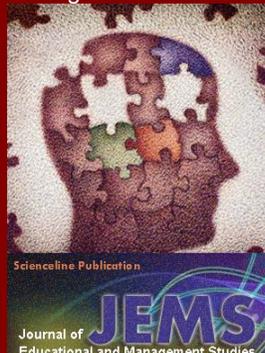
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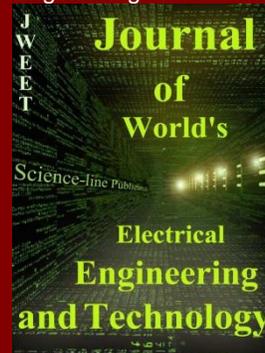
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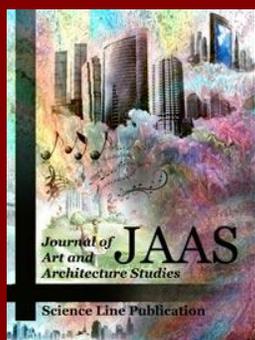
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