

## Investigating Mental Health Status in High School Students

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### Abstract

Behavioral-psychological disorder is a clinically significant condition that is associated with changes in thinking, mood, emotion, or any specific behavior and is accompanied by personal distress and or life dysfunction. The present study was conducted to investigate mental health status of high school students in Izeh, a, Iran, in the academic year of 2019-2020 in a cross-sectional survey design. A total of 362 students were selected using multistage random sampling from among male and female high school students in Iezh, the Province of Khuzestan. The participants completed the Symptoms Checklist for Mental Disorders (SCL-90-R). The data were analyzed using statistics measurements frequency and frequency percent, and factorial analysis of variance and SPSS-22 software. The results indicated that 22.7% [n=82] of the total sample, 32.6% [n=59] of the girls, 12.7% [n=23] of the boys; 17.5% [n=21] of tenth graders, 24.8% [n=30] of eleventh graders, 25.6% [n=31] of twelfth graders, 20.4% [n = 28] of students in humanities , 25.5% [n=48] of students in natural sciences, and 16.2% [n=37] of students in mathematics and physics were suspected to have mental disorders. Also, significant differences in mental disorders were observed between girls and boys, and among tenth, eleventh, and twelfth graders. According to the reports obtained, the mental health authorities of the Office of Education and the relevant community authorities should take appropriate actions to promote the mental health and well-being of adolescent male and female students.

**Keywords:** *Prevalence; Mental disorders; Students*

### 1. Introduction

The concept of mental health, according to the World Health Organization [WHO], is beyond the absence of mental disorder and includes [1] mental well-being, [2] self-efficacy perception, [3] independence and autonomy, [4] adequacy and competency, [5] interpersonal dependence, and [6] self-actualization, intellectual empowerment, and emotional potential [1]. Behavioral-psychological disorders are clinically significant conditions that are associated with changes in thinking, mood, emotion, or some specific behaviors and are accompanied by personal distress or life dysfunction [2]. WHO has defined the three dimensions of health, i.e. biological, mental and social health since 1946. However, little if any attention has been paid to the psychological and social dimensions of health in most countries, and Iran is no exception to this rule. The organization

points to the role of 85% of psychosocial factors affecting health. According to statistics from WH, approximately 450 million people worldwide suffer from mental, neurological, or behavioral problems over a period of time [1].

## **2. Significance of the Study**

Adolescence is a critical period for adolescents, and they exposure to many of social issues and problems that can lead to a variety of mental disorders. If these mental disorders are not prevented by experts in the family and school environments, they will affect the adolescent's social, family and academic performance. In fact, if professionals in psychology can conduct a screening in the area to look at signs of mental disorders in educational settings, they can avoid wasting economic costs for the families and the society. As a result, we can have happy children and adolescents in families and educational settings. This issue also affects adolescents due to the crises that occur in our society from time to time. Hence, the aim of this study is to explore mental conditions in a certain geographical region in Izeh, a city in the Province of Khuzestan, Iran.

## **3. Literature Review**

Epidemiological studies of mental disorders in childhood and adolescence have been performed worldwide with varying prevalence rates ranging from 7% to 16.4% [3,4]. A number of studies in different cultures such as Taiwan, Brazil, and Puerto Rico have reported a prevalence of between 12.7% and 23% [5]. The median value of published prevalence estimates of 18% [5,6] and 12% [7] have been reported for severe emotional disturbance. In a study on psychological problems of children, 5.6% of those aged 7-12 years, 6.3% of those aged 7-10 years (3.7% for girls and 8.5% for boys), and 4.9% of those aged 11-17 years [4% for girls and 5.7% for boys] are estimated to have such problems [8]. In another study, the most common disorders in adolescents aged 14-17 years were depression [3.3%], ADHD [3%], phobia [2.5%], stubbornness [1.8%], generalized anxiety disorder [1.4%] and obsessive-compulsive disorder [1.2%], and more girls than boys have been reported to suffer from separation anxiety disorders [1.3% vs. 0.2%], specific phobias [3.7% vs. 1.4%], post-traumatic stress disorder [1.5% vs. 0%], and depression [4.7% vs. 1.8%] [9]. In this study, it was also observed that internalization disorders (such as separation anxiety disorders, specific phobias, social phobias, panic, post-traumatic stress disorder, obsessive-compulsive disorder, generalized anxiety disorder, and major depression) were more related to females and externalization disorders (Such as ADHD, oppositional disorder, and conduct disorder) were more found in males. A meta-analysis including 25 studies from 1990 to 2008 years showed that 53% of boys had the necessary criteria for conduct disorder, 12% for ADHD, 11% for major depressive disorder, and 3% for psychotic disorder. The analysis also revealed that 53% of girls had the necessary criteria for conduct disorders, 29% for major depression, 19% for ADHD and 3% for mental illness [10]. Depression affects approximately 5% of the adolescents [11] and is the fourth important disease in estimating disease weights [12]. Ferguson and Woodward discussed the impact of adolescent depression on the individual and society: adolescent depression was found to significantly increase the risk of major depressive disorders, anxiety, social dysfunction, nicotine dependence, alcohol dependence, alcohol abuse, unemployment, dropout, suicide attempts, and successful suicide [13]. Unsal and Ayranci reported a prevalence of depression as much as 30.7% and 22.6% in boys and 39.6% in girls [14]. According to World Health Organization, the prevalence of mental disorders in 14 countries varies from 4.3% in Shanghai, China to 26.4% in the United States [15]. The study of Noorbala, Bagheri Yazdi, and Yasemi reported the prevalence of mental disorder in the whole country 21% (25.9% women and 14.9% men), 21.2% in Tehran province, and 21.5% in Tehran city [16-18]; Mohammadi et al., the prevalence of mental disorders in 2001 in the whole country and Tehran province were 17.10% [23.4% of women and 10.8% of men] and 14.29% [19-21],

respectively; Noorbala, Bagheri Yazdi, Asadi Lari, and Vaez Mahdavi [22] and Noorbala, Bagheri Yazdi and Mohammad in Tehran city 34.2% [37.9% women and 28.6% men] [23]. Bagheri Yazdi, Boalhari, and Shah Mohammadi showed that 12.5% of the population over 15 years of age have mental disorders, the rate of mood disorder 5.75%, anxiety disorder 5.5%, pseudo-somatization and brain organ disorder each 0.5%, and schizophrenia 0.25%, women more than men and illiterate and less literate people than literate people with mental disorders and the most common disorders are mood and anxiety disorders [24].

An epidemiological study showed that 16.6% of students have mental disorders, and girls more than boys have mental disorders, and the prevalence of anxiety disorders is 8.4% higher than other disorders [25]. A study revealed that 29.3% of people aged 15-30 years in Tehran city had 29.3% mental, 4.1% anxiety, 6.5% physical, 11% had social dysfunction, and 9.3% suffer from depressive disorders. Also, in this study, women were worse than men except for social dysfunction [26]. Another study showed that 10% of high school adolescents are suspected of having a mental disorder. Female adolescents scored higher on all SCL-90 subscales except to obsessive-compulsive subscale than male adolescents, but they were not different statistically from each other [27].

In a study, Masoudzadeh, Khalilian, Ashrafi, and Kimiabeigi found that 39.1% of adolescents were suspected of having a mental disorder based on a GHQ-28 [55.3% of girls and 44.7% of boys]. The prevalence of types of psychopathological in the nine dimensions of SCL-90-R test was paranoid thoughts, interpersonal sensitivity, obsessive-compulsive, aggression, depression, anxiety, psychosis, somatizations and phobia, respectively [28]. Rajabi and Hrizavi showed that 34.1% of students are suspected of having a mental disorder [35.5% girls and 33% boys]; the highest percentages was related to anxiety 34.1% [38.7% girls and 32.1% boys], social dysfunction [25.6%, girls 22.6% and boys 26.9%], depression disorders, 17.7% [girls 11.8% and boys 20.3%] and physical complaints 17.4% [girls 17.2% and boys 17.5%], respectively, and there was no difference in general mental health between female and male students and age groups [29]. In a study of children aged 6 to 18, Sarraf et al., showed that 28.19% of children and adolescents [31.5% of boys and 25% of girls] have mental disorders; there was a significant difference between girls and boys and anxiety disorders [13.2%] were the most common disorder [30]. And a another study showed that the prevalence of psychiatric disorders in children and adolescents in Kurdistan, Iran was 33.8% [34.4% boys and 33.1% girls] and anxiety and behavioral disorders had the highest prevalence and substance abuse and psychosis disorders the least prevalence [31].

#### **4. Research Questions**

- How is the mental health status of boy and girl students?
- How is the mental health status of the tenth, eleventh and twelfth academic grades students?
- How is the mental health status of and humanities, experimental sciences and mathematics-physics academic fields in high school students?

#### **5. Methods**

##### **5.1 Study design**

The present study was conducted in a survey research of cross-sectional type. In cross-sectional research, data are collected from the research participants at a single point in time or during a single, relatively brief time period (i.e., a period long enough

to collect data from all of the participants selected to be in the study). The data are typically collected from multiple groups or types of people in cross-sectional research.

## **5.2 Study population**

The population study consisted of all boy and girl high school students in Izeh city in the academic year 2020 (over 6208 students).

## **5.3 Sample**

362 students were selected based on Krejcie and Morgan sampling table using multi-stage random sampling method [32]. That is, of 25 high schools [13 boys' high schools and 12 girls' high schools] 10 high schools [5 girls' high schools of Hazrat Khadijeh Kobra [sa]), Moallem, Razieh, Kowsar and Hazrat Sedigheh Kobra [sa] and 5 high schools for boys Shahid Nouri Membini, Al-Ghadir, Ayatollah Mahmoud Taleghani, Shahid Ali Asadpour and Dr. Jafar Al-Amandmandan] and one class from each grade and 12 students from each class were randomly selected.

## **5.4 Tool of data collection**

The study used a questionnaire consisting of closed ended questions to obtain data from subjects.

The Symptoms Checklist of Mental Disorders [SCL-90-R]. The measurement and data collection instrument was the Checklist of Mental Disorders Symptoms [SCL-90-R], this checklist includes 90 questions to assess the symptoms checklist of mental disorders that has been developed the first time to show the psychological aspects of the physical and mental patients. The initial form of this checklist designed by Drogatis, Lippmann, and Cui, and has been revised based on clinical experiences and psychometric analysis, and then the final form was prepared. The questions on this checklist are scored on a five-point Likert continuum [none=0, little=1, partly=2, high=3, and strongly=4]. This instrument examines nine areas of mental disorders such as physical complaints, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, aggression, phobia, paranoid thoughts, and psychosis. In this study, a cut-off point of 0.7 was used to determine the prevalence of psychiatric symptoms. There are seven questions in the SCL-90 checklist that do not fall under any of the nine dimensions. Although these questions spoil the statistical criteria by being added to the test, however, because they are clinically important, they are included in the test questions and help to the general indicators of the test [33].

Drogatis, Rickles, and Rock Cronbach's alpha reliability coefficients for depressive disorder 0.95 and psychoticism mental disorder 0.77, test-retest reliability coefficient of 94 heterogeneous psychiatric patients (1 one week interval) in nine dimensions from 0.70 to 0.90, Cronbach's alpha reliability coefficients of outpatients in the range of 0.79 for paranoid thoughts up to 0.70 in depressive disorder and these coefficients in individuals with clinical symptoms in the range of 0.77 in psychoticism psychotic disorder up to 0.90 in depression disorder [34]; Ignatyev, Fritsch, Priebe, and Mundt Cronbach's alpha coefficients of this checklist from 0.76 for phobia and paranoid thinking dimensions, and 0.89 for anxiety dimension, and 0.97 for geological strength index [GSI] [35], and Tomika, Shimara, Hidaka, and Kubo convergent validity of the SCL-90-R depression subscale with the psychopathic deviation [Pd] and depression [D] subscales of the MMPI questionnaire 0.50 and 0.78, respectively have been obtained [36]. Studies in 1997, 1999, and 2014 years have confirmed the nine-factor SCL-90-R model, with acceptable

and high Cronbach's alpha reliability coefficients and high correlations [0.70 to 0.90] between long form and the abbreviated forms this list has been showed the checklist of mental disorders symptoms [37].

#### 5.4.1 Reliability

In this study, Cronbach's alpha coefficients of the checklist of mental disorders symptoms in whole of sample and in male and female students in TABLE 1 have been reported that the highest coefficient is related to the depression subscale of 0.70 to 0.90 [ $\alpha = 0.90$ ] and the lowest to phobia subscale [ $\alpha = 0.60$ ] and  $\alpha = 0.97$  in the whole checklist [See TABLE 1].

TABLE 1. Cronbach's Alpha reliability coefficients results.

Components	Total (n = 362)	Female (n = 181)	Male (n = 181)
	Cronbach's Alpha coefficients		
Mental disorders	0.97	0.97	0.96
Physical compliances	0.84	0.84	0.78
Depression	0.90	0.89	0.87
Obsession	0.75	0.77	0.73
Interpersonal sensitivity	0.76	0.76	0.75
Phobia	0.60	0.71	0.43
Paranoia thoughts	0.67	0.64	0.69
Anxiety	0.80	0.85	0.73
Aggressive	0.81	0.83	0.79
Psychosis	0.81	0.75	0.78

#### 5.4.2 Procedure

Necessary permits for initial and coordination and implementation of research were obtained from Shahid Chamran University of Ahvaz, Education Organization of Khuzestan Province and Education Office Izeh city. Also, selected students were provided with explanations about the aim and implementation of the research and points on responding to the research instruments.

#### 5.4.3 Ethical considerations

All research ethics considerations, obtaining informed consent, refusing to participate in research, confidentiality of research information were clearly and clearly explained to the participants in the research. This article is extracted from the master's thesis of school counseling and with the financial support of the Vice Chancellor for Research and Technology of Shahid Chamran University of Ahvaz in the form of research [SCU.EM99.421] and with ethic code scu.ac.ir/50014. 02. 3. 99 / EE was conducted.

#### 5.4.4 Data analysis

To examine the research questions of statistical indicators such as frequency and frequency percentage and factorial analysis of variance statistical method were used using SPSS-22 statistical software.

### 6. Findings

TABLE's 2 to 4 rate of mental status in boy and girl, the tenth, eleventh, and twelfth grades, and in humanities, experimental sciences, and mathematics and physics academic fields in the high school students.

TABLE 2. The mental status in boy and girl high school students.

Sample	Total [n=362]	Female [n=181]	Male [n =181]
Variables	f (%)	f (%)	f (%)
<b>Mental disorders</b>	82 (22.7)	59 (32.6)	23 (12.7)
<b>Physical compliances</b>	74 (20.4)	56 (30.9)	18 (9.9)
<b>Depression</b>	82 (22.7)	52 (28.7)	30 (16.6)
<b>Obsession</b>	79 (21.8)	47 (26)	32 (17.7)
<b>Interpersonal sensitivity</b>	84 (23.2)	52 (28.7)	32 (17.7)
<b>Phobia</b>	87 (24)	50 (27.6)	37 (20.4)
<b>Paranoia thoughts</b>	68 (18.8)	44 (24.3)	24 (13.3)
<b>Anxiety</b>	72 (19.9)	48 (26.5)	24 (13.3)
<b>Aggressive</b>	87 (24)	50 (27.6)	37 (20.4)
<b>Psychosis</b>	87 (24)	50 (27.6)	37 (20.4)

As you can see in TABLE 2, according to the cut-off point of 0.70 and higher in the symptoms checklist [SCL-90], of 362 students, 82 [22.7%], of 181 girl high school students, 59 [32.6%] and, of 181 male students, 23 [12.7%] are suspected of mental disorders. The prevalence of symptoms of aggression and psychosis with 87% and 24% is higher than other disorders. The most common mental disorders are in female students with 30.9% [physical complaints] and 28.7 [depression] respectively, and in male students with 24.87% [phobia, aggression and psychosis, respectively].

The results of analysis of variance showed that the mean of mental disorders in girl students compared to boy students in all mental disorders [F=7.39] and in the subscales of physical complaints [F=55.76], obsession [F=16.93], sensitivity in interpersonal relationships [F=12.25], phobia [F=5.47], anxiety [F=12.29], depression [F=23.25] and aggression [F=5.04,  $p<0.001$ ] is higher, and not in psychosis and paranoid thoughts subscales.

**TABLE 3. The mental status in academic grades students.**

<b>Academic grade</b>	<b>Tenth grade [n=120]</b>	<b>Eleventh grade [n=121]</b>	<b>Twelfth grade [n=121]</b>
<b>Variables</b>	f (%)	f (%)	f (%)
<b>Mental disorders</b>	21 (17.5)	30 (24.8)	31 (25.6)
<b>Physical compliances</b>	19 (15.8)	29 (24)	26 (21.5)
<b>Depression</b>	21 (17.5)	28 (23.1)	33 (27.3)
<b>Obsession</b>	13 (10.8)	32 (26.4)	34 (28.1)
<b>Interpersonal sensitivity</b>	17 (14.3)	32 (26.4)	35 (28.9)
<b>Phobia</b>	25 (20.8)	30 (24.8)	32 (26.4)
<b>Paranoia thoughts</b>	23 (19.2)	18 (14.9)	27 (22.3)
<b>Anxiety</b>	22 (18.3)	21 (17.4)	29 (24)
<b>Aggressive</b>	25 (20.8)	30 (24.8)	32 (26.4)
<b>Psychosis</b>	26 (21.7)	30 (24.8)	31 (25.6)

As can be seen in TABLE 3, out of 120 tenth grade high school students, 21 [17.5%], out of 121 eleventh grade students, 30 [24.8%] and from of the 121 twelfth grade students, 31 [25.6%] are suspected of having a mental disorder based on a cut-off point of 0.70 in the symptoms checklist [SCL-90]. Prevalence of symptoms of disorders such as psychosis, aggression and phobia in 10th grade students with 21.7%, 20.8%, and 20.8%, respectively; prevalence of symptoms of disorders such as obsession and sensitivity in interpersonal relationships in 11th grade students with 26.4%, and 26.4% and prevalence of symptoms of disorders such as sensitivity in interpersonal relationships and obsession in the twelfth-grade students is higher with 28.9% and 28.1% than other mental disorders.

The results of factor analysis of variance showed that there are significant differences among the tenth, eleventh and twelfth grades students in all mental disorders [F=5.54], and obsessive-compulsive disorders [F=12.57], depression [F=3.75], sensitivity in interrelationships [F=3.94], and paranoid thoughts [F=6.36, p<0.011] subscales, and not in other disorders.

Pair comparison [Bonferroni follow-up test] of the means of academic grade students showed that there are significant difference between tenth and eleventh academic grades students, and eleventh and twelfth academic grade students in all mental disorders. This finding shows that the rate of mental disorders in 12<sup>th</sup> grade students is higher than 11<sup>th</sup> and 10<sup>th</sup> grades students and the rate and prevalence of mental disorders such as depression, obsession, sensitivity in interpersonal relationships and paranoid thoughts in 12<sup>th</sup>, and 11<sup>th</sup> grades students is higher than 10<sup>th</sup> grade students. And the eleventh is higher than the tenth-grade students. Also, the results showed that there is a significant interaction between gender and academic grade in relation to depressive disorder in students [F=4.12, p<0.017].

**TABLE 4. The mental status in different academic field's students.**

<b>Academic field</b>	<b>Humanities</b>	<b>Experimental science</b>	<b>Math-physics</b>
<b>Variables</b>	f (%)	f (%)	f (%)
<b>Mental disorders</b>	28 (20.4)	48 (25.5)	37 (16.2)
<b>Physical compliances</b>	28 (20.4)	42 (22.3)	4 (10.8)
<b>Depression</b>	24 (17.5)	51 (27.1)	7 (18.9)
<b>Obsession</b>	27 (19.7)	42 (22.3)	10 (27)
<b>Interpersonal sensitivity</b>	24 (17.5)	54 (28.7)	6 (16.2)
<b>Phobia</b>	33 (24.1)	47 (25)	7 (18.9)
<b>Paranoia thoughts</b>	26 (19)	37 (19.7)	5 (13.5)
<b>Anxiety</b>	26 (19)	40 (21.3)	6 (16.2)
<b>Aggressive</b>	33 (24.1)	47 (25)	7 (18.9)
<b>Psychosis</b>	27 (19.7)	52 (27.7)	6 (21.6)

TABLE 4 shows that, 28 [20.4%] of humanities field students, 48 [25.5%] of experimental science field students, and 6 [16.2%] of students math-physics field students with a cut-off point of 0.70 in the symptoms of checklist- SCL-90 are suspected of having mental disorders. Also, the highest percentages of mental disorders in humanities field students related to phobia [24.1%], and aggression [24.1%] disorders, in experimental science field students related to mental anxiety [27.7%], and depression [27.1%] disorders, and in mathematics-physics field students are related to obsessive-compulsive [27%], and psychosis [21.6%] disorder. Also, other results showed that there was no difference between humanities, experimental sciences and mathematics-physics academic field's students of in the symptoms of checklist, and the interaction between gender and grade in relation to the studied variables was not observed.

## 7. Discussion

This study clearly showed that the prevalence of psychiatric pathology among adolescents in Izeh city is 22.7%, that the reported percentage of this study with other Persian and English studies by Farbstein et al., Rawns-Cyber et al., Desert Tourist & Javadi et al., Canino et al., Hirwang et al., Benjet et al., Roberts et al., Costello et al., Noor Bala, Mohammadi et al., Bagheri Yazdi et al., it is somewhat close [2-9,15,19-21,24-27] and with the studies of Sadeghian Moghaddari, Diligent, and Georgian; Noor Bala et al., Noorbala et al., and Masoudzadeh et al., who reported a rate higher than 30%, are not consistent [22,23,28]. Therefore, the prevalence of mental disorders in adolescents in the studied community can be a little worrying for parents and education officials, and relevant organizations. Of course, this number of mental disorders which is referred to as a figure may be related to the age group of adolescents who are in the developmental stage. From the perspective of developmental psychologists, adolescence is a developmental stage, and adolescents in this age group are exposed to a number of challenges, including identification and values, respect for themselves and others, increasing self-responsibility, and increasing problem-solving skills. Perhaps another reason that explains our finding is that the sensitivity of the student, parents, and community to being accepted in top academic disciplines, such as medicine that it is social-desirable can increase signs and symptoms of

mental disorders in this particular period of life. Other risk factors such as living with a divorced parent, minority group status, large family members and low parental literacy are associated with an increase in mental disorders [4]. Geographical conditions and lack of cultural, welfare, recreational and sports facilities are other factors that adolescents cannot properly express their emotions and feelings. However, it should be noted that the difference in different research results in different regions of our country and other countries may be due to different research methods, different measuring instruments, different sampling methods, different populations and different socio-economic conditions, where these studies have been conducted. Therefore, the findings reported in the epidemiological studies are not expected to be similar and close.

The results showed that girl students had a higher percentage of psychiatric illnesses than male students; That is, 32.6 vs. 12.7% girl students suffer more from physical complaints, depression, obsessive-compulsive, phobia, paranoid thoughts, anxiety, aggression, and psychosis disorders than boys. These findings are consistent with the research of Mohammadi et al., [19-21], and Emami, Ghazinpour, Rezaei-Shiraz, and Richter [36], and they also showed that the scores of female students compared to male students are higher in mental disorders. Numerous factors can be used to explain this result, including the fact that women and girls report their illnesses compared to men and boys, biological factors and the role of gender and environmental pressures, being limit sources of satisfaction, limit of social participation, and lack of impact on the environment is another factor in the higher rate of mental disorders in girls and women. It should be noted that this rate is equal to a number of studies such as Shams Alizadeh et al., [33] and is higher than other studies obtained [8,9,25,26,29]. Also, it can be said that in our society, grieving women and girls are members of their family and friends and internalize all problems, and irrational controls and restrictions by society as well as by families in different aspects of girls 'behavior and life are more applied than boys'. Another possible cause of psychological distress may be the perceived limitations to success in personal life and specialized fields. This is probably more likely for girls than for boys and can lead to a higher proportion of psychiatric disorders among adolescent girls. This result warns the need to promote the mental health of girl students in school and family settings, improve living conditions and their participation in social and cultural activities. If the school and community environment does not improve, it is possible that girls' psychosocial functions will be impaired.

Another finding of the study showed that twelfth grade students [25.6%] are more susceptible to mental disorders than tenth and eleventh grade students. Also, these students are more prone to mental disorders in sensitivity disorders in interpersonal relationships, obsession and depression than the other two legs. It is possible that because these students are preparing for university and entrance exams, and on the other hand, the expectations of parents and families and their own expectations for admission to their favorite fields are so high that they lead to sensitization, involvement and rumination, and sometimes become sad and as a result, during this period of time they suffer from some kind of mental and psychological problems. In this regard, parents, school administrators, counselors, or school psychologists with coordination and emotional support can greatly reduce these stresses and worries and re-inject the necessary efficiency into students.

Another finding of the study indicated that experimental field students were more likely to have a disorder than humanities and math-physic field's students. This result is not unexpected, and in the last decade, parents have been unconsciously directing their children to experimental science academic field without realizing their children's ability to choose a academic major. This issue can create mental conflicts and rumination, hopeless, and sensitivity in these children for acceptance in medical fields that are very popular among the people of the society. In this study, the rate of mental disorder in students of experimental field

was 25.6%, which is higher than humanities and mathematics-physics field's students, and these figures indicate that parents and the community should reconsider their attitudes towards their children's education continuing in their favorite fields as soon as possible, and otherwise, depressed and even aggressive adolescents will enter society.

## **8. Conclusion**

The findings of this study indicate a concern about mental disorder in high school students in Izeh city of Khuzestan province that these figures are plausible in terms of psychological health and psychology perspective, and are demanding the intervention and follow-up of education authorities create an appropriate environment for students in this geographical area. If these statistics do not decrease over time and appropriate action is not taken in this regard to remove barriers to mental health, the dangerous consequences will have for continuing education and productivity of this group of society. Therefore, careful plannings and creation of workshops for communication skills training, stress reduction and prevention of mental illness can be an effective step in this field.

## **9. Limitations & Recommendations**

It should be noted that this study was conducted in a geographical area in southwestern Iran and the generalization of the results of this study to the population and other geographical areas that have their own conditions should be done with caution. It is suggested that this research be carried out in the whole of Khuzestan province and especially in critical situations such as Quid-19on primary and other grades students in a research project.

## **10. Contribution of Authors**

Gholamreza Rajabi have done of design, information retrieval, translating the extracted sources, data analysis and writing the article report, and Azemh Moradi the query and data entry of the article.

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