

MIGRATION AND MENTAL HEALTH: A COMPARATIVE STUDY OF DEPRESSION RATE AMONG IMMIGRANT IRANIAN STUDENTS

Abdolvahab Mohammadi*

Abstract:

There are many factors to cause depression in international students including leaving home & family, housing & money, study, relationships, and culture & identity. There is no single cause and risk factor of depression. Instead, depression results from a combination of genetic, biochemical, environmental, and psychological factors. Depression can run in a foreign country to international students, and depression generally starts between the ages of 15 and 30, exactly the same age, a person can be a foreign student in oversea countries. International students face multiple extra challenges in adjusting to a new culture and often having to operate using a foreign language. Being an international student can be an exciting and richly rewarding experience. However, many international students underestimate the level of stress these extra challenges will raise, leaving them potentially vulnerable to depression. For example, many are used to being high achieving students and may have unrealistic expectations that the cultural adjustments won't have any impact on their academic success.

This paper discusses the state, effective factors and prevalence of depression among international students. It assesses the depression rate among 50 Iranian students in Bangalore University (India) and 50 Iranian students Shahrekord University (Iran) [including 25 male and 25 female students] ;also, Beck depression inventory (BDI) is used in present study. After theoretical and statistical analysis of the study, the author focuses on its conclusion and recommends some possible treatments and solutions according to attained results.

Key words: Migration and Mental health, Depression, Iranian students

* Ph.D student in Psychology department of Pune University

• Introduction and background:

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and physical well-being (Sandra Salmans,1997) Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, or problems concentrating, remembering details or making decisions; and may contemplate or attempt suicide. Insomnia, excessive sleeping, fatigue, loss of energy, or aches, pains or digestive problems that are resistant to treatment may be present (National Institute of Mental Health, 2009)

Depression and other mental health disorders are a significant public health problem in universities. Many students experience their first psychiatric episode while at college, and 12%–18% of students have a diagnosable mental illness (Mowbray et al., 2006). Epidemiological studies suggest that the 15–21 age category (typical college years) has the highest past-year prevalence rate of mental illness at 39%. Eisenberg, Gollust, Golberstein, and Hefner (2007) reported that the general prevalence of depression and anxiety is 16% among undergraduate students and 13% among graduate students. Based on findings from the American College Health Association (ACHA) National College Health Assessment (NCHA), the rates of students reporting having been diagnosed with depression have increased from 10% in 2000 to 18% in 2008 (2000, 2008). A number of factors contribute to the initial presentation of depression during college. The transition itself from home to college places additional life stressors on young adults as they explore their identity, strive to master new skills, are away from established social support systems, and have increased time demands (Dyson & Renk, 2006). The consequences of depression are significant. Depression has long been associated with academic impairment (Heiligenstein, Guenther, Hsu, & Herman, 1996). While the depression is common on college campuses recently, probably international students will struggle with it as extra-multiple challenge far way home.

● Discussion and analysis

Depression and anxiety are consistently listed among the top 10 factors impairing academic performance in the past 12 months on the NCHA (ACHA, 2008). Diagnosed depression was associated with a 0.49 decrease in student GPA, and treatment was associated with a 0.44 protective effect (Hysenbegasi, Hass, & Rowland, 2005). Depression may also lead to increased risk of self-injury, dropping out of or failing college, attempting or committing suicide, and other risky behaviors (Gollust, Eisenberg, & Golberstein, 2008; Kisch, Leino, & Silverman, 2005). In addition, there is an association between feeling functionally impaired by depression in the past 12 months and accumulation of credit card debt among students (Adams & Moore, 2007). Psychiatric disorders and depressive symptoms have been associated with tobacco use, alcohol consumption, physical inactivity, and partner violence (physical, psychological, or sexual victimization; Sabina & Straus, 2008; Strine, Mokdad, Balluz, et al., 2008; Strine, Mokdad, Dube, et al., 2008). The role of culture, gender, age, length of stay, social support, and proficiency in English in the variance of depression among foreign students indicated that social support was a significant predictor of depression among these students. Self-rated English proficiency uniquely contributed to the variance in depression rate.

At the beginning, studying abroad may be sounds like fun and exciting journey; however once the student is abroad it perhaps much more difficult than him/her originally expected. Not only is the student in a new culture, language and environment, but the student is also away from the familiarity of family and friends. Understandably, it is not uncommon for some students to experience depression. According to WebMD, depression is when a person has five or more symptoms of depression for at least 2 weeks. These symptoms include:

- * Persistent sadness, pessimism
- * Feelings of guilt, worthlessness, helplessness or hopelessness
- * Loss of interest or pleasure in usual activities, including sex
- * Difficulty concentrating and complaints of poor memory
- * Worsening of co-existing chronic disease, such as rheumatoid arthritis or diabetes
- * Insomnia or oversleeping
- * Weight gain or loss

- * Fatigue, lack of energy
- * Anxiety, agitation, irritability
- * Thoughts of suicide or death
- * Slow speech; slow movements
- * Headache, stomachache, and digestive problems

In order to prevent depression, it is important to have a well-balanced diet, make time for exercise, and incorporate fun and relaxing activities into student's new routine. While it may be tempting to try all of the restaurants nearby, it is more important to eat foods that are high in nutrients. Nutrients people all need include vitamins; minerals, carbohydrates, protein, and even a small amount of fat. These are things which are difficult to be provided by international students especially Iranian students in India because of Indian style foods, recent high cost of living, different climate in India, inexperience and young age of some Iranian students can cause to increase the possibility of depression among these students and it seems depression can be prevented and controlled much better in home land, Iran than abroad if the consulting centers develops in Iran because the mentioned factors don't exist in the homeland. In this research study, 100 students are tested including 50 Iranian under graduate students in Bangalore University, India and 50 Iranian graduate students in Sharekord University, Iran: 25 female and 25 male students.

Hypotheses

(H⁰)

1. There is a significant difference in depression rate between Iranian students in Bangalore University and Iranian students in Sharekord University
2. There is a significance difference in depression rate between Iranian girl and boy students in Bangalore University.

(H¹)

1. There is no significant difference in depression rate between Iranian students in Bangalore University and Iranian students in Sharekord University
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Materials and Methods

Total numbers of admitted students in present research study were 100 including 50 Iranian under graduate students in Bangalore University, India and 50 Iranian graduate students in Sharekord University, Iran: 25 female and 25 male students. Collecting data was randomly; the colleges and students were selected randomly and then asked the students for answering the questionnaires. Student participation was voluntary and participation is a randomized controlled trial. The Beck Depression Inventory for Primary Care (BDI-PC) was embedded within the survey. The Beck Depression Inventory (BDI, BDI-II), created by Dr. Aaron T. Beck, is a 13-question multiple-choice self-report inventory, one of the most widely used instruments for measuring the severity of depression. Its development marked a shift among health care professionals, who had until then viewed depression from a psychodynamic perspective, instead of it being rooted in the patient's own thoughts. In its present version the questionnaire is designed for individuals aged 13 and over, and is composed of items relating to symptoms of depression such as hopelessness and irritability, cognitions such as guilt or feelings of being punished, as well as physical symptoms such as fatigue, weight loss, and lack of interest in sex. The development of the BDI was an important event in psychiatry and psychology; it represented a shift in health care professionals' view of depression from a Freudian, psychodynamic perspective, to one guided by the patient's own thoughts or "cognitions". It also established the principle that instead of attempting to develop a psychometric tool based on a possibly invalid theory, self-report questionnaires when analyzed using techniques such as factor analysis can suggest theoretical constructs. The BDI was originally developed to provide a quantitative assessment of the intensity of depression. Because it is designed to reflect the depth of depression, it can monitor changes over time and provide an objective measure for judging improvement and the effectiveness or otherwise of treatment methods. The instrument is used in

this research. All analyses were conducted separately by gender. Students completed the screening questionnaire while waiting for their appointment and returned the completed questionnaire.

Description of assessment tools:

Beck Depression inventory (BDI) was used in this study which included 13 self-administered items, self-report scale, measuring supposed manifestations of depression. The BDI-PC is an accurate and effective screening test for major depression in primary care settings.

Statistical Analysis:

Regarding there is a comparative study of a quality between two random samples from two different statistical societies and the objective of this research is to find out whether there is a significant justice in comparing the rate of depression between Iranian students in Bangalore University and Iranian students in Sharekord University, it has been attempted to utilized the following statistical tests: Mean, SD, and t' test.

Findings:

Test of 1st Hypothesis: the calculated t' in comparative relation between these two groups, Iranian students in Bangalore University and Iranian students in Sharekord University, equals 0.76 that from t table in the level of 0.05 means 1.93 and in the level of 0.01 means 2.63 with 98 freedom degree that smaller than t' test; therefore, the difference of each level is low and is not significant.

Table NO: (1) Depression rate frequency of students in Iran.

Depression Rates	Not at all	Mildly	Moderately	Severely	Total
Sex					
Boys	3	8	11	3	25
Girls	3	7	8	7	25

Table NO: (2) Depression rate frequency of Iranian students in India.

Depression Rates \ Sex	Not at all	Mildly	Moderately	Severely	Total
Boys	5	5	10	5	25
Girls	5	7	9	4	25

Table NO: (3) Obtained results

Samples	't' table in level of 0.05	't' table in level of 0.01	Df	Calculated t'
Iranian girls and boys students in India	2.08	2.79	48	0.45
Iranian students in Iran and India	1.93	2.63	98	0.76

Table NO: (4) Iranian girl and boy students' depression scores in Iran

Boy students	x_1	x_1^2	Girl students	x_1	x_1^2
1	0	0	1	0	0
2	1	1	2	0	0
3	2	4	3	2	4
4	6	36	4	4	16
5	4	16	5	4	16
6	5	25	6	5	25
7	5	25	7	5	25
8	5	25	8	6	36
9	6	36	9	6	36
10	6	36	10	7	49
11	8	64	11	7	49
12	8	64	12	7	49
13	9	81	13	8	64

14	9	81	14	8	64
15	10	100	15	9	81
16	10	100	16	9	81
17	10	100	17	10	100
18	12	144	18	10	100
19	13	169	19	10	100
20	13	169	20	12	144
21	16	256	21	14	196
22	18	324	22	16	256
23	20	400	23	16	256
24	23	529	24	19	361
25	26	676	25	21	441
	$\sum x_1=242$	$\sum x_1^2=3129$		$\sum x_1=215$	$\sum x_1^2=2549$
$\bar{x} = \frac{242}{25} = 9.7$			$\bar{x} = \frac{215}{25} = 8.6$		

Table NO: (5) Iranian girl and boy students' depression scores in India

Boy students	x_1	x_1^2	Girl students	x_1	x_1^2
1	0	0	1	0	0
2	1	1	2	1	1
3	1	1	3	1	1
4	5	25	4	5	25
5	6	36	5	5	25
6	6	36	6	5	25
7	6	36	7	6	36
8	7	49	8	6	36
9	7	49	9	7	49
10	7	49	10	7	49
11	7	49	11	8	64
12	8	64	12	9	81
13	8	64	13	9	81
14	9	81	14	9	81
15	9	81	15	10	100
16	10	100	16	12	144

17	10	100	17	12	144
18	11	121	18	14	169
19	12	144	19	16	256
20	14	196	20	16	256
21	14	196	21	16	256
22	15	225	22	17	286
23	18	324	23	23	529
24	23	529	24	25	625
25	28	784	25	26	650
	$\sum x_1=242$	$\sum x_1^2=3921$		$\sum x_1 =256$	$\sum x_1^2 =3740$
$\bar{x} = \frac{242}{25} = 9.7$			$\bar{x} = \frac{256}{25} = 10.6$		

The result of testing 1st hypothesis:

The calculated t' in comparative relevant to these two groups: Iranian students in Bangalore University and Iranian students in Sharekord University, equals 0.76 that from t table in the level of 0.05(freedom degree, fd.) means 1.97 and in the level of 0.01(justice with 99%) means 2.63 with 98 freedom degree smaller than t' table ; hence, the difference of each level is low and is non- significant.in the other words, the observed difference among averages are not important and there is no significant difference thus zero hypothesis can't be rejected.

The result of testing 2nd hypothesis:

The calculated t' in the comparison of female Iranian students group in Bangalore University with male Iranian students group in Bangalore University equals 0.45; t' table in the level of 0.05 equals 2.08 and in the level of 0.01 equals 2.79 with 48 freedom degree smaller than t' table so the difference per level is low and insignificant. Hence, zero hypotheses can't be rejected.

● Conclusions

After statistical analysis and testing hypotheses of the research, analyzing the tables, the following results are obtained:

- a) According to obtained statistical analyses of findings of between these two groups, Iranian students in Bangalore University and Iranian students in Sharekord University, the observed difference was not significant in the tested averages. It indicates that immigration and urbanization do not have an effect on increasing or decreasing the rate of depression and is not a direct factor.
- b) The done comparison between these two groups, Iranian students in Bangalore University in India and Iranian students in Sharekord University in Iran, shows that the difference among the averages is not significant and it reveals that the gender of the students having depression didn't have a special role and both gender, male and female, has an equal possibility to have a depression.
- c) The done comparison of findings via tables, abundance distribution of depression shows that the average rate of depression among whole participant students in both test groups has higher abundance.
- d) In general, the assumed hypothesis by the researcher: a significant difference in the rate of depression among Iranian students in Bangalore University in India and Iranian students in Sharekord University in Iran and higher rate of depression among female Iranian students in Bangalore University were not proven but useful findings were achieved. e.g. there is depression among all Iranian students in weak and medium rates.

● Solutions, treatments and Recommendations:

Paying attention to mental and physical conditions of students every country is essential in order to develop a proper society for creating specialist forces. Proper and perfect planning for young people and students will cause to promote the health level and prevent mental and physical problems. Also, having a counseling center in the universities especially for

international students is necessary. Knowing the condition and culture of the countries and their academic centers can aid international students greatly.

Environmental factors, cultural differences, homesickness and distress, English proficiency, and intrapersonal and interpersonal factors are important in creating depression among Iranian students in oversea countries; although, India as an Asian country has less difference than European countries and U.S but there are still unnecessary challenges for young Iranian students to study abroad; while, there are a good quality of education and open seats for them in Iran. When there is a good opportunity to study in their home land, Iran within their own culture, language and family, no need to face them with new unnecessary psychological and social problems in a foreign country. Also, they might achieve higher academic performance along with the mentioned privileges in home land.

Possible Treatments

There are many forms of treatment for depression associated with a mental disorder. Treatments may include cognitive-behavioral therapy, music therapy, art therapy, group therapy, psychotherapy, animal-assisted therapy, physical exercise, medicines such as antidepressants, and keeping a gratitude journal. But the researcher still emphasized on prevention than possible treatments for foreign students specially Iranians due to their present education opportunities in Iran.

The researcher recommends doing more extensive and wider research with covering the larger number of the students then it will be more feasible.as the research will be in large size, it needs to be done a professional team which can be supported by a governmental or non-governmental academic organization.

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