

RELATIONSHIP BETWEEN NEGATIVE COGNITIVE STYLE AND DEPRESSION AMONG UNIVERSITY STUDENTS

Shagufta Perveen, (Phd scholar)

Designation: Lecturer, Psychology Department, Hazara University, Mansehra, Pakistan
shaguftak27@gmail.com

Abstract: Several studies have documented the link between negative cognitive style and depression. However, little is known about the mechanisms underpinning the relationship between negative cognitive style and depression. Using battery of scales naming Quick Inventory of Depressive Symptomatology – Self Report (QIDS-SR; Rush et al., 2003) Cognitive style Questionnaire (CSQ-SF; Meins, et al., 2012) and Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) study explored the relationship between cognitive styles and depression in a non clinical sample of 1000 Pakistani university students. The study result show positive relationship between negative cognitive style and depression among students. Exploring the gender differences results indicates that men have higher scores on self worth, stability and while women have high scores on Internality based cognitive styles.. Result also shows that the mean score of women is higher on Somatic Complaints, Depressed Affect and Interpersonal Problem. Whereas men scored higher on positive affect.

Key words: Negative Cognitive Style, Depression Gender.

INTRODUCTION

Depression is regarded as a natural reaction to the tragedies and some perceive it as a major disease. Depression comprises of negative emotions such as stress, sleep and appetite problem, feeling of worthlessness and despair which may lead to varying from negative emotions to self destructive thoughts (Ibrahim, Kelly, Challenor, & Glazebrook, 2010; Thapar et al., 2012).

Based on the World Health Organization (WHO; 2008) reports, mental disorders are the fourth major health problems in the world and among the mental disorders, the greatest disability and handicap in the world is related to depression. Depression is associated with reduced energy and passion, feeling guilty, lack of concentration, poor appetite and thoughts of death and suicide and is accompanied with changes in activity level, cognitive abilities, speaking, sleep and other biological rhythms (WHO, 2008).

Depression among university students

The university years often have more adverse effects on emotionally and intellectually functioning of an individual than almost any other stage of education. University life has an adverse effect on the academic performance, physical health, and psychological well being of the students. Depression is known as a universal and devastating problem amongst student affecting motivation level, concentration, mood and feelings of sense worth the occurrence rate of depressive symptoms among university students ranges from 10.2% to 71.2%, (Christensson, Vaez, Dickman & Runeson, 2011; Kumar, Jain & Hegde, 2012) .

Depression is a major problem faced by many college students today. Students with depression can have significant impairments in many areas of functioning, including social, academic, and occupational (Field et al., 2012). The prevalence of depression has been shown to be higher in college-aged students than in the general population, with around 30% of students at any given time with depression and around only 9% in the general population (Ibrahim, Kelly, Adams, & Glazebrook, 2012). Students in particular tend to face unique life challenges that can put them at an even greater risk for developing symptoms of depression (Yakunina, Weigold, Weigold, Hercegovac, & Elsayed, 2013). Depression is highly prevalent about 44% of students reporting suffering from depressive symptoms (Krucik, 2012) and later on about 9% developing major depression (Reyes-Rodriguez, Rivera-Medina, Camara- Fuentes, Suarez-Torres & Bernal, 2012).

With regard to student populations, stressors include the transition to university life, adjusting to a new environment, independently handling with the demands of daily life, launch new social networks, achieving their goals, tolerating academic burden and strain, economical problems (Tosevski, Milovancevic & Gajic, 2010) and parting from their usual support network (Sidana, Kishore, Gulati, Jiloha, & Arand, 2012). Depressive symptoms may put an adverse effect on learning abilities and knowledge grasping quality. Moreover, for university students depressive symptoms may be triggered by experienced financial burden (Tosevski, Milovancevic & Gajic, 2010). As a result of these stressors, students become susceptible to physical, mental health problems and academic difficulties, (Dolbier & Rush, 2012).

Depression is a most prevalent problem among students across the world. Depression among university students is exceedingly prevailing and common problem (Abedini, Davachi, Sohbaee, Mahmoodi, & Safa, 2007).

University students are subjected to a crucial period of transition from adolescence to adulthood experience, number of stresses they attempt to fit in, uphold good grades, makes future plans, causes stress and anxiety for a number of students (Buchanan, 2012). This unhandled stress, may result in to depressogenic symptoms.

A wealth of researches has been conducted studying the prevalence of psychological problems among the university population (Nordin, Talib, & Yaacob, 2009; Seim & Spates, 2010), mental health problems are proving to be increasing day by day among university students (e.g. Hunt & Eisenberg, 2010). Previous studies have suggested that around the world depression in university students is well documented (Eller, Aluoja, Vasar, & Veldi, 2006; Mahmoud, Staten, Hall & Lennie, 2012), and the prevalence rate is increasing day by day (Reavley, McCann & Jorm, 2012; Castaldelli-Maia et al., 2012).

Among university students significant negative correlation exists between life satisfaction and depression (Guney, Khalafat & Boysan, 2010). Moreover, earlier studies have revealed that all over the world, among university students there is higher rates of psychological disorders, specifically anxiety and depression (Stewart-Brown, et al., 2000; Tomoda, Mori, Kimura, Takahashi & Kitamura, 2000; Reynolds, MacPherson, Tull, Baruch, & Lejuez, 2011; Aselton, 2012).

Relation between Negative Cognitive Style And Depression

Cognitive theories lay heavy emphasis on the role of negative cognitions in causing depression. Abramson, Seligman, and Teasdale, (1978) anticipated that persons with a predisposition to attribute negative life circumstances as stable (enduring), and global (wide spread) causes and who assumes that negative characteristics about themselves are more vulnerable to have depression episodes. Based on Abramson-Seligman-Teasdale model of depression (1978), Wenier (2000) gave a model of cognitive style. Three dimensional model of attribution which comprises of three relatively independent dimensions; stable and unstable, internal and external and controllable or uncontrollable.

For assessing this model, Meins et al. (2012) developed a cognitive style questionnaire short form (CSQ-SF). This instrument was devised in accordance with the Beck's hopelessness theory of depressogenic cognitive style; which assumes that holding negative cognitive style increase the likelihood of developing depression after a negative life event (Alloy et al., 2006). Individuals who repeatedly interpret life events negatively are vulnerable to depression because they believe that they are worthless and that negative consequences are unavoidable (Alloy et al., 2000).

Joiner and Wagner's (1995) demonstrated that negative cognitive style predicts the onset and recurrence of depressive disorders. Both of these models are dependent on the idea that a stressful life event occurs for the individual. Thus, maladaptive cognitive style and stress are posited to work together in contributing to the development of depression. Therefore, a person with a negative cognitive style may never develop depression simply because that person never encountered a particularly stressful event (Slavik & Croake, 2006).

More specifically, Alloy et al. (2006) found that there was a greater likelihood of past depressive disorders and symptoms demonstrated in individuals with negative cognitive styles. A Number of studies have established a link between depression and cognitive vulnerability. Recent longitudinal studies involving a sample of university students indicated the association connecting cognitive functioning with depression (Cole et al., 2008). Furthermore, Abela and Hankin (2008) have postulated that cognitive functioning (Negative cognitive style) may become more interrelated among adults causing higher vulnerability for depressive symptoms. This may suggest that negative cognitive style, results in depression.

Abela, Stolow, Zhang, and McWhinnie (2012) reported the significant positive relationship between negative cognitive styles past experience of depressive episodes in university students. Hamilton et al. (2013) found that negative cognitive style prospectively predicted the experience of dependent interpersonal stress and relational victimization.

Xiaoting, Wei and Nan, (2010) explored the connection between negative cognitive style, and depressed mood among students; suggesting Negative cognitive style to be positively correlated with depressive mood. Each year about one third of the students suffer from depression that negatively affects their abilities (Arnett, 2000; Eiser, 2011). In addition, a study by Craighead, Sheets, Craighead, and Madsen, (2011) found that about 18% of students experience Major Depressive Disorder (MDD) later in their life (Furr, Westefeld, McDonnell, & Jenkins, 2011) about 53% of college student exhibits depressive symptoms at some point of life. Craighead et al. (2011) suggests that these students experiencing a first episode of depression are more vulnerable to have future depressive episodes.

Cognitive styles have an important link with psychological well being of individuals. The hopelessness theory (Abramson, Metalsky, & Hatlage, 1988) attempts to understand faulty cognitive style suggesting that particular negative cognitive styles increase individual's likelihood of developing episodes of depression. Individuals with the negative cognitive style (NCS) are at greater risk for depression (Fresco, Moore, Walt, & Craighead, 2009; Lacoviello, Alloy, Abramson, Whitehouse, & Hogan, 2007; Alloy et al., 2000). Hamilton et al.

(2013) reported that the negative cognitive style and rumination prospectively predicted the experience of dependent depression.

The most recent and convincing evidence of negative cognitive style as a predictor of depression has emerged revealing that individuals classified as high risk were more likely to experience an initial lifetime onset of Major Depression, minor depression, and hopelessness depression than individuals classified as low risk (Alloy et al., 2006), participants with high risk exhibited greater incidence of major depression in their lives to date than those with low risk, while controlling for current depressive symptoms (Alloy et al., 2000).

A plethora of research support suggests that as students related problems are increasing day by day researchers are now putting attention these issues (e.g. Harrar, Affsprung, & Long, 2010; Seim & Spates, 2010). With the recognition that learning environment, gender role may cause depressive symptomology among students, it became an important research question to identify what aspects of cognition, contribute in determining student's mental health. The current study hypothesized that negative cognitive style may lead to depression. Unlike any other factor there is limited research work is presented in cognitive styles, particularly on negative cognitive styles (Robins et al., 1994).

Method

Participants

In total, a sample of 1000 university students with an age range of 18-35 years was selected through convenient sampling technique from university of Islamabad, Huripur, Peshawar, Abbottabad and Hazara. Researcher contacted the students individually and briefed about the objectives of the study. Only those participants were selected who showed their consent to participate in the study. In phase I for screening purpose for Quick inventory of depressive symptomology was administered. Later on The participants were handed over with a questionnaire pack (including informed consent form, Quick Inventory of Depressive Symptomology–Self Report, Center for Epidemiologic Studies Depression Scale, and Cognitive style questionnaire). With response rate of 75%, 500 university students returned the completed questionnaires; among these ten incomplete questionnaires were dropped.

Measures

Quick Inventory of Depressive Symptomology – Self Report

For detecting depression among students sixteen item Quick Inventory of Depressive Symptomatology – Self Report (QIDS-SR; Rush et al. 2003) having .95 alpha coefficients with three point response category (0= never, 1= rarely, 2= often and 3= always) was used as screening tool. It comprises of nine subscales (Sleep, Psychomotor disturbance, Appetite/weight disturbance, depressed mood, Decreased interest, decreased energy, Worthlessness/guilt, Concentration/decision making, and suicidal ideation). The total score ranges from 0-27 whereas test score more than 6, depicts depressive symptomology.

Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) consist of total 20 items with four sub scales naming somatic complaints, depressed affect, positive affect and interpersonal problems with 4 point Likert scale ranging from where (0) (use for rarely or none of the time (less than one day) to 3 (use for most the time (5-7 days)). The score range is 0-60. The higher scores indicated greater symptoms of depression, measured by frequency of occurrence in past week. CES-D>16 is typically employed as a cut-off for clinical depression.

Cognitive style Questionnaire (CSQ-SF) Cognitive Style of Questionnaire Short Form (CSQ-SF; Meins, et al., 2012) has 72 items having .81 alpha coefficients with scoring on a five - point scale. It is a measure of inferential style with sub-scales of Globality, Stability, and Negative Consequences, Self worth implications. The CSQ SF include four negative and four positive hypothetical situations to which respondents are asked to write down the causes of situation and then to evaluate the cause on a scale from one to seven regarding internal-external, global- specific, and stable-un stable attribution dimensions. There are 41 positive and 32 reverse items.

Procedure

For the purpose of data collection after obtaining the written informed consent by the respective authorities of each university, the researcher contacted the possible participants of study. The criterion of selection of participants of the study was that only those were included who showed their willingness to participate in the study, belonged to age group ranging from 18 to 35 years and screened on Quick Inventory of Depressive Symptomatology – Self Report (QIDS-SR; Rush et al. 2003) (scoring higher than 6 on QIDS formed a pool of potential high-risk (HR) participants, whereas those who scored low on QIDS formed a pool of potential low-risk (LR) participants).

The participants were approached individually; they were briefed about the purpose and objectives of the study. They were also assured about the confidentiality of the data and that the information obtained would purely be used for research purpose. In phase II, students who met the phase I criteria for the HR or LR groups were requested to respond on all remaining questionnaires. The participants were contacted after 2-3 days with follow up telephonic reminders speeded up respondents to response on time.

RESULTS

In pilot study the data of 1000 university students (women $n = 569$, men $n = 431$) have been analyzed. The results of these analyses are given below:

Table 1

Alpha Reliability Coefficients of Quick Inventory Depression Symptomology (QIDS), and its Subscales (N=1000)

S. No	Subscales	No. of Items	Alpha Coefficient
I	Sleep disturbance	2	.86
II	Sad mood	2	.79
III	Appetite/weight change	2	.86
IV	Concentration	2	.75
V	Self-outlook	2	.89
VI	Suicidal ideation	2	.77
VII	Involvement	2	.69
VIII	Energy	1	.81
IX	Psychomotor change	1	.84
	QIDS	16	.91

Table 1 indicates that the alpha reliability coefficient for Quick Inventory of Depressive Symptomology self report (QIDS) is .91, while for its subscales alpha value ranges from .75 to .89, which shows that the scale is internally consistent.

Table 2

Alpha Reliability Coefficients of Cognitive style Questionnaire (CSQ-SF) and its Subscales (N=1000),

S. No	Subscales	No. of Items	Alpha Coefficients
I	Negative consequences	08	.74
II	Stability	16	.65
III	Globality	16	.80
IV	Internality	16	.87
V	Self worth	16	.91
	CSQ-SF	72	.85

For the Cognitive style Questionnaire short form (CSQ-SF), the alpha coefficients are satisfactory as shown in the Table 2. The alpha reliability coefficient for the entire scale is .85, while for its subscales alpha values ranges from .65 to .91.

Table 3

Inter-Scale Correlation Coefficients for the Subscales of Cognitive style Questionnaire Short Form(CSQ;SF N=1000)

S. No	Subscales	I	II	III	IV	V
I	Negative consequences	----	.32**	.89**	.68**	.77**
II	Stability	----	----	.11*	.42**	.49**
III	Globality	----	----	----	.78**	.55**
IV	Internality	----	----	----	----	.19*
V	Self worth	----	----	----	----	----

* $p < .05$, ** $p < .01$

The Table 3 portrays that all subscales of CSQ-SF have significant positive correlation with each other, which indicates that CSQ-SF has satisfactory construct validity.

Table 4
Inter-Scale Correlation Coefficients for the Subscale of Center for Epidemiologic Studies Depression Scale (CES-D; N=1000)

S. No	Subscales	I	II	III	IV
I	SC	----	.82**	.80**	.41**
II	DA	----	----	.56**	.49**
III	PA	----	----	---	.17**
IV	IPP	----	----	----	----

Note .SC = Somatic Complaints, DA= Depressed Affect, PA= Positive Affect, IPP= Interpersonal Problems
* $p < .05$, ** $p < .01$

The results of Table 4 describe that all personality traits of CES-D has significant positive correlation with each other.

Table 5
Correlation Coefficients between the Subscales of CSQ and Subscales of CES-D (N=1000)

Subscale of CSQ-SF	Subscale of CES-D			
	SC	DA	PA	IPP
Negative consequences	.52**	.49**	-.58**	.67**
Stability	.63**	.72**	.73**	.71**
Globality	.73**	.48**	.54**	.59**
Internality	.61**	.31**	.23**	.40**
Self worth	.53**	.39**	-.53**	-.60**

** $p < .01$

Note. CES-D= Center for Epidemiologic Studies Depression Scale, CSQ-SF= Cognitive Style Questionnaire Short form, SC= Somatic Complaints, DA= Depressed Affect, PA= Positive Affect, IPP= Interpersonal Problems.

Table 5 shows that sub scale Cognitive style questionnaire (Negative consequences, Stability, Globality and Internality) have significant positive relationships with all subscales of Center for Epidemiologic Studies Depression Scale (Somatic Complaints, Depressed Affect, Positive Affect, and Interpersonal Problem Scale); while on SELF worth sub scale have significant negative correlation with Somatic complaints and Positive affect subscales of CES-D.

Table 6
Mean, Standard Deviation, and t-values of Men and Women University Students on Subscales of Center for Epidemiologic Studies Depression Scale (CES-D; N=1000)

Subscale CES-D	Men (n = 431)		Women (n = 569)		t	p	CI 95%		Cohen's d
	M	SD	M	SD			LL	UL	
SC	83.49	19.50	86.94	14.20	3.19	.001	-1.82	2.71	0.21
DA	68.4	26.56	72.33	24.6	2.39	.008	-1.87	2.66	0.15
PA	30.99	9.78	28.97	9.42	3.77	.001	-0.48	1.13	0.24
IPP	49.75	7.89	50.6	9.32	1.52	.063	-0.75	0.78	-0.10

df = 998

Note. CI = Confidence Interval, LL= lower Limit, UL= Upper Limit, CES-D = Center for Epidemiologic Studies Depression Scale, SC= Somatic Complaints, DA= Depressed Affect, PA= Positive Affect, IPP = Interpersonal Problems.

Table 6 shows significant gender differences on subscales of Center for Epidemiologic Studies Depression Scale (SC, DA, PA and IPP). Whereas scores on subscale IPP indicates that insignificant difference exist between men and women. Result shows that the mean score of women is higher on Somatic Complaints, Depressed Affect and Interpersonal Problem. Where as men scored higher on positive affect.

Table 7
Mean, Standard Deviation, and t-values of Men and Women University Students on Subscales Cognitive style Questionnaire (CSQ-SFQ; N=1000)

Subscales	Men (n = 431)		Women (n = 569)		t	p	CI 95%		Cohen's d
	M	SD	M	SD			LL	UL	
Negative consequences	55.05	11.89	56.32	9.30	1.83	.033	-1.24	0.64	-0.12
Stability	66.85	2.38	65.94	1.60	13.06	.001	.77	1.04	0.45
Globality	52.02	7.01	53.1	10.72	1.87	.031	-0.77	0.81	-0.11
Internality	39.59	18.5	46.2	21.6	5.09	.000	-1.71	1.86	0.33
Self worth	24.8	15.21	22.03	11.28	3.31	.000	-1.27	1.05	0.20

df = 998

Note. CI = Confidence Interval, LL= lower Limit, UL= Upper Limit

Table 7 shows significant gender differences on subscale of Cognitive style Questionnaire (Negative consequences, Stability, Internality and Self worth). While on Globality and Negative Consequences non-significant difference exists. It indicates that men have relatively higher on stability and significantly higher scores on Self Worth, and while women have high scores on Internality based cognitive styles.

DISCUSSION

The current study was based on two objectives; 1) to explore the relationships between negative cognitive styles and depression, 2) to find the gender based differences on depression and negative cognitive styles. The alpha coefficient value for QDSI was .91, while for its subscales alpha value ranges from .75 to .89, (see Table 1); and for CES-D it was .85, while for its subscales alpha values ranges from .65 to .91 (see Table 2). The values of inter-scale correlation coefficients for CSQ-SF and CES-D indicated that all instruments have satisfactory level of construct validity (see Table 3 & 4).

The findings of Table 5 showed that Center for Epidemiologic Studies Depression Scale has a significant positive association with negative cognitive styles which support the first hypothesis of the current study. These findings are supported by previous studies (Alloy et al., 2006; Cole et al., 2008) which found a positive relationship between negative cognitive styles and depression. The results of Table 5 also support the second hypothesis of the current study by exploring that depressed affect shows significant positive correlation with negative consequences based cognitive style. These findings are supported by some previous studies (e.g., Kashdan & Roberts, 2007; Segerstrom, Tsao, Alden, & Craske, 2000; Segerstrom, Roach, et al., 2010) who explored that the negative consequences based repetitive thoughts appears to be more strongly associated with depressed mood. These results support the seventh hypothesis of the present study. These findings are supported by a previous study (Alloy et al., 2000), university students with past experience of depressive episodes exhibited negative cognitive styles (Abela, Stolow, Zhang & McWhinnie, 2012). Similarly another previous study also reported the relationship between negative beliefs and past record of major depressive episodes (Abela, Auerbach, Sarin & Lakdawalla, 2009). The third hypothesis of the present study also supported by analysis and explored the negative association of negative affect with self worth based cognitive style (see Table 5). These findings are partially supported by the results of some previous studies (Hofmann et al., 2012; Borton, Markowitz, & Dieterich, 2005), which stated that participants with lower state self esteem censored their negative thoughts more and were more depressed .

The analysis of the current study explored significant gender differences on all subscales of Center for Epidemiologic Studies Depression Scale (Somatic Complaints, Depressed Affect, Positive Affect, Interpersonal Problems). These results indicate that women show high scores on Somatic Complaints, Depressed Affect and Interpersonal Problem while men show high scores on positive affect which support the fourth hypothesis of the study (see Table 6). These results are in line with the findings of some previous studies which found that female shows high scores on somatic symptoms (Golding & Aneshensel, 1991; Mumford, Tareen & Bhatt, 1991) on depressed affect (Australian bureau of statistics, [ABS] 2007; Waghachavare, Dhumale, Kadam, & Gore, 2013),

on interpersonal problems while men show a high level of positive affect (Asgari & Almasi, 2013 ;Aparicio, Rosset, Diaz & Ucles, 2009).

The analysis of the current study shows significant gender differences on all cognitive style Questionnaire (Negative consequences, Stability, Globality Internality and Self worth). These findings of the study indicated that women have higher scores on Internality (Pearson et al. 2015), while men have high scores on self worth (see Table 7). These findings are consistent with the results of some previous studies which reported that males perform better in self –worth (Zeinwand, 2006) It has been reported that there is a significant difference with reference to self worth between male and women (SarAbadaniTafreshi, 2006; Malik & Sadi, 2013) The findings of the present research are also consistent with the findings of previous researches regarding cognitive style, girls attributed positive events to internal, stable, and global causes and negative events to external, unstable, and specific causes. Khodayarifard (1996) boys, on the other hand, tended to attribute negative events to internal, stable, and global causes and positive events to external, unstable, and specific causes. Similarly, another study reported that females experience more depressive symptoms and a more maladaptive cognitive style than males (Chen & Hongjing, 2012).

CONCLUSION

It is concluded that significant positive relationships emerged between negative cognitive styles and depression. The present study also found that women show higher scores on Somatic Complaints, Depressed Affect and Interpersonal Problem and Internality based cognitive styles while men show high scores on positive affect stability and significantly higher scores on self worth.

Limitations and Suggestions

The present research was confronted with some limitations. The present study was conducted only on university students ignore children and mature people in this study; only studied gender ignore some other important demographic variables (e.g., age, academic discipline, education differences and social class etc.). The present study only explores the relationship between depression and negative cognitive style and unable to give information about the cause and effect relationship.

Implications of the Current Study

The present is helpful in understanding the negative cognitive styles of individuals with respect to gender based differences and depressive symptomology. These findings can help educationists to know about the variables that negatively affects the mental health of the students. Present study will help in taking measure for improving psychological health of university students. The findings of the current study also have important implications in the fields of education, health and management. Specifically within the culture of Pakistan very limited studies were conducted in this field.

References

- Abedini, S., Davachi, A., Sohbaee, F., Mahmoodi, M., & Safa, O. (2007). Prevalence of depression in nursing students in Hormozgan University of Medical Sciences,” *Hormozgan Medical Journal*, 11(42), 139–145.
- Abela, J. R. Z., Auerbach, R. P., Sarin, S., & Lakdawalla, Z. (2009). Core beliefs and history of major depressive episodes in currently non-depressed university students. *Cognitive Therapy and Research*, 33, 50–58
- Abela, J. R. Z., & Hankin, B. L. (2008). Cognitive vulnerability to depression in children and adolescents: a developmental psychopathology perspective, in *Handbook of Depression in Children and Adolescents*. Edited by Abela, J. R. Z., & Hankin, B. L. New York, Guilford,
- Abela, J. R. Z., Stolow, D. Zhang M., & Mc-Whinnie C. M. (2012). Negative Cognitive Style and Past History of Major Depressive Episodes in University Students. *Cognitive Therapy and Research*, 36(3), 219-227.
- Alloy, L. B., Abramson, L. Y., Metalsky, G. I., & Hartlage, S. (1988). The hopelessness theory of depression: attributional aspects. *British Journal of Clinical Psychology*, 27, 5-21.
- Al-Faris, E.A., Irfan, F., Van derVleuten, C.P.M., Naeem, N., Alsalem A., Alamiri N., ... Alofaisan ,Y.(2012).The prevalence and correlates of depressive symptoms from an Arabian setting: a wake up calls. *Med Teach*, 34,32–36.
- Alloy, L. B., Abramson, L. Y., Hogan, M. E., Whitehouse, W. G., Rose, D. T., & Robinson, M. S. (2000). The Temple-Wisconsin cognitive vulnerability to depression project: Lifetime history of axis I psychopathology in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology*, 109, 403–418.
- Alloy, L. B., Abramson, L. Y., Safford, S. M., & Gibb, B. E. (2006). *The Cognitive Vulnerability to Depression (CVD) Project: Current Findings and Future Directions*. In Alloy, L. B., & Riskind, J. H. (Eds.), *Cognitive vulnerability to emotional disorders*. (pp. 33-61). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978).Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49–74. doi:10.1037=0021-843X.87.1.49

- Aparicio, M.D.C., Rosset, M.C., Diaz, M.D., & Ucles, I.S. (2009). Gender differences in affect, emotional maladjustment and adaptive resources in infertile couples: a positive approach. *Annals of Clinical Health Psychology*, 5, 39-46.
- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469.
- Aselton, P. (2012). Sources of stress and coping in American college students who have been diagnosed with depression. *Journal of Child and Adolescent Psychiatric Nursing*, 25(3), 119-123. doi: 10.1111/j.1744-6171.2012.00341.x.
- Asgari, A., & Almasi, S. (2013). The Relationship Between Core Self-Evaluations with Life Satisfaction and Positive and Negative Affect among Students. *Middle-East Journal of Scientific Research*, 16 (11): 1581-1588.
- Australian bureau of statistics. (2007) national survey of mental health and wellbeing: Summary of results. (document 4326.0).
- Borton, J. L. S., Markowitz, L.J., & Dieterich, J. (2005). Effects of Suppressing Negative Self-Referent Thoughts on Mood and Self-Esteem. *Journal of Social and Clinical Psychology*, 24 (2), 172-190. doi: 10.1521/jscp.24.2.172.62269
- Buchanan, J. L. (2012). Prevention of depression in the college student population: a review of the literature. *Archives of Psychiatric Nursing*, 26 (1), 21-42, 2012.
- Castaldelli-Maia, J. M., Martins, S. S., & Bhugra D. Machado, M. P., Andrede, A.G.D., Alexnderio-silva, C., Baldassin, S.P., Alvis, T.C. D.S. (2012). Does ragging play a role in medical student depression—cause or effect. *Journal of Affective Disorders*, 139(3), 291-297, 2012
- Chen, H. Q. Z., & Hongjing, T. J. H. Z. (2012). Students attribution methods and flexibility and mental health Relation of attribution styles and attribution flexibility to mental health in college students. *Chines Mental Health Journal*, 26(4), 310-314
- Christensson, A., Vaez, M., Dickman, P., & Runeson, B. (2011). Self-reported depression in first-year nursing students in relation to socio-demographic and educational factors: a nationwide cross-sectional study in Sweden. *Soc Psychiatric Epidemiology*, 46(4), 299-310.
- Cole, D.A., Ciesla, J.A., Dallaire, D.H., Jacquez, F.M., Pineda, A.Q., LaGrange, B., . . . Felton, J.W. (2008). Emergence of Attributional Style and Its Relation to Depressive Symptoms. *Journal of Abnormal Psychology*, 117(1), 16-31.
- Craighead, W.E., Sheets, E.S., Craighead, L.W., & Madsen, J.W. (2011). Recurrence of MDD: A prospective study of personality pathology and cognitive distortions. *Personality Disorders: Theory, Research, and Treatment*, 2(2), 83-97. doi: 10.1037/a0020456.
- Dolbier, C. L. & Rush, T. E. (2012). Efficacy of abbreviated progressive muscle relaxation in a high-stress college student sample. *International Journal of Stress Management*, 19(1), 48-68.
- Eiser, A. (2011). The crisis on campus. *American Psychological Association*, 42, 18-19.
- Eller, T., Aluoja, A., Vasar, V., & Veldi, M. (2006). Symptoms of anxiety and depression in Estonian medical students with sleep problems. *Depression and Anxiety*, 23(4), 250-256.
- Field, T., Diego, M., Pelaez, M., Deeds, O., & Delgado, J. (2012). Depression and related problems in university students. *College Student Journal*, 193-202.
- Fresco, D. M., Moore, M. T., Walk, L., & Craighead, L. W. (2009). Self-administered optimism training: Mechanisms of change in a minimally supervised psychoeducational intervention. *Journal of Cognitive Psychotherapy: An International Quarterly*, 23, 350-367. doi:10.1891/0889-8391.23.4.350
- Furr, R. S., Westefeld, S. J., McConnell, N. G., & Jenkins, M. J. (2001). Suicide and depression among college students: A decade later. *Professional Psychology: Research and Practice*, 32, 97-100.
- Golding, J.M., & Aneshensel, C.S. (1991). *J Clin Psychology*, 47:61-74 .
- Guney, S. Khalafat, T., & Boysan, M. (2010). Dimensions of mental health: Life satisfaction, anxiety and depression: A preventive mental health study in Ankara University students population. *Procedia Social and Behavioral Sciences*, 2, 1210-1213.
- Hamilton, J. L., Stange, J. P., Shapero, B. G., Connolly, S.L., Abramson, L.Y., & Alloy, L.B. (2013). Cognitive vulnerabilities as predictors of stress generation in early adolescence: pathway to depressive symptoms. *Journal of Abnormal Child Psychology*, 41(7), 1027-39, doi: 10.1007/s10802-013-9742-z.
- Harrar, W. R., Affsprung, E.H., & Long, J.C. (2010). Assessing Campus Counseling Needs. *Journal of College Student Psychotherapy*, 24, 233-240.
- Hofmann, S. G., Asnaani, A., Vonk, I. J. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy Research*, 36, 427-440.
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, 46, 3-10.

- Ibrahim, A. K., Kelly, S. J., & Glazebrook, C. (2012). Reliability of a shortened version of the Zagazig Depression Scale and prevalence of depression in an Egyptian university student sample, *Comprehensive Psychiatry*, 53(5), 638–647.
- Ibrahim, A. K., Shona, J. K., Challenor, E. C., Glazebrook, C. (2010). Establishing the reliability and validity of the Zagazig Depression Scale in a UK student population: an online pilot study Ibrahim et al. *BMC Psychiatry*, 10, 107 <http://www.biomedcentral.com/1471-244X/10/107>
- Borton, J. L. S., Markowitz, L. J., Dieterich, J. (2005). Effects of Suppressing Negative Self-Referent Thoughts on Mood and Self-Esteem. *Journal of Social and Clinical Psychology*: Vol. 24, No. 2, pp. 172-190.
- Joiner, T. E., & Wagner, K. D. (1995). Attributional style and depression in children and adolescents: a meta-analytic review. *Clinical Psychology Review*, 15, 777-798.
- Kashdan, T. B., & Roberts, J. E. (2007). Social anxiety, depressive symptoms, and post-event rumination: Affective consequences and social contextual influences. *Journal of Anxiety Disorders*, 21, 284–301
- Khodayarifard, M. (1996). Students and their parent's attributional style, trait anxiety, and socio-demographic factors as predictors of teachers' perceptions of academic performance in late childhood
- Krucik, G. (2012, March 29). *Depression and college students*. Retrieved from <http://www.healthline.com/health/depression/college-students>
- Kumar, G.S., Jain, A., & Hegde, S. (2012). Prevalence of depression and its associated factors using Beck Depression Inventory among students of a medical college in Karnataka. *Indian journal of Psychiatry*, 54 (3) 223-226.
- Lacoviello, B. M., Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., & Hogan, M. E. (2007). The role of cluster B and C personality disturbance in the course of depression: a prospective study. *J Pers Disord*, 21: 371–383.
- Malik, S., & Sadia, A. (2013). Gender differences in self-esteem and happiness among university students International *Journal of Development and Sustainability*, 2(1) 445-454
- Mahmoud, J. S. R., Staten, R. T., Hall, L. A., & Lennie, T. A. (2012). The relationship among young adult college students' depression, anxiety, stress, demographics, life satisfaction, and coping styles, *Issues in Mental Health Nursing*, 33(3), 149–156.
- Meins, E., McCarthy-Jones, S., Fernyhough, C., Lewis, G., Bentall, R. P., & Alloy, L.B. (2012). Assessing negative cognitive style: Development and validation of a Short-Form version of the Cognitive Style Questionnaire. *Personality and individual differences*, 52(5-2): 581–585. doi: 10.1016/j.paid.2011.11.026
- Mumford, D.B., Tareen, M.R., & Bhatt, M.A.Z. (1991). An investigation of "functional" somatic symptoms among patients attending hospital medical clinics in Pakistan: II. Using somatic symptoms to identify patients with psychiatric disorders. *Psychosom Res*, 35:257-264.
- Nordin, N. M., Talib, M. A., & Yaacob, S.N. (2009). Personality, Loneliness and Mental Health among Undergraduates at Malaysian Universities. *European Journal of Scientific Research*, 36(2), 285-298.
- Pearson, R.M., Heron, J., Button, K., Bentall, R.P., Fernyhough, C., Mahedy, L., Bowes, L., Lewis, G. (2015). Cognitive styles and future depressed mood in early adulthood: The importance of global attributions. doi:10.1016/j.jad.2014.08.057
- Radloff, L.S. (1977). The CED-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Reavely, N.J., McCann T.V., & Jorm A.F. (2012). Mental Health literacy in higher education students. *Early intervention in psychiatry*, 6, 54-52.
- Reyes-Rodriguez, M. L., Rivera-Medina, C., Camara-Fuentes, L., Suarez-Torres, A., & Bernal, G. (2012). Depression symptoms and stressful life events among college students in Puerto Rico. *Journal of Affective Disorder*. doi: 10.1016/j.jad.2012.08.010
- Reynolds, E.K., MacPherson, L., Tull, M.T., Baruch, D.E., & Lejuez, C.W. (2011). Integration of the brief behavioral activation treatment for depression (BATD) into a college orientation program: Depression and alcohol outcomes. *Journal of Counseling Psychology*, 58 (4), 555-564. doi: 10.1037/a0024634
- Robinson, C.J., Ladd, J., Welowitz, J., Blaney, P.H., & Diaz, R. (1994). The personal style inventory: Preliminary validation studies of new measures of sociotropy and autonomy. *Journal of psychopathology and behavioral assessment*, 16, 277-300.
- Rush, A.J., Trivedi, M.H., Ibrahim, H.M., Carmody, T.J., Arnow, B., Klein, D.N., Markowitz, ...Keller M.B. (2003). The 16-item quick Inventory of depressive symptomatology (QIDS) clinician rating (QIDS-c) and self-Report (QIDS-SR): a psychometric evaluation in patients with chronic major depression. *Biological psychiatry*, 54:573-583.
- SarAbadaniTafreshi, L. (2006). The relationship between academic achievement, Self-Esteem and Gender with Anxiety of Computer among Postgraduate of Students in University of Tabeiyat Moallem Tehran. University of Tabeiyat Moalem, Theran, Iran

- Segerstrom, S.C., Roach, A.R., Evans, D.R., Schipper, L.J., & Darville, A.K. (2010). The structure and health correlates of trait repetitive thought in older adults. *Psychology and Aging, 25*, 505-515
- Segerstrom, S.C., Tsao, J.C.I., Alden, L.E., & Craske, M.G. (2000). Worry and rumination: Repetitive thought as a concomitant and predictor of negative mood. *Cognitive Therapy and Research, 24*, 671-688.
- Seim, R.W., & Spates, C. R. (2010). The prevalence and comorbidity of specific phobias in college students and their interest in receiving treatment. *Journal of College Student Psychotherapy, 24*, 49-58.
- Slavik, S. & Croake, J. (2006). The individual psychology conception of depression as a stress-diathesis model. *The Journal of Individual Psychology, 62*(4), 417-428.
- Sidana, M., Kishore, J., Gulati, D., Jiloha, R., & Arand, T. (2012). Prevalence of depression in students of a medical college in New Delhi: a cross-sectional study. *Australian Medical Journal, 5*(5):247–250.
- Stewart-Brown, S., Evans, J., Patterson, J., Petersen, S., & Doll, H. (2000). The health of students in institutes of higher education: an important and neglected public health problem? *J Public Health Med, 22*(4): 492–499.
- Thapar, A., Collishaw, S., Pine, D.S., & Taper, A.K. (2012). Depression in adolescence. *Lancet, 379* (9820), 1056–1067.
- Tomoda, A., Mori, K., Kimura, M., Takahashi, T., & Kitamura, T. (2000). One-year prevalence and incidence of depression among first-year university students in Japan: a preliminary study. *Psychiatry Clin Neurosci, 54*(5): 583–588.
- Tosevski, D.L., Milovancevic, M. P., & Gajic, S.D. (2010). Personality and psychopathology of university students. *Curr Opin Psychiatry, 23*, 48–52.
- Waghachavare, V.B., Dhumale, G.B., Kadam, Y.R., & Gore, A.D. (2013). A Study of Stress among Students of Professional Colleges from an Urban area in India. *Sultan Qaboos University Med J, 13*(3), 429-460
- Weiner, B. (2000). *Human Motivation : Metaphore, Theories and Research*. Sage, Newbury Park, CA.
- World Health Organization (2008). World Health Organization. Global Burden of Disease 2004 update. Geneva.
- Xiaoting, S., Wei, H., & Nan, Z. (2010). Study on Relationships among Negative Cognitive Style, Remination and Depressive Mood. *China Journal of Health Psycholog, 06*.
- Yakunina, E. S., Weigold, I. K., Weigold, A., Hercegovac, S., & Elsayed, N. (2013). International students' personal and multicultural strengths: Reducing acculturative stress and promoting adjustment. *Journal of Counseling & Development, 91*, 216-223.
- Zeinvand, A. (2006). Relationships between self esteem, social support and student's educational progression in a high school in Dareh Shar city in Iran. University of Tabiat Moallem, Theran, Iran.