

# Stress, Perceived Social Support, Coping Capability and Depression: A Study of Local and Foreign Students in the Malaysian Context

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**Abstract**—The aim of this study is to investigate the effect of perceived social support and stress on the coping capability and level of depression of foreign and local students in Malaysia. Using convenience sampling, 200 students from three universities in Selangor, Malaysia participated in the study. The results of this study revealed that there was a significant relationship between perceived social support and coping capability. It is also found that there is a negative relationship between coping capability and depression. Further, stress and depression are positively related whereas stress and coping capability are negatively related. Lastly, there is no significant difference for the stress level and coping capability amongst local and foreign students.

**Keywords**—Coping capability, depression, perceived social support, stress.

## I. INTRODUCTION

LEAVING comfort zone at home to attend university can be stressful to students. This is because they are presented to a new social and educational environment. It could be even more stressful in the case of the international students who have to study away from their country of origin [1]. With globalization, number of international students opted to study overseas has increased significantly. For example, in the United States alone, number of foreign student has increased from 134, 959 in 1970 to 582,996 in 2002. Asian students comprised more than half of the international students in the United States, followed by Europeans as the second largest group [2].

Since Malaysia has become a regional hub of educational excellence in recent years, the local newspaper, The Star [3] has highlighted that the population of international students in peninsular Malaysia has been drastically increased. The Immigration Department, Higher Education Ministry Marketing and International Education Division reported that there was a total of 65,000 international students studied in the international schools, either private or public institutions of higher education in 2007 as compared to 48,000 in 2006 [3].

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While studying abroad can be beneficial to students, the uncertainty in the new environment may cause frustration and dissatisfaction. This could be resulted from language barriers, cultural differences, discrimination and loss of social support. As a result, it gives rise to high level of anxiety, stress, confusion and even depression. This, indeed, affects the students' psychological wellbeing [4]. Similarly, Owie [5] found that foreign students may experience more uncomfortable adjustment to their campus life as compared to their native-born counterparts or host students due to difficulties in adjusting themselves in a new culture.

A review of the literature shows that many studies have been conducted to examine the issue of stress among foreign students [6]. However, these studies are mainly centered on foreign students residing in the Western countries particularly in the United States and Canada. A study in the Asian context such as Malaysia is essential as a large number of foreign students are currently embarking their studies in Malaysia. Hence, research findings of such a Malaysian study could provide useful insights to parents, counselors and educators in Malaysia in identifying pre-emptive measures and remedies in helping students that are suffering from high level of stressors, anxiety and depression. The results of the present study could also contribute towards the psychological literature since limited studies have been conducted in the Asian context. Specifically, the present study aims to examine whether stress and perceived social support networks could have any effect on students' coping capability and depression. In addition, the difference in the level of stress and coping capability among local and foreign students would also be compared.

### A. Stress

Stress occurs when one is perceived that he/she is confronted with harm, danger or challenge that may exceed his/her ability to deal with it [7]. This is particularly applicable in the case of the international college students as they are lacking of knowledge about the host culture, customs and lifestyle. Hence, it is not a matter of surprise that they may find such a situation to be stressful in view of the difficulties in adjusting themselves to the new environment.

### B. Perceived Social Support

Perceived social support is defined by Hale, Hannum and Espelage [8] in different domains to include emotional support, appraisal and affirmation, informational assistance, intimacy, comfort and physical affection. In line with Hale, Hannum and Espelage, Eldeleklioglu [9] regarded perceived social support as having someone to offer help, when such assistant is needed.

### C. Coping Capability

Coping capability is known as the process of handling stressful situations [10]. According to Deniz[10], there are several common kinds of behaviors to cope with stress. For instance, when one is confronted with a stressful situation, one may start smoking cigarettes, eating, drinking alcohol or any combination of those.

### D. Depression

Ceyhan, Ceyhan and Kurtyilmaz [11] defined depression as an emotional state that cause one to lose interest and pleasure in carrying out his/her usual activities. Furthermore, depressed individual would demonstrate several core symptoms such as sadness, guilt and worthlessness feelings as well as loss of appetite and sleep. Additionally, Diagnostic and Statistical Manual (DSM) IV-TR defined depression as the presence of at least one core symptom lasting at least for two weeks. Kessler et al. [12] and Lexis et al. [13] found various subsidiary symptoms including decreased ability to experience pleasure may come after the core symptom.

## II. LITERATURE REVIEW

### A. Stress, Perceived Social Support as Predictors of Coping Capability and Depression

Cohen and Wills [14] believed that perceived social support may act as buffer against stress as it prevents one to perceive a situation to be a stressful one. Thus, social support is crucial in providing remedies to a stressful and difficult situation since it minimizes its apparent importance. In line with Cohen and Wills, Friedlander, Reid, Shupak and Cribbie [15] found perceived social support as an important protective factor that may help students in handling stress. Their study also reported that perceived social support obtained from friends and family tends to increase one's personal, social and overall adjustment.

Using adolescents as participants, the study of Seiffge-Krenke and Klessinger [16] found that coping capability was correlated with depression. Their study also found that lower level of depression after the adoption of constructive coping capabilities such as discussing with parents. Buck [17] argued that there was relationship between stress and level of depression. For example, it is essential to note that individuals who failed to meet environmental challenges often lead to high level of stress and resulted in depression. In addition, Lazarus [18] explained that knowing that we have coping capability seems to be essential; we do not actually need to engage in the coping mechanism in order to reduce the stress level.

### B. Stress Levels and Coping Capability of Local and Foreign Students

A study conducted by Ebbin and Blankenship [19] found that international students experience more forceful stress than their fellow (local) American students. Similarly, Misra, Crist and Burant [20] reported that international students are confronted with more stress resulted from frustration due to delays, insufficient resources, failure to achieve goals, and social outcasts feeling. Perhaps, competition, deadlines, work, responsibilities and overload give extra pressure to them.

Yeh and Inose[4] revealed that international students often reported greater level of stress which required personal and mental concerns. Personal concerns cover the aspects of language barriers, academic difficulties, financial difficulties, and loss of social support. Meanwhile concern on mental distress includes depression, homesickness, alienation and loneliness. Unsolved adjustment problems subsequently may affect students' academic performance, psychological and physical health, level of satisfaction with their cross-cultural experiences, and coping capability relative to students of the host country [21].

## III. RESEARCH HYPOTHESES

Furthering education to university level is a positive development for most young people. However, the psychological effects are different among individuals. Some may feel extremely stressful but some may even enjoy it. Social support networks seem to serve as an important means to regulate student's stressors. In addition, stress and perceived social support also seem to predict student's level of depression and level of coping in a new environment. Hence, this study put forward the following six hypotheses:

1. There is a significant relationship between perceived social support and coping capability; the higher the level of perceived social support, the higher the level of coping capability.
2. There is a significant relationship between coping capability and depression; the higher the level of coping capability, the lower the level of depression.
3. There is a significant relationship between stress and depression; the higher the level of stress, the higher the level of depression.
4. There is a significant relationship between stress and coping capability; the higher the level of stress, the lower the level of coping capability.
5. There is significant difference between local and foreign students' levels of stress; foreign students would encounter more stress compared to local students.
6. There is significant difference between local and foreign students' levels of coping capability; local students would have higher coping capability compared to foreign students.

## IV. METHOD

### A. Research Design

A correlation analysis was adopted to investigate the interrelationships among stressors, perceived social support, coping capability and depression of university students. In addition, T-test was used to determine the difference of stress level and coping capability between local and foreign students.

### B. Sampling

The sample comprised of 200 students, primarily from three universities located in Bandar Sunway, Selangor. There were 100 local and 100 foreign students. The foreign population comprised of students from various parts of the world such as

Pakistan, India, Bangladesh, Maldives and Sri Lanka. Participants (sample students) recruited for this study were between the age of 18 to 25 with an average age of approximately 21. Convenience sampling was used in the study. Profile characteristics of the participants are shown in Table 1. The sample consisted of 62 (31%) males and 138 (69%) females. In terms of educational level, 54 (27%) were at the pre-university level, while 40 (20%) of participants were at the diploma level and another 106 (53%) were pursuing their degree.

TABLE I  
DESCRIPTIVE STATISTICS OF STUDENTS' PROFILE

Variable	College Students (n=200)
Age (range in years)	(18-25)
Mean age	20.56 (SD= 1.987)
Nationality	
Locals	100 (50.0%)
Foreigners	100 (50.0%)
Gender	
Male	62 (31.0%)
Female	138 (69.0%)
<i>Educational level</i>	
Pre-University/equivalent	54 (27.0%)
Diploma/equivalent	40 (20.0%)
Degree/equivalent	106 (53.0%)

### C. Measurement Instruments

The questionnaire comprised of four well validated and reliable measurement instruments. The instruments are the Stress-Arousal Checklist, Perceived Social Support Family and Friend Scale, Adolescent Coping orientation for Problem Experiences and Self-Rating Depression Scale.

#### 1. Stress-Arousal Checklist (SACL)

The Stress-Arousal Checklist (SACL) [22] consists of 30 items (adjectives) commonly used to describe one's psychological experience of stress. The respondents are required to describe their feelings by choosing one of the adjectives that best describes their feelings at that particular moment. The scaling used required the respondent to choose a double plus (+ +) if that adjective describes their feelings. Meanwhile, the choice of plus (+) represents that the word (adjective) more or less describes their feelings. If they do not understand the word, or they cannot decide whether or not it describes how they feel, they should circle the question mark (?). Respondents are required to circle the minus (-) if the word does not describe the way they feel. The sum of negative and positive adjectives represents the scores, which range from 0 to 18; arousal scores from 0 to 12. Higher scores reflect more stress and arousal.

#### 2. Perceived Social Support Family and Friend Scale (PSS-Fr and PSS-Fa)

The PSS-Fr (Friends) and PSS-Fa (Family) are two 20-item instruments designed to measure the degree to which one perceives his/her needs for support as fulfilled by friends and family [23]. For each statement, there are three possible answers: Yes, No and Don't know, hence the respondent is required to circle the appropriate answer. The scale scores are the total of item scores and range from 0 to 20 for the PSS-Fr and PSS-Fa. High scores reflect more perceived social support.

#### 3. Adolescent Coping orientation for Problem Experiences (A-COPE)

The Adolescent Coping orientation for Problem Experiences (A-COPE)[24] is a 54-item instrument designed to measure the behaviors adolescents find helpful in managing problems or difficult situations. Participants are required to respond according to a 5-point scale ranging from "1" (implies "Never"), to "2" (Hardly ever), "3" (Sometimes), "4" (Often) and "5" (Most of the time). Summing the respondent's score for each of the items would derive an adolescent's coping score for the subscales of "ventilating feelings", "seeking diversions", "developing self-reliance", "developing social support", "solving family problems", "avoiding problems", "seeking spiritual support", "investing in close friends", "seeking professional support", "engaging in demanding activities", "being humorous", and "relaxing". All items from each subscale are summed to give an overall coping score.

#### 4. Self-Rating Depression Scale (SDS)

The Self-Rating Depression Scale (SDS) [25] is a 20 items instrument that has been developed to examine the three basic aspects of depression: (1) pervasive affect, (2) physiological concomitants and (3) psychological concomitants. There are 10 items in SDS that have been worded symptomatically positive and 10 items symptomatically negative. Respondents are required to give rating for each of the 20 items on a sliding scale as to how it applies to them at the time of testing. The scale of SDS are ranged from '1' being lowest frequency of symptoms occurrence to "4" being highest frequency of symptoms. (Note that there are several items are scored in reverse). Hence, score of "1" represent "Some or a little of the time", "2" implies "Some of the time", "3" for "Good part of the time" and "4" being "Most or all of the time". The authors suggests the following clinical cutting scores to estimate the degree of depression: 50 to 59 (mild to moderate); 60 to 69 (moderate to severe); 70 and over (severe). SDS is scored by summing the values obtained on each item to produce a raw score ranging from 20 to 80. An SDS index is produced by dividing the raw score by 80 to produce a range of .25 to 1.00 (higher scores equal greater depression).

#### D. Procedure

Participants of this study were selected from both local and foreign students. Questionnaires comprised of four measurements instruments as mentioned above were distributed to them. In addition, participants were required to fill in a consent form and demographic sheet. Confidentiality of the participants was assured and it was an anonymous

survey. Besides, the participants were not pressurized to participate in the study and they were informed that they could exit from the research study (survey) at any point of time. On average, the questionnaire took around 25 to 30 minutes to be completed. Some of the questionnaires were collected on the spot upon completion whereas the others were collected after a day or two.

## V. RESULTS

### A. Stress, Perceived Social Support as Predictors of Coping Capability and Depression

Matrix correlation was applied to investigate the relationship between social support and coping capability. Results showed significant positive relationship between perceived social support and coping capability [ $r = .379$ ,  $p < .01$ ]. This implies that the higher perceived social support an individual receives, the higher the level of coping capability. Besides, the results showed a negative relationship between coping capability and depression [ $r = -.210$ ,  $p < .01$ ]. This implies that higher level of coping capability, the lower the level of depression. Relationship between stress and depression is also analyzed using matrix correlation. Results showed a strong positive correlation between stress and depression [ $r = .990$ ,  $p < .01$ ]. This implies that higher the level of stress, the higher the level of depression. In addition, the results showed a negative relationship between stress and coping capability [ $r = -.192$ ,  $p < .01$ ], which indicated that the higher the level of stress, the lower the coping capability of the individual. Details of all the mentioned findings are presented in Table II.

TABLE II  
CORRELATION MATRIX DEPICTING RELATIONSHIPS BETWEEN STRESS, PERCEIVED SOCIAL SUPPORT, COPING CAPABILITY AND DEPRESSION

	CC	PSS	Str	Dep
Perceived Social Support (PSS)	.379**			
Stress (Str)	-.192**	.018		
Depression (Dep)	.210**	.002	.990**	
Coping Capability (CC)	.114	.179*	-.177*	-.179*

Note: \* $p < .05$ , \*\* $p < .01$

### B. Comparison of Students on Coping Capability and Stress Level

Independent sample t-tests were conducted to examine whether there are differences in coping capability and stress levels of local and foreign students. Result showed no significant difference in coping capability for local students (with mean (M) equal 171.03, standard deviation (SD) equal 20.54) and foreign students (M= 170.27, SD= 17.05), while  $t(198) = .285$ ,  $p > .05$ . Lastly, the results also showed no significant difference in stress levels between locals (M= 14.72, SD= 5.38) and foreign students (M= 13.87, SD= 4.76), with  $t(198) = 1.184$ ,  $p > .05$ . These results are presented in Table III.

TABLE III  
MEAN SCORES AND STANDARD DEVIATIONS FOR MEASURES OF COPING CAPABILITY AND STRESS LEVELS FOR LOCAL AND FOREIGN STUDENTS

	Locals		Foreigners	
	M	SD	M	SD
Coping Capability	171.03	20.54	170.27	17.05
Stress	14.7	25.38	13.87	4.76

Note: M = mean & SD = standard deviation

## VI. DISCUSSION

This study aims to explore whether stress and perceived social support have significant roles in effecting coping capability and depression of local and foreign students in Malaysia. Thus, the study hypothesized that there would be a significant relationship between perceived social support and coping capability while relationship between coping capability and depression is expected to be negative. In addition, this study hypothesized that there would be a significant relationship between stress and depression as well as stress and coping capability will be negatively correlated, such that the higher the level of stress, the lower the level of coping capability. Finally, it is hypothesized that foreign students would encounter more stress and have more difficulty adjusting into a new surrounding compared to local students.

### A. Perceived Social Support vs. Coping Capability

The findings of the study supported the first hypothesis that there is a significant positive relationship between perceived social supports and coping capability. This implies that the students' have a better coping capability when they received more social support. Generally, the findings of the present study are in line with various previous studies in the literature. For example: Furnham and Shiekh [26] found that perceived social support has a direct and buffering effect on the stressors associated with living in a foreign culture while Coffman and Gilligan [27] indicated that supportive relationships enabled students to cope better in the college environment. Likewise, other studies such as Meleis [28] argued that social support network served as a means of social contact and a reinforcement of norms to deal with stressful situations. Likewise, Misra et. al [20] found that contact with one's own culture such as friends and family were particularly helpful in reducing academic stressors and their consequent reactions. Therefore, results of this study are consistent with the notion that perceived social support does have an impact on an individual's coping capability.

### B. Coping Capability vs Depression

In this aspect, the study found a negative relationship between depression and coping capability. Such a finding implies the higher coping capability; the lower the level of depression can be expected. Thus, the second hypothesis is supported. This finding is consistent with the study of Dyson and Renk [28] and Seiffge-Krenke and Klessinger [16] as they found that individuals who are having difficulties in alleviating or coping with stress are more likely to experience the feelings of depression which include hopelessness and sadness. In addition, Seiffge-Krenke and Klessinger suggested that the coping capability that based on the beliefs that things will work out play an important role in reducing that level of depression.

### C. Stress vs Depression

Findings of this study also revealed a strong positive correlation between stress and depression and the third hypothesis is supported. This is in agreement with the previous findings of Dyson and Renk [29]. Their study showed that the high levels of stress were related to high levels of depressive symptomatology. The results of present study are also in parallel with Buck [17] who found that high level of stress would have a higher tendency to lead to depression. Buck proposed that individuals need to restructure what they are doing and set new goals as to initiate adoptive behaviours.

### D. Stress vs Coping Capability

Moreover, the present study found that stress and coping capability were negatively correlated, the fourth hypothesis is supported. This means that the higher the level of stress, the lower the level of coping capability. Hence, it supports the assertion of Deniz [10] who claimed that when the intensity of stress is high, mood disorder is likely to occur. The results of present study are also consistent with the finding of Lazarus [18] and LeDoux [30] who found that if the coping capability of individuals is good, the stress level would decrease. Hence, this implies that coping capability will be greatly reduced as a result of sombre moods.

### E. Stress Levels between Local and Foreign Students

The results of the present study indicated that there was no significant difference in the stress levels between local and foreign students. Thus, the fifth hypothesis is rejected. It was hypothesized that foreign students are required to face the dilemma of adapting to a new culture. A plausible explanation given to such a finding in the present study may be due to the fact that many of the local students' are also staying away from home in the period of their studies. Hence, the local students are likely to be equally stressed as they didn't live with their family and therefore required to cope on their own. In a nutshell, the local students too would have to deal with financial problems, accommodation difficulties, food and so on just as the foreign students may have faced. In addition, completing assignments, meeting deadlines, pleasing parents and reaching expectations are major stressors for every student who attends university, regardless of local or foreign. Therefore, it is perhaps rational to state that it is not only the foreign students who suffer in a college environment, but the local students also find it difficult to cope with such a stressful setting.

Perhaps, the results obtained in this study differed from what was hypothesized because this study did not specify the type of stress that was being measured (i.e; acculturative stress or stress in general). Rather, the study tested for stress as a whole. Thus, it did not differentiate stress which is normal for every student to undergo (e.g., meeting deadlines) with specific stress due to changes of comfort zone. Additionally, it also should have taken into consideration of cross cultural stress and the difficulties in adjusting to a new culture. This may be one of the reasons to justify the results of the present study from what have been hypothesized.

### F. Coping Capability of Local and Foreign Students

The results from this study did not support the sixth hypothesis claiming that the local students have relatively higher coping capability as compared to the foreign students. Indeed, it is revealed that there are no significant differences in coping capability between the two groups. The disparity of findings between the present results and previous studies regarding coping capability could be due to the majority of the studies of the past centered on the Western international students where white and non-white disparities make a big difference to their society. For instance, Poyrazli and Lopez [6] postulated that non-White U.S students would experience feelings such as alienation and isolation because of their entrance into a new culture where the White, middle-class values are the norm. Cultural shock was resulted from alienation experienced by non-White students in the White-centred university setting.

Conversely, the present study was conducted in Malaysia i.e. an Asian country and majority of foreign participants for this research were from Asian countries as well. Perhaps, a relatively foreigner-friendly culture from Asian society may have eased the coping difficulties of foreign students, making them able to blend into the Malaysian culture and its living environment. The use of English medium in their study, road sign and various aspects of daily living may be another factor in helping foreign students to cope well.

Another possible explanation why foreign students coped better could be due to the fact that these particular students have set an initial expectation on different environment in foreign soil. Initially, foreign students moved to another country to pursue their studies with a high degree of commitment. These students were aware that once they moved out of their home country, they would have to be independent and coped on their own. Therefore, they may have adopted coping strategies at the initial stage and mentally prepared to overcome the stressors during their university life. According to Moroi [31] the intensity of feeling lonely for international students diminished as students' expectations and patterns of life changed. Meanwhile, Klomegah and Yao [32] claimed that contacts among students from the same geographical regions helped students to experience a sense of belonging. Thus, even though foreign students were away from home, they were able to cope well. They learned to cope to extend their social circles and met new friends. Thus, this may be another reason why these foreign students seemed to cope quite well without significant difference to the local students.

## VII. STRENGTHS, LIMITATIONS AND FUTURE RESEARCH

Most of the previous studies on stress, coping capability amongst local and foreign students seem over-focused to the West in relative to Eastern world. Therefore, the study that based on respondents studying in eastern countries provided significant contribution to the existing literature. Furthermore, this study also weighted into the robustness to cover students from various nationalities, rather than just focused on one. Equal numbers of subjects were allocated for both groups, local and foreign students (N=100) so that comparison was more accurate amongst the two groups. However, none of research study is free from limitation, including the findings of

the present study. First of all, this study was based on a self-reported questionnaire and hence respondents may have answered questions in a socially desirable manner. As the questionnaire was lengthy, participants may not be motivated to provide the appropriate answers, thus may cause the results being skewed. Hence, future research may be more beneficial if qualitative aspect is incorporated, whereby researchers could interview foreign and local students regarding their stressors. By using qualitative research, future findings would be able to obtain additional information from the respondents.

Most of the previous studies focused on students entering university for the first time. However, this particular research has wider scope that taken into account of students who were at the pre-university level, first, second and third year. On one hand, wider scope gives the benefit of comprehensiveness. Conversely, this may have been the cause to the variation in results as first year students' would naturally be more stressed. Thus, this group of students may skew the findings from the second or third year students. Future research could benefit from overcoming this limitation with various ways. Example is focusing on two groups of university students, i.e.; first year and third year students and then the comparison of these two groups. This will help indentifying which group of students is stressed out.

It is acknowledged that majority of participants took part in the survey were females (69%). This disparity in males versus females may have resulted in the findings being obscured. Therefore, it would be helpful if future research controlled an equal number of females and males in the study. Larger sample size may beneficial in future research too. In addition, this study was not longitudinal; hence it provided only a snapshot of the issues faced by these students. Future research of similar topic would help by taking on a long term basis. By doing so may provide a broader representation regarding the issues and stressors that local and foreign students faced in university.

#### VIII. IMPLICATIONS OF STUDY

Counselors and other individuals who deal with students at university can benefit from this study. As it is evident that both foreign and local students are stressed out, it is vital that university personnel provide greater services in order to tackle these stressors. For instance, effort to increase inter-connectivity between local and foreign enables students to gather and discuss their problems regarding various issues that may help in reducing their stress. Besides, a buddy system could be implemented whereby each student at university has a mentor to guide and advise them if they faced with stressful problem.

#### IX. CONCLUSION

As conclusion, university students, regardless of local or foreign may encounter numerous stressors along their study life. The stressors may vary from meeting deadlines to reaching expectations and coping in a new environment. One of the highlights of this study is that local and foreign students are in fact stressed out. These findings called for measures to be taken to ensure that the needs of these students are met. In addition, as social support networks are important in

moderating stress, every possible action should be taken to expand social systems. It is hopeful that findings and implications from this study could help keep stressors faced by university students at a minimum level.

#### REFERENCES

- [1] Mori, S. C. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development*, 78, 137-144.
- [2] Tomich, P.C., McWhirter, J.J., & Darcy, M.U.A. (2003). Personality and International Students Adaptation experience. *International Education*, 33, 22-39.
- [3] The Star, Issue: 0020, 16 March 2008.
- [4] Yeh, C.J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly*, 14, 15-28.
- [5] Owie, I. (1982). Social Alienation Among Foreign Students. *College Student Journal*, 16, 163-165.
- [6] Poyrazli, S., & Lopez, M.D. (2007). An Exploratory Study of perceived discrimination and homesickness: A comparison of international students and American students. *The Journal of Psychology*, 141, 263-280.
- [7] Chen, C. P. (1999). Common stressors among international college students: Research and Counselling Implications. *Journal of College Counselling*, 2, 49-65.
- [8] Hale, C.J., Hannum, J.W., Espelage, D.L. (2005). Social Support and Physical Health: The Importance of Belonging. *Journal of American College Health*, 53, 276-284.
- [9] Eldeleklioglu, J. (2006). The Relationship between the Perceived Social Support and the Level of Depression and Anxiety in University Students. *Educational Sciences: Theory & Practice*, 6, 742-752.
- [10] Deniz, M.E. (2006). The Relationships Among Coping with Stress, Life satisfaction, Decision-making styles and Decision Self-Esteem: An Investigation with Turkish University Students. *Journal of Social Behavior and Personality*, 34, 1161-1170.
- [11] Ceyhan, E., Ceyhan, A.A., & Kurtayilmaz, Y. (2005). Depression among Turkish Female and Male University Students. *Journal of Social Behavior and Personality*, 33, 329-340. B. Smith, "An approach to graphs of linear forms (Unpublished work style)," unpublished.
- [12] Kessler, R.C., Chiu, W.T., Demler, O., Merikangas, K.R., & Walters, E. (2005). Prevalence, severity and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 617-27.
- [13] Lexis, M., Jansen, N., van Amelsvoort, L., van den Brandt, P., & Kant, I. (2009). Depressive complaints as a predictor of sickness absence among the working population. *Journal of Occupational and Environmental Medicine*, 5, 887-95.
- [14] Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- [15] Friedlander, L.J., Reid, G.J., Shupak, N., & Cribbie, R. (2007). Social Support, Self-Esteem, and Stress as Predictors of Adjustment to University Among First-Year Undergraduates. *Journal of College Student Development*, 48, 259-274.
- [16] Seiffge-Krenke, I., & Klessinger, N. (2000). Long-term effects of avoidant coping on adolescents' depressive symptoms. *Journal of Youth and Adolescence*, 29, 617-628.
- [17] Buck, R. (1999). The biological affects: A typological. *Psychological Review*, 106, 301-336.
- [18] Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, 46, 352-367.
- [19] Ebbin, A. J., & Blankenship, E. S. (1986). A longitudinal health care study: International versus domestic students. *Journal of American College Health*, 34, 177-182.
- [20] Misra, R., Crist, M., & Burant, C.J. (2003). Relationships among Life Stress, Social Support, Academic Stressors, and Reactions to Stressors of International Students in the United States. *International Journal of Stress Management*, 10, 137-157.
- [21] Wan, T., Chapman, D. W., & Biggs, D. A. (1992). Academic stress of international students attending U.S. universities. *Research in Higher Education*, 33, 607-623.

- [22] Mackay, C., Cox, T., Burrows, G., &Lazzerini, T. (1978). An inventory for the measurement of self-reported stress and arousal. *British Journal of Social and Clinical Psychology*, 17, 283-284.
- [23] Procidano, M.E. & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology*, 11, 1-24.
- [24] Patterson, J.M., &McCubbin, H.I. (1991). *Family Assessment Inventories for Research and Practice*. Madison, WI: University of Wisconsin.
- [25] Zung, W.K. (1965). A Self-Rating Depression Scale. *Archives of General Psychiatry*, 12, 63-70.
- [26] Furnham, A. & S. Shiekh. (1991). Gender, generation and social support correlates of mental health in Asian immigrants. *International Journal of Social Psychiatry*, 39, 23-33.
- [27] Coffman, D.L., & Gilligan, T.D. (2003). Social support, stress, and self-efficacy: Effects on students' satisfaction. *Journal of College Student Retention*, 4, 53-66.
- [28] Meleis, A. I. (1982). Arab students in western universities: Social properties and dilemmas. *Journal of Higher Education*, 53, 4, 439-447.
- [29] Dyson, R., &Renk, K. (2006). Freshmen Adaptation to University Life: Depressive symptoms, Stress and Coping. *Journal of Clinical Psychology*, 62, 1231 – 1244.
- [30] LeDoux, J. E. (1986). Sensory systems and emotion. *Integrative Psychiatry*, 4, 237-248.
- [31] Moroi, K. (1986). Loneliness induced by situational changes in lives of freshmen. *Japanese Journal of Experimental Social Psychology*, 25, 115-125.
- [32] Klomegah., & Yao, R. (2006). Social factors relating to alienation experienced by international students in the United States. *College Student Journal*, 40, 303-315.