Relationship Between Ego Resilience, Perceived Stress And Life Satisfaction Among Faculty Nursing Students.

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Abstract:

Background: Ego resilience works as a stress resistance mechanism. It reinforces the individual's ability to recover from negative emotional experiences and flexibly adjusts to stressful events which is essential to individual's well-being and life satisfaction. Having high level of ego resilience and successfully dealing with perceived stress are very important to heighten life satisfaction for every individual and more especially for nursing students as they are encountered with lot of stressors during their clinical experience.

Aim: This study aims to determine the relationship between levels of ego resilience, perceived stress, and degree of life satisfaction among Faculty Nursing Students, Damanhour University.

Design: A descriptive correlational design was followed in this study.

Subjects: A representative sample of 50% of the students (n=520) who were registered in the faculty of nursing, Damanhour University; during the academic year 2014-2015 was randomly selected using systematic random sampling method.

Tools: Socio-demographic and academic data Questionnaire, Connor-Davidson Resilience Scale (CD-RISC), Perceived Stress Scale (PSS), and Satisfaction with Life Scale (SWLS) were used.

Results: The study results revealed that there is a negative significant correlation between ego resilience and perceived stress (r=-0.51) and a positive significant correlation between ego resilience and life satisfaction (r=0.39). There is a negative significant correlation between perceived stress and satisfaction with life (r=-0.47). **Conclusion**: Increased level of Ego resilience decreases the degree of perceived stress among Faculty Nursing Students, Damanhour University and it is positively associated with their life satisfaction.

Recommendation: Based on results, developing and enhancing the students' level of ego resilience should receive more attention to produce graduate professional nurses who are not only academically and clinically competent, but also who are able to adapt to workplace adversities.

Keywords: Ego resilience, Perceived-stress, and Life satisfaction.

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I. Introduction

The concept of resilience or ego resilience has drawn the attention of many psychologists and behavioral scientists since the middle of the twentieth century ⁽¹⁻³⁾. Ego-resilience has been defined in many ways. Luthar et al (2000) defined ego resilience as an active process incorporating positive adaptation within the context of serious harsh conditions ⁽⁴⁾. Connor and Davidson (2003) defined resilience as a multidimensional representative that fluctuates with context, time, age, gender, and cultural origin, as well as different life circumstances. It is not a personality trait, but a shielding factor that guides an individual to succeed in perplexing events and reduces the effect of threatening conditions ⁽⁵⁾. Ahern's (2006) defined resilience as a process of adaptation to risk that integrates personal characteristics, family and social support, and community resources ⁽⁶⁾. Furthermore, Block (2004) conceptualized ego-resilience as central personality constructs for understanding motivation, emotion, and behavior⁽⁷⁾.

Individuals with high resiliency have personal qualities such as an internal locus of control, empathy, constructive self-image, hopefulness, an ability to consolidate daily responsibilities, and the ability to adjust effectively by reacting flexibly to varying situational needs⁽⁸⁾. The concept of resilience has a strong importance during the adolescence stage with its ever changing emotional states and responses. Within the study of adolescents' resilience, four models have been recognized that are namely Casita Model, Youth Resilience Framework, Ahern's Model of Adolescent Resilience, and The Adolescent Resilience Model (ARM).**Casita**

Model highlighted the elements of resilience which are namely fundamental acceptance of the person, the presence of social network, capacity to discover sense, having meaning and coherence, self esteem, skills and competencies, constructive humors, and other experiences to be discovered ⁽⁹⁾. Youth resilience framework was established to address the individual and socio-cultural threats, and protective factors that could stimulate or hamper both positive and negative consequences in adolescents. The model proposed that adolescents can be taught to access and mobilize their protective factors to offset risks ⁽¹⁰⁾. Resilience is denoted by the interface between risk factors (susceptibility) and shielding resources (protection) which are present throughout one's life. Ahern's Model of Adolescent Resilience is an adaptation of the youth resilience framework that was modified by including intervention steps. The proposed model of adolescent resilience is on a range with one pole including risk (internal and external aspects) and the opposite pole including protection (individual and socio-cultural). Resilience can accordingly be conceptualized as the product of the triadic influences of risk, protection, and interventions ⁽⁶⁾. These interventions could include; minimizing health risk behaviors, decreasing risk factors, enhancing shielding factors, building on strong points and properties, developing chances to improve skills, and improving access to quality health care. In addition, Ahern's adaptation model obviously designates the probable interactions of the internal and external influences as well as links between the individual, family, and community ⁽¹¹⁾. The Adolescent Resilience Model (ARM) is a reworked copy of Ahern's model to grow interventions based on the experiences and perceptions of adolescents and their families, to improve resilience and quality of life outcome ⁽¹²⁾.

Resilience assists healthy, well-adjusted individuals to cope better with everyday hassles, preparing them for future challenges, and possible adversity ⁽¹¹⁾. Ego resilient individuals would experience lower levels of perceived stress and would use more effective coping strategies to handle such stress ⁽¹³⁾. Stress can be provoked by any situation that creates frustration, anger, or anxiety. Everyone can comprehend situations in different ways and has coping skills that are not identical with those of others. Consequently, no two people will react in the same way to a given situation ⁽¹⁴⁾. Cognitive appraisal is crucial to the stress and coping process, it decides how the situation is perceived and therefore works as a crucial mediator between the event and the outcome ⁽¹⁵⁾. People perceive stress when any event stimulates undesirable physiological and cognitive distress in an individual that go beyond his or her emotional and behavioral repertoire intended to minimize the destructive effects of external stressors ⁽¹⁶⁾.

Perceived stress is defined as the individual's reaction to life proceedings that could be perceived as stressful such as divorce, poverty, and aggressive communities ⁽¹⁷⁾. It was manifest that stress perception is determined by the individual's stage of development, life experience, personality, and coping tactics ⁽¹⁸⁾. Researchers reported that there was a statistically significant opposite relationship between ego resilience and perceived stress among students. Thus, ego-resiliency works as a stress buffering mechanism as it stimulates positive adaptation when the person is challenged by numerous stressors ^(19–21).

University students are going through the critical time of adolescence; therefore, stress in university student's life is an important concern of recent studies ^(19, 22). Nursing students not only face the same developmental challenges and stressors as other college students, but also experience unique stressors that may contribute to increased risk for negative outcomes ⁽¹¹⁾. For instance, the clinical experience of nursing courses may include many sources of stress such as caring for dying patients, struggles with other nurses or staff members, uncertainty about personal clinical proficiency, fear of failure, making rapport with patients, the nature of clinical surroundings, work burden, and concerns about guaranteeing quality nursing care ⁽²³⁻²⁵⁾. Exposure to these unique stressors can affect their academic life in terms of memory problems, inability to concentrate or even having physical problems that may lead to academic failure ⁽²³⁾.

People, who adjust effectively to stress, changes, and demands of the environment, could possess less negative emotions in the face of difficulties and are satisfied with their overall life ⁽³⁾. Researches suggested that resilience appears to be particularly significant to adolescents' life satisfaction that mirrors conscious inner pleasant experiences which inspire them to pursue their objectives ⁽²⁶⁻²⁸⁾. Life satisfaction helps individuals' better coping with their difficulties, accepting new responsibilities and adapting to the changes around them ⁽²⁹⁾. People, who are satisfied with their life, feel good about themselves, tend to be happier, open-minded, creative thinker and treat others better ⁽³⁰⁾.

Helping students to live a fulfilling, and satisfactory life is of great importance ⁽³⁾. In the process of preparing university nursing students for future professional responsibilities, ego resilience is a major ingredient for success. Future nursing professionals, who will act as health care providers in the community, should master the ability to cope flexibly with stress, anxiety, and life challenges ⁽³¹⁾. Increased resilience could be useful in

helping them confidently face challenges; successfully move forward, and beneficially managing their future professional life ⁽³⁰⁾.

Aim of the study:

The study aims to determine the relationship between levels of ego resilience, perceived stress, and degree of life satisfaction among Faculty Nursing Students, Damanhour University.

The research question:

Is there a relationship between levels of ego resilience, perceived stress, and degree of life satisfaction among Faculty Nursing Students, Damanhour University?

II. Materials And Method

Materials:

Research design: A descriptive correlational research design was used for the current study.

Setting: This study was conducted at the Faculty of Nursing, Damanhour University.

Subjects: A representative sample of 50% of the students (n=520) who were enrolled at the academic year 2014-2015 was randomly selected using systematic random sampling method. The epidemiology information statistic program (Epi- info 10) was used to estimate the sample size of this study based on using 5% acceptable error, 99% confidence coefficient, 50% expected frequency and population size of 1040.

Tools of the study: Four tools were used in this study:

Tool I: A Socio-demographic and academic data Questionnaire:

This tool was developed by the researchers after reviewing the related literature. It has two categories of data; **Socio-demographic** which include student's sex, age, residency, marital status, family income, social support and exposure to traumatic events. **Academic data** include items related to student's year of enrollment, students' grade in previous academic year and participation in academic/social activities.

Tool II: Connor-Davidson Resilience Scale (CD-RISC):

Connor-Davidson Resilience Scale (CD-RISC) was developed in $2003^{(5)}$ and translated into Arabic language by Tomah et al. at 2013. The scale proved to be valid ⁽³²⁾. It comprises 25 self-report statements to measure the level of resilience. Factor analysis of the scale yielded five factors consistent with the theoretical framework of ego resilience. Factor I (8 statements) describing personal competence, high standards, and tenacity. Factor II (7 statements) measuring trust in one's instincts, tolerance of negative affect, and strengthening effects of stress. Factor III (5 statements) related to positive acceptance of change, and security in interpersonal relationship. Factor IV (3 statements) related to controlling the environmental situations and factor V (2 statements) covering the spiritual influences. Responses are rated on a five-point likert scale ranging from (0) "not true at all" to (4) "true nearly all of the time". Total score is obtained by summing up all items. It ranges from 0 to100, with higher scores indicating greater resilience. Rating is based on how participants felt over the past month. Scores ranging from 0-19 represents very low level of resilience, scores ranging from 20-40 indicate low level of resilience, scores from 41-62 mean undetermined traits, scores from 63-83 denote high level of resilience, and scores from 84-100 reflects very high level of resilience. The scale has been tested by the original authors for internal consistency and reliability. Cronbach's alpha for the entire instrument was 0.93, and a coefficient correlation of 0.87.

Tool III: Perceived Stress Scale (PSS):

The Perceived Stress Scale (PSS) was developed by Cohen et al. (1983)⁽³³⁾ and modified by Cohen & Williamson in 1988 to include 10 items only⁽³⁴⁾. The responses are rated on a five-point Likert scale from (0) indicating "never" to (4) indicating "very often". Four statements from the scale are negatively stated and reversely scored. Total Score is obtained by summing up all item scores and is ranging from 0 to 40, with higher scores indicating greater perceived stress. Total scores from 0-7 are considered as having very low level of perceived stress, scores from 8-11 referred to low level of perceived stress, scores from 12-15 as average level of perceived stress, scores from 16-20 as high level of perceived stress, and scores from 21 and more reflect very high level of perceived stress. The scale has been tested for internal consistency and reliability by the original authors. Cronbach's alpha for the entire instrument was 0.87, and a coefficient correlation of 0.85.

Tool IV: Satisfaction with Life Scale (SWLS):

This scale was developed by Diener et al. (1985)⁽³⁵⁾. It is a 5-item scale to measure global cognitive judgments of one's life satisfaction. Subjects were asked to respond to the 5 items on a seven point Likert scale ranging from"1" (strongly disagree) to"7" (strongly agree). Total score is obtained by summing up all item scores, with a potential total score ranging from 5 to 35. Respondents with a score ranging from 5-9 are

considered as being extremely dissatisfied with life, score from 10-14 denotes being dissatisfied, score from 15-19 reflects being slightly dissatisfied, score 20 is neutral. Students with a score from 21-25 are considered slightly satisfied, score from 26-30 are considered satisfied, and score from 31-35 extreme satisfaction with life. The scale has been tested for internal consistency and reliability by the original authors. Cronbach's alpha for the entire instrument was 0.78, and a coefficient correlation of 0.80.

Method:

- **1.** Official permissions were obtained from the responsible authorities of the Faculty of Nursing, Damnhour University.
- 2. A Socio-demographic and academic data Questionnaire (tool 1) was developed by the researchers.
- 3. The Arabic version of Connor-Davidson Resilience Scale (tool 2) was used in this study.
- **4.** Perceived Stress Scale (tool 3), and Satisfaction with Life Scale (tool 4) were translated into Arabic language, then submitted to a jury composed of seven experts in the field of psychiatric nursing to test translation and content validity of the scale. Tools proved to be valid.
- **5.** Concerning Satisfaction with Life Scale (tool 4). For the purpose of comparing between the three studied variables, scores were re-categorized after the completion of data collection into only five categories in which responses are considered as being extremely dissatisfied with life, dissatisfied, neutral, satisfied with life , and extremely satisfied with life.
- 6. The internal consistency and reliability of tools (2, 3 and 4) were done on 20 registered students in the fourth academic year who were excluded from the study subjects using Cronbach's Alpha test and Test re-test reliability with a period of 2 weeks interval between the two measurements. Tools proved to be reliable, tool 2 (α = 0.885), and a coefficient correlation (0.833), tool 3 (α = 0.806), and a coefficient correlation (0.812), and tool 4 (α = 0.871), and a coefficient correlation (0.860).
- **7. Pilot study:** Before embarking on the actual study, a pilot study was carried out on 52 registered students who were excluded from the actual study to ascertain the clarity and applicability of the study tools and identify obstacles that might be faced during data collection. The pilot study revealed that tools were clear, understood and applicable.

Actual study:

- 1. A list of students' names in each academic year was obtained from the Students Affair Department.
- 2. Out of 1040 of enrolled Faculty of Nursing students, Damanhour University in the first semester of the academic year 2014-2015, a representative sample (50%) from each academic year was selected through systematic random sampling method after excluding the names of those who participated in the pilot study and the reliability test.
- 3. The researchers collected the data by meeting the randomly selected students in group basis in their classroom lectures, and clinical areas (labs, Damanhour general ICU, Kafr El-Dawer general ICU, Itay-Elbaroad general ICU, medical and surgical units). She explained the purpose of the study, way of answering tools, and reassured them about anonymity and confidentiality of their responses.
- 4. Data collection was completed over a period of about three months from November 2014 to ending of January 2015.

Ethical considerations:

Throughout the study the followings ethical steps were followed:

- Informed written consent was obtained from each student after explaining the importance and aim of the study.
- Confidentiality of the obtained information was ensured.
- Student's privacy and anonymity were respected.

Statistical analysis:

- Collected data were revised, coded, computerized, and analyzed using SPSS program version 20.
- Statistical analysis was done using two tailed tests and alpha error of 0.05. P value less than or equal to 0.05 was considered to be statistically significant.
- The items discrete scores for each scale were summed together then the sum of scores for each dimension and total score was calculated by summing the scores given for its responses.

Statistical analysis of the data includes:

- **1. Descriptive statistics:** included the mean and standard deviation with range and percent to describe the scale and categorical data, respectively.
- 2. Analysis of numeric data: the following statistical analysis were done:

- 1) **Independent sample t-test** is used to compare the mean for two independent groups for numeric data and following normal distribution.
- 2) **One Way ANOVA** is used to compare the means for quantitative data of more than two independent groups which follow a normal distribution.
- **3. Correlation analysis** is used to test the nature and strength of relation between two quantitative / ordinal variables. The sign of the co efficient indicates the nature of relation (positive /negative) while the value indicates the strength of relation as follow: Weak correlation for r less than 0.25, intermediate correlation for r of value between 0.25-0.74 and strong correlation for values between 0.75-0.99.
- **4. Ordinal logistic regression analysis** is a regression model for ordinal dependent (response) variables as ego resilience; perceived stress and satisfaction with life all have ordinal responses. The purpose of the analysis is to see how well that response can be predicted by the responses to other questions, some of which may be quantitative, and then ordered logistic regression may be used. It can be thought of as an extension of the logistic regression model that applies to dichotomous dependent variables, allowing for more than two (ordered) response categories. The individual and adjusted effect for each predictor included in the model is tested by an effect size called Odds Ratio (OR) which means the amount of risk for being at higher level of response category for each unit change in the predictor value.

III. Results

Table (1) shows that 70.8% of the studied students were **females**. In relation to their **age**, it ranges between 18-24 years, with a mean age of 20.02 ± 1.35 years. Regarding the **students' residency**, nearly three quarter of the studied students (70.4%) were living in rural areas. Considering **residency during the academic year**, 89.2% were living with their families or relatives. As regards **marital status**, the majority of the studied students (95.2%) were single. It also appears that 88.7% of the studied students had adequate **family income**. The table also illustrates that the majority of the studied students (97.7%) reported that they received **social support**. More than three quarter of them mentioned emotional, esteem, and interaction support (89.4%, 81.7%, and 78.5% respectively). It was observed that more than two thirds of the studied students (67.5%) reported exposure to death of sibling, second degree relative or a friend, 13.5% reported a traumatic experience of having parents or sibling with chronic physical or psychiatric illness, and 12.5% considered being admitted to faculty of nursing as a traumatic event.

Socio demographic characteristics	Frequency (N = 520)	%
Sex		
• Female	368	70.8
• Male	152	29.2
Age (years)		
• 18<20	183	35.2
• 20<22	269	51.7
• 22+	68	13.1
Min-Max 18 -24	Mean± SD 20.02	±1.351
Residency		
Rural	366	70.4
• Urban	154	29.6
Residency during academic year		•
With family / relatives	464	89.2
University students' hostel / supervised	56	10.2
houses	50	10.2
• Alone	3	0.6
Marital status		
Single	495	95.2
Married	25	4.8
Family income		
Adequate	461	88.7
Inadequate	59	11.3
Social support		
• No	12	2.3
• Yes	508	97.7
Types of social support* (N=508)		
Emotional support	465	89.4

Table (1) Distribution of the studied students according to their Socio demographic characteristics.

Esteem support	425	81.7
Interaction, Network support	408	78.5
Knowledge support	385	74.2
Financial support	312	60.0
Exposure to traumatic events		
• No	169	32.5
• Yes	351	67.5
Types of traumatic events** (N = 351)		-
Student physical or psychiatric illness	54	10.4
Parents/ sibling chronic physical or psychiatric illness	70	13.5
Death of parents	60	11.5
Death of sibling/ second degree relative/friend	114	22
Love story failure/ unfaithful friend	27	5.2
Family conflicts/ parental divorce	22	4.2
Academic failure	12	2.3
Being admitted to the faculty of nursing	65	12.5

* More than one type of social support **More than one type of traumatic event.

Table (2) shows the academic characteristics of the studied students. According to year of enrollment, it is observed that more than one third of the studied students (34.6%) was registered in the third year, and more than one quarter (25.6%) in the first year, while the rest of the studied students were registered in the second and fourth year (22.9% and 16.9%, respectively). As regards their grade in the previous academic year, nearly half of the studied students (45.7%) obtained very good grade, and more than one quarter of them (29.7%) obtained excellent grade. Only 1.3% of the studied students failed. Concerning participation in academic/social activities, more than one third of the studied students (38.5%) were participating in academic/social activities. Almost half of the studied students (48.5%) participated in sports, and more than one third of them (33.5%) participated in music, art, drawing, and Drama.

Table (2) Distribution of the studied students according to their academic characteristics.

Academic characteristics	Frequency $(N = 520)$	%
Year of enrollment	· · · · · · · · · · · · · · · · · · ·	
• First	133	25.6
• Second	119	22.9
• Third	180	34.6
• Fourth	88	16.9
Students 'grade in previous academic year*(N = 3	87)	
• Excellent	115	29.7
Very good	177	45.7
• Good	69	17.8
• Pass	6	1.6
Residual subjects	15	3.9
Failure	5	1.3
Participation in academic / social activities		
• No	320	61.5
• Yes	200	38.5
Types of academic/ social activities**(N=200)		
Scout and Camps	29	14.5
Music, Art, Drawing and Drama	67	33.5
Trips	43	21.5
Sports	97	48.5
Egyptian Nursing Students' scientific association	16	8.5

*First year was not among the students' grade in previous academic year.

** More than one type of academic / social activity.

It was noticed in **table (3)** that concerning ego resilience, 51.7% of the students had high level and more than one third (34.4%) had undetermined trait. Also, more than half of the studied students (56.0%) had very high level of perceived stress and more than one quarter (28.8%) had high level of perceived stress. According to the students' satisfaction with life, the table revealed that 59.9% of the studied students were satisfied with their life and only 26.5% of them were dissatisfied.

	Ego res	Ego resilience		ved stress	Life satisfaction	
Levels/degrees	No.	%	No.	%	No.	%
Very low/ extremely dissatisfied	2	0.4	3	0.6	9	1.7
Low/ dissatisfied	20	3.8	14	2.7	138	26.5
Undetermined trait/ average/neutral	179	34.4	62	11.9	34	6.5
High/ satisfied	269	51.7	150	28.8	311	59.9
Very high/extremely satisfied	50	9.7	291	56.0	28	5.4

 Table (3) Students' levels/degrees of ego resilience, Perceived stress and Life satisfaction according to their total scores (N=520)

Table (4) reveals the relationship between levels of ego resilience, perceived stress, and degree of life satisfaction of the studied students. A negative significant correlation was found between ego resilience and perceived stress (r = -0.51) and a positive significant correlation with life satisfaction (r = 0.39). This denotes that high level of ego resilience lower the level of perceived stress and promote satisfaction with life. The table also reveals that perceived stress had a negative significant correlation with satisfaction with life (r = -0.47).

 Table (4): Relationship between levels of ego resilience, perceived stress, and degree of life satisfaction of the studied students (N=520)

Ego resilience, Perceived	Ego resilience	Perceived Stress	Satisfaction with life
stress, and Satisfaction with life (N = 520)	r	r	r
Ego resilience	1	- 0.51*	0.39*
Perceived Stress	-0.51	1	-0.47*
Satisfaction with life	0.39*	-0.47*	1

r: Pearson correlation co-efficient Interpretation of r: Weak (0.1-0.24) * P value < 0.05 (significant) Intermediate (0.25-0.74)

Strong (0.75-0.99)

Table (5) shows factors predicting ego resilience among studied students according to ordinal logistic regression analysis. **Participation in academic/ social activities** increased the level of ego resilience by about more than 1.5 times (OR= 1.66; 95% CI: 1.17- 2.36) keeping all other factors constant. **Social support** increased the level of ego resilience by 1.37 times more (OR= 1.37; 95% CI: 1.20- 1.55) keeping all other factors constant. Regarding **year of enrollment**, those who were in advanced years of enrollment had increased level of ego resilience by 1.16 times more (OR=1.16; 95% CI: 0.98- 1.38) keeping all other factor constant. **Increased level of perceived stress** reduced level of ego resilience by about 20% (OR=0.81; 95% CI: 0.78- 0.85) keeping all other factors constant. **Higher degree of satisfaction with life** increased level of ego resilience by 1.14 times more (OR=1.14; 95% CI: 1.10- 1.17) keeping all other factors constant.

Table (5): Factors predicting ego resilience among studied students according to ordinal logistic

regression	

Parameter	В	Std. Error	Hypothesis Test Sig.	OR	95% Wald Confidene Interval for Exp(B) Lower	Upper
Threshold [RI SC_C=1.00]	-3.965-	0.8559	0.000	0.02	0.00	0.10
[RI SC_C=2.00]	-1.510-	0.5288	0.004	0.22	0.08	0.62
[RISC_C=3.00]	1.251	0.5057	0.013	3.50	1.30	9.42
[RISC_C=4.00]	4.079	0.5356	0.000	59.06	20.67	168.76
Participate in academic/ social activities	0.507	0.1801	0.005	1.66	1.17	2.36
Social support	0.311	0.0649	0.000	1.37	1.20	1.55
Advanced years of enrollment	0.152	0.0864	0.078	1.16	0.98	1.38
Increased level of perceived	-0.20	0.019	0.001	0.81	0.78	0.85

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stress						
Higher degree of Satisfaction with life	0.13	0.016	0.001	1.14	1.10	1.17

OR: Odds Ratio

Dependent Variable: Resilience Scale

B. Fixed at the displayed value

Table (6) shows factors predicting perceived stress among studied students according to ordinal logistic regression analysis. **Females** had 2 times more risk to be at a higher perceived stress level than males keeping all other factors constant (OR=2.12; 95% CI: 1.40-3.22). Regarding **residency during academic year**, those who lived with family/relatives had 2.2 times more risk to be at a higher level of perceived stress compared to others who lived in university students' hostel/supervised students' houses or Alone. (OR=2.24; 95% CI: 1.29-3.90) keeping all other factors constant. **Non participation in academic social activities** increased the risk for being at a higher level of perceived stress by about 1.5 times more (OR=1.44; 95% CI: 1.01-2.14) keeping all other factors constant. **Increased level of ego resilience** reduced the risk of being at a higher level of perceived stress by about 80% (OR= 0.21; 95% CI: 0.17-0.26) keeping all other factors constant. **Higher degree of satisfaction with life** reduced the risk of being at a higher level of perceived stress by about 70% (OR= 0.30; 95% CI: 0.12- 0.48) keeping all other factors constant.

 Table (6): Factors predicting perceived stress among studied students according to ordinal logistic regression analysis

Parameter	В	Std. Error	Hypothesis Test	OR	95% Wald Confidence Interval for Exp(B)	
			Sig.		Lower	Upper
Threshold [PSS_C=2.00]	-1.588-	2.4647	0.519	0.20	0.00	25.61
[PSS_C=3.00]	0.178	2.4588	0.942	1.20	0.01	148.01
[PSS_C=4.00]	1.843	2.4596	0.454	6.32	0.05	783.57
Female	0.760	.2167	0.000	2.12	1.40	3.22
Living with family/ relative	0.806	0.2826	0.004	2.24	1.29	3.90
Not participate in academic / social activities	0.363	0.2018	0.047	1.44	1.01	2.14
Increased level of ego resilience	-1.57	0.085	0.001	0.21	0.17	0.26
Higher degree of Satisfaction with life	-1.20	0.041	0.001	0.30	0.12	0.48

OR: Odds Ratio

Dependent Variable: Perceived Stress

B: Fixed at the displayed value.

Table (7) shows factors predicting life satisfaction among studied students according to ordinal logistic regression analysis. Regarding **residency during academic year**, those who lived in university students' hostel/supervised students' houses/alone had 2.14 times more increased satisfaction with life compared to others who lived with their families or relatives (OR=2,14; 95% CI:1.32-3.71) keeping all other factors constant. However, those who had **adequate family income** showed increased degree of satisfaction with life by 2.29 times more (OR=2.29; 95% CI: 1.40-3.76) keeping all other factors constant. **Social support** increased the degree of satisfaction with life by 1.25 times more (OR=1.25; 95% CI: 1.11-1.41) keeping all other factors constant. Concerning **year of enrollment**, those who were in higher level of year of enrollment increased degree of satisfaction with life by 1.15 times more (OR=1.15; 95% CI: 1.04- 1.34) keeping all other factors constant. **Increased level of perceived stress** decreased degree of satisfaction with life by 1.60 (OR=0.84; 95% CI: 0.81- 0.86) keeping all other factors constant, while **increased level of ego resilience** increased degree of satisfaction with life by 1.15 times more (OR=1.15; 95% CI: 1.09-1.29) keeping all other factors constant.

Table (7): Factors predicting life satisfaction among studied students according to ordinal logistic

	regres	sion analysi	15			
Parameter	В	Std. Error	Hypothesis Test Sig.	OR	95% Wald Confidence Interval for Exp(B) Lower	Upper
Threshold [Satisfaction_c=.00]	-1.883-	0.6453	0.004	0.15	0.04	0.54
[Satisfaction_c=1.00]	0.034	0.5768	0.953	1.03	0.33	3.20
[Satisfaction_c=2.00]	1.351	0.5755	0.019	3.86	1.25	11.93
[Satisfaction_c=3.00]	1.677	0.5768	0.004	5.35	1.73	16.57
[Satisfaction_c=4.00]	3.454	0.5922	0.000	31.61	9.90	100.91
[Satisfaction_c=5.00]	5.376	0.6217	0.000	216.15	63.19	731.07
Living in students' hostel/ Supervised student's houses/ alone	0.785	0.2567	0.002	2.14	1.32	3.71
Adequate family income	0.830	0.2528	0.001	2.29	1.40	3.76
Social support	0.225	0.0620	0.000	1.25	1.11	1.41
Advanced year of enrollment	0.140	0.0799	0.050	1.15	1.04	1.34
Increased level of perceived stress	-0.17	0.017	0.001	0.84	0.81	0.86
Increased level of ego resilience	0.07	0.052	0.001	1.15	1.09	1.29

regression analysis

OR: Odds Ratio

Dependent Variable: Satisfaction with Life

B. Fixed at the displayed value.

IV. Discussion

The present study revealed that more than half of the studied students had high level of *ego resilience*. This result could be attributed to many factors. First, most of the studied students fall in the age group between 18 and 22 years, which is the period of late adolescence and early adulthood. According to Erikson (1968), if individuals successfully negotiate this period, they will develop a stronger appreciation for their own personal identity, better perception of feelings of self-esteem and self-concept, become more independent, begin to look at the future in terms of career, and be able to establish intimate relationships ⁽³⁶⁾. The everyday hassle to meet their goal of identity and their needs of independency may contribute to resilience. Second, an obvious characteristic of the adolescents during this period is the frequent use of humor as a way of managing different stressful situations, which may play a significant role in promoting positive adaptation. Humor as a protective factor was mentioned by many authors in different models of ego resilience ^(6,9,10). Moreover, several studies assessing resilience among students concluded that most of the undergraduate students had high level of ego resilience ⁽³⁷⁻³⁹⁾. Third, the majority of the studied students were from rural areas, where the culture encourages the sense of autonomy and independence very early in life, this may contribute to the high level of ego resilience observed among studied students. Autonomy was emphasized by Bernard (1995) as a character of resilient individuals ⁽³⁰⁾.

In relation to *life satisfaction*, the present study strengthens that nearly two thirds of the studied students had scores ranging from satisfied to extremely-satisfied with their lives. This could be a reflection of the high level of ego resilience demonstrated by the studied students. According to the Adolescent Resilience Model developed by Hasse (2004), resilience is conceptualized as a protective feature for quality of life that may contributes to higher degree of life satisfaction ⁽¹²⁾. This interpretation was supported by the study of Rani and Midha (2014) who reported that resilient teenagers appeared to be satisfied with their lives due to their possession of personal protective factors such as experiencing positive emotions, positive self-image, high self-esteem, self-efficacy, empathetic feelings, personal effectiveness, and emotional control ⁽⁴⁰⁾. This result is similar to those of Shi et al. (2015), Cazana and Truta (2015) who found that mean scores of satisfaction with life of undergraduate students reflected that they are satisfied with their lives ^(38, 41). On the other hand, the present findings are inconsistent with Paschali and Tsitsas (2010) who found in their study of stress and satisfaction with life among university students that the majority of them had low degree of life satisfaction which is related to high anxiety level ⁽⁴²⁾.

As regards the *perceived stress* among the studied students, the current study indicated that more than half of the students had very high level of perceived stress. This result could be attributed to several factors. First, the studying environment itself is characterized by many sources of stress such as time pressure, worrying over exams, case presentation, and assignments presentation. Second, students encounter extra sources of stress due to the nature of their clinical practice such as, going through different clinical experiences that are full of stress including communication with different types of patients such as intensively cared, dying, psychiatric and burn patients which are highly stressful for them. This goes with the findings obtained by Eswi et al.(2013) in their study of stress as perceived by baccalaureate Saudi nursing students, revealed that the level of perceived stress among them was very high $^{(43)}$. In the same line, Shilpa and Srimathi (2015), and Shi et al. (2015), found that undergraduate students had moderate to high level of perceived stress $^{(37,38)}$.

Concerning the relation between ego resilience, perceived stress, and life satisfaction, results demonstrated a negative correlation between students' level of ego resilience and perceived stress and a positive correlation between levels of ego resilience and life satisfaction. This was expected and strongly verified by the ordinal logistic regression which showed that increased level of ego resilience reduced the risk of being at a higher level of perceived stress by about 80%. Moreover, higher degree of satisfaction with life reduced the risk of being at a higher level of perceived stress by about 70%. Also increased level of ego resilience increased the degree of satisfaction with life by 1.15 times more.

The present findings could be attributed to that people with higher ego resilience are supposed to meet the challenges of their lives more effectively, adapt in a flexible manner to the surrounding stresses, and are more likely to become more successful, healthier, and happier in the future and in turn become more satisfied with their lives. Furthermore, resilient individuals most of the times have better feelings and are able to develop resources to get greater control over their lives which enhance satisfaction with life. Results of the present study are consistent with Holmes (2012), and Tung et al. (2014) who reported that university students who had high level of ego-resilience had lower levels of perceived stress , and so had a better global life quality ^(20,26). Other researches by Pourafzal (2012), Cazan and Truta (2015) revealed that highly resilient undergraduate students are more likely to perceive stressors as less demanding, able to cope better with them and adapt more efficiently to academic requirements, which in turn lead to higher levels of satisfaction with life ^(19,41). In the same line, Shi et al. (2015) concluded that medical students with high scores on perceived stress on perceived stress on perceived stress scale had lower levels of life satisfaction, while those with low scores on perceived stress scale had higher level of ego resilience, which may lead to higher levels of life satisfaction ⁽³⁸⁾.

Regarding the socio-demographic characteristics in the present study, the ordinal logistic regression revealed that **females** had two times more risk to have a higher level of perceived stress than males. This may be understood in the light of the Egyptian cultural beliefs and attitudes in which the feminine role put a lot of pressure over females due to their obligation in the community as caregivers, family supportive persons either financially or emotionally. These may give little chances for outdoor activities that could help in releasing and expressing the stress. Moreover, the high sensitivity level that characterizes the female gender may intensify the feelings associated with faced stressful situations, and increases their emotional involvement with patients demonstrating critical diagnoses. The present finding also is confirmed by the studies of Ranjita and Michelle (2000) and Vandegrift (2013) who concluded that students of female gender exhibit higher perceived stress scores than male ones ^(13, 44).

Interestingly, **cohabitation** is a significant indicator of the students' level of perceived stress and satisfaction with life. This is supported by the findings of ordinal logistic regression which showed that students who live with their families or relatives had 2.12 times more risk to be at a higher level of perceived stress than others who are living in university students' hostels, supervised students' houses or alone. The reasons for this could be explained by the fact that, students who live with their families encounter different types of family pressures such as household responsibilities and parental expectations which they have to fulfill. Moreover, the burden of transportations, daily travel to college, and lack of control over their life routine could be another contributing factor. The present result was confirmed by Shaikh et al. (2004), Muirhead and Locker (2007), Deshpande and Chari (2014) who reported that those who live with parents reported higher perceived stress scores than students living at hostels or in other living arrangements ⁽⁴⁵⁻⁴⁷⁾. On the other hand, Humphris et al. (2002) argued that students living at home with their families experienced a lower level stress than those living away. They concluded that students who lived at home during the studying period ,could gain some protection against stress, had more support, and had kinship relations ⁽⁴⁸⁾.

Likewise, the present study showed that students who live in university hostels or alone had a higher degree of life satisfaction than those who are living with their families. The ordinal logistic regression showed that students who live in university students' hostel, supervised students' houses, or alone had 2.14 times more increased satisfaction with life as compared to others who were living with their families or relatives. This result could be justified by the nature of the hostel houses environment which reinforces students to live independently and enhances their management abilities. Moreover, living independently promotes the students' self-confidence, help them attain maturity, become goal oriented, and more responsible. In addition, hostels' life provides students with some freedom to manage their time properly, arrange day time activities without the continuous pressure of the family. These in turn could lead to high degree of life satisfaction.

Family income represents a significant factor contributing to satisfaction with life in this study. This is proved by the findings of ordinal logistic regression which showed that students who had adequate family income had increased degree of satisfaction with life by 2.29 times more. This was expected as students would be satisfied with their life when their life comes close to ideal. Better income helps students to fulfill their basic needs such as eating, clothing, and housing. According to Maslow's hierarchy of needs, satisfaction of the basic human needs is correlated with life satisfaction ⁽⁴⁹⁾. These findings are similar to that of other researchers who reported that higher income tends to be associated with a sense of well-being, and greater satisfaction with life ⁽⁵⁰⁻⁵²⁾.

The present study supported the value of **social support** by increasing the level of ego resilience among studied students. Results of ordinal logistic regression showed that students who reported receiving social support had increased level of ego resilience by 1.37 times more. Findings of the present study goes with Mansour et al. (2014) who reported that university students with higher degree of social support from friends are more prone to have higher level of resiliency ⁽⁵³⁾. Some other researchers found a significant positive correlation between social support and resilience among adolescents ^(54 - 56).

Concerning the relationship between satisfaction with life and social support, the findings of ordinal logistic regression showed that students who received social support had increased level of satisfaction with their life by1.25 times more. This is logically expected as social support is considered as a construct that designates the physical and emotional security that individuals have because of the support provided by their families, friends, and other significant persons in their lives, which may result in a sense of wellbeing and satisfaction with life. In this respect, Mahantand & Aggarwal (2013) reported a statistically significant positive relationship between perceived social support and levels of life satisfaction. They reported that the more social support from friends and family students have, the higher satisfaction with life they would experience ⁽⁵⁷⁾. Some researches revealed that perceptions of supportive family interactions have been associated with an increase in signs of wellness such as life satisfaction and subjective well-being ⁽⁵⁸⁻⁶⁰⁾.

Speaking about **year of enrollment**, findings of ordinal logistic regression also showed that students in higher academic year had increased level of ego resilience by 1.16 times more, and had increased degree of satisfaction with life by 1.15 times more. This could be explained by the fact that as students' grow and move to a higher academic level, they become more able to adapt and adjust to academic and clinical requirements of the program, they acquire and master nursing skills necessary to their clinical practice which help them to develop more effective ways in dealing with different stressors, and offer them an intense feeling of self-confidence and efficiency. In addition, students in higher academic level usually get more social support from their extended network of friends, and teachers from different specialties. All of these factors help in developing resilience and consequently promote satisfaction with life. In this respect, Maria et al. (2013) reported that students in the third year had a reduced stress perception compared to first and second year students ⁽⁶¹⁾.

Academic/social activities promote students' achievement, attainment and success. This is obvious in the present study. Ordinal logistic regression analysis showed that students who participated in academic/social activities had increased level of ego resilience by about 1.5 times more and those not participating in academic/social activities had increased risk of having a higher level of perceived stress by about 1.5 times more. These findings may be related to the value and importance of physical activities as viable means of reducing and expressing stress among students. In this respect Hancock (2011) stated that physical activities can improve the general health, decrease the risk factors for chronic diseases, and improve many features of mental health. These could include: inhancing mood, decreasing symptoms of stress, anger, depression, relieving anxiety, and reducing cognitive decline ⁽⁶²⁾. Furthermore, academic/ social activities could help students to form and extend their social network with others colleagues, as well as the success and competition that may play a significant role in building up positive self-esteem, and promote their self-confidence. Michel et al. (2006) reported that students who participated in physical activities had the least levels of perceived stress ⁽⁶³⁾. In addition, Chand and Balakrishnamurthy (2013) found a statistically significant positive correlation between students' participation in social activities and their level of ego resilience. They concluded that developing school/ college activities and the insertion of sufficient physical activities in daily routine can contribute to resilience (64).

V. Conclusion

Ego resilience is correlated negatively with perceived stress and positively correlate with life satisfaction. However, a negative correlation is reported between perceived stress and life satisfaction. Participation in academic/social activities is the most predicting factors of high level of ego resilience among the study subjects. Moreover, living with families during the academic year and not participating academic/social activities are the most predicting factors of high level of perceived stress among students. Moreover, living in university hostels or alone are the most predicting factors of life satisfaction among the studied students. **Recommendations**

The followings are the main recommendations yielded by this study:

- 1. Nursing educators should be aware of the importance of developing and enhancing the students' level of ego resilience to produce graduate professional nurses who are not only academically and clinically competent, but also who are able to adapt to workplace adversities.
- 2. Students' resilience could be promoted through giving continuous encouragement, enhancement of their self-esteem and self-confidence as well as promoting their independence.
- 3. Academic/social activities, counseling and academic advisor support should be encouraged and promoted by responsible authorities.
- 4. Students' stress level should be monitored on a regular base and proper stress reduction interventions should be enhanced.
- **5.** Further research is required to study the effect of implementing intervention programs to enhance resilience and decrease stress among nursing students

References

- 1. Michael W. Students' handbook of psychology. 3rd ed. Hong Kong: Psychology press ltd., 2000; 707.
- [2]. Collins A. Life experiences and resilience in college students: a relationship influenced by hope and mindfulness. Doctorate Thesis. Taxes ABM University, 2009; 1-26. Available at: http://oaktrust.library.tamu.edu/handle/1969.1/ETD-TAMU-2009-08-838. (Retrieved on:20/5/2015).
- [3]. Chung H. Resiliency and character strengths among college students. Doctorate Thesis. Graduate College, Arizona University, 2008; 70-80. Available at:
- [4]. http://arizona.openrepository.com/arizona/bitstream/10150/195507/1/azu_etd_2637_sip1_m.pdf.
- [5]. (Retrieved on: 2/4/2014).
- [6]. Luthar S, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. NIH Public Health 2000; 71(3):543–62.
- [7]. Connor K, Davidson J. Development of new resilience scale: The Connor-Davidson Resilience Scale. Depression and Anxiety Journal 2003; 76-82.
- [8]. Ahern N. Adolescent resilience: an evolutionary concept analysis. Journal of Pediatric Nursing 2006; 21(3): 175-85.
- [9]. Block J. Ego control and ego resilience. Journal of Research in Personality 2004; 1-28.
- [10]. Mcallister M, Mckinnon J. The importance of teaching and learning resilience in health disciplines: a critical review of the literature. Journal of Nurse Education Today, 2009; 371-9.
- [11]. Vanistendael S, Lecomte J. Resilience abstract concept or survival skills. Paris, 2000:8-10.Availableat: http://www.infiressources.ca/fer/Depotdocument_anglais/Resilience_abstract_concept_or_survivl_skill.pdf (Retrieved on: 5/3/2014).
- [12]. Rew L, Horner S. Youth resilience framework for reducing health risk behaviors in adolescents. Journal of Pediatric Nursing 2003; 18(16): 379-88.
- [13]. Stephens T. Increasing resilience in adolescent nursing. Doctorate Thesis. University of Tennesse, 2012; 1-4.Available at:
- [14]. http://trace.tennessee.edu/cgi/viewcontent.cgi?article=2500&context=utk_gradiss
- [15]. (Retrieved on: 22/3/2014).
- [16]. Hasse J. The adolescent resilience model as a guide to intervention. Journal of Pediatric Oncology Nursing 2004; 21(5): 289-99.
- [17]. Vandegrift A. Ego resilience among college students. Master thesis. St. Mary's College, Maryland University, 2013;3-4.Available at: http://www.smcm.edu/psyc/_assets/documents/SMP/Showcase/1213AVandegrift.pdf. (Retrieved on: 19/3/2014).
- [18]. Stress and stress management. Klinic Community Health Center Winnipeg MB Canada 2010; 1-30.
- [19]. Oliver J, Brough P. Cognitive appraisal, negative affectivity and psychological well-being. NewZealand Journal of Psychology 2002; 31(1): 1-7.
- [20]. SuldoSh, Shaunessy E, Hardesty R. Relationships among stress, coping, and mental health in high school students. Wiley Inter Science Journal 2008; 45(4): 273-90.
- [21]. Roberts R, Corcoran J. Crisis intervention practices in social work, 2000.In: Catherine N, Hilarski C. The stress-trauma crisis continuum. Brief Treatment and Crisis Intervention 2003; 3(1): 27-35.
- [22]. Catherine N, Hilarski C. The stress-trauma crisis continum. Brief Treatment and Crisis Intervention 2003; 3(1): 27-35.
- [23]. Pourafzal F. Relationship between perceived stress, resilience, and life satisfaction among under-graduated students. Master Thesis. Faculty of Nursing and Midwifery, Tehran University, 2012; 1-2. Available at: http://fnm.tums.ac.ir/userfiles/Dessertation/En/Nursing/Pourafzal.pdf. (Retrieved on: 20/4/2014).
- [24]. Tung K, Ning W, Alexander L. Effect of resilience on self-perceived stress and experiences on stress symptoms surveillance report. Universal Journal of Public Health 2014; 2(2): 64-72.
- [25]. Solomon O. Exploring the relationship between resilience, perceived stress, and academic achievement. Master Thesis. Manchester Metropolitan University, 2013; 1-28. Available at:
- [26]. https://www.google.com.eg/?gws_rd=ssl#q=exploring+the+relationship+between+resilience,+perceived+stress,+and +academic+achievement.(Retrieved on: 30/5/2015).
- [27]. Elsayad S. Relationship between levels of depression and self-assertiveness among university students. Unpublished Doctorate Thesis. Faculty of Nursing, Port Said University, 2010; 1-2.

- [28]. Singh C, Sharma S, Sharma R. Level of stress and coping strategies used by nursing interns. Nursing Midwifery Research Journal 2011; 7(4): 152-60.
- [29]. Maville J, Kranz P, Tucker B. Perceived stress reported by nurse practitioner students. Journal of the American Academy Nurse Practitioners 2004; 16(6): 257-61.
- [30]. Nancy R. Stress and coping strategies among nursing students. Nursing and Midwifery Research Journal 2011; 7(4): 141-51.
- [31]. 26.Holmes K. Across-ethnic examination of a stress resilience model. DoctorateThesis, 2012; 3-7.

- [33]. http://aladinrc.wrlc.org/bitstream/handle/1961/14302/Holmes_american_0008E_10367display.pdf?sequence=1. (Retrieved on 1/6/2015).
- [34]. Abolghasemi A, Varaniyab S. Resilience and perceived stress predictor of life satisfaction in the students of success and failure. Procedia-Social and Behavioral Sciences 2010; 5(1): 748-52.
- [35]. Bailey T, Eng W, Frisch M, Synder C. Hope and optimism as related to life satisfaction. Journal of Positive Psychology 2007; 2(3):168-75.
- [36]. Shali R. Investigation of life satisfaction and effective factors affecting on it among citizens of Iran. Faragastar Rahbord Danesh Institution.Tehran, 2007; 1-7.
- [37]. Bernard B. Fostering resilience in children. Urbana Champaign; 1995: 3-7. Available at: http://files.eric.ed.gov/fulltext/ED386327.pdf. (Retrieved on: 22/4/2014).
- [38]. Noh J, Lim E. Ego resilience and health locus in nursing students. Health Care and Nursing Journal 2015; 88(1): 19-22.
- [39]. Tomah J, Fterz M, Hamad A, Talaat N, Yacob T, 2013. Personal communication with Jonathan R.T. Davidson through: david011@mc.duke.edu. April 2014.
- [40]. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. Journal of Health and Social Behavior1983; 4(24): 385-95.
- [41]. Cohen S, Williamson G. Perceived stress in probability sample. The social psychology of health, USA: Newbury Park Company, 1988; 31-67.
- [42]. Diener E, Emmons R, Larsen R, GriffinS. The Satisfaction with Life Scale. Journal of Personality Assessment, 1985;
 71-5. Available at:
- $[43]. https://www.google.com.eg/?gws_rd=ssl#q=The+Satisfaction+with+Life+Scale$
- [44]. (Retrieved on: 15/4/2014).
- [45]. Erikson E. Psychosocial stages of personality development,1968. In: SchultzD. Theories of personality.10th ed. Canada: Wadsworth Company, 2013; 170-80.
- [46]. Shilpa S, Srimathi L. Role of resilience on perceived stress among pre-university and undergraduate students. The International Journal of Indian Psychology 2015; 2(2):142-9.
- [47]. Shi M, Wang X, Bian Y, Wang L. The mediating role of resilience in the relationship between stress and life satisfaction among chines medical students. BioMedical Central 2015; 15(16): 1-7.
- [48]. Mcgillivray C, Pidgeon A. Resilience attributes among university students: a comparative study of psychological distress, sleep disturbance, and mindfulness. European Scientific Journal 2015; 11(5): 33-48.
- [49]. Rani R, Midha P. Does resilience enhance life satisfaction among teenagers?. Journal of Humanities and Social Science 2014; 19(6): 16-19.
- [50]. Cazan A, Truta C. Stress, resilience and life satisfaction in college students. Revista de Cercetare Si Interventie Sociala 2015; 48(1): 95-108.
- [51]. Paschali A, Tsitsas G. Stress and life satisfaction among university students. Annals of General Psychiatry 2010; 9(1): 1-5.
- [52]. Eswi A, Radi S, Youssri H. Stress and stressors as perceived by baccalaureate Saudi nursing students. Middle East Journal 2013; 4(2): 193-202.
- [53]. Ranjita M, Michelle M. College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. American Journal of Health Studies 2000; 16(1): 41-51.
- [54]. Shaikh B, kahloon A, Kazmi M, Khalid H, Nawaz K, Khan N, Khan S. Students, stress and coping strategies: a case of Pakistani Medical School. Education for Health Journal 2004; 17(3): 346-53.
- [55]. Muirhead V, Locker D. Canadian dental students' perceptions of stress. Canadian Dental Association Journal 2007; 73(4): 323-28.
- [56]. Deshpande A, Chari S. Perceived sources of stress and coping strategies in dental students and interns. Psychology Journal 2014; 5(2): 133-41.
- [57]. Humphris G, Blinkhorn A, Freeman R, Gorter R, Reddick G, Murtomaa H, Sullivan R, Splieth C. Psychological stress in undergraduate dental students: baseline results from seven European dental students. European Journal Dental Education 2002; 6: 22-9.
- [58]. Maslow A. Self-actualizing people, 1950. In: Maginness A. The development of resilience. Doctorate Thesis. University of Canterbury, 2006; 3.Available at: http://ir.canterbury.ac.nz/bitstream/10092/1443/1/thesis_fulltext.pdf?ev=pub_ext_prw_xdl. (Retrieved on : 15/3/2014)
- [59]. Lora E, Chaparro J. The conflictive relationship between satisfaction and income, 2008; 2-5. Available at:
- [60]. https://www.google.com.eg/?gws_rd=ssl#q=the+conflictive+relationship+between+satisfaction+and+income.(Retrie ved on: 10/4/2015).
- [61]. Roy F, Nolan M, Steinhardt M. Age, life satisfaction, and relative income insights from the UK and Germany. Hamburg Institute of International Economics, 2011:1-5 available at:

^{[32].} Available at:

- [62]. https://www.google.com.eg/?gws_rd=ssl#q=age%2c+lifesatisfaction%2c+and+relative+income+%e2%80%93+insig hts+from+the+uk+and+germany. (Retrieved on: 13/5/2015).
- [63]. Stevenson B, Wolfers J. Subjective well-being and income: is there any evidence of satiation. American Economic Review 2013; 103(3): 598-604.
- [64]. Mansour A, Azzeghaiby S, Alzoghaibi I, Badawi T, Nassar O, Shaheen A. Correlates of resilience among university students. American Journal of Nursing Research 2014; 2(4): 74-9.
- [65]. Amandru W, Bantu E, Mwebi B, Okwara M, Onderi H. Adolescent resilience, social support and drug abuse: a case of koboko district, wist line, ugenda. Basic Research Journal of Education Research and Review 2014; 3(4): 35-44.
- [66]. Jang J. The effect of social support type on resilience. Master Thesis. Faculty of Arts, University of Alabama, 2012; 32-54. Available at:
- [67]. https://www.google.com.eg/?gws_rd=ssl#q=THE+EFFECT+OF+SOCIAL+SUPPORT+TYPE+ON+RESILIENCE. (Retrieved on: 25/7/2015).
- [68]. Achour M, Nor M. The effect of social support and resilience on life satisfaction of secondary school students. Journal of Academic and Applied Studies 2014; 4(1): 12-20.
- [69]. Mahanta D, Aggarwal M. Effect of perceived social support on life satisfaction of university students. European Academic Research 2013; 1(6): 1083-94.
- [70]. Edwards L, Lopez S. Perceived family support, acculturation, and life satisfaction in Mexican American youth. Journal of Counseling Psychology 2006; 53(3): 279-87.
- [71]. Suldo S, Huebner S. Is extremely high life satisfaction during adolescence advantageous?. Social Indicators Research 2006; 78: 179-203.
- [72]. Mohamed H, Khletet R, Al-Awany Z. The moderating effect of social support on stress and academic performance among nursing students. Journal of American Science 2012; 8(12): 716-20.
- [73]. Maria M, Sandra L, Cristina L, Irene L, Lidia M, Angela S. Stress perception in nursing students facing their clinical practices. Enfemeria Global Journal 2013:244-53.
- [74]. Hancock C. The benefits of physical activity for health and well-being. Collaborating for Health 2011: 1-31.
- [75]. Michel S, Unger J, Hamilton J, Metz D. Associations between physical activity and perceived stress/ hassles in college students. Stress and Health Journal 2006; 22: 179-88.
- [76]. Chand B, Balakrishnamurthy C. Participation in physical activities, resilience and vulnerability. Indian Journal of Applied Research 2013; 3(10): 1-2.

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