

Academic Burnout, Resilience and Their Relations with Psychological Wellbeing of Baccalaureate Nursing Students

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Abstract

Academic burnout is one of most challenges in nursing education. It's characterized by emotional exhaustion, cynicism and low personal efficacy. So, resilience helps nursing students to handle stressful situations and have more psychological wellbeing. Psychological well-being of nursing students is associated with more productive and successful in academic learning and clinical practice.

Aim of the study: was explore academic burnout, resilience and their relation with psychological wellbeing of baccalaureate nursing students. **Subject:** All nursing students in the third and fourth academic year (2022-2023) at the Faculty of Nursing at Tanta University. The total number of studied students were (1487) students involved (997) students in third academic year and (490) students in fourth academic year. **Study design:** A descriptive correlation research design was utilized. **Study tools:** three tools were used: **Tool 1** was Nursing students' academic burnout questionnaire, **Tool 2** was Connor-Davidson Resilience Scale, and **Tool 3** was Ryff's Psychological Wellbeing Scale. **Results:** This study revealed that around half of the nursing students have high level of academic burnout, while, more than half of the nursing students have low level of resilience, low level of psychological well-being. Also, there is highly negative statistical significant correlation between academic burnout and psychological well-being. Also, there is highly positive statistical significant correlation between resilience and psychological well-being. In addition, there is highly negative statistical significant correlation between resilience and academic burnout. **Conclusion:** It can be concluded that, academic burnout leads to distress and has effects on psychological well-being. Resilience is a protective factor that the nursing students who have more resilience are likely to have less academic burnout and perceived more psychological wellbeing. **Recommendations:** Managing resilience skills training for nursing students in the curriculum, lectures, seminars and other workshops . Giving counseling and guidance to nursing students about adaptive stress managements and coping skills.

Key words: Academic Burnout, Baccalaureate Nursing Students, Psychological Wellbeing, Resilience.

Introduction

Nursing is considered a demanding profession that includes promotion of health, prevention, and care of illness, dealing with disabled and dying patients, so, nursing is one of the most stressful jobs. Nurses in their career suffer from many stressors than other health care providers. Therefore, preparing nurses for this career is considered more challenges, that make students faced more stressors during their journey of learning, which has been attributed the nature of this field.^(1,2)

Nursing students during their academic study exposed to many stressors, such as fear of failure and worries from their abilities to cope with intense heavy assignments and clinical examinations, a lack of professional nursing skills and unfamiliarity with patients' diagnoses, medical history, or treatment.⁽³⁾ Fear of making mistakes especially when exposed for serious cases. Moreover lack of therapeutic communication skills that lead to experiences of interpersonal conflicts, that already impact on their social life and role in their families . Consequently, prolonged exposure of nursing students to stress may lead to academic burnout.^(4,5)

Academic burnout is one of the most challenges in nursing education. It can be defined as a negative emotional, physical and mental reaction to prolonged study that results in exhaustion, frustration, lack of motivation and reduced ability for studying or learning.⁽⁶⁾ Also, academic burnout defined as a kind of feeling of exhaustion arising from academic requirements and demands accompanied by disinterested attitudes and pessimistic feelings about assignments.⁽⁷⁾ The academic burnout among nursing students characterized by emotional exhaustion in response to intense demands of nursing studying, perceived distrustful attitude from the study, and low personal efficacy.⁽⁸⁾

One study showed that approximately 40% of nursing students had experienced academic burnout.⁽⁹⁾

Academic burnout has been viewed as comprising of three main sub-categories such as emotional exhaustion, cynicism and low personal efficacy. Emotional exhaustion arises from the academic pressure exerted upon the students due to competitive nature of academics and the need to excel. Cynicism on the other hand emerges when students are either disappointed or frustrated by failure to excel as expected. Low personal efficacy is feelings of inadequacy which makes students experience decrease in achievement in the educational process. Indeed academic burnout has become one of the most common problems in institutions of learning .⁽¹⁰⁾

Academic burnout have mental and emotional responses that emerge because of the emotions and thoughts of nursing students related to educational conflict, disappointment, pressure and the fear of being unsuccessful.⁽¹¹⁾ Nursing students who experience academic burnout exhibit characteristics such as negative perceptions of the learning environment, high levels of perceived workload, lack of enthusiasm in what they are studying, inability to constantly attend classes, lack of participation in class activities and meaninglessness in academic activities. Also, have an impact on one's concentration, memory, and the processes making decisions and solving problems.⁽¹²⁾

Resilience is considered a protective factor, advocated in the academic literature and educational workforce. Nursing student's resilience has potential to alleviate some of the academic burnout associated with nursing education.^(13,14) It is defined as the capacity to bounce back or cope well with stress when faced with adversity, especially when

recovering from extremes of trauma, deprivation, danger, and severe disturbance.⁽¹⁵⁾

Also, resilience is defined as an individualized process of development that occurs as a result of successfully perceived stress and adversities using personal and protective factors.⁽¹⁶⁾

Resilience is crucial for nursing students to survive adversity and prepare them for undertaking professional role after graduation. It is an indicator of well-being and a process that enables nursing students to remain healthy or to recover quickly after adversity. Previous studies have found that resilience has an impact on learning experience, academic performance, course completion, decrease burnout, and in the longer-term professional practice.^(17,18)

Resilience helped nursing students to survive with today's complex academic stressors and competing priorities and challenges.⁽¹⁹⁾ Also, helped them how to deal with the unique challenges of nursing practice and overcome adversity in their future clinical work ,improves coping, adaptive capacities, and psychological wellbeing.⁽²⁰⁾

Psychological well-being is fundamental to the overall health of undergraduates, particularly to enable them to address challenges at the university.⁽²¹⁾ Psychological well-being defined as a state in which a person has a positive mental status, including feeling happy, satisfied, and not feeling anxious about anything.⁽²²⁾

Psychological well-being usually includes dimensions such as self- acceptance, positive relationships, autonomy, environmental mastery, personal growth and purpose-in-life.⁽²³⁾

It is a combination of positive affective states such as happiness and functioning with optimal effectiveness in individual and social life as well as refers to the extent to which people feel that they have meaningful control over their life and their activities.⁽²⁴⁾

Psychological well-being of nursing students is a vital component within the training and development of future nurses. Many Studies assumed that nursing students with good psychological wellbeing will have academic achievement than those with low level and will become qualified nurse in the future. Psychological well-being is beneficial for students to live a healthy life, which makes it an important part of their professional career.^(25,26)

Psychological well-being is associated with better functioning in various life domains such as health, longevity, income, and productivity of individuals, which has an essential aspect for nurses due to its effect on the patient care, patient-nurse relationship and other health care services that provide by nurses. Good mental health of nursing staff is essential for maintain the quality of patient's care.⁽²⁷⁾ On the contrary, academic burnout caused by student stress in their study has significant effect on their psychological well-being.⁽²⁸⁾

In investigating academic burnout, resilience and it's relation with psychological well-being of nursing students, the literature review indicated that nursing students frequently suffer from academic burnout, which is brought by different situations experienced during the training process and that can concern on their psychological well-being. In another line the resilience is a personal resource that allows adverse situations to be handled in a successful way. So, resilience has positive effect on psychological well-being of nursing students.⁽²⁹⁾ Furthermore, resilience is not only important to improve the mental health of nursing students, but also to buffer and minimize the negative consequences of the academic burnout to which have most adverse result on their psychological wellbeing .⁽³⁰⁾

Significance of the study

Undoubtedly, University nursing students experience higher levels of academic stress and burnout. Academic burnout leads to psychological distress and has detrimental effects on psychological well-being. The ability to overcome such adversity and learn to be stronger from the experience is regarded as resilience. Resilience is found to have an impact on learning experience, academic performance, course completion and professional practice. Resilience can resist academic burnout and improve psychological well-being.⁽¹⁴⁾ Therefore, an emphasis on resilience and psychological well-being of nursing students will be influence on their confidence and maturity for think analytically and handle effectively the stressors in their academic learning. Furthermore nursing students who have resilience and enjoy with psychological wellbeing will be able to transition in clinical practice as professional graduate nurses. Thus, it is important to study academic burnout that may be faced by nursing students and their resilience to maintain their psychological wellbeing.

The aim of the study was to

Explore academic burnout, resilience and their relations with psychological wellbeing of baccalaureate nursing students.

Research questions

1. What are the levels of academic burnout and resilience of baccalaureate nursing students?
2. What are the levels of psychological wellbeing of baccalaureate nursing students?
3. What are the relations of academic burnout and resilience with psychological wellbeing of baccalaureate nursing students?

Subjects and Method

Study design

Descriptive correlational design was used in the current study.

Setting: The present study was conducted at the Faculty of Nursing at Tanta University that affiliated to Ministry of Higher Education and Scientific Research.

Subjects:

The study sample was all nursing students in the third and fourth academic year (2022-2023). They were (1066) students in third year and (555) students in fourth year, But in actual study the participants were (1487) students involved (997) students in third academic year and (490) students in fourth academic year. The number of students who withdrawal and not available during time of data collection were (69) students and (65) students from third and fourth academic year respectively. The researcher selected students in third and fourth academic years for this reason:

- The students in this final year (third and fourth) having additional stress and burnout due to multiple assignments during clinical practice, heavy theoretical courses and lessons and their working beside the academic study. In addition, the duties that placed on them from the personal and social life events.

-These students in the last years close to graduation from the faculty and they have more expectation about life after graduation. Suppose to be more qualified and highly professional to identify how they deal with and interact with patients and how to cope with the stressful work events perfectly.

Tools of the study: The data was collected by using the following tools:

Tool I: Nursing students' academic burnout questionnaire:

This tool consisted of two parts:

Part 1: Socio-demographic characteristics of nursing students:

It was developed by the researcher to elicit data such as: age, sex, academic year, marital status, residence and parents' education level, parents' occupation and family income.

Part 2: Maslach Burnout Inventory - Student Survey:

The original tool was Maslach Burnout Inventory (MBI) which was adapted by **Maslach C & Jackson E. (1996)**⁽³¹⁾, and validated by **Shi Y et al.(2019)**⁽³²⁾ to be used for medical students. The researcher used the validated MBI to measure academic burnout in nursing students. The tool consist of 15 items rated on 7- point likert scale, ranged from (1) never to (7) every day with 6 items with reverse score .

The tool consisted of three domains

1) Emotional exhaustion: (5) items such as " Feeling emotionally drained by my studies."

2) Cynicism: (4) items such as " Having become less enthusiastic about my studies"

3) Low Personal efficacy: (6) items such as " Can effectively solve the problem that arise in my studies" . Those items had reverse score.

The scoring system

The total score of this scale ranged from (15-105) and the higher score means higher academic burnout. The level of burn out will be summed and categorized according to cut off points:

Less than 50% ----- low level of burnout

50-75% ----- Moderate level of burnout

More than 75% ----- High level of burnout

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

This tool was developed by **Connor K & Davidson J. (2003)**⁽³³⁾ and was adapted by the researcher. This tool was used to measure resilience among nursing students. It was consisting of 25 items, the items were rated on

5-point Likert scale, ranging from (0) = not true at all to (4) = true nearly all the time.

This scale consisted of five subscales were explained as a following:

1) Personal competence: it consists of (8) items such as "Able to adapt to change "

2) Trusting one's instincts, tolerance to negative affect: it consists of (7) items such as "under pressure, I focus and think clearly "

3) **Positive attitude to change:** it consists of (5) items such as " I Think of self as strong person ".

4) **Perceived control:** it consists of (3) items such as "I'm control of my life "

5) **Spirituality:** it consists of (2) items such as "I works to attain my goals"

The scoring system

The total score of the scale ranged from (0-100) and the higher score means higher resilience. The level of resilience was summed and categorized according to cut off points:

Less than 50 % Low level of resilience

50-75 % Moderate level of resilience

More than 75 % High level of resilience

Tool III: Ryff's Psychological Wellbeing Scale

It was developed by **Ryff Carol K & Keyes C. (1995)**⁽³⁴⁾ and was adapted by the researcher. This tool was used to measure positive aspects of psychological functioning among nursing students. This scale consisted of a 42-item, on a 6-point Likert scale ranged from (1) = strongly disagree, to (6) = strongly agree. 22 item of this scale had reverse score. The Scale divided on to six subscales, seven items for each, it was explained by the following:

1. **Autonomy** (independence and self-determination): such as " My decisions are not usually influenced by what everyone else is doing"

2. **Positive relation with others** (having satisfying, high quality relationship) such as: "Most people see me as loving and affectionate"
3. **Environment mastery:** (ability to manage one's life): such as "I am quite good at managing the many responsibilities of my daily life"
4. **Personal growth:** (being open to new experiences) : such as " I have the sense that I have developed a lot as a person over time"
5. **Purposes of life:** (believing that one's life is meaningful): such as " I am an active person in carrying out the plans I set for myself"
6. **Self- acceptance:** (a positive attitude toward oneself) : such as " In general, I feel confident and positive about myself"

The scoring system

The total score of this scale ranged from (42-252) and the higher score means higher psychological wellbeing. The level of psychological wellbeing was summed and categorized according to cut off points:

Less than 50 %----- Low level of psychological wellbeing

50-75 % ----- Moderate level of psychological wellbeing

More than 75% ----- High level of psychological wellbeing

Method

The study was accomplished according to the following steps:-

1. An official letter clarifying the purpose of the study was addressed to the Dean of Faculty of Nursing to obtain permission for data collection.
2. Ethical considerations
The permission to conducted to the study was obtained from the scientific research ethical committee in Faculty of Nursing at Tanta university and informed consent was obtained from students after explaining to them in details what kind of the study. The participants was reassured about confidentiality of their information. Anonymity was used instead of person's name on questionnaire sheets. And respecting the right of the participants to withdraw at any time during the data collection period. So, the study caused no harm for nursing students. The study caused no harm for nursing students.
3. The study tools were translated into Arabic by the researcher and tested for internal validity by a jury composed of five experts in psychiatric nursing to ascertain the appropriateness of items for measuring what they were supposed to measure. The required corrections were carried out accordingly.
4. A pilot study was carried out on 10% of the study subjects to ascertain the clarity and applicability of the study tools and to identify obstacles that might be faced during data collection. The total number of students are (1487) and the pilot study from third academic year was (107) students and from fourth academic year was (55) students. Those subjects was selected randomly, the simple modification was done accordingly and those subjects were not excluded from study sample.
5. The study tools were tested for reliability by using Cronbach's alpha test and was found 0,759 - 0,851 and 0,912 respectively for tool 1, tool 2 and tool 3 which represented highly reliable tools.
6. The actual study: The researcher collected the data during the first semester of academic year (2022-2023). The study sample was already divided in small groups during days of practical

training. The average number of students group in third academic year range from 40-50 and in fourth academic year range from 30-40. The researcher met of the students during break or after end of clinical day in their classroom, During meeting the researcher initially explain the purpose of the actual study and take consent from students. Then distributed the study tools on participants and explained any confusion or misunderstand during data collection. The duration of group interview ranged from 20-30 minute. The researcher was collected study data four days per weeks. The duration of data collected was three months (from first October 2022 to end December 2022).

7. Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 26. For quantitative data, the range, mean and standard deviation were calculated. For comparison between means of variables, paired samples T-test was used.

Correlation between variables was evaluated using Pearson and Spearman's correlation coefficient r . A significance was adopted at $P < 0.05$ for interpretation of results of tests of significance (*). Also, a highly significance was adopted at $P < 0.01$ for interpretation of results of tests of significance (**).⁽³⁵⁾

Limitation of the study

One of the interfering factors in this study is the large number of the studied students that hinder the researcher to collect data from all students. Some of the students refused to participate in the

study and some of them were not available during time of data collection.

Results

Table (1) clarifies distribution of the studied nursing students according to their socio-demographic characteristics. The majority of studied nursing students were students in third academic year (67.0%). Regarding to the age; more than one third of nursing students (40.2%) aged 22 to less than 23 years old, while the minority of them 1.7% of them aged 23 years old. Moreover , 64.4% of nursing students are female and 35.6% are male. In addition to marital status; around two third 67.9% of the nursing students are single , and 32.1% of them are married.

Regarding to the residence; near to two thirds of students (64.9%) were living in rural. Regarding level of fathers' education; 41.6% of the students' fathers were university educated and 36.2% had secondary level of education . while level of mothers' education represent 41.4% of the them were secondary educated and 31.1% of them learned in university.

Concerning father occupation; near to one third (32.8%) of the students' fathers were hand crafts and 27.0% of them were employees and 23.2% of them occupied professional work. Regarding to mother occupation; the majority of the students' mothers (69.2%) were house wife and 23.5% of them were employees. As regards to family income; half of students' families (50.0%) had not enough income, and 45.3% had enough income.

Figure (1) illustrates levels of academic burnout among baccalaureate nursing students. It shows that around half of the nursing students (51.7%) have high level of academic burnout, and near to one third of students (31.4%) have low level of academic

burnout, while 16.9% of students have moderate level of academic burnout.

Table (2) shows domains of academic burnout among baccalaureate nursing students. The first domain with higher level was emotional exhaustion, it present among 51.8% of students and among only 35.6% of students with lower level. The second domain was low personal efficacy, the around half of students (51.0%) had higher level, and 30.0% of other students had lower level .The third domain was cynicism, It represent 48.0% of students with higher level, and 26.0% of students expressed moderate level, and the same level among other students had lower level of cynicism with range (21-101) and Mean±SD 70.81±28.777 of total academic burnout.

Figure (2) shows levels of academic burnout among students' who enrolled in third and fourth academic year. It shows that more than half (55.3%) of the nursing students in fourth year have high level of academic burnout, and about to one third (32.4%) of other students have low level of academic burnout, while only 12.2% of other students have moderate level of academic burnout. On the other hand, nearly to half of the nursing students (49.9%) in third year have high level of academic burnout, and near to one third (30.9%) of other students have low level of academic burnout, while 19.2% of other students have moderate level of academic burnout.

Table (3) clarifies comparison between mean scores of academic burnout domains among nursing students who enrolled in third and fourth academic year. It's obvious that, low personal efficacy domain has the highest mean score followed by emotional exhaustion and Cynicism. There are no statistically significant difference between

mean score of academic burnout and its' domain among students in third and fourth academic years. The result also show that the total academic burnout mean score in fourth academic year (71.94±27.181) and in third academic year is (70.25±29.528) .

Figure (3) illustrates levels of resilience among baccalaureate nursing students. It shows that more than half (55.5%) of the nursing students have low level of resilience, and near to one quarter (23.3%) of students have moderate level of resilience, while 21.2% of students have high level of resilience.

Table (4) shows domains of resilience among baccalaureate nursing students. The first domain was Students' positive attitude to change more than half (54.5%) of nursing students have low level and more than quarter (26.1%) of other students have moderate level. The second domain was trusting student's desires, tolerance to negative affect 53.9% of nursing students have low level and 26.3% of other students have moderate level. The third domain was personal competence, more than half (53.7%) of nursing students have low level and around one quarter (25.4%) of students have moderate level of personal competence. The fourth domain was students' perceived control, it was found that 52.3% of nursing students have low level and 29.6% of other students have moderate level. The fifth domain was spirituality, near to half (47.7%) of nursing students have low level and 29.7% of other students have moderate level, and less than one quarter (22.5%) of other students have high level of spirituality. Also, Mean score of total resilience among nursing students was 1.66 with standard deviation 0.806 and with rang (1-3).

Figure (4) illustrates levels of resilience among students' who enrolled in third and fourth academic year. It obvious that, more than half (61.0%) of the nursing students in fourth academic year have low level of resilience, and less than one quarter (20.4%) of other students have moderate level of resilience, while 18.6% of other students have high level of resilience. On the other hand, more than half (52.9%) of the nursing students in third academic year have low level of resilience, and about one quarter (24.7%) of other students have moderate level of resilience, while 22.5% of other students have high level of resilience.

Table (5) demonstrates comparison between mean scores of the resilience domains among nursing students who enrolled in third and fourth academic years. It's obvious that, personal competence domain has the highest mean score followed by trusting student's desires, tolerance to negative affect, students' positive attitude to change, perceived control and spirituality. There are not statistically significant difference between students in third and fourth academic years regarding to mean score of their resilience domain except personal competence which mean score of it among fourth year students more than third year students . The result also shows that the total resilience score among students in fourth academic year (48.33 ± 23.647) more than third academic year (46.16 ± 28.606).

Figure (5) shows levels of psychological well-being among baccalaureate nursing students. It shows that more than half (62.7%) of the nursing students have low level of psychological well-being, and 16.1% of students have moderate level of psychological well-being. While less than one quarter (21.2%) of students have high level of psychological well-being.

Table (6) shows domains of psychological well-being among baccalaureate nursing students. The first domain was autonomy, more than two third (71.4%) of nursing students have low level. The second domain was personal growth, while two thirds (63.4%) of nursing students have low level. The third domain was Purpose in life, which 61.8% of nursing students have low level. The fourth domain was environmental mastery, that near to two thirds (61.1%) of nursing students have low level. The fifth domain was a positive relations with others, which 61.0% of nursing students have low level. The sixth domain was self-acceptance, which 59.6% of nursing students have low level. It also show mean score of total psychological well-being 126.80 with standard deviation 59.036 and with range 65-230.

Figure (6) illustrates levels of psychological well-being among nursing students' who enrolled in third and fourth academic year. It appears that, around two thirds (67.3%) of the nursing students in fourth year have low level of psychological well-being, and less than one quarter (18.6%) of other students have high level of psychological well-being, while 14.1% of other students have moderate level of psychological well-being. On the other hand, more than half (60.4%) of the nursing students in third year have low level of psychological well-being, and 22.5% of other students have high level of psychological well-being, and only 17.2% of other students have moderate level of psychological well-being.

Table (7) demonstrates comparison between mean scores of the psychological well-being domains among nursing students who enrolled in third and fourth academic years. It's observed that, a similarity in mean score

between students in third and fourth academic years regarding total psychological wellbeing and its' domain and there are not any statistically significant difference between them.

Table (8) clarifies correlation between academic burnout, resilience and psychological wellbeing among studied nursing students. It's show that, there is highly negative statistical significant correlation between academic burnout and

psychological well-being ($r = -0.976$, $p\text{-value} = 0.000$). Also, there is highly positive statistical significant correlation between resilience and psychological well-being ($r = 0.972$, $p\text{-value} = 0.000$).

Table (9) clarifies correlation between academic burnout and resilience among studied nursing students. It's show that, there is highly negative statistical significant correlation between resilience and academic burnout ($r = -0.947$, $p\text{-value} = 0.000$).

Table (1): Distribution of the studied nursing students according to their socio–demographic characteristics .

Students 'Characteristics	The studied students (n=1487)	
	No.	%
Academic Year		
- Third year	997	67.0
- Fourth year	490	33.0
Age (in years)		
- 20-<21	325	21.9
- 21-<22	538	36.2
- 22-<23	598	40.2
- 23	26	1.7
Sex		
- Male	529	35.6
- Female	958	64.4
Marital Status		
- Single	1009	67.9
- Married	478	32.1
Students'Characteristics	The studied students (n=1487)	
	No.	%
Residence		
- Rural	965	64.9
- Urban	522	35.1
Father Educational Level		
- Read and write	157	10.6
- Primary	135	9.1
- Secondary	538	36.2
- University	618	41.6
- Post graduate	39	2.6

Mother Educational Level					
- Illiterate			67	4.5	
- Read and write			141	9.5	
- Primary			182	12.2	
- Secondary			616	41.4	
- University			462	31.1	
- Post graduate			19	1.3	
Father Occupation					
- Hand crafts				32.8	
- Craft work				8.5	
- Professional w				23.2	
- Employee				27.0	
- Retirement				8.4	
Mother Occupation					
- House wife				69.2	
- Professional v				4.0	
- Craft work				2.4	
- Employee				23.5	
- Retirement				0.9	
Family Income					
- Not enough			743	50.0	
- Enough			674	45.3	
- Enough and save			70	4.7	

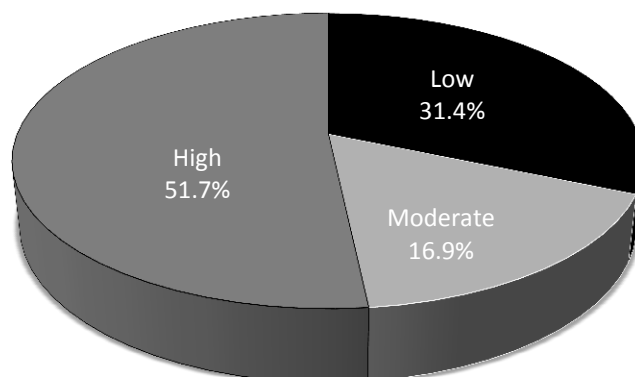


Figure (1): levels of academic burnout among baccalaureate nursing students. (n=1478)

Table (2): Domains of academic burnout among baccalaureate nursing students .

Domains of academic burnout	The studied students (n=1487)					
	Low		Moderate		High	
	No.	%	No.	%	No.	%
- Emotional exhaustion	530	35.6	187	12.6	770	51.8
- Cynicism	387	26.0	386	26.0	714	48.0
- Low personal efficacy	446	30.0	283	19.0	758	51.0
Academic burnout level	467	31.4	251	16.9	769	51.7
Range	(21-101)					
Mean ± SD	70.81±28.777					

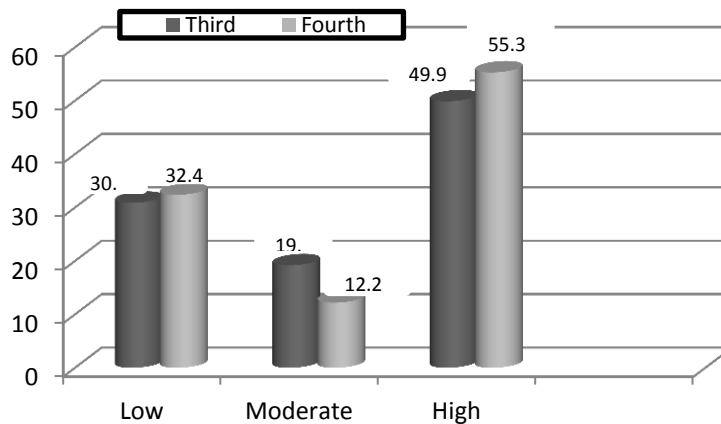
**Figure (2): levels of academic burnout among students' who enrolled in third and fourth academic year. (n=1478)**

Table (3): Comparison between mean scores of academic burnout domains among nursing students who enrolled in third and fourth academic year .

Domains of academic burnout	The studied students (n=1487)		t P
	Range Mean \pm SD		
	Third year (n=997)	Fourth year (n=490)	
- Emotional exhaustion	(7-35) 23.85 \pm 9.927	(5-35) 24.68 \pm 9.682	1.518 0.129
- Cynicism	(4-27) 18.40 \pm 7.815	(4-27) 18.58 \pm 7.322	0.417 0.676
- Low personal efficacy	(8-41) 28.00 \pm 12.049	(8-41) 28.69 \pm 10.659	1.086 0.277
Total academic burnout score	(21-101) 70.25 \pm 29.528	(23-99) 71.94 \pm 27.181	1.069 0.285

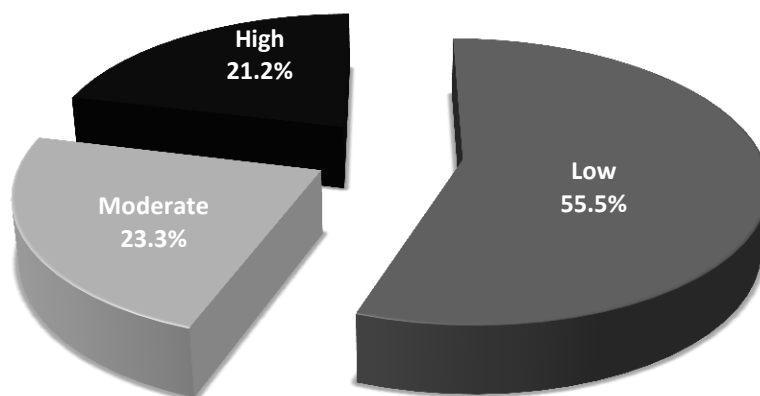
**Figure(3) : Levels of resilience among baccalaureate nursing student . (n=1478)**

Table (4): Domains of resilience among baccalaureate nursing students .

Domains of resilience	The studied students (n=1487)					
	Low		Moderate		High	
	No.	%	No.	%	No.	%
- Personal competence	798	53.7	378	25.4	311	20.9
- Trusting student's desires, tolerance to negative affect	801	53.9	391	26.3	295	19.8
- Students' positive attitude to change	811	54.5	388	26.1	288	19.4
- Perceived control	777	52.3	440	29.6	270	18.2
- Spirituality	710	47.7	442	29.7	335	22.5
Resilience level	826	55.5	346	23.3	315	21.2
Range	(1-3)					
Mean ± SD	1.66±0.806					

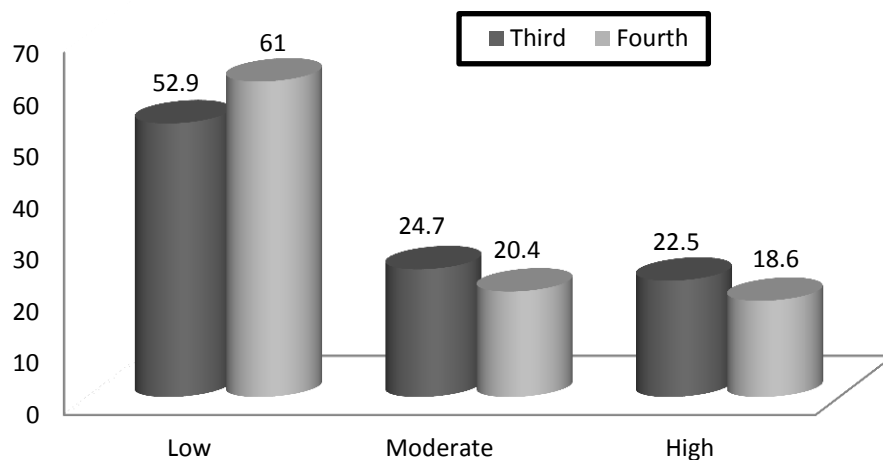
**Figure (4) : Levels of resilience among students enrolled in third and fourth academic year . (n=1478)**

Table (5): Comparison between mean scores of the resilience domains among nursing students who enrolled in third and fourth academic years. (n=1478)

Resilience Domains	The studied students (n=1487)		T P
	Range		
	Mean \pm SD		
	Third year (n=997)	Fourth year (n=490)	
- Personal competence	(5-28) 14.74 \pm 8.740	(6-31) 15.60 \pm 7.686	1.849 0.065
- Trusting student's desires, tolerance to negative affect	(3-27) 13.03 \pm 7.940	(4-26) 13.41 \pm 7.300	0.876 0.381
- Students' Positive attitude to change	(0-19) 9.34 \pm 5.947	(3-19) 9.43 \pm 4.791	0.297 0.767
- Perceived control	(0-11) 5.24 \pm 3.811	(1-11) 5.81 \pm 3.026	2.895 0.004*
- Spirituality	(0-8) 3.81 \pm 2.829	(0-8) 4.09 \pm 2.313	1.862 0.063
- Total Resilience - Score	(15-88) 46.16\pm28.606	(20-89) 48.33\pm23.647	1.452 0.147

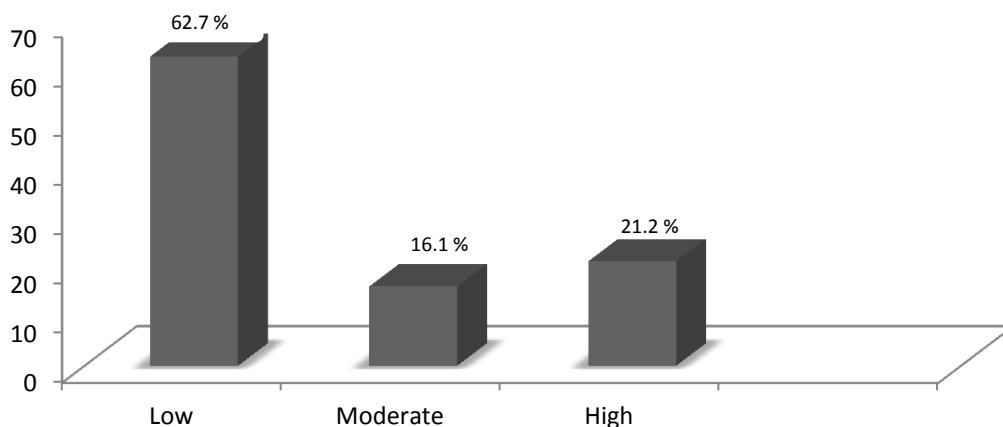
**Figure (5) : Levels of psychological well-being among baccalaureate nursing students. (n=1478)**

Table (6): Domains of psychological well-being among bacculurate nursing students .

Psychological well-being domains	The studied students (n=1487)					
	Low		Moderate		High	
	No.	%	No.	%	No.	%
- Autonomy	1062	71.4	109	7.3	316	21.3
- Positive relations with others	907	61.0	294	19.8	286	19.2
- Environmental mastery	909	61.1	315	21.2	263	17.7
- Personal growth	943	63.4	213	14.3	331	22.3
- Purpose in life	919	61.8	253	17.0	315	21.2
- Self-acceptance	886	59.6	286	19.2	315	21.2
Psychological well-being level	932	62.7	240	16.1	315	21.2
Range	(65-230)					
Mean ± SD	126.80±59.036					

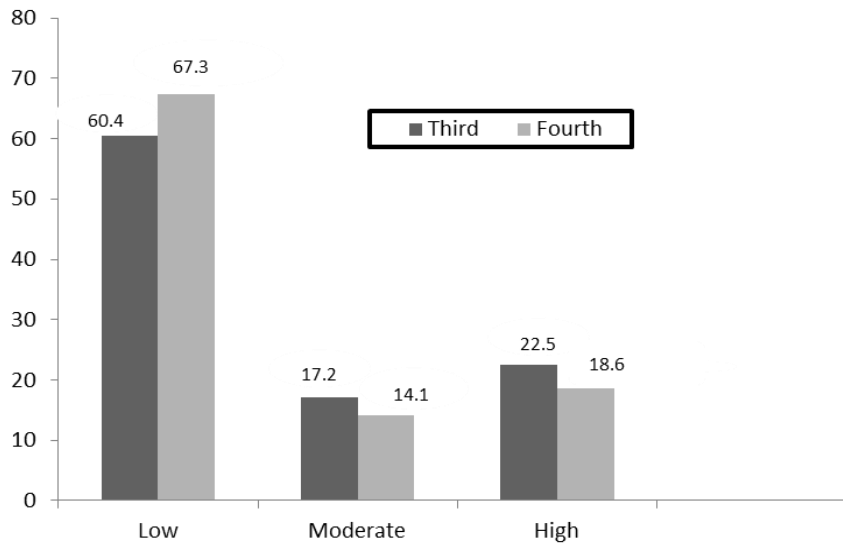
**Figure (6): Levels of psychological well-being among nursing students who enrolled in third and fourth academic years. (n=1478)**

Table (7): Comparison between mean scores of the psychological well-being domains among nursing students who enrolled in third and fourth academic year.

Psychological well-being domains	The studied students (n=1487) Mean ± SD		t P
	Third year (n=997)	Fourth year (n=490)	
- Autonomy	(11-40) 20.72±9.286	(11-38) 21.26±9.130	1.060 0.289
- Positive relations with others	(8-40) 21.33±11.007	(11-39) 20.93±9.243	0.696 0.487
- Environmental mastery	(11-40) 21.69±9.697	(10-42) 20.91±9.171	1.490 0.137
- Personal growth	(9-40) 21.21±10.507	(8-41) 20.29±10.064	1.611 0.107
- Purpose in life	(10-39) 21.68±10.566	(9-39) 20.61±9.692	1.889 0.059
- Self-acceptance	(8-41) 21.07±10.594	(10-40) 20.97±9.574	0.176 0.860
Total psychological well-being score	(65-230) 127.70±60.886	(68-227) 124.96±55.096	0.840 0.401

Table (8) Correlation between academic burnout, resilience and psychological wellbeing among studied nursing students.

	Psychological well-being					
	Third year (n=997)		Fourth year (n=490)		All studied students (n=1487)	
	R	P	R	P	R	P
- Academic burnout	-0.990	0.000**	-0.940	0.000**	-0.976	0.000**
- Resilience	0.976	0.000**	0.970	0.000**	0.972	0.000**

Table (9) Correlation between academic burnout and resilience among studied nursing students.

	Academic burnout					
	Third year (n=997)		Fourth year (n=490)		All studied students (n=1487)	
	R	P	R	P	R	P
Resilience	-0.962	0.000**	-0.918	0.000**	-0.947	0.000**

Discussion

Academic burnout is a great psychosocial problem and it is considered important problem that leading to weak performance of students and develop a feeling of inability to give more which leads to loss of interest and developing negative attitude toward one's own capacity in academic life. So, nursing students should cope with academic burnout by using some strategies as resilience.⁽³⁶⁾ Resilience is considered an essential element for nursing students to survive adversity and prevent the onset of negative aspects arising from demanding situations in the educational context prepared them for undertaking professional role.⁽³⁷⁾

Resilience is buffering for students' psychological well-being which beneficial and important part for nursing students that help them to live a healthy life.⁽³⁸⁾

Psychological wellbeing is a sense of growth and self-realization which contribute to increase nursing student's efforts to facilitate experiences of purposeful engagement. It is also ability of a student to strive towards perfection. It is a collection of psychological features involved in positive human functioning and linked with greatest academic function, social support skills and physical health.^(39,40)

The present study derived toward explored nursing students' burnout, resilience and their relation with psychological wellbeing. The current study revealed that around half of the nursing students have high level of academic burnout and only less one third have lower level. The main domains of academic burnout were highly emotional exhaustion that experienced by around half of students and cynicism which near to half of students feel highly level and lack of personal efficacy among half of students with lower to moderate levels.

Those may be explained by the students may feel overwhelmed due to heavy academic load such as a lot of lessons and lectures, multiple assignments, fear of failure and worries about the abilities to cope with intense clinical training, challenging course subjects, extended study periods, feeling of anxiety and frustration that result from exams and duties that need for critical thinking. Also, they may be loss of confidence in academic abilities, lack of good time management during their learning process which lead to incapability to meet important deadlines to complete their academic tasks and exhaustion from academic responsibility and overloads that effect on eating and sleeping habits of

students. All of those explained feeling drained and emotional exhaustion during learning process.

In addition, the current study was the same line with the result of **Mohamed S et al; (2022)** measured faculty support and burnout among students' of nursing faculty at Beni-suef University and cleared that among burnout dimensions, emotional exhaustion had the highest percentage score.⁽⁴¹⁾ While the result carried out by **Galdino M et al; (2020)** analyzed burnout among nursing students and found nursing students at a public university having high level of emotional exhaustion.⁽⁴²⁾ Also, the result conducted by **Goulart C et al; (2014)** under title "hardy personality and burnout syndrome among nursing students in three Brazilian universities", they indicated that 64.04% of the nursing students in their sample had high levels of emotional exhaustion.⁽⁴³⁾

In this context, the result of study by **Ghods A et al; (2023)** under title "academic burnout in nursing students: an explanatory sequential design", they found that burnout values greater than 50% of their students .⁽⁴⁴⁾ While the result conducted by **Maslach C and Leiter M (2016)** tried understanding the burnout experience on nursing students at western state university, they indicated that nursing students have high academic burnout.⁽⁴⁵⁾ In addition, the result of **Tomaschewski-Barlem J et al; (2014)** analyzed burnout syndrome among undergraduate nursing students at a public university and **Rudman A et al; (2012)** examined burnout during nursing education, both studies predicted lower occupational preparedness and future clinical

performance, also reported that nursing students experienced moderate to high levels of academic burnout.^(46,47)

On the other hand, the current study is contrast with the study by **Mahmoud R et al; (2023)** assessed the quality of learning experience and academic burnout among nursing students, they revealed that the vast majority of nursing students had low level of academic burnout .⁽⁴⁸⁾ Also, **Alshammari F et al; (2019)** studied the relation between academic burnout and self-efficacy among university nursing students indicated that slightly more than one fifth of nursing students had severe academic burnout.⁽⁴⁹⁾ While the result carried out by **Mathias C and Wentzel D (2017)** studied burnout, compassion fatigue and compassion satisfaction in undergraduate nursing students at a tertiary education institution in kwazulu-natal, they found that the nursing students had moderate and low levels of academic burnout.⁽⁵⁰⁾

Moreover, the present study appeared that more than half of the nursing students in fourth year have high level of academic burnout than in the third academic year. Those explained by in fourth academic year, the students have heavy and difficult clinical and theoretical course and nearly completion of the undergraduate nursing degree, this lead to increased levels of students stress, fear and worry from facing the community and dealing with different peoples in working after graduation. In addition to, time constraints for some of the students due to working beside their academic study that made them sometimes feeling of depletion of their physical and emotional resources and feeling of workload.

Additionally, The present study showed that there are no any difference between students in third and fourth academic year regarding their types of academic burnout. In contrast with, the study by **Horan K (2022)** examined burnout and psychological capital in baccalaureate nursing students enrolled in clinical rotations and considered that the mean score levels of emotional exhaustion were highest among last year of nursing students.⁽⁵¹⁾

Regarding to levels of resilience among baccalaureate nursing students. The current study appeared that more than half of the nursing students have low level of resilience. Accordingly the main domains of resilience were lowering, the results appeared that more than half of students have lower level of positive attitude to change, tolerance to negative affect, personal competence and perception of own control and lastly lower spirituality. This may be explained by many stressors and challenges that faced by students in their academic atmosphere as social, financial, family and academic stressors and poor controlling of those stressors that impact negatively on different aspects of student's life. Also, the students' not have skills and ability to cope effectively with stressors and overload of academic study.

As a same line, the study performed by **Kerbage S et al; (2021)** investigated undergraduate nursing students' resilience, challenges, and supports and explored those students had low score of resilience.⁽⁵²⁾ This confirmed by study of **Grimes A et al; (2020)** determined relation between preparedness and resilience of student nurses in Northern Queensland Australia for

disasters, they identified that Australian nursing students have low level of resilience.⁽⁵³⁾

Additionally, result conducted by **Sam and Lee (2020)** aimed to assess nursing students' stress and their resilience, they discovered that 55% of nursing students had low resilience.⁽⁵⁴⁾ In addition, **Oliveira de Souza F et al; (2020)** conducted a study to identify relationship between stress and resilience among students nurses and they revealed that students had low resilience level and this strongly related to students stress.⁽⁵⁵⁾ Furthermore, **Lekan D et al; (2018)** applied web-based survey to examined resilience in nursing students and indicated lower level among those students.⁽⁵⁶⁾

On the other hand, the result of present study is not similar with the study of **Alkaissi A et al; (2022)** showed nursing students have relatively high level of resilience.⁽⁵⁷⁾ Also ,the study carried out by **Angelo R et al; (2021)** aimed to identify association between perceived resilience and mental well-being of Saudi nursing students, they indicated that Saudi nursing students' resilience were significantly higher, this is due to those students have positive adaptation and experience in their academic study.⁽⁵⁸⁾

More while the study by **Elsayed M et al; (2020)** under title "creativity, resilience and sense of humor among nursing graduates", Alexandria University, Egypt . They reported that more than 81% of nursing students sample was highly resilient.⁽⁵⁹⁾ Also, **Chow K et al; (2020)** examined resilience-building module for undergraduate nursing students **and**

Ozsaban A et al; (2019) analyzed the effect of academic stress and social support on resilience, they revealed that the majority of nursing students reported moderate levels of resilience. ^(14,12) Moreover, the study by **Chamberlain D et al; (2016)** studied dispositional mindfulness and employment status as predictors of resilience in third year nursing students, they reported that high resilience scores among their sample. ⁽⁶⁰⁾

Concerning levels of resilience among students' who enrolled in third and fourth academic year. In the present study, the result showed that more than half of the nursing students in fourth academic year have low level of resilience compared with students in third academic year. This is due to the fourth year students increase exposure to prolonged and chronic stress because multiple requirement during academic study and expectation about life after graduation which relate to the work. This is lead to academic burnout. So, fourth year students find difficulty to have much power and many efforts to deal with these expectation and requirement. Unlike third year students reported slightly higher academic stress and burnout than the fourth year students.

Regarding to comparison between domains of resilience among nursing students in third and fourth academic years. The present study explored that students' perceived control among fourth year students were more than third year students and there were statistically significant difference between them. While the more resilience characteristics among both third and fourth academic year students were personal competence, tolerance to negative affect and positive attitude to change.

Contrastly, the result performed by **Kerbage S et al; (2021)** conducted a study entitled relation between resilience, challenges, and supports among undergraduate nursing students, they showed that there was no statistically significant difference in resilience scores across academic years. ⁽⁵²⁾ In the another line, **Chamberlain D et al;(2016)** explored dispositional mindfulness and employment status as predictors of resilience in third year nursing students, they explored nursing students in third academic year had higher levels of resilience. ⁽⁶⁰⁾

Regarding levels of psychological well-being among baccalaureate nursing students. The current study appeared that more than half of the nursing students have low level of psychological well-being. In the fact, this is due to the nursing students have not sense of endurance to cope with many stressors in their life. Feeling of overwhelming with responsibilities during studying and inability to solve problems effectively and take appropriate decisions due to decrease knowledge and experience that lead to increase pressure and strain of them. So, inability of them to feel of wellbeing.

In the same line, **Ghadampour E et al; (2019)** examined comparison of the quality of life, psychological well-being, and emotional self-regulation among nurse women in Imam Khomeini hospital, Kuhdasht City, Iran, they showed that lower level of psychological well-being among their sample. ⁽⁶¹⁾ This consisted with result of **He F et al; (2018)** conducted study to assess stress, protective factors and psychological well-being among undergraduate nursing students, they found

that the undergraduate nursing students had a high level of perceived stress and lower levels of psychological well-being.⁽⁶²⁾

The result by **Ltepe A et al; (2022)** was disagreement with the result of the present study that they investigated the effect of the life satisfaction and psychological well-being of nursing students on their happiness levels, they cleared that nursing students have high levels of psychological well-being.⁽⁶³⁾ Additionally, **Candrawati A et al; (2021)** investigated psychological well-being among nursing students and found that more than half of the respondents had moderate level of psychological wellbeing, and 30.3% had higher levels.⁽⁶⁴⁾ Moreover, the result by **Kim J (2019)** examined nursing students' relationships among resilience, life satisfaction, psychological well-being, and attitude to death, they referred to level of psychological well-being was close to moderate level among nursing students.⁽⁶⁵⁾

Furthermore , the present study explored that nursing students in fourth academic year less than third academic year regarding to low level of psychological wellbeing . In addition to, around one quarter and less than one quarter of students in third and fourth academic year had higher level of psychological wellbeing . This can be explained by that the fourth nursing students have more efforts in thinking about transition period from an educational environment to the professional working environments. Also, academic burnout and psychological wellbeing influence on each others as the fourth nursing students experience high academic burnout. So, have low psychological wellbeing.

In support of the current study, the study of **Smith and Yang (2017)** found in their cross-sectional study that the psychological well- being of Chinese nursing students, tended to decrease in the final year due to final year nursing students may encounter additional stress from the combination of academic and clinical responsibilities prior to registration.⁽⁶⁶⁾

Moreover, **Rios-Risquez M et al; (2016)** studied relationship between resilience, academic burnout and psychological health in nursing students, and discovered that the older nursing students who participated in the study perceived worse psychological health. The researcher explained that by those students in their final year reported disappointment and perception of highly responsibilities for nursing profession that could stretch them beyond their capacities.⁽¹⁷⁾

In addition to, the present study showed that comparison between mean scores of the psychological well-being domains among nursing students who enrolled in third and fourth academic years. There is no any significant difference between students in third and fourth academic year regarding to domains of their psychological wellbeing.

In regarding to domains of psychological well-being among baccalaureate nursing students. The present study revealed that autonomy is the lowest domain than the other domains among nursing students. Autonomy is a crucial factor in determining the psychological health of nursing students which helping how to think and make decisions independently and to act independently in putting their decisions into action. The autonomy is the lowest domain among nursing students due to inadequate

knowledge, skills, attitudes and values of nursing students which associated to professional roles during their education journey. So, this lead to their feeling of low autonomy and independency.

Additionally, personal growth is the second lower domain among nursing students which the personal growth refers to a feeling of continued development, open to new experiences and have the sense of realizing potentials and it is the process of an individual becoming aware of the self in its entirety, followed by taking steps to address the behavior, attitudes, values, actions, habits that they wish to change and ability to continue to grow, expand and improve. This is can be explained by most of the nursing students have fear of failure, laziness, sense of inadequacy and impatience. Also, they do not have any changes to their thoughts, emotions and behaviors. Inability of them to build positive relations with others. Therefore, all of those lead to decrease personal growth of students.

Concerning on correlation between academic burnout, resilience and psychological wellbeing among studied nursing students. The present study cleared that there is highly negative statistical significant correlation between academic burnout and psychological well-being. As, when the students have high level of academic burnout, this lead to low level of psychological well-being and vice viscera. It is discovered that throughout the course of their education journey , nursing students are vulnerable to many stressors that may negatively impact on their psychological well-being and fear of unknown situations during clinical practice that lead to decrease

sense of self confidence , feeling of trust and sense of wellbeing and also may cause mental and psychological problems as anxiety and depression. Moreover, it is beneficial for faculty and staff to provide the trust and confidence with the student and for the student to be ready to learn. Those create a support system that encourages students to persevere toward growth, change, and acceptance. So, improve and enhance psychological wellbeing of them.

Within this context, the result conducted by **Dorn A et al; (2021)** titled the impacts of nursing students' burnout on students' psychological well-being and academic achievement, they showed that students who experiencing higher levels of burnout may have a lower sense of psychological wellbeing and academic achievements. Which, reducing the incidence of nursing students' burnout may improve their academic performance and ultimately carry over into their professional lives and wellbeing.⁽⁶⁷⁾ This supported by study of **García-Izquierdo M et al; (2018)** studied the moderating role of resilience in the relationship between academic burnout and perception of psychological health among nursing students, they reported that high resilience and low stress will predict better psychological well-being.⁽⁶⁸⁾

In addition, the current study revealed that there is highly positive statistical significant correlation between resilience and psychological well-being. In support of this, study by **Zeng G et al; (2016)** studied effect of growth mindset on school engagement and psychological well-being of Chinese primary and middle school students, and clarified that medium positive correlation

between resilience and psychological well-being and **Dluzewska T. et al; (2016)** examined predictors of psychological distress and well-being in a sample of Australian undergraduate students, and reported a highly resilience levels significantly predict better psychological well-being in undergraduates studying psychology. ^(69,70)

In the same line, **Tang W et al; (2018)** analyzed resilience and well-being of university nursing students in Hong Kong: a cross sectional study, which show that there is a medium and positive relationship between resilience and well-being among university nursing students . Furthermore, resilience is a significant predictor of perceived well-being in this group of students. ⁽¹⁴⁾

Lastly, it is summarized that the correlation between academic burnout and psychological wellbeing is negative. While the correlation between resilience and psychological wellbeing is positive. In support of this, the study of **Lia Z and Hasson F (2020)** under title "Resilience, stress, and psychological well-being in nursing students: a systematic review", they suggested that stress is a feature of a nursing student's life, which affects their psychological well-being. As a coping strategy, resilience is reported to be variable, which suggests the need for more attention to be given to student nurses to help develop their resilience skill. ⁽⁷¹⁾

Regarding to correlation between academic burnout and resilience among studied nursing students, the result of present study revealed that there is highly negative statistical significant correlation between

resilience and academic burnout. That when the nursing students experience high level of academic burnout have low level of resilience and vice viscera. This is explained by learning and studying exhaustion of nursing students and decrease their enthusiasm toward learning., more attention should be paid to adverse experiences of nursing students in a clinical setting that make them have a ‘dreadful day’ and increase their burnout.

Consistently, the study by **Wang Q et al; (2022)** focused on associations between academic burnout, resilience and life satisfaction among medical students, they indicated that lower levels of academic burnout were associated with higher levels of resilience, which in turn contributed to higher life satisfaction levels and higher levels of academic burnout were associated with lower levels of resilience. ⁽⁷²⁾ In the same line, the result carried out by **Mwaura P and Oyoo S (2018)** conducted a study under title academic resilience as a predictor of academic burnout among form four students in Homa-Bay County, Kenya, which suggested that students with high academic resilience skills experience low academic burnout. ⁽⁷³⁾

Also, **García-Izquierdo M et al; (2018)** explored the moderating role of resilience in the relationship between academic burnout and the perception of psychological health in nursing students, they indicated that a significant negative relationship between academic resilience and emotional exhaustion of burnout. ⁽⁶⁸⁾ Moreover, **Kamalpour S et al; (2017)** examined the relationship between resilience and academic burnout in nursing students, they

confirmed that a significant and inverse association between resilience and academic burnout. So that students with higher resilience had lower levels of burnout and academic failure while students with resilience skills can manage difficult life situations and adapt themselves to stressful situations, which increases their performance and reduces their academic burnout.⁽⁷⁴⁾

Conclusion

According to the results of the current study, it can be concluded that the academic burnout was effective negatively on resilience and psychological wellbeing of nursing students. Also, resilience will increase with improve psychological wellbeing.

In addition, around half of the nursing students have high level of academic burnout and more than half of the nursing students have low level of psychological well-being.

Recommendations

According to the results of the current study, the following recommendations were suggested: -

1) Recommendations for the students: -

- 1- Conducting a series of workshops, seminars and training programs about stress management techniques that used to overcome on academic burnout for nursing students.
- 2- Conducting resilience training program that help students to understand causes of stress and how to develop their resilience.
- 3- Establishing training program to help students how to enhance their psychological wellbeing and identify

issues which affect on their psychological wellbeing.

2) Recommendations for the students' families

- 1- Instructing student's families about the need of the students to have appropriate supportive environments to help them to adapt efficiently with stress and burnout in academic life.
- 2- Performing regular counseling session for the student's families which help the families to identify all aspects of psychological health to promote resilience and psychological wellbeing .

3) Recommendations for the staff members: -

- 1- Orienting staff members about attending training programs to improve their personal growth and knowledge to guide the students how to promote their resilience and psychological wellbeing.
- 2- Carrying out a series of educational workshops for nursing educators and other staff members to expand their knowledge and awareness of them about sources of stress and burnout of students through academic life.
- 3- Building training program about resilience to increase experience of staff members about strategies to increase resilience.

4) Recommendations for the future research: -

- 1- More studies are required to determine training strategies and programs about adaption with academic burnout to help nursing

students to improve their skills and experiences.

- 2- Implementation of research project for nursing students on resilience training skill program to reduce and adapt with academic burnout which faced in academic life and increase their psychological wellbeing.
- 3- Further research on developing interventional educational programs that target enhancing psychological wellbeing among nursing students based on their personality.

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