

## Basic Psychological Needs and it's Relation to Self-efficacy among Nursing Collegians

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### Abstract

**Background:** The basic psychological needs could be a predictor of how one thinks about oneself and one's abilities. Specifically, self-efficacy could be affected by whether basic psychological needs are satisfied. As basic psychological needs satisfaction is a construct that directly affects inner motivation, it could be that it will influence self-efficacy.

**Methodology:** A quantitative correlation study design was used for undergraduate students at the College of Nursing from September 20<sup>th</sup>, 2021 to July 3<sup>rd</sup>, 2022. To meet the study objectives, A multi stage sample of (354) male and female students was selected, and basic psychological needs scale, and self-efficacy scale were used.

**Results:** The vast majority of students had somewhat satisfied of basic psychological needs (66.7%) and the majority of students (51.4%) had a moderate level of academic performance. There is a positive correlation between the students' basic psychological needs and their academic performance.

**Conclusion:** The study concludes that basic psychological needs of student's effect on their levels of self-efficacy.

**Recommendations:** the study recommended the supportive programs are essential at the university about the importance of basic psychological needs, and self-efficacy to develop their level, colleges' curriculum should contain one course about basic psychological needs and self-efficacy.

**Keywords:** Basic Psychological Needs, self-efficacy.

### 1-Introduction:

Basic psychological needs (BPN) are innate and universal, and must be satisfied for people to develop and function in healthy or optimal ways. These include the needs for competence (the need to be able to succeed at optimally challenging tasks and achieve a desired outcome), autonomy (the need to have a sense of choice and being the initiator of an action), and relatedness (the need to establish mutual respect and reliance with others) (Ryan &Deci, 2018; Uzman, 2014). While Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments. It reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. These cognitive self-evaluations influence all manner of human experience, including the goals for which people strive, the amount of energy expended toward goal achievement, and likelihood of attaining particular levels of behavioral performance (American Psychological Association, 2022).

In a healthcare setting, self-efficacy is related to nursing education and training. Nursing students who participate in effective clinical experiences should develop a sense of self-efficacy, which is a crucial element of independent work and competency in the nursing profession. The perception of one's own self-efficacy affects clinical performance, course completion, and achievement motivation in students (Shorey and Lopez, 2021).

The satisfaction of nursing student's psychological needs is supporting the needs of the students for relatedness, competence, and autonomy, when the needs are met, students could construct their learning motivation by promoting positive self-perceptions of relatedness, competence, and autonomy. Students can thus draw on the resources of self-determination when they encounter difficulties, coping constructively, reengaging with challenging academic tasks, and in general developing self-efficacy and academic performance (Liu & Huang, 2021).

### 2- Methodology:

**Study Design:** A quantitative correlational study was conducted on undergraduate nursing students at the Universities of Kerbala, Kufa, Babylon, and AL-Qadisiyah in the Middle Euphrates Governorates from September 20<sup>th</sup>, 2021, to July 3<sup>rd</sup>, 2022, and aims to assess the levels of BPN, and self-efficacy among nursing students and to identify the relationship between BPN and their AP among nursing students.

**Study Instruments:** Different scales and tools were used to achieve the goals of the study to assess the relationship between BPN and self-efficacy among nursing collegians. The study instrument consists of three parts. Part I: Student's Demographic Characteristics: general characteristics of the respondents, such as the student's age, gender, place of residence,

marital status, name of the college, type of study, the father's and mother's educational levels, family monthly income, and type of housing. And part II: BPN Scale: this scale was initially developed by (La Guardia, et al., 2000). The BPN of students and the degree to which these requirements. It has 21 items and is graded on a Likert-type scale with five possible responses (4=Always, 3=Often, 2=Sometimes, 1=Rarely, 0=Never). With the higher score indicated a psychological need is greatly satisfied while the lowest score indicated a psychological need is completely unmet. And part III Self-efficacy Scale: this scale is used to identify the abilities of students as they expect them to themselves in general, which is reflected on their self-confidence and psychological health (Abu Assad, 2011). Schwarzer and Jerusalem (1995) was the first to create this scale, and the original form of this scale consisted of ten items, and each item was answered on a 4-point Likert scale (3=Always, 2=Often, 1=Rarely, 0=Not applicable). The overall score ranges between (0) and (30), with a low score indicating lower general self-efficacy benefits and a high score indicating a higher general self-efficacy expectation (Albagawi et al., 2019).

Study Sample: A multi stage sample of 354 fourth-class students has been selected from intentionally nursing colleges. The students selected throughout the use of multi stage sampling. A non-probability sample of 354 fourth-class students has been selected of nursing colleges. Other than this total number, 34 questionnaires were neglected for not completing all the questionnaire information by the participants. The sampling of study is divided into two stages which include: First stage: colleges selection by purposive. The researcher intentionally selected all government nursing colleges in the Middle Euphrates Governorates: (Kerbala University/ Nursing College, Kufa University/ Nursing College, Babylon University/ Nursing College, and AL-Qadisiyah University/ Nursing College). Second stage: selection the students in the convenience sample. The researcher selected only fourth-class students in both morning and evening classes from, of the all four nursing colleges of the Middle Euphrates region of Iraq:

Validity and Reliability: The validity of the instruments was achieved through a panel of (13) experts. The accuracy of the scales' Arabic translation was assessed using the Cronbach's alpha coefficient test. This test was also administered for the BPN, and self-efficacy items. The test's outcome revealed a respectable reliability based on the Cronbach's alpha value. Method of Statistic: The researcher utilized SPSS version (24) to statistically analyze and deal with the data obtained from the study sample in order to arrive at the results, identify links between the variables, and produce the final results. studies that make use of a variety of statistical tests. Correlation coefficient was also used to determine the relationship between students' BPN and their self-efficacy, and statistically significant was on  $p\text{-value} \leq 0.05$ .

### 3-Results

**Table (1): Distribution of Socio-Demographic Characteristics of Students**

List	Variables	Groups	Frequency	Percentage
	Age (years)	20-24	309	87.3
		25-29	33	9.3
		30-34	7	2
		35-39	2	0.6
		40-44	3	0.8
		Total	354	100
	Gender	Male	123	34.7
		Female	231	65.3
		Total	354	100
	Residence	Urban	73	20.6
		Rural	281	79.4
		Total	354	100.0
	Marital Status	Single	285	80.5
		Married	67	18.9
		Divorced	2	0.6
		Total	354	100
	The College	Karbala	126	35.6
		Al-Qadisiya	66	18.6
		Kufa	71	20.1
		Babylon	91	25.7
		Total	354	100
	Type of Study	Evening	161	45.5
		Morning	193	54.5

		Total	354	100
<b>Father Educational Levels</b>		Not read and write	14	4.0
		Read and write	32	9.0
		Primary school	30	8.5
		Intermediate school	69	19.5
		Secondary school	74	20.9
		Institution	<b>122</b>	<b>34.5</b>
		College	1	0.3
		Master	10	2.8
		PhD	2	0.6
		Total	354	100
<b>Mother Educational Levels</b>		Not reads and writes	23	6.5
		Reads and writes	43	12.1
		Primary school	75	21.2
		Intermediate school	<b>80</b>	<b>22.6</b>
		Secondary school	68	19.2
		Institution	56	15.8
		College	1	0.3
		Master	4	1.1
		PhD	4	1.1
		Total	354	100
<b>Monthly Income</b>		Not Enough	20	5.6
		Enough to Some Extent	112	31.6
		Enough	<b>222</b>	<b>62.7</b>
		Total	354	100
<b>Type of Housing</b>		Property	<b>312</b>	<b>88.1</b>
		Rent	25	7.1
		Encyclic	3	0.8
		Random Housing	14	4.0
		Total	354	100

Table (1) shows that a higher percentage of the study sample which represented (87.3%) within the age groups of (20-24) years, (65.3%) were females, the majority (79.4%) was living in a rural residential area, (80.5%) were single, (35.6%) of the participants were from (College of nursing/University of Karbala), (54.5%) were from morning study, (34.5%) of the students' father's education level were graduates from an institution, the highest percentage of students' mothers had intermediate and primary education and accounted (22.6%, 21.2%) respectively. The financial income of the most study sample was enough (62.7%), and enough to some extent (52.5%), The majority (88.1%) of students' lives in a home owned by their family.



**Figure (1): Students' Basic Psychological Needs**

This figure shows that the most of students' BPN assessment was somewhat satisfied (66.7%) and satisfied (31.4%).

**Table (2): Assessment of Students Levels of Self-Efficacy.**

Variables	Levels	Frequency	Percentage
Self-efficacy	Low self-efficacy	41	11.6
	Moderate self-efficacy	182	51.4
	High self-efficacy	131	37.0
	Total	354	100.0

This table shows that the most of students' (51.4%) had a moderate level of self-efficacy and only (37%) had a high level of self-efficacy.

**Table (3): The Relationship between Basic Psychological Needs of Students and their Academic Performance.**

Variables		Mean of Self-efficacy
Mean of basic psychological needs	Pearson Correlation	1.000
	Sig. (2-tailed)	.0001
	Sample Number	354

This table shows the high-significant relationship between students' BPN and their self-efficacy ( $r=1.000$ ,  $P=.0001$ ).

#### 4-Discussion

According to the results of the current study, the majority of students who had relatively satisfied BPN made up two-thirds of the study sample, around a third of the sample had satisfied BPN, and only 2% of the sample had BPN that wasn't satisfied (figure 1). The results and assessment of the students in the current study led researchers to evaluate their responses to be satisfactory. The findings of this study are consistent with research conducted in Korea by the present findings, which mention that the study sample BPN had a moderate level ( $m=3.05$ ,  $SD=0.49$ ), are consistent with a cross-sectional study of 254 Chinese college students carried out by Liu et al. in 2022. Additionally, Kim (2019) found that the BPN score was moderate among the 164 nursing students that participated (66.7%).

The results of the present study indicate that the distribution of the students according to their level of self-efficacy showed that the majority of participants had a moderate level representing more than half of the study sample; more than a third of the sample had a high level, and only 11.6% a low level (table 2). The results of this present study are consistent with Iranian studies, done by Seyedi-Andi et al. (2019) performed to investigate the relationship between some demographic variables and socioeconomic variables with the self-efficacy status of 350 students from Babol University of Medical Sciences, Islamic Republic of Iran, who reported that participants' self-efficacy status was moderate level. Also, agree with Hassankhani et al. (2015) carried out a descriptive-correlational study of Tabriz University of Medical Sciences of 125 participants, which indicated that nursing students' self-efficacy was at a moderate level ( $M=67.57 \pm$ ,  $SD=16.20$ ). Likewise, this finding similar to study findings done by Abdal et al. (2015) conducted in the Faculty of Nursing and Midwifery at

Kashan University of medical sciences, found that nursing students' self-efficacy was at a moderate level. Also, agree with a cross-sectional study conducted in 150 nursing and midwifery students in Isfahan University of Medical Science, found self-efficacy was at a moderate level (53.3%) (Mohamadirizi et al., 2015).

Furthermore, the finding of the current study similar to the finding of Egyptian research carried out on 136 nursing students done by Ebrahim&Elrefaey (2018) that stated that the majority of nursing students had a moderate level of self-efficacy. Moreover, Kassem et al. (2015) conducted a descriptive, correlation study done at Mansoura University and revealed that more than half of total nursing students in final year had moderate self-efficacy (58.9%) and (24.9%) had high complete self-efficacy, this finding in the same line with our study.

While another study was conducted on 72 fourth-year nursing students from the University of Hail in Kingdom of Saudi Arabia by Albagawi et al. (2019) mention that the study sample had a high level of self-efficacy (mean= 3.23, SD = 0.837), and this result is inconsistent with our current study.

Another study conducted in Egypt on 376 nursing students at the fourth academic year in the Faculty of Nursing at Benha University by Mohamed &Morsi, (2019) reported that the highest percentage of nursing students had a high level of self-efficacy 79.20%, this may be due to the students judged for items, and to be had high percent. This finding disagrees with our present study.

In addition, the results of this study contradict Allari et al.'s (2020); Athira's et al.'s (2017); and Abo Habieb's et al.'s (2013) researchers who found that most nursing student had high self-efficacy.

Table (3) indicated the results Pearson correlation analyses indicated that the BPN of students had positive effects on their self-efficacy, in which that student with satisfied BPN are more likely to have a high level of self-efficacy. Diseth et al. (2012) found a positive relationship between BPN scores and self-efficacy, this finding in the same line with our study. Arguably, if the BPN is not satisfied, students will be prone to lower mood (Gander et al., 2016) and will have lower wellbeing (Cordeiro et al. 2015), which can lead to lower self-efficacy (Diseth et al., 2012). The finding of current study supporting previous research findings done by Macakova& Wood (2020), they reported that BPN satisfaction of 203 University students was statistically positive high-relationship with their self-efficacy ( $\beta = 0.37$ ,  $p < .01$ ), and there was an indirect effect of BPNS on academic achievement via self-efficacy was supported ( $\beta = -.03$ ,  $p = .73$  for a direct relationship between BPNS and academic achievement, and  $\beta = .05$ ,  $p = .04$  for an indirect relationship via self-efficacy). Studies investigating BPNS rarely report a direct relationship with academic achievement (Cordeiro et al. 2015).

## 5- Conclusions:

The current study aims to measure relationship between undergraduate nursing students' BPN and their self-efficacy. The majority of students who have met to some extent the BPN have an average level of self-efficacy. Also, the researcher found a strong positive correlation between BPN of students and their self-efficacy, in which that student with satisfied BPN are more likely to have a high level of self-efficacy. People with weak self-efficacy may believe that things are more difficult than they really are, a belief that reinforces stress, depression, and a narrow view of how best to solve the problem. Consequently, self-efficacy beliefs are powerful determinants and predictors of an individual's ultimate level of achievement.

## 6- Recommendation

The recommendations have been suggested based on the conclusions of the current study:

1. Increasing awareness programs at the university about the importance of BPN, and self-efficacy to develop their level. And colleges' curriculum should contain one course about BPN and self-efficacy.
2. Improve nursing student's self-efficacy through different leaning, teaching methods and applying of skills mastery experiences, vicarious experiences, and social persuasions in education.
3. During skills training, nursing students with low self-efficacy should be supported and encouraged to complete tasks.
4. The Nursing curriculum should combine leaning activities that support nursing students in developing self-efficacy.

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