

# Assessment of Self Efficacy Level Among Nurse Educators in Technical Nursing I Institutes

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## Abstract

**Background**, in educational settings, self-efficacy beliefs support motivation, well-being, and achievement. The factors that influence behavior are embedded in the belief that one has the capability to accomplish that behavior. Most research suggests that self-efficacy is strongly predictive of academic performance; in fact, it is typically as good a predictor of academic success as previous achievement or mental ability. **Aim of this study** was to assess the level of self-efficacy among nurse educators in Alexandria Health Institutes. **Design**: Descriptive research design was adopted. All available nurse educators (n=180) at Alexandria Technical Health Institute (n=90) and Health Insurance Technical Institutes (n=45) and Alexandria University Institute (n=45) were included in this study. One tool for data collection were used, Teacher Self-Efficacy Scale. **Results** of the conducted study revealed that nurse educators were perceived moderate level of overall self-efficacy, there was statistically significant positive correlation between overall self-efficacy and its dimensions. **Conclusion**, there was significant positive correlation regarding to self-efficacy and its dimensions in 3 working institutes. **Recommendations**: Therefore, it was recommended that, Technical Nursing Institutes should focus on nurse educators' feedback regarding their need to enhance nurse educators' self-efficacy through periodical educational programs.

**Keywords**: Toxic leader, self-efficacy, Nurse Educators.

## Introduction

Self-efficacy is a fundamental concept in nursing education. The concept of self-efficacy was derived from the psychological research of Albert Bandura. Through **Bandura's (1994)** proposition of social cognitive theory, the concept of self-efficacy

developed. Social cognitive theory emphasizes a difference exists between an individual's ability to demonstrate moral competence versus moral performance (**Bandura, 1994**). **Bandura (1994)** defines self-efficacy as an individual's perception of

his/her capabilities to produce designated levels of performance.

The self-efficacy belief that occurs with the impact of the sources stated that affects teachers' cognitive processes necessary to perform the tasks they need to do, risk-taking attitudes; and ability to manage stress, and internal motivation processes for themselves about the fact that they can fulfil their duty. In addition, teachers who are self-competent to perform the task have a higher tendency not to avoid the task to be performed and to choose the task, which also positively reflects the job satisfaction of the teachers (**Soto & Rojas, 2019**).

According to **Zee and Koomen & de Jong (2018)** who concluded that teachers who have high self-efficacy experience have less stress and burnout, and experience higher levels of personal achievement and job satisfaction. Furthermore, it is highly relevant to effective teaching behaviors in class despite moderate effect sizes for these relations (**Klassen & Tze, 2014**). Teachers with high self-efficacy perceive school as a community in which students learn through cooperative experience (**Woolfolk, Rosoff & Hoy, 2019**). Also they focus on learning and mastery rather than on competition in class (**Lazarides, Buchholz & Rubach, 2018**).

**Zee, Koomen & de Jong (2018)** concluded that teacher self-efficacy is associated with students' academic adjustment and achievement, and closely linked to student motivation. Also, many studies found that teachers with great passion for teaching increase their self-efficacy (**Fernet, Lavigne, Vallerand & Austin,**

**2014**). Moreover, Teachers' confidence in their ability to perform the actions is one of the teacher characteristics that reliably predict teacher practice and student outcomes (**Zee, De Jong & Koomen, 2016**). Furthermore, efficacy beliefs within a school can result in increased levels of student and school achievement (**Casanova & Azzi, 2015**).

#### **Aim of the study:**

This study aims to assess of self-efficacy level among nurse educators in Alexandria Health Institutes.

#### **Research questions**

What is the level of self-efficacy as perceived by nurse educator?

#### **Materials and Method**

##### **Materials**

##### **Research design:**

Cross-sectional descriptive research design was used.

##### **Setting:**

The study was conducted at the Technical Nursing Institutes; Alexandria Technical Health institutes, which is affiliated to Ministry of Health and population; Health Insurance Technical Institutes; Alexandria University Institute.

##### **Subjects:**

All nurse educators working in the previous setting and who were available at the time of data collection. (N = 180). Inclusion criteria for studied nurse educators include study

subjects were available in the pre-mentioned settings and had BSCs, Master or PhD degree in nursing science, and had at least one year of experience at the current working institute.

**Study Tool:** one tool was used in the study.

### **Tool :Teacher Self-Efficacy questionnaire**

It was first developed by **Bandura (1997)** and tested for psychometric properties by **Karbasia & Samani (2016)**. It was used to assess the nurse educators level of confidence in their self-efficacy from their prospective. It consists of 28 items and classified into six factors include; efficacy to influence decision making (3 items), instructional self-efficacy (8 items), disciplinary self-efficacy (3 items), efficacy to create positive school climate (8 items), efficacy to enlist community involvement (3 items) and efficacy to enlist Parental involvement (3 items). Nurse educators rate their confidence by recording each item in a number from 0 to 100. the cronbach's alpha coefficient was 0.899, the content validity was 0.725. The maximum and minimums scores ranged from 0 to 2800. The scoring system was:

- The range of scores <33.33% indicates low level of self-efficacy.
- The range of scores 33.33<66.66% indicates moderate level of self-efficacy.
- The range of scores more than 66.66% indicates high level of self-efficacy.

### **Method**

- Permission from Ethical Research Committee was obtained.

- Permission to conduct the study was obtained from dean of the faculty of nursing Alexandria University to collect necessary data and from the administrators of the identified study settings to collect the necessary data.
- Content validity of the questionnaire was done by 5 experts in the related fields in the field of the study.
- The reliability coefficient of the tool by Cronbach's alpha was 0.899.
- A pilot study was carried out on a sample of (10%) from participants to check and ensure the clarity and applicability of the tools. Based on the finding's corrections were done. The main study subjects.
- Informed consent was obtained from all participants of the study after explanation of the study purpose and confidentiality of data was ensured.
- The questionnaire was completed in the presence of the researcher to ensure objectivity of nurse educator's response, avoid contaminating of their opinion and check that all items were answered. The amount of time needed to fill the questionnaire was about 15-20 minutes for each study subject.
- Data collection phase consumed a period of one month from 2<sup>nd</sup> of August to 5<sup>th</sup> of September 2021.

### **Results**

**Table 1** This table shows that nurse educators were perceived moderate level of overall self-efficacy (58.12 ± 16.14). Regarding to dimensions of self-efficacy,

nurse educators were perceived high level of disciplinary self-efficacy, instructional self-efficacy, and efficacy to enlist community involvement ( $73.61 \pm 25.76$ ,  $72.12 \pm 18.26$ ,  $68.24 \pm 24.90$ ) respectively. While, they perceived moderate level of self-efficacy dimensions in relation to efficacy to enlist parental involvement, efficacy to influence decision making and efficacy to create a positive school climate ( $65.0 \pm 28.47$ ,  $39.07 \pm 25.49$ , and  $39.06 \pm 18.61$ ) respectively.

**Table 2** This table clarifies that there was statistically significant difference regarding to self-efficacy and its dimensions in the three working institutes. studied nurse educators work at Health Insurance Technical Institute perceived high level of self-efficacy ( $71.27 \pm 12.12$ ) and its related dimensions of efficacy to Influence decision making, instructional self-efficacy, disciplinary self-efficacy, efficacy to create a positive school climate, efficacy to enlist community involvement, efficacy to enlist parental involvement ( $58.15 \pm 20.60$ ,  $81.53 \pm 14.78$ ,  $85.93 \pm 17.39$ ,  $50.42 \pm 14.68$ ,  $84.44 \pm 20.23$ ,  $84.81 \pm 22.14$ ) respectively.

**Table 3** shows there was statistically significant positive correlation between overall self-efficacy and its dimensions namely; efficacy to influence decision making, instructional self-efficacy, efficacy to create a positive school climate, efficacy to enlist community involvement, efficacy to enlist parental involvement except disciplinary self-efficacy ( $P \leq 0.001$   $r = 0.514$ ,  $P \leq 0.001$   $r = 0.829$ ,  $P \leq 0.001$   $r = 0.781$ ,  $P \leq 0.001$   $r = 0.761$ ,  $P \leq 0.001$   $r = 0.790$ ) respectively.

## Discussion

Regarding to teacher self-efficacy, nearly two third of nurse educators were perceived moderate level of overall self-efficacy. Moreover, health insurance institute had the highest level of overall self-efficacy and its dimensions more than other institutes because of nurse educators pointed that they able to influence the decisions that are made in the institute, express their view freely on important institute matters.

This interpretation was supported by (**Bandura, 1997, cited in Ilan & Sheaffer, 2019**) who claimed that if teachers feel that they have control over events, their beliefs in their efficacy can be strengthened. Also, when teachers' participation in the decisions at school is ensured and they are authorized, their feelings of control over their job increase. Consequently, efficacy beliefs can develop (**Goddard et al., 2004; Brinson and Steiner, 2007 as cited in Cansoy, Parlar 2018**).

Regarding to study setting, finding of the current study clarified that there was positive significant correlation between nurse educators working in Health Insurance Technical Institutes and their levels of self-efficacy this result may be due to most of nurse educators working in this institute reported that their managers provide them with required support to achieve objectives of the institute and support them to develop positive attitude toward job.

This finding is consistent with (**Tickle, Chang & Kim, 2011**) whose claimed that positive and negative managerial behaviors of school administrators can affect how teachers

behave in their working life. Support of school administrators may be effective in that teacher develops positive or negative attitudes and behaviors related to their jobs. Moreover, Researches reveal that employees who receive support from the administrators adopt the objectives of the institution, exhibit attitudes and behaviors in favor of their institutions, and avoid those which shall damage it (Avanzi, Schuh, Fraccaroli & van Dick, 2015).

On the other hand, Alexandria technical health institute had the lowest level overall self-efficacy than other institutes because the most of nurse educators working in this institute reported that their level of self-efficacy were affected by leader behaviors and how treat them such as isolation, lack of recognition, and excessive role requirements. Also, the increasing demands on nurse educators and less time to fulfill their many job duties. Likewise, a lack of autonomy and the freedom to choose objectives or teaching materials that decrease their level of competence. In addition, low nurse educators' morale and insufficient resources are other factors that lead to diminish their self-efficacy.

### Conclusion

*Based on the results of the current study, it can be concluded that:*

- Nurse educators were perceived moderate level of overall self-efficacy.
- nurse educators were perceived high level of disciplinary self-efficacy, instructional self-efficacy, efficacy to enlist community involvement While, they perceived moderate level of self-efficacy

dimensions of efficacy to enlist parental Involvement, efficacy to influence decision making and efficacy to create a positive school climate.

- Nurse educators' work at Health Insurance Technical Institutes perceived high level of self-efficacy and its related dimensions.
- Significant positive correlation between overall self-efficacy and its dimensions

### Recommendations

*In line with the findings of the study, the following recommendations are made:*

- Using reward motivators and remuneration in a manner that enhances their self-efficacy.
- Improvement of working conditions to eliminate or reduce job strain can increase teachers' self-efficacy levels. Provision of instructional resources would enhance teachers' effectiveness
- Provision of counselling and Psychotherapy services would help nurse educators to deal with such issues as conflict, work-related stress.
- Provision in-service training approaches and continuing professional education increase workers effectiveness.

**Table (1) level of self-efficacy and its dimensions among the studied nurse educators (n= 180).**

Nurse educator's self-efficacy	Mean ± SD	Mean percentage score
<b>Efficacy to Influence Decision Making</b>	5.34 ± 1.53	39.07 ± 25.49
<b>Instructional Self-Efficacy</b>	19.54 ± 2.92	72.12 ± 18.26
<b>Disciplinary Self-Efficacy</b>	7.42 ± 1.55	73.61 ± 25.76
<b>Efficacy to Create a Positive School Climate</b>	14.25 ± 2.98	39.06 ± 18.61
<b>Efficacy to Enlist Community Involvement</b>	7.09 ± 1.49	68.24 ± 24.90
<b>Efficacy to Enlist Parental Involvement</b>	6.90 ± 1.71	65.0 ± 28.47
<b>Overall self-efficacy</b>	60.54 ± 9.04	58.12 ± 16.14

Low Mean score percentage = <33.33    Moderate Mean score percentage = 33.33<66.66    High Mean score percentage ≥66.66

**Table (2) level of self-efficacy among all studied nurse educators regarding to place of work.**

Nurse educators self-efficacy	Alexandria technical health institute (n = 90)	Health insurance technical institutes (n = 45)	University technical institute (n = 45)	F	p
<b>Efficacy to Influence Decision Making</b>					
Mean ± SD	5.13 ± 1.36	6.49 ± 1.24	4.62 ± 1.51	23.022	<0.001**
Mean percentage score	35.56 ± 22.65	58.15 ± 20.60	27.04 ± 25.20		
<b>Instructional Self-Efficacy</b>					
Mean ± SD	18.70 ± 3.07	21.04 ± 2.36	19.71 ± 2.50	10.830	<0.001**
Mean percentage score	66.88 ± 19.21	81.53 ± 14.78	73.19 ± 15.63		
<b>Disciplinary Self-Efficacy</b>					
Mean ± SD	6.89 ± 1.53	8.16 ± 1.04	7.73 ± 1.63	12.827	<0.001**
Mean percentage score	64.81 ± 25.53	85.93 ± 17.39	78.89 ± 27.15		

<b>Efficacy to Create a Positive School Climate</b> Mean ± SD Mean percentage score	14.03 ± 2.77 37.71 ± 17.31	16.07 ± 2.35 50.42 ± 14.68	12.87 ± 3.10 30.42 ± 19.38	15.671	<0.001**
<b>Efficacy to Enlist Community Involvement</b> Mean ± SD Mean percentage score	6.82 ± 1.44 63.70 ± 24.04	8.07 ± 1.21 84.44 ± 20.23	6.67 ± 1.45 61.11 ± 24.10	14.866	<0.001**
<b>Efficacy to Enlist Parental Involvement</b> Mean ± SD Mean percentage score	6.38 ± 1.67 56.30 ± 27.77	8.09 ± 1.33 84.81 ± 22.14	6.76 ± 1.57 62.59 ± 26.15	18.204	<0.001**
<b>Overall Teacher self-efficacy</b> Mean ± SD Mean percentage score	57.96 ± 8.54 53.49 ± 15.24	67.91 ± 6.79 71.27 ± 12.12	58.36 ± 8.06 54.21 ± 14.39	25.382	<0.001**

F: F for ANOVA test

\*\* : Statistically significant at p < 0.001

Low Mean score percentage = <33.33    Moderate Mean score percentage = 33.33<66.66    High Mean score percentage ≥66.66

**Table (3) Correlation Matrix between Teacher Self-Efficacy and its dimensions among nurse educators.**

Self-efficacy dimensions	Influence Decision Making	Instructional	Disciplinary	Create a Positive School Climate	Enlist Community Involvement	Enlist Parental Involvement	Overall self-efficacy
<b>Influence Decision Making</b>							
<b>Instructional</b>	r P	0.248 <0.001**					
<b>Disciplinary</b>	r P	0.123 0.099	0.615 <0.001**				
<b>Create a Positive School Climate</b>	r P	0.463 <0.001**	0.431 <0.001**	0.338 <0.001**			
<b>Enlist Community Involvement</b>	r P	0.318 <0.001**	0.572 <0.001**	0.370 <0.001**	0.512 <0.001**		
<b>Enlist Parental Involvement</b>	r P	0.206 0.006*	0.649 <0.001**	0.505 <0.001**	0.487 <0.001**	0.663 <0.001**	
<b>Overall self-efficacy</b>	r P	0.514 <0.001**	0.829 <0.001**	0.658 <0.001**	0.781 <0.001**	0.761 <0.001**	0.790 <0.001**

r: Pearson coefficient

\*: Statistically significant at p ≤ 0.05

\*\* : Statistically significant at p < 0.001

## References:

- Bandura, A. (1994). Self-efficacy In VS Ramachaudran (Ed.) Encyclopedia of Human Behavior, 4, 71-81.
- Soto, M., & Rojas, O. (2019). Self-efficacy and job satisfaction as antecedents of citizenship behaviour in private schools. *International Journal of management in education*, 13(1), 82-96.
- Zee, M., Koomen, H. M., & de Jong, P. F. (2018). How different levels of conceptualization and measurement affect the relationship between teacher self-efficacy and students' academic achievement. *Contemporary Educational Psychology*, 189-200.
- Klassen, R. M., & Tze, V. M. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational research review*, 12, 59-76.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (2019). TEACHERS' SENSE OF EFFICACY AND THEIR BELIEFS ABOUT MANAGING STUDENTS. *Educational Review: International Journal*, 16(2), 112-128.
- Lazarides, R., Buchholz, J., & Rubach, C. (2018). Teacher enthusiasm and self-efficacy, student-perceived mastery goal orientation, and student motivation in mathematics classrooms. *Teaching and Teacher Education*, 69, 1-10.
- Fernet, C., Lavigne, G. L., Vallerand, R. J., & Austin, S. (2014). Fired up with passion: Investigating how job autonomy and passion predict burnout at career start in teachers. *Work and Stress: An International Journal of Work, Health & Organisations*, 28, 270-288
- Zee, M., de Jong, P. F., & Koomen, H. M. (2016). Teachers' self-efficacy in relation to individual students with a variety of social-emotional behaviors: A multilevel investigation. *Journal of Educational Psychology*, 108(7), 1013.
- Cansoy, R., & Parlar, H. (2018). Examining the relationship between school principals' instructional leadership behaviors, teacher self-efficacy, and collective teacher efficacy. *International Journal of Educational Management*.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY, USA. WH Freeman and Company
- Karbasi, S., & Samani, S. (2016). Psychometric properties of teacher self-efficacy scale. *Procedia-Social and Behavioral Sciences*, 217, 618-621
- Brender-Ilan, Y., & Sheaffer, Z. (2019). How do self-efficacy, narcissism and autonomy mediate the link between destructive leadership and counterproductive work behaviour. *Asia Pacific Management Review*, 24(3), 212-222
- Cansoy, R., & Parlar, H. (2018). Examining the relationship between school principals' instructional leadership behaviors, teacher self-efficacy, and collective teacher efficacy. *International Journal of Educational Management*.
- Tickle, B. R., Chang, M., & Kim, S. (2011). Administrative support and its mediating effect on US public school teachers. *Teaching and Teacher Education*, 27(2), 342-
- Avanzi, L., Schuh, S. C., Fraccaroli, F., & van Dick, R. (2015). Why does organizational identification relate to reduced employee burnout? The mediating influence of social support and collective efficacy. *Work & Stress*, 29(1), 1-10