# Predictors of Empowerment Among Undergraduate Nursing Students: A Cross-Sectional Study

SAGE Open Nursing Volume 10: 1–9 © The Author(s) 2024 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/23779608241286740 journals.sagepub.com/home/son



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#### Abstract

**Objective:** To predict the factors that influence undergraduate nursing students' perception of empowerment. **Methods:** A cross-sectional design was used, and fourth-year nursing students (n = 164) were selected using convenient sampling. The data collection methods included the Arabic version of self-reported questionnaires: The (LES), (LOGO-II), and (UNSASS).

**Results:** The results showed a positive correlation between nursing students' perception of empowerment and their attitudes toward learning. Also, the results showed a strong correlation between students' perception of empowerment and their academic satisfaction. In addition, in-class teaching was found to be the strongest predictor of students' perception of empowerment.

**Conclusions:** Verified the factors that may contribute to promoting the teaching-learning process to focus and stress on them. Teachers and instructors should utilize the available resources in the teaching environment to maximize the learning outcomes. All these factors are not limited and will enhance the nursing students' perception of empowerment.

#### **Keywords**

nursing students, empowerment, predictors, satisfaction, learning, teaching

Received 7 March 2024; Revised 16 August 2024; accepted 3 September 2024

# Introduction

Empowerment is "the act of strengthening an individual's belief in his or her sense of effectiveness" (Conger, 1989). This has been widely used in various fields including community development (Christens, 2012), social work (Wallach & Mueller, 2006), economics and marketing (Bachouche, 2017), and business and management (Saremi, 2015). In academia, the concept of empowerment has been embraced due to its significant contribution to achieving the optimal goals of the teaching-learning process. It refers to a match between internal factors "*intrapersonal empowerment*," which facilitates the learning environment and achieves the targeted goals (Frymier et al., 1996).

# **Review of Literature**

Interpersonal empowerment is the process of transferring decision-making power from the teacher to the students in

an educational setting (Lawson, 2011). It involves a process where the students develop the competence to take charge of their growth (Kimwarey et al., 2014) and engage in various learning processes (Ledbetter & Finn, 2013). Empowered students are more likely to effectively perceive the potential opportunities and support within the learning environment (Bradbury-Jones et al., 2011) and understand the meaningfulness and impact of the learning courses on and outcomes (Jernberg, their objectives 2008). Additionally, some studies found that some personal characteristics may enhance the perception of empowerment such as gender, academic achievement, the academic year, and participation in non-curricular activities (Alotaibi, 2016; Khater et al., 2014; Sanaie et al., 2019). On the other hand, teacher attitudes positively affect nursing students' learning

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Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access page (https://us.sagepub.com/enus/nam/open-access-at-sage). values, decision-making, and perception of empowerment (Ahn & Choi, 2015; Bradbury-Jones et al., 2010).

The satisfaction of learners with the learning process, innovative teaching strategies, and the use of technology in teaching significantly impact the educational experience (Walker et al., 2016). When learners are satisfied, they are more engaged and participative in learning activities, resulting in positive learning outcomes (D'Souza et al., 2015). Empowered learners are more motivated and involved in utilizing technology in the classroom (Ledbetter & Finn, 2013). Empowered students demonstrate advanced capabilities, such as making clinical decisions, mastering complex skills, and achieving higher grades (Abatihun Alehegn & Boitumelo, 2019; Ahn & Choi, 2015; Kirk et al., 2016; Saeedi & Parvizy, 2019). In addition, they tend to have levels of confidence and self-efficacy greater (Babenko-Mould et al., 2015). Student empowerment is influenced not only by their traits but also by empowering teachers, clinical instructors, and clinical placements (Saeedi & Parvizy, 2019). Additionally, the introduction and adoption of innovative teaching strategies positively affect learning outcomes (Lewis et al., 2020).

Factors that affect students' empowerment were investigated extensively to evaluate its impact on the learning process and outcomes. Teachers play a significant role in facilitating students' empowerment perception. The motivation encourages students to believe in their intrapersonal potentials, which enhance their feelings of impact, meaningfulness, and competence (Ledbetter & Finn, 2013). In addition, clinical training strongly affects the sense of satisfaction among nursing students because they spend the majority of their training at hospitals and different clinical placements. Studies found that well-organized and structured organizations reflected positively on students' empowerment (Peterson et al., 2014). Availability of learning opportunities such as complex and advanced skills harms nursing students' learning process (Atakro et al., 2019; Smith et al., 2018), scarcity of these opportunities, and hands-on procedures may contribute to the sense of dissatisfaction (Murphy et al., 2012).

The previous studies investigated one factor that may influence nursing students' perception of empowerment, such as the classroom factors or the clinical environment. This study examined factors that could influence nursing students' empowerment.

# **Conceptual Framework and Definitions**

#### Conceptual Model

This study aims to identify the factors that predict undergraduate nursing students' perception of empowerment. Based on the literature, the researcher developed this hypothetical conceptual model to guide this study (Supplementary Figure 1). The intrapersonal empowerment definition is based on the conceptualization of empowerment concerning workplace context with its three domains (*meaningfulness*, *competence*, *and impact*) (Frymier et al., 1996).

Conger (1989) believed that the working environment strongly affects a holistic perception of empowerment. Individuals would feel empowered if they were aware of their environment's condition (Zimmerman & Warschausky, 1998). According to Kanter (1977), organizational conditions are defined as the access to (1) information including important knowledge and experiences to accomplish tasks properly, (2) resources needed to perform tasks and skills competently according to the organizational goals (financial, technical, facilities, and human), (3) opportunity entails access to challenges, rewards, and professional development opportunities to increase knowledge and skills, and (4) support to make decision according to the organizational standards and get encouragement from peers and employers. Proper organizational conditions empower employees to accomplish their desirable goals (Laschinger et al., 2013).

The researcher hypothesized that the learner's orientation to learning (learner orientation to learning and learner orientation to grade), student's satisfaction with the teaching-learning experiences (in-class teaching, clinical teaching, and program design and delivery), and learning environment (support and resources) collectively and individually influence learners' perception of empowerment (Supplementary Figure 1).

# Conceptual and Operational Definitions of the Study Variables

**Empowerment:** Conceptually, it is defined as "a process by which individuals gain control over their lives" (Perkins & Zimmerman, 1995). Additionally, it is defined as "the degree of autonomy and self-determination in people and communities." Empowerment is an action that refers both to the process of self-empowerment and to professional support (Rappaport, 1981). Furthermore, "Empowerment is viewed as a process: the mechanism by which people, organizations, and communities gain mastery over their lives" (Julian, 1984). Operationally, it is defined by the score obtained from the Learner Empowerment Scale (LES), and its subscale (1) meaningfulness: individual's values of his/ her tasks to be recognized, the more valuable tasks are the more tasks suitable in work setting, (2) competence: individual feels confident and able to perform tasks to achieve the desired goals, and (3) impact: individuals perceive their tasks useful and make a difference within work setting (Frymier et al., 1996).

Satisfaction With Teaching-Learning Experiences. Satisfaction With In-class Experiences: Conceptually, it is defined as

"the student's subjective cognitive appraisal of the quality of his or her structural learning, mainly being in the classroom" (Balaguer et al., 2014; Masilaca et al., 2018). Operationally, it is defined by the score obtained on subscale I of the Undergraduate Nursing Students Academic Satisfaction Scale (UNSASS) (Dennison & El-Masri, 2012).

Satisfaction With Clinical Experience: Conceptually, it is defined as "the student's subjective cognitive appraisal of the quality of the clinical learning environment and the interactive network of forces within the clinical setting that influence the student's clinical learning outcomes" (Balaguer et al., 2014). Operationally, it is defined by the score obtained on subscale II of the UNSASS (Dennison & El-Masri, 2012).

Satisfaction With Program Design and Delivery: Conceptually, it is defined as "the student's subjective cognitive appraisal of the quality of a pedagogical model for specific learning objective, target group, and specific context or knowledge domain." The program design and delivery specify under which conditions, what activities have to be performed by learners and teachers to enable learners to attain the desired learning objectives. It can refer to physical resources (learning objects and learning services) that are needed during the teaching and learning process (Balaguer et al., 2014; Koper & Olivier, 2004). Operationally, it is defined by the score obtained on subscale III of the UNSASS (Dennison & El-Masri, 2012).

Satisfaction With Learning Environment: Conceptually, it is defined as "student's subjective cognitive appraisal of the quality of the diverse physical locations, contexts, and cultures in which students learn" (Balaguer et al., 2014; Bates, 2019). Operationally, it is defined by the score obtained on subscale IV of the UNSASS (Dennison & El-Masri, 2012).

*Learner Orientation:* Conceptually, it refers to the "*pre-dominant attitude held by the students toward their college experience*" (Eison et al., 1983). Operationally, it is defined by the score obtained on the Learning Orientation-Grade Orientation Scale (LOGO-II) (Eison et al., 1983).

# The Purpose and Questions

The purpose of the study is to predict the most significant predictors for undergraduate nursing students' perception of empowerment among the entire set of variables. This study aims to answer the following questions:

- 1. What is the level of the nursing students' perception of empowerment, learning orientation grade orientation, and academic satisfaction?
- 2. What is the relationship between the selected demographic variables and their perception of empowerment among the nursing students?

- 3. What is the relationship between the students' learning orientation and grade orientation and their perception of empowerment?
- 4. What is the relationship between the student's academic satisfaction with "In-class teaching, Clinical teaching, Program design and delivery, and Support and resources" and their perception of empowerment?
- 5. What is the relationship between the student's academic satisfaction with "In-class teaching, Clinical teaching, Program design and delivery, and Support and resources" and the students' learning orientation and grade orientation?
- 6. What are the strongest predictors of empowerment as perceived by nursing students?

# Methods

#### Design and Setting

The cross-sectional design was conducted employing a quantitative research approach and correlation design, which was utilized to test the hypothesized relationship between the research variables and to answer the research questions (Plichta, 2013).

This study was conducted at five different universities in Jordan (private/public) distributed over the three regions (north, middle, and south) based on the highest number of students in each sector.

# Sample and Sampling

This national study targeted all nursing students at the public and private universities in Jordan to participate in this study. Multistage sampling was used; the first stage was the selection of universities by using purposeful sampling to pick one public and one private university from each region. The second stage was the participants' recruitment using convenient sampling from selected universities. The sample size was estimated using G\*Power software version 3.0.10 (Faul et al., 2007), to prevent type I error: CI 95%, power of .90, the medium effect size of .15,  $\alpha$  = .05, the number of predictors is 14, and the estimated sample size is 166. The researcher increased the sample size to *n* = 184 to consider the attrition.

*Inclusion/Exclusion Criteria*. All fourth-year nursing students, male and female, and Arabic-native language were included in this study. First-, second-, and third-year nursing students and students engaged in the bridging pathway were excluded from the study.

# Data Collection Materials

1. The researcher developed the demographic data sheet, which includes gender, university affiliation, place of residency, and desire to attend nursing school.

- LES, developed by Frymier, Shulman, and Houser to assess intrapersonal students' empowerment (Frymier et al., 1996). 35 items were included under three subscales: impact, meaningfulness, and competence (16, 10, and 9 items, respectively). Responses of all subscales using a five-point Likert scale range from 0 *never empowered* to 4 *very empowered*. The theoretical range is 0– 140, and classified (0–46), (47–93), (94–140), as mild, moderate, and high levels of empowerment, respectively. The overall correlation coefficient is .95, and for subscales: impact, meaningfulness, and competence are .92, .92, and .91, respectively (Houser & Frymier, 2009). The current study's overall correlation coefficient was .93, and the subscales were .90, 80, and 80, respectively.
- The UNSASS was developed by Dennison and 3. El-Masri to measure the students' satisfaction with the teaching program and resources (Dennison & El-Masri, 2012). 48 items, four subscales (in-class learning, clinical experience, the program delivery, and the program support and resources), items included into 16, 15, 12, and 5, respectively. Responses of all subscales using a five-point Likert scale range of 5 highly agreed to 1 highly disagreed; the theoretical score is (48-240). The overall Cronbach's alpha coefficient is .96. Cronbach's alpha coefficients of the subscales, in-class teaching, clinical experiences, program delivery and design, and program support resources, are .92, .91, .91, and .74, respectively (Dennison & El-Masri, 2012). The current study's overall scale correlation coefficient was .96, and for subscales were .89, 88, 93, and 79, respectively.
- 4. The LOGO-II was developed by Eison et al. to assess the students' attitudes and behaviors toward their learning experience (Eison et al., 1983). 32 items, divided into two subscales: Learning Orientation (16 items) and Grade Orientation (16 items). Responses of all subscales using a five-point Likert range from 1 *never* to 5 *always*, the theoretical score is (32–160). The Cronbach's alpha coefficient of the Learning Orientation subscale is .76 and for Grade Orientation is .73 (Eison et al., 1983). In the current study, the Learning Orientation subscale Cronbach's alpha was .71, and the Grade Orientation subscale Cronbach's alpha was .70.

### **Data Collection Process**

*Ethical Consideration.* The Institutional Review Board (IRB) approval was granted by the University of X scientific committee under the reference number (PDs.18.5) in December 2021 after the study's purpose and significance were expounded for comprehensive understanding. All ethical concepts were explained to students, the surveys were anonymous, and confidentiality was maintained all over the study process. Consent forms were obtained from all participants

before answering the self-reported questionnaires. The duration of the data collection process was six months (Feb 2022– Aug 2022).

# Data Analysis Process

Data were analyzed using SPSS<sup>®</sup> version 22 (IBM, 2011). Cleaning and checking for any missed data were performed, and missed data were deleted to prevent any source of bias.

Descriptive analysis of central tendency and variance was used to describe the sample demographic characteristics (frequency, mean, and median).

Different statistical tests were used to answer the research questions. Descriptive statistical analysis was used to answer the first question, Bivariate Pearson's correlation was used to answer the second, third, fourth, and fifth questions, and Multiple Hierarchical Regression was used to answer the sixth question (Plichta, 2013).

# Results

#### Participants' Characteristics

A total of 164 participants completed the self-reported questionnaires with a response rate of 90%; the demographic characteristics were analyzed using descriptive statistics, the mean age of participants is  $(22.4 \pm 3.6)$ , and the mean GPA is  $(76.1 \pm 8.8)$ . The results showed that 76.2% (*N* = 125) were female, 68.3% (*N* = 112) were from public universities, 47% (*N* = 77) lived in the middle region of the kingdom, and 75.6% (*N* = 124) were willing to join nursing college (Supplementary Table 1).

Descriptive statistics were used to answer the first question and to measure the level of nursing students' perception level of empowerment (LES), LOGO-II, and academic satisfaction (UNSASS) (Supplementary Table 2). Participants showed a moderate perception of empowerment with a mean total score of 79.0 (SD = 17.35). A detailed description of the scale and subscales is illustrated in Supplementary Table 2.

Also, participants showed a moderate level of academic satisfaction with a mean total score of 187 ( $SD \pm 30.5$ ), the subscales of in-class teaching, clinical experiences, program delivery, and program and resources mean were 56.6 ( $SD \pm 11.1$ ), 54.3 ( $SD \pm 11.4$ ), 44.4 ( $SD \pm 7.4$ ), and 31.7 ( $SD \pm 7.6$ ), respectively (Supplementary Table 2).

# Relationship Between Nursing Students' Perception of Empowerment and Selected Demographic Characteristics

The Pearson correlation was used to answer the second question in this study to assess the relationship between age, GPA, and the perception of empowerment. The results are not statistically significant; r(160) = .001 and r(160) = .03, respectively.

Point biserial *r* is used to answer the second question in this study to assess the relationship between the perception of empowerment, gender, university affiliation, and willingness to join nursing school. The correlation between the perception of empowerment and gender is statistically significant  $r_{pb}(159) = -23$ , p < .01. Male nursing students were found to be more empowered than females according to the mean score of both groups. The mean score of the male students' group (M = 86.25, SD = 17.13) is compared with the mean score of the female students' group (M = 76.82, SD = 16.87). But the relationships between the perception of empowerment with university affiliation and desire to join nursing school were not statistically significant  $r_{pb}(159) = -.14$  and -.00 respectively. The results are illustrated in Supplementary Table 3.

# The Relationship Between Students' Learning Orientation, Grade Orientation, and Their Perception of Empowerment

Pearson's correlation was used to answer the third question in this study and to assess the relationship between the nursing students' perceived level of empowerment and the Learning Orientation Grade orientation scale measurement. The total score of LOGO-II was  $104.2 \pm 10.1$ . The correlation showed a significant relationship between the perception of empowerment and LOGO-II, r(162) = +.33, p < .01 (two-tailed) (Supplementary Table 3).

# The Relationship Between Nursing Students' Perception of Empowerment and Their Academic Satisfaction

Pearson's correlation was used to answer the fourth question in this study and to assess the relationship between nursing students' perception of empowerment and their academic satisfaction subscales (in-class, clinical teaching, program design and delivery, and support and resources). The results showed a statistically significant correlation r(162) = +.37, +.27, +.26, and +.30, respectively, p < 0.01 (two-tailed) (Supplementary Table 3).

# The Predictors of Nursing Students' Perception of Empowerment

To answer the fifth question of this study and assess the multicollinearity, a correlation was performed to assess if there is a relationship between the learning orientation grade orientation and the nursing students' academic satisfaction, and the results showed that there are no significant relationships between the independent variables of this study (Supplementary Table 3).

Regression analysis was used to answer the sixth question in this study and to evaluate whether the entire set of data was sufficient to predict the study's outcome. The assumptions of sequential multiple regression were tested by examining the probability plot, the histogram for standardized residual analysis, and Scatter plots for linearity and multivariate normality. Collinearity was a tolerance diagnostic test  $(1-R^2)$ , it was (.76), and the Durbin Watson test was also performed (1.85). So, there was no violation of assumptions was detected.

The overall regression including six predictors showed a statistically significant, R = .50,  $R^2 = .25$ , adjusted R = .01, F(6, 157), p < .001. Participants' perception of empowerment could be predicted from the set of the six predictors with approximately 25% of the variance in perception of empowerment scores in accounting by the sequential multiple regression (Supplementary Table 4).

The sequential multiple regression results present the six models of predictors. Model (1) of gender predictor predicts a 5% proportion variance to participants' perception of empowerment,  $R^2 = .054$ , F(1, 162) = 9.22, p < .001. In model (2), learning orientation measurement was added to gender, it explained 14% proportion variance to participants' perception of empowerment,  $R^2 = .143$ , F(2, 161) = 13.4, p <.001. In model (3), when the in-class teaching predictor was added to predictors, the proportion increased to explain 22% of variance to participants' perception of empowerment,  $R^2 =$ .224, F(3, 160) = 15.39, p < .001, which indicates the highest predictability from the set of predictors. Models 4, 5, and 6 did not increase the proportion of variance to the overall model when it was added. In conclusion, it was found that the in-class teaching significantly predicted the nursing students' perception of empowerment (Supplementary Table 4).

To assess the contribution of individual predictors, the t ratios for the individual regression slopes were examined for each variable in the step when it was first entered into the analysis. In step (1), gender was statistically significant,  $t (162) = -3.0, p < .001; R_{\text{increment}}^2 = .054$  [(the negative sign indicates that the majority of participants (females) had a lower score in perceived level of empowerment)]. In step (2), learning orientation measurement significantly increased the  $R^2$  when it entered, t (161) = 4.0, p < .001;  $R^2_{\text{increment}} =$ .089. Then, in step (3), in-class predictor contributed to increasing  $R^2$  when entered, t (160) = 4.1, p < .001;  $R_{increment}^2$ =.081. In step (4), clinical teaching was entered, step (5) program design and delivery entered, and in step (6) support and resources were entered, which were negatively related to participants' perceived level of empowerment. Model (3) of gender, learning orientation measurement, and in-class teaching, is highly predictable of participants' perception of empowerment among the significant set of predictors that entered sequentially (Supplementary Table 4).

# Discussion

In our study, we utilized Pearson's correlation to explore the relationship between the nursing students' perceived level of empowerment and the Learning Orientation Grade orientation scale measurement. The results indicate a significant positive correlation (r = +.33, p < .01), indicating that students who feel more empowered also tend to have higher learning orientation grades. Additionally, we examined the relationship between nursing students' perception of empowerment and their satisfaction with various academic aspects, such as in-class teaching, clinical teaching, program design and delivery, and support and resources. The findings revealed statistically significant positive correlations between empowerment and all of these satisfaction subscales (r = +.37, +.27, +.26, and +.30, respectively, p < 0.01).

Furthermore, we carried out a regression analysis to determine the factors influencing the perception of empowerment among nursing students. Our results indicate that gender, learning orientation measurement, and in-class teaching significantly contribute to predicting the perception of empowerment, collectively explaining 22% of the variance. However, other predictors, such as clinical teaching and program design and delivery, did not significantly improve the prediction model. These findings suggest that gender, learning orientation, and in-class teaching play crucial roles in shaping students' perception of empowerment.

The overall regression, including all six predictors, showed a statistically significant association, with approximately 25% of the variance in empowerment scores being accounted for. Our analysis met the assumptions of sequential multiple regression, indicating no violations and supporting the validity of our findings. This research provides valuable insights into the factors influencing nursing students' perception of empowerment and its relationship with academic satisfaction. This study aimed to predict the factors that affect undergraduate nursing students' perception of empowerment. The results of this study indicate that Jordanian nursing students perceived themselves as moderately empowered. Their moderate level of perception indicates that they have an adequate internal state to be empowered and that the surrounding situations offer empowering conditions. These results are consistent with many previous studies that assessed nursing students' perception of empowerment in different linguistic and cultural contexts (Ahn & Choi, 2015; Babenko-Mould et al., 2015; Cakır, 2015; Houser & Frymier, 2009; Moore & Ward, 2017).

The relationship between the participants' demographic characteristics and their perception of empowerment is examined. The results of the current study found that gender is correlated positively and that male nursing students are more empowered than female nursing students, which is consistent with the results of Burton (2012) and contradicts with the results of Kirk et al. (2016). This may be attributed to the fact that the Jordanian community is considered male-dominant (masculine), meaning in part that the social context supports males in general, which gives them extra self-confidence and motivation. This difference may also be related to the significant level of physical, psychological, and social stressors for female students during clinical training (Chen & Hung, 2014). On the other hand, according to

the United States for International Development (USAID) report *Promoting Gender Equality and Women's Empowerment*, in Jordan females have equal access and opportunity to education as males. Despite political and governmental opportunities and support provided to facilitate women's engagement and political and social participation, females are still facing many cultural and traditional constraints at the organizational and social levels (USAID, 2020).

The results of the relationship between the nursing students' perception of empowerment and orientation to learning indicate a strong positive correlation. These are consistent with the results of Matsuo (2019) who proposed that the learners' orientation to learning is considered one of the learners' perceptions of empowerment determinants. Additionally, Alotaibi (2016) mentioned that self-directed learning is determined by the individual learners' characteristics and the learning environment collectively. Also, this is supported by Cayaban et al. (2022) who stated that nursing students who are well-informed, well-involved, and motivated have the act of power and a sense of empowerment.

In the current study, there is a strong correlation between students' perception of empowerment and their academic satisfaction across all aspects. This indicates that the classroom environment and the characteristics of the teachers significantly influence the learning process and contribute to empowering students. This result was supported by the previous finding (Green & Schlairet, 2017) shaded on the educators' contribution to enriching the learning experience, which makes the classroom a valuable source of information and full of learning activities. Similarly, Zraa et al. (2011) emphasized the positive impact of effective and structured classroom activities on students' confidence and motivation, showing a direct relationship with their sense of empowerment. While clinical teaching is not less important than a classroom because nursing students spend about one-third of their education time in clinical placement. The results of the current study showed a strong relationship between clinical teaching and their perception of empowerment. This was supported by previous studies which reported that a professional competent nursing educator who uses advanced teaching strategy and has theoretical and clinical skills is more capable of empowering students (Bogren et al., 2019). Also, D'Souza et al. (2013) reported that a competent clinical instructor enhances the nursing students' perception of engagement in clinical placement. Additionally, clinical placement characteristics have a great impact on learning process; thus, good clinical facilitators include the availability to provide support, respect, and adequate communication give the learners extra confidence (Sweet & Broadbent, 2017), which permits students to demonstrate proper clinical skills and procedures (Albloushi et al., 2019; Lamont et al., 2015). Finally, the last two subscales are the program design and delivery, and resources and support. These two subscales handled the teaching-learning strategies used, and the different educational resources that could support the learning process. The results showed a strong relationship between the students' perception of empowerment with these subscales, and the results were congruent with previous studies that highlighted the essence of emerging teaching strategies to link the educational requirements and learning outcomes (Babenko-Mould et al., 2015; D'Souza et al., 2013; Parvan et al., 2018; Sweet & Broadbent, 2017). For example, attending a simulation learning program makes students perceive themselves as empowered (Babenko-Mould et al., 2015).

The variables that are most strongly correlated with the participant's perception of empowerment are in-class teaching, orientation to learning, and gender, in that order. These results are consistent with previous work of Houser and Frymier (2009) and Kirk et al. (2016), which mentioned that an in-class learning environment facilitates interpersonal and intrapersonal communication between students and educators, making students feel more motivated, self-directed, and more empowered.

Many factors contribute to empowering students, such as a teaching environment that must be equipped with various teaching-learning resources to facilitate the learning process, exposing learners to different teaching methods to expand their capabilities and enhance their learning process. These factors but not limited promote learners' motivation and engagement and become empowered (Green & Schlairet, 2017; Marin, 2015; Parvan et al., 2018). In addition, effective classroom learning activities were found to have a strong positive relationship with students' perception of empowerment (Zraa et al., 2011).

Consequently, social theories of learning clarified the importance of social relationships and interactions of the learners and also the relationships between the learners and teachers which collectively enhance the learners' empowerment (Lawson, 2011).

#### Limitation

The design of this study is cross-sectional descriptive, which is useful to study time-related phenomena, but it has problems interfering with changes over time. Also, the selfreported questionnaire depends on the participants' accuracy and their perception (Polit & Beck, 2017).

# **Conclusion and Implication**

This study revealed a strong relationship between the learners' perception of empowerment and learning orientation to learning, which highlighted the essence of the learners' orientation to learning and the learners' orientation to grades. Also, the results revealed a strong relationship between the learners' perception of empowerment and their academic satisfaction subscales (in-class, clinical teaching, program design and delivery, and support and resources). The regression results showed that in-class teaching is the strongest predictor among the study's variables.

Faculties should induce innovative teaching strategies in the classroom and clinical placement to enhance students' sense of empowerment. Educational institutions can encourage nursing students' motivation and self-directed attitudes to enhance empowerment through students' participation in academic and non-academic meetings and decision-making. Also, educational institutions should encourage new teaching methods that exploit technological developments to improve the teaching-learning process and outcomes. Faculty can conduct or participate in educational programs or activities to gain adequate knowledge and skills on how to create an empowering environment and empower the students.

Further studies to explore and explain nursing students' self-perception of empowerment are needed. Qualitative studies may reveal the wide, deep meaning of nursing students' empowerment, clinical placement, and classroom teaching. Longitudinal studies may describe and assess nursing students' empowerment over the four years of learning to measure the effects of personal and environmental changes on the students' empowerment.

#### Acknowledgment

The author acknowledges the nursing students' contributions to this study. Also, to thank the nursing colleges' Dean where the data were collected, this work would not have been done without their cooperation.

#### **Declaration of Conflicting Interests**

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Funding

The author received no financial support for the research, authorship, and/or publication of this article.

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#### **Supplemental Material**

Supplemental material for this article is available online.

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