

The Roles Of Self-Efficacy Theory In Developing Essential Skills, Clinical Supervision, And Competency Skills Among Nursing Students: A Theoretical Framework

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Abstract

The development of essential skills, clinical supervision and competency skills among nursing students remain a critical challenge in contemporary nursing education. The application of Self-Efficacy theory enables students to address tasks in the face of challenges and fosters their motivation to pursue continuous self-improvement. This paper explores the theoretical importance of Bandura's self-efficacy theory as a foundational framework for understanding how nursing students develop essential skills through clinical supervision and competency skill acquisition. The paper presents a comprehensive theoretical framework that integrates self-efficacy theory with nursing education practices, demonstrating how self-efficacy beliefs influence students' learning processes, clinical performance, and professional development. The proposed framework offers implications for nursing educators, clinical instructors, and curriculum developers in designing more effective educational interventions that enhance students' confidence and competence in clinical practice.

Keywords: Clinical supervision, Competency skills, Essential skills, Nursing students, Self-efficacy Theory

INTRODUCTION

The transition from theoretical knowledge to clinical practice represents one of the most challenging phases in nursing education. Nursing students must develop not only technical skills but also the confidence to apply these skills effectively in complex clinical environments (Levett-Jones et al., 2011). Research has consistently revealed that students' belief about their capabilities significantly influence their learning outcomes, clinical performance, and eventual success as professional nurses (Berkow et al., 2008; Bandura, 1997). The theory of self-efficacy enhances the understanding and optimizes the academic performance of students. Self-efficacy theory, developed by Albert Bandura (1977, 1997), provides a robust theoretical foundation for understanding how individuals develop confidence in their abilities to perform specific tasks and achieve desired outcomes. In the context of nursing education, self-efficacy has emerged as a critical predictor of students' academic success, clinical competence, and professional development (Chesser-Smyth & Long, 2013; Usher et al., 2013). This paper explores the roles of self-efficacy theory in developing essential skills, clinical supervision practices, and competency skills among nursing students: A Theoretical framework. This paper also proposes a comprehensive theoretical framework that integrates these elements, providing a foundation for evidence-based nursing education practices.

Related Literature review: Theoretical Background and Variables

A theoretical framework includes key concepts and definitions, referencing relevant literature and theories for a particular study. It should demonstrate an understanding of theories related to the research topic and broader knowledge areas. In research, variables are essential elements representing characteristics or attributes studied. Researchers measure, check, or apply these variables to observe their effects and answer research questions or test hypotheses. Detailed overview of literature and variables (i.e.: essential skills, clinical supervision and competency skills) are presented below.

1. The Foundations of Self-Efficacy Theory

Albert Bandura's self-efficacy theory is grounded in social cognitive theory and represents one of the most extensively researched constructs in psychology and education (Bandura, 1977, 1997). According to Bandura (1997) theory Self-efficacy is refers to an individual's belief in their capability to organize and execute the courses of action required to produce given attainments. These beliefs influence how people think, feel, motivate themselves, and behave. Bandura (1997) identified four primary sources of self-efficacy information: mastery experiences, vicarious experiences, verbal persuasion, and physiological and emotional states. **Refer to Table 1.**

2. Self-Efficacy in Educational Contexts

To start off, in educational settings, self-efficacy has been extensively studied and consistently linked to academic performance, motivation, and learning outcomes (Schunk & Pajares, 2009). Students with higher self-efficacy tend to set more challenging goals, persist longer in the face of difficulties, and achieve better academic outcomes compared to their peers with lower self-efficacy beliefs (Zimmerman, 2000).

Research in nursing education has demonstrated that self-efficacy significantly influences students' clinical performance, critical thinking abilities, and professional development (Chesser-Smyth & Long, 2013; Jamshidi et al., 2016). Students with higher self-efficacy beliefs demonstrate greater willingness to engage in challenging clinical situations, show improved problem-solving abilities, and exhibit more effective coping strategies when faced with clinical stressors. According to (Fredricks et al., 2006) motivation is something that energizes, directs and sustains behaviours, it gets students moving, point them in a particular direction and keeps them going.

3. Essential Skills Development in Nursing Education

Essential skills in nursing include competencies like critical thinking & clinical judgement, communication, teamwork, lifelong learning and advocacy, which are important for professional nursing practice. The Essentials framework reflects and integrates nursing as a discipline. Nursing is considered both a science and an art, with the whole patient (mind, body, and spirit) being the focus of nursing practice. The environment's influence on an individual's health and recovery is also significant.

- **Defining Essential Skills in Nursing**

Essential skills in nursing education encompass a broad range of competencies that are fundamental to safe and effective nursing practice. The American Association of Colleges of Nursing (AACN, 2021) identifies several core competencies including clinical judgment, communication and relationship-centered care, advocacy, and systems-based practice. These skills form the foundation upon which all other nursing competencies were developed. mAccording to Benner's (1984) seminal work "From Novice to Expert", has provided theoretical framework for understanding skill development in nursing; describing five levels of proficiency: novice, advanced beginner, competent, proficient, and expert. This model emphasizes the importance of experiential learning and the gradual development of clinical expertise through practice and reflection. Self- efficacy helps the nursing student to go through these stages easily. In addition, the role of Self- efficacy helps students in skills development in clinical practice.

- **The Role of Self-Efficacy in Skills Development**

The development of clinical skills represents one of the most challenging aspects of nursing education, requiring students to integrate theoretical knowledge with practical application, while managing the complexities of real patient care situations. Self-efficacy plays a crucial role in this process by influencing students' willingness to engage in clinical activities, their persistence in skill development, and their ability to transfer learned skills to new situations. Self-efficacy theory provides valuable insights into how nursing students develop essential skills. According to Bandura (1997), individuals with higher self-efficacy are more likely to engage in learning activities, persevere through challenges, and ultimately achieve better performance outcomes. In the context of nursing education, students who have confidence in their abilities are more inclined to practice their skills, seek constructive feedback, and participate in reflective learning processes. Research by Leigh (2008) demonstrated that nursing students' self-efficacy beliefs significantly predicted their clinical competence ratings. Students with higher self-efficacy showed greater improvement in clinical skills over time and demonstrated more effective problem-solving abilities in clinical situations. Similarly, McLaughlin et al. (2008) found that self-efficacy was a significant predictor of nursing students' performance on standardized clinical examinations.

The development of essential skills is enhanced when educational interventions specifically target the four sources of self-efficacy. **Refer to Table 1.**

4. Clinical Supervision and Self-Efficacy

Clinical supervision and self-efficacy are interconnected in professional development. Clinical supervision provides guidance, feedback, and support to nursing students, enhancing their skills and confidence. This supportive relationship helps students build their self-efficacy, or belief in their ability to perform specific tasks effectively. As nursing students gain competence and positive reinforcement through supervision, their self-efficacy increases, leading to improved performance, greater motivation, and better clinical outcomes. In short, effective supervision fosters self-efficacy, which in turn enhances professional competence and confidence.

- **The Nature of Clinical Supervision in Nursing Education**

Clinical supervision in nursing education serves for multiple functions: ensuring patient safety, facilitating learning, providing support and guidance, and evaluating student performance (Franklin, 2013). Effective clinical supervision requires a balance between providing adequate support for learning while gradually increasing student independence and responsibility. The relationship between clinical instructors and students is crucial for effective clinical learning outcomes. Research has consistently demonstrated that positive Clinical Instructors-Students relationships are associated with better learning outcomes, increased student satisfaction, and improved clinical performance (Jokelainen et al., 2011; Henderson et al., 2012).

- **Self-Efficacy and Supervisory Relationships**

Self-efficacy theory provides important insights into the dynamics of clinical supervision. The quality of the supervisory relationship significantly influences students' self-efficacy beliefs through all four sources of efficacy information. Supportive clinical instructors who provide opportunities for mastery experiences, perform as positive role models, offer constructive feedback, and help students manage anxiety contribute to enhanced self-efficacy development.

Research by Chesser-Smyth and Long (2013) found that nursing students' perceptions of supervisory support were significantly correlated with their self-efficacy beliefs and clinical performance. Students who perceived their clinical instructors as supportive, knowledgeable, and encouraging developed higher self-efficacy beliefs and demonstrated better clinical outcomes.

The timing and nature of feedback provided by clinical instructors also impact self-efficacy development. Constructive, specific, and timely feedback enhances mastery experiences and provides verbal persuasion that supports self-efficacy development (Hattie & Timperley, 2007). On the contrary, overly critical or poorly timed feedback can undermine students' confidence and negatively impact their self-efficacy beliefs. Brief explanation is presented below:

- **Supervisory Practices that Enhance Self-Efficacy:** Evidence-based supervisory practices that enhance self-efficacy: **Refer to Table 1**

- **Progressive Skill Building:** This approach aligns with Bandura's emphasis on the importance of mastery experiences in developing self-efficacy.

- **Modelling and Demonstration:** Effective supervisors serve as positive role models, demonstrating clinical skills and professional behaviours.

- **Constructive Feedback:** Regular, specific, and constructive feedback helps students understand their progress and areas for improvement.

- **Emotional Support:** Supervisors who help students manage anxiety, stress, and other emotional responses create conditions that by addressing physiological and emotional states.

5. Competency Skills and Self-Efficacy

Competency in nursing refers to the ability to integrate knowledge, skills, attitudes, and values to provide safe and effective care (Cowan et al., 2007). Nursing competencies are typically organized around core areas such as clinical knowledge, technical skills, communication abilities, critical thinking, and professional behaviours.

- **Understanding Competency in Nursing**

The development of competency skills is a complex process that involves not only the acquisition of knowledge and skills but also the development of confidence and professional identity. Research has

demonstrated that students' beliefs about their competency significantly influence their actual performance and their willingness to engage in challenging clinical situations (Cant et al., 2013).

• Evidence for Self-Efficacy's Role in Competency Development

Multiple studies have demonstrated the relationship between self-efficacy and competency development in nursing students. A systematic review by Franklin (2013) found consistent evidence that self-efficacy was positively associated with clinical competence across various nursing education contexts. Leigh (2008) conducted a longitudinal study of nursing students and found that self-efficacy beliefs at the beginning of clinical education significantly predicted competency ratings at the end of the program. Students with higher initial self-efficacy showed greater improvement in clinical competence over time.

Similarly, a study by McLaughlin et al. (2008) demonstrated that interventions designed to enhance self-efficacy led to significant improvements in nursing students' clinical competence ratings. The intervention included structured skill practice, peer mentoring, and reflective exercises designed to target all four sources of self-efficacy.

6. Discussion on Proposed Framework of The Study

Based on the theoretical foundations and empirical evidence reviewed above, this paper proposes a comprehensive framework that integrates self-efficacy theory with essential skills development, clinical supervision, and competency skills in nursing education. The framework is grounded in Bandura's self-efficacy theory and incorporates contemporary understanding of nursing education and clinical supervision practices.

7. Core Components of the Framework

In this framework, there are core components discussed. These components consist of five important parts, and each one has its own role.

Component 1: Self-Efficacy as the Central Mediating Variable

The framework positions self-efficacy as the central mediating variable that influences the relationship between educational interventions and learning outcomes. Self-efficacy beliefs influence how students engage with learning opportunities, respond to challenges, and translate their knowledge and skills into competent practice. Moreover, self-efficacy has been shown to mediate academic achievement, wherein students with high self-efficacy demonstrate superior motivation and performance outcomes (Zimmerman, 2023).

• Component 2: Four Sources of Self-Efficacy in Nursing Education

Figure 1: Self-efficacy theory from Bandura 1997 (Source Bandura, 1997)

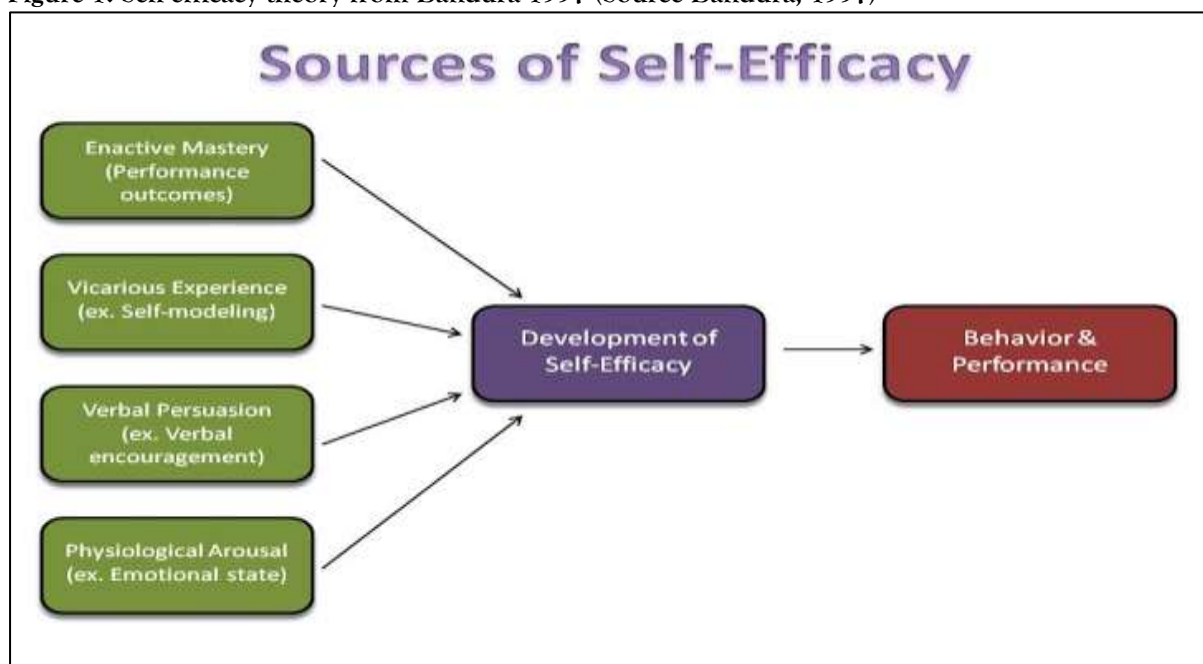


Figure 1: Above explicitly incorporates Bandura's four sources of self-efficacy and demonstrates how they can be systematically addressed in nursing education:

- a) Mastery Experiences: Structured skill practice, simulation experiences, progressive clinical assignments, and successful patient care experiences
- b) Vicarious Experiences: Peer learning, mentorship programs, observational learning, and exposure to positive role models
- c) Verbal Persuasion: Constructive feedback, encouragement, recognition of achievements, and supportive communication
- d) Physiological and Emotional States: Stress management, anxiety reduction techniques, emotional support, and wellness programs

Table 1: Summary of Four Sources Self-Efficacy Through Foundation Theory, Skill Development and Supervisory Practices

1. Self - Efficacy through Foundation theory	Mastery experiences	Considered the most influential source, involve direct personal experiences of success or failure in performing specific tasks
	Vicarious experiences	Occur through observing others perform tasks, particularly when observers perceive similarities between themselves and the models
	Verbal persuasion	Involves encouragement or discouragement from others regarding one's capabilities.
	Physiological and emotional states	Provide information about one's capabilities through bodily sensations and emotional reactions.
2.Skill Development	Mastery experiences	Can be provided through structured skill practice sessions, simulation experiences, and progressive clinical assignments
	Vicarious experiences	Facilitated through peer learning, mentorship programs, and observational learning opportunities
	Verbal persuasion	Delivered through constructive feedback, encouragement, and recognition of achievements
	Physiological and emotional states	Involves helping students manage anxiety, stress, and other emotional responses that may interfere with learning
3.Supervisory Practices	Mastery experiences	Supervisors who structure clinical experiences to provide progressive challenges allow students to build confidence
	Vicarious experiences	Enhance students' beliefs about their own capabilities
	Verbal persuasion	Supports self-efficacy development by providing intrinsic motivation.
	Physiological and emotional states	Support self-efficacy development by managing the stress

- **Component 3: Essential Skills Development** The framework identifies essential skills as the foundational competencies that nursing students must develop. These skills are enhanced through self-efficacy-promoting interventions and serve as building blocks for more advanced competencies.
- **Component 4: Clinical Supervision as a Vehicle for Self-Efficacy Enhancement** Clinical supervision is positioned as a critical mechanism through which self-efficacy can be enhanced. The framework

emphasizes the importance of supervisory relationships, feedback practices, and support mechanisms in promoting self-efficacy development.

• **Component 5: Competency Skills as Outcomes** The framework identifies competency skills as the ultimate outcomes of the educational process. These competencies are influenced by students' self-efficacy beliefs and their development of essential skills through effective clinical supervision.

8. Purpose of The Study

To develop a theoretical framework by applying roles of self-efficacy theory in developing essential skills, clinical supervision practices, and competency skills among nursing students.

8.1. Implications for Nursing Education

• Curriculum Development Implications

The proposed framework has significant implications for nursing curriculum development. Curricula should be designed to systematically address the four sources of self-efficacy through various educational strategies. This includes:

• **Structured Skill Progression:** Curricula should provide progressive opportunities for mastery experiences, beginning with low-stakes practice opportunities and gradually increasing in complexity and responsibility.

• **Peer Learning Integration:** Formal peer learning programs, mentorship opportunities, and collaborative learning experiences should be integrated throughout the curriculum to provide vicarious experiences.

• **Feedback Systems:** Comprehensive feedback systems that provide regular, constructive, and specific feedback should be implemented to enhance verbal persuasion and support self-efficacy development.

• **Student Support Services:** Services that address students' emotional and physiological states, including stress management programs, counselling services, and wellness initiatives, should be integrated into the curriculum.

8.2. Clinical Supervision Implications

The framework provides important guidance for clinical supervision practices:

• **Supervisor Training:** Clinical supervisors should receive training on self-efficacy theory and evidence-based supervision practices that enhance students' confidence and competence.

• **Relationship Building:** Emphasis should be placed on developing positive supervisor-student relationships that create supportive learning environments.

• **Structured Feedback:** Supervisors should be trained in providing constructive, timely, and specific feedback that enhances self-efficacy development.

• **Progressive Independence:** Supervision practices should provide appropriate scaffolding that gradually increases student independence while maintaining adequate support.

9. Assessment and Evaluation Implications

The framework suggests that assessment and evaluation practices should consider not only students' performance but also their self-efficacy beliefs. This includes:

• **Self-Efficacy Measurement:** Valid and reliable instruments should be used to assess students' self-efficacy beliefs at various points in their educational journey.

• **Holistic Assessment:** Assessment practices should consider multiple dimensions of competence, including knowledge, skills, attitudes, and confidence.

• **Formative Evaluation:** Regular formative evaluation should be used to monitor students' progress and adjust educational interventions as needed.

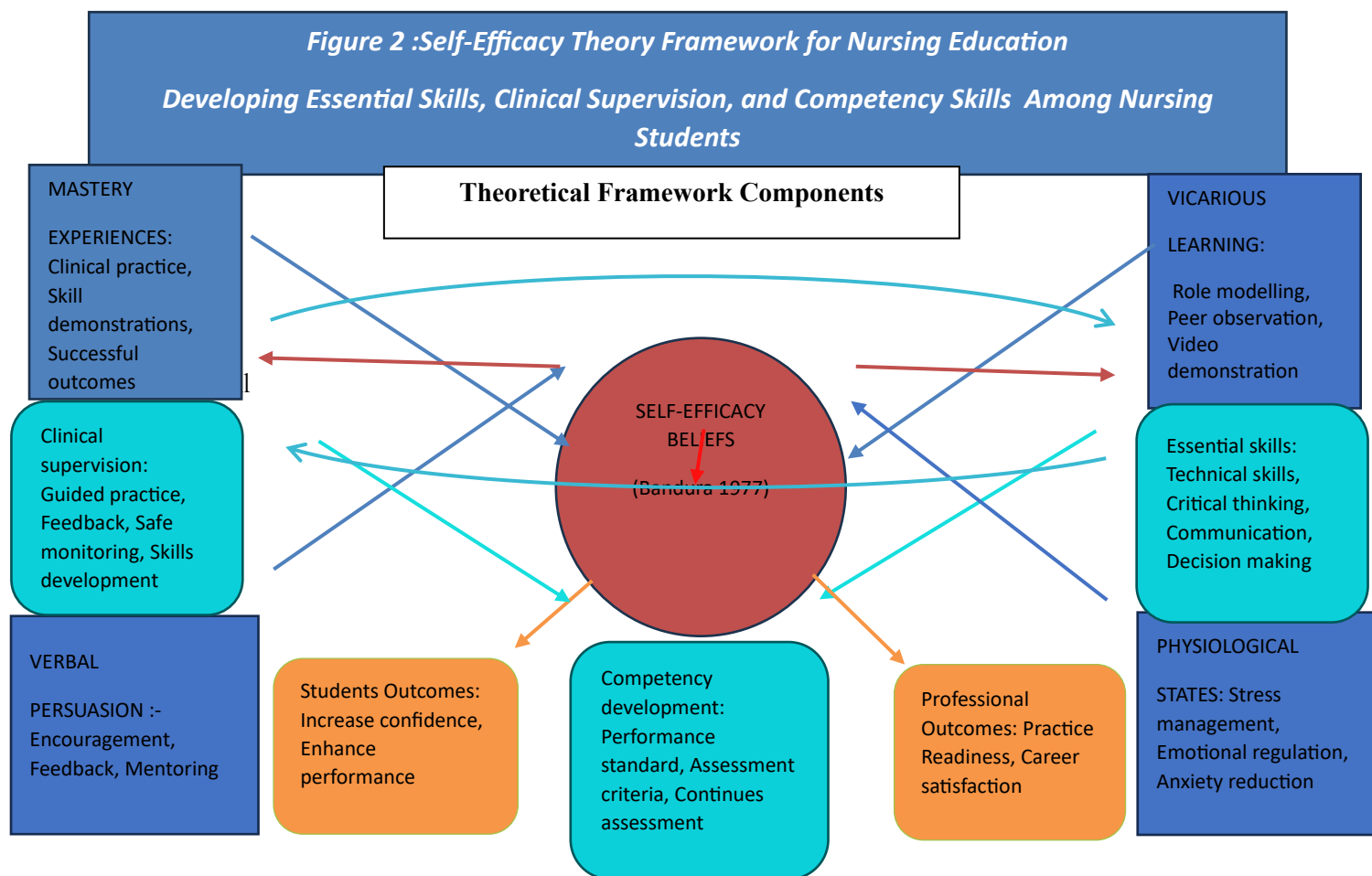


Figure 2: suggested theoretical framework: shows The Roles of Self-Efficacy Theory in Developing Essential Skills, Clinical Supervision, and Competency Skills Among Nursing Students: A Theoretical Framework.

10. Suggested Framework Dynamics

The proposed framework is dynamic and interactive, recognizing that the relationships between components are multiple directional and mutually reinforcing. As students develop competency skills, their self-efficacy beliefs are strengthened, which in turn promotes further learning and skill development. Similarly, effective clinical supervision enhances self-efficacy, which improves essential skills development and ultimately leads to better competency outcomes. The framework also recognizes the importance of contextual factors such as curriculum design, institutional culture, and individual student characteristics in influencing the relationships between components(variables).

Based on literature review, the research develops the above theoretical framework, which includes the following:

Core Elements:

- **Central Self-Efficacy Beliefs** (based on Bandura's theory) as the hub that influences all other components
- **Four Sources of Self-Efficacy** (blue boxes):
 - Mastery Experiences (clinical practice, skill demonstrations)
 - Vicarious Learning (role modelling, peer observation)
 - Verbal Persuasion (encouragement, feedback, mentoring)
 - Physiological States (stress management, emotional regulation)
- **Key Components** (turquoise boxes):
 - **Clinical Supervision:** Guided practice with real-time feedback and safety monitoring
 - **Essential Skills:** Technical skills, critical thinking, communication, and decision-making
- **Competency Development:** Performance standards, assessment criteria, and progressive complexity

- **Outcomes** (orange boxes):
 - Student outcomes (increased confidence, enhanced performance)
 - Professional outcomes (practice readiness, career satisfaction)
- **Visual Flow:**
 - Blue arrows show how the four sources feed into self-efficacy beliefs
 - Red arrows demonstrate how self-efficacy influences the three main components
 - Turquoise arrows show interconnections between components
 - Orange arrows lead to final outcomes

This framework demonstrates how self-efficacy theory provides a comprehensive foundation for understanding and enhancing nursing education through structured clinical supervision, essential skill development, and competency skills-based learning approaches.

11.CONCLUSION

The framework impacts nursing education by addressing self-efficacy beliefs in curriculum development, clinical supervision, and assessment. Integrating self-efficacy theory enhances educational interventions, boosting student confidence and competence, improving patient care outcomes, and strengthening the nursing profession. Future research should test the framework empirically and explore its applications across various educational contexts and student groups.

REFERENCES

- 1.American Association of Colleges of Nursing. (2021). The essentials: Core competencies for professional nursing education. AACN.
- 2.Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191-215.
- 3.Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.
- 4.Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Addison-Wesley.
- 5.Berkow, S., Virkstis, K., Stewart, J., & Conway, L. (2008). Assessing new graduate nurse performance. *Journal of Nursing Administration*, 38(11), 468-474.
- 6.Cant, R., McKenna, L., & Cooper, S. (2013). Assessing preregistration nursing students' clinical competence: A systematic review of objective measures. *International Journal of Nursing Practice*, 19(2), 163-176.
- 7.Chesser-Smyth, P. A., & Long, T. (2013). Understanding the influences on self-confidence among first-year undergraduate nursing students in Ireland. *Journal of Advanced Nursing*, 69(1), 145-157.
- 8.Cowan, D. T., Norman, I., & Coopamah, V. P. (2005). Competence in nursing practice: A controversial concept—a focused review of literature. *Nurse Education Today*, 25(5), 355-362.
- 9.Franklin, N. (2013). Clinical supervision in nursing: A concept analysis. *International Journal of Nursing Knowledge*, 24(2), 71-78.
10. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
11. Henderson, A., Cooke, M., Creedy, D. K., & Walker, R. (2012). Nursing students' perceptions of learning in practice environments: A review. *Nurse Education Today*, 32(3), 299-302.
12. Jamshidi, N., Molazem, Z., Sharif, F., Torabizadeh, C., & Najafi Kalyani, M. (2016). The challenges of nursing students in the clinical learning environment: A qualitative study. *The Scientific World Journal*, 2016, 1846178.
13. Jokelainen, M., Turunen, H., Tossavainen, K., Jamookeeah, D., & Coco, K. (2011). A systematic review of mentoring nursing students in clinical placements. *Journal of Clinical Nursing*, 20(19-20), 2854-2867.
14. Leigh, G. T. (2008). High-fidelity patient simulation and nursing students' self-efficacy: A review of the literature. *International Journal of Nursing Education Scholarship*, 5(1), Article 37.
15. Levett-Jones, T., Hoffman, K., Dempsey, J., Jeong, S. Y. S., Noble, D., Norton, C. A., ... & Hickey, N. (2010). The 'five rights' of clinical reasoning: An educational model to enhance nursing students' ability to identify and manage clinically 'at risk' patients. *Nurse Education Today*, 30(6), 515-520.
16. McLaughlin, K., Moutray, M., & Muldoon, O. T. (2008). The role of personality and self-efficacy in the selection and retention of successful nursing students: A longitudinal study. *Journal of Advanced Nursing*, 61(2), 211-221.
17. Schunk, D. H., & Pajares, F. (2009). Self-efficacy theory. *Handbook of Motivation at School*, 35-53.
18. Usher, K., Woods, C., Casella, E., Glass, N., Wilson, R., Mayner, L., ... & Pit, S. W. (2014). Australian health professions student use of social media. *Collegian*, 21(2), 95-101.
19. Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25(1), 82-91.
20. Zimmerman, B. J. (2023). Academic self-efficacy and achievement: A meta-analytic review. **Educational Psychology Review*