Research Article

A Theoretical Model of Interpersonal Trust Relationships and Student Success in Baccalaureate Nursing Education

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Abstract

Student-faculty trust and related concept characteristics have been shown to be factors associated with successful student learning. The purpose of the proposed model is to present a conceptual framework supporting the complex relationships between students' trust in faculty, the students' mood states, and students' educational performance and outcomes.

Enhanced understanding and assessment of factors contributing to student success are needed by nurse educators to decrease student attrition and increase graduation rates for students participating in nursing education programs. Improved understanding of factors related to the successful education of nursing students would serve to relieve the existing and upcoming shortage of registered nurses.

INTRODUCTION

Despite the volumes of research and investigation into factors that contribute to or influence student success, much remains to be known and understood concerning the subject. A review of the literature reveals that many studies investigating factors associated with student success in nursing education have been conducted in ongoing efforts to improve educational offerings. McLaughlin, Moutray, & Muldoon [1] concluded that psychological testing could offer valuable insight into nursing student retention and attrition, and Pryjmachuk, Easton, & Littlewood [2] verified relationships between nursing student success and age, academic abilities, and student engagement with didactic content. Peterson [3] cited the need to incorporate a multivariate approach to facilitate understanding of the complexity of factors contributing to nursing student success. The author proposes a conceptual model which seeks to integrate what is currently understood about trust and other factors contributing to nursing student success as an approachable visual conceptual model.

Pedagogy and Interpersonal Relationships

The facilitation of meaningful learning experiences and the establishment of an environment conducive to student success are seen as key tasks to be assumed by the modern university

educator [4]. A thorough definition of exactly what can be meant by student success has been compiled by the ASHE Higher Education Report [5]. The most innovative aspect of the proposed model is its integration of the concept of interpersonal trust with other factors historically attributed as relating to student success (Figure 1).

Trust

The establishment of a precise and all-encompassing definition of the phenomena of trust is challenging, but an aggregate working definition derived from a synthesis of the literature reveals the belief that interpersonal trust exists as a non-linear composite concept encompassing firm reliance on the integrity, ability, strength, truth or character of another. The phenomenon of trust is understood to be one of the essential underpinnings supporting human interpersonal relationships. Lewicki, McAllister, &Bies [6] define trust as "an individual's belief in, and willingness to act on the basis of, the words, actions, and decisions of another." Similarly, Rousseau, Sitkin, Burt, & Camerer [7] offer a more internalized definition: "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another." Curzon-Hobson [8] defines trust within educational pedagogy as "a student's sense that his or her projections of potentiality will be both encouraged and rewarded by the teacher." Owing

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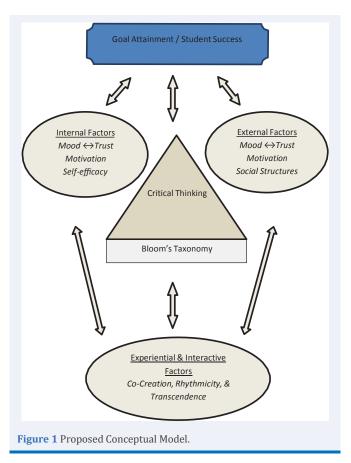
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to its interpersonal construct trust is therefore defined and understood as a contextual experience of the participants involved in the trusting relationship in which the involved parties undergo exposure to vulnerabilities through the reliance upon the goodwill of the other. Specific emphasis and attention are given to the student-teacher relationship in light of the inherent vulnerability and risk assumed by student participants in the educational process.

Understanding of the student-faculty trust relationship involves appreciation and consideration of the internal factors that contribute to the existence of trust on the students' behalf. Curzon-Hobson [8] emphasized the inherent risk that students assume in trusting faculty due to the potential for abuse that exists within the relationship. Erickson [9] posited that the very foundations for normal psychosocial development begin with the individual child's ability to establish trust that his or her needs will be met. The courage and willingness to assume risk can therefore be understood to involve intrinsic personal mood states and internalized factors such as motivation, drive, and perseverance. The student-faculty relationship of interest is not explicitly identified in the model, but is subsumed under the mood <-> trust components identified in both the internal and external factor aspects of the model.

Baseline concepts within the model

Bandura [10] discussed and analyzed the roles that emotional arousal and motivation are believed to play in the formation of self-efficacy, understood to be the belief in one's ability to achieve a given goal or task successfully. By extension, the interplay of self-efficacy with motivation, trust, and mood may be viewed as foundational contributory internal factors related to student success. Using the framework of Bloom's Taxonomy [11] as a basis for understanding the hierarchical development of critical thinking, the central component of the proposed model (critical thinking) is presented as central to the development and achievement of student success. Since trust may be understood as an interrelated component of mood [12], and mood is influenced by both internal and external factors, both may yet be implicated as concepts involved in the process of development and achievement in educational success. Together, both trust and mood are hypothesized to function as both internal and external factors influencing interpersonal relationships between educator and learner. The additional influence of external factors presented by social structures (peer pressure, familial obligation, economic achievement) also are presented in the model as exhibiting influence on student performance and success. The primary objective in the creation of the model is to provide a pictorial representation of the multifactorial concepts involved in the achievement of student success.

The examination and consideration of factors that relate to student success therefore may involve the inclusion of trust as a key contributor to the multifactorial, holistic, and complex relationships that exist within present-day nursing education programs. Improvement of the understanding and appreciation of the phenomenon of trust as it relates to student success presents additional opportunities for investigation by nurse educators seeking to improve and enhance the nursing education system with an ultimate goal of increasing student success.

ORGANIZATIONAL FRAMEWORK

The proposed conceptual model incorporates existing conceptual structures generally attributed to [11,13,14]. The following domains of inquiry are offered as foundational underpinnings based upon the research and writings of these same authors:

- Internal factors including motivation, personality, and mood state
- External factors including the achievement of preestablished standards and goals as well as both microand macro-social structures
- Experiential, interpersonal, and interactive factors including educational experiences and the concept of authenticity

Rotter's concepts of internal and external locus of control are operationalized such that trust is understood as existing interpersonally as a balance between internal and external forces. These internal and external forces are identified in the model as they flank the central concept of critical thinking. Particular emphasis is placed on the choices that an individual makes in navigating the two polar extremes of internal and external forces while striving for success. Foundational thought by [9,15] further emphasize the reciprocal nature of trusting relationships while recognizing the influences that both internal and external factors may exert on trust as a lived experience.

CONTRIBUTORY CONCEPTS

Internal factors

The reasons why students establish commitments and exert effort in achieving educational goals are not clearly understood. Alvernini, Lucidi, & Manganelli [16] use the term *intrinsic regulation* as they describe the highest level of internal motivation as being present when the student undertakes initiative to understand or engage in tasks that produce self-satisfaction and enjoyment through participation in the acts themselves, mirroring Rotter's [13]concept of internal locus of control.

The relationship between mood states and trust has been explored in depth by Curren & Harich [17], in which the authors cited a large amount of research correlating students' mood state and attributes for academic success. The authors found that the impact of mood state as a performance attribute contributing to academic success is significant, although moderated when the student placed lower importance on the task outcomes versus estimations of high task importance. In other words, when the students thought that what they were doing was important, the outcomes were significantly more favorable than when students placed low value on the activity at hand. The findings supported the significance of mood state on nursing student performance. Research by Shirey [18] focused attention on the mood state of anger as it negatively impacts performance attributes of students. She noted a significant decrease of student civility in the classroom, which correlated well with increasing signs of anger and potential rage in United States society as a whole. Similar work by Scarbrough [12] identified an inverse relationship between trust and mood, where decreasing trust was associated with increases in mood disturbance in nursing students. The potential relationships between mood state and trust are thereby demonstrated as being significant as they relate to student success.

External factors

Nilsen [19] found that the overall interactions between students and their environment exerted a significant influence on both motivation and student performance, noting the importance of the consideration of student-faculty interactivity in pedagogical design. Research by Shirey [20]highlighted the impact that environment can have on working nurses employed in facilities exhibiting a strong commitment to nurturance, in which increases in feelings of self-worth as well as increases in individual goal attainment were positively associated with the provision and establishment of a supportive work environment.

The nursing students' perception of clinical credibility on the part of their clinical instructors was found to offer notable external influence on the students' anxiety levels and clinical performance in research by Gillespie & McFetridge [21]. In order to bridge nursing theory with clinical practice, the importance of the creation of a welcoming and nurturing educational environment incorporating a strong sense of faculty credibility was identified and underscored by the research findings. Research by Wheeless & Grotz [22] offers further evidence of the importance of external factors, underscoring recognition of the influence that instructor self-disclosure has on student trust in faculty.

Critical thinking as an interaction between internal and external factors

The relationship between critical thinking and student success has been studied and documented, and is evidenced by the widespread acceptance and use of Bloom's Taxonomy of Learning [11] by large numbers of educators. Bloom's higher and increasingly abstract levels of analysis and synthesis are well correlated with and demonstrative of current understandings of what is meant by critical thinking. Bloom's [11] taxonomy incorporates the belief that learners move through increasing levels of complexity and away from more concrete, linear thinking to higher levels of abstraction and synthesis.

PHILOSOPHICAL PRECEDENTS

Foundational developments in Western philosophical thought support the work of social psychologists, paralleling the emphasis on trust as a reciprocal and interactive experience with an individual's environment. Dilthey [23] worked to develop an understanding of the science of human development seeking to mirror existing thought found in the natural sciences by the logical positivist authors such as Kant [24]. Central to Dilthey's conceptual framework is an appreciation of the importance that experience plays in an individual's interpretation and understanding of reality in that one cannot divorce the individual's experiences from his perspective and world view. Later work by Husserl [25] resulted in the development of the belief system that would come to be known formally as phenomenology, which further emphasized the necessity of considering the human lived experience as being essential for human understanding and authenticity.

Expanding upon the importance of the role of individual lived experience as an essential concept underpinning modern philosophy, Heidegger [26] focused on the study of existence itself in his book *Being and Time*. Key to the understanding and appreciation of Heidegger's concept of Dasein (being) are the three traits of 1) mood or feeling, 2) understanding, and 3) speech. Building further upon Heidegger's framework, Sartre [27] focused on the need of the individual to attend consciously to lived experiences while searching for meaning in human life. Sartre was a key contributor to the existentialist posture, and as such further sharpened and increased emphasis on subjective experience as a key formative element for understanding the human condition. Saye & Brush [28] expressed an appreciation of the transformational nature of scientific advances within a phenomenological framework as follows:

Kuhn posited that critical thinking evolves developmentally. Thinkers move from assumptions that reality is directly knowable and knowledge is certain and received from authoritative sources to beliefs that reality is not directly knowable and knowledge is uncertain and constructed by the knower.

Freire [29] emphasized the importance of critical thinking as a means of transcending oppression and powerlessness through education.

RELATIONSHIP OF PHILOSOPHICAL EPISTEMO-LOGY TO NURSING THEORY

During the 1970s, nursing theorist Rogers [30] developed an applied theory for the nursing profession based largely in

part upon the foundation established by the phenomenologists and existentialists noted above. Her concern for the human condition was evidenced in her Science of Unitary Human Beings, in which she applied principles of ontology, holism, and authenticity to the art and science of nursing. Current work by Parse [14] has built upon the legacy left by Rogers, and has yielded a phenomenological framework upon which nursing care in the 21st century and moving forward may be understood and appreciated. Parse's [14] Theory of Human Becoming is therefore offered as the philosophic and theoretical framework underlying and integrating the proposed understanding of interpersonal trust in nursing education. The significance of co-creation of the trust relationship between student and faculty lies in the ability of either party to facilitate or to impede the development and growth of trust. The second tenet, rhythmicity, can be understood in the context of trust relationships through the waxing and waning that is commonly evident in interpersonal trust interactions. The belief that individuals may cause trust to increase or diminish directly supports Parse's conceptual framework in which patterns present themselves and repeat over time, quite literally defining their own rhythm of recurrence. The third tenet, transcendence, encompasses the ability of faculty and student to rise above their explicit roles and achieve greater authenticity and success in their co-created existence. Successful students demonstrate transcendence and transformation as they achieve nursing licensure and embark on nursing careers. The work of faculty may be seen as experiencing transcendence as instructional skills evolve and are refined due to the interaction with students. The potential exists for ever higher transcendence as all participants subsequently create new learning, knowledge, and understanding. Trust may likewise be better understood through the same lens of authenticity and transcendence; the student-faculty trust relationship serves as a model for rising above the pre-existing status quo and endorsement of a newlycreated (and re-created) nursing existence.

The over-arching framework of Parse's [14] Theory of Human Becoming embraces and mirrors Rotter's subsumed concepts of locus of control, where Parse additionally underscores the inability to detach the experiences of the learner from the meaningfulness of interpersonal discourse. The Theory of Human Becoming emphasizes the roles that internal or constitutional forces and external or environmental forces play in the subject's lived experiences, and as such affords a nursing theoretical umbrella that integrates the identified foundational concepts. Incorporation of Parse's [14] Theory of Human Becoming emphasizing the three cardinal concepts of co-creation, rhythmicity, and transcendence is embedded in the design as follows:

- 1) The student's trust in faculty is understood to be cocreated as an interaction between internal and external factors
- 2) Rhythmicity exists in the interactions between students and faculty.
- 3) Transcendence is represented by student success as measured by increases in critical thinking skills, which according to Bloom's Taxonomy of Learning represent the highest level of achievement in which the learner

rises above existing knowledge through the creation and synthesis of new thought.

Application and implementation of theoretical constructs embracing internal and external loci of control in combination with Parse's [14] Theory of Human Becoming come together to afford a holistic, quantitative perspective of qualitative experience related to interpersonal trust. Improved understanding could serve to impact significantly the instructional methodologies employed in nursing education. Program development and evaluation would serve to improve the student's educational experience and increase opportunities to engage in meaningful learning.

The proposed conceptual model embraces the function of both mood and trust and their ability to impact student performance, while incorporating the beliefs of Parse [14] concerning the phenomenological aspects of the interpersonal relationships involved. The proposed model resonates with the identified relationship between mood and trust as potential mediators of student success while functioning within Parse's key theoretical components of co-creation, rhythmicity, and transcendence.

RELATED CONSTRUCTS

The concept of trust understands self-efficacy as being related to trust as an application of the concept in which the individual experiences confidence and or positive regard towards their own task-oriented skills and abilities. Self-efficacy therefore may be defined as constituting trust in oneself. Self-trust necessarily differs from interpersonal trust.

The importance of self-efficacy and its impact on cognitive development permeates the significant body of work founded by Bandura [10], which offer additional support for consideration of self-efficacy as an applied subset of the concept of trust.

Dreyfus [31] underscored the importance of lived experience in the process of learning and educational development outlined in his five part model that is frequently referenced by nursing educators. In describing his proposed model, Dreyfus [31] states that "the student needs not only the facts but also an understanding of the context in which that information makes sense." The five part model designed by Dreyfus mirrors the thinking and theoretical framework of Parse [14] through the reliance upon lived experience to inform and guide the process of learning and skill acquisition. The model identifies five progressive stages involved in learning and skill acquisition as follows: Novice, Advanced Beginner, Competence, Proficiency, and Expertise. The concept of self-efficacy is incorporated in the five part model as the beginning novice progresses hierarchically towards mastery. As environmental exposure and interaction increase (Parse's lived experience), the ability to integrate ever-increasing volumes of data and conceptual components culminates in higher and higher levels of cognition and function. The concept of critical thinking subsequently emerges as an experientially-informed core component of student success.

The proposed model seeks to improve the understanding of factors contributing to the achievement of student success, with the belief that such knowledge will afford educators the opportunity to develop and improve educational processes,

methodologies, and nursing curriculum development. It is from an integrated perspective of the presented viewpoints that an appreciation of the roles and relationships of factors relating to the successful attainment of educational outcomes is presented, examined, and discussed.

PROPOSED CONCEPTUAL MODEL

Figure 2 depicts a visual representation of the previouslydetailed interactions and presents the domains of inquiry and relationships in a pictorial fashion. The conceptual model is an original construct designed by the author in order to provide an approachable overview of the written construction, emphasizing a deeper appreciation of the interconnections and interrelations of the themes involved. The identified domains and theoretical constructs present a conceptual overview of the role and relationship that student-faculty trust plays in student success in nursing education. Increased understanding and appreciation of the relationship between student trust in faculty and student performance would serve not only to validate what many (if not most) instructors feel intuitively, but could have significant implications related to the delivery of educational content. The impact of interpersonal trust on nearly all human endeavors has been documented and demonstrated, and the practice of holistic nursing and health care rests on a trusting nurse-patient relationship (Giffin [32]. Curzon-Hobson [8] posited that trust between the student and faculty "is a fundamental and necessary condition for the realization of a particular pedagogy of higher learning" through its intricate linkage with notions of "freedom,

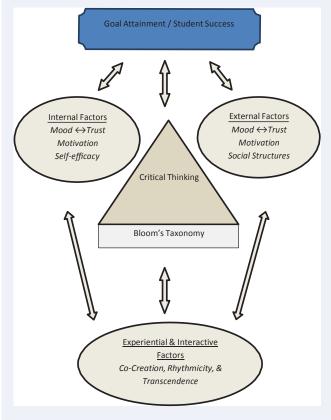


Figure 2 Author's Conceptual Model of the Role of Trust in Nursing Education.

risk, and overcoming." Absence of the trusting relationship was felt to restrict the learning experience and would serve functionally to marginalize the education received. Should the proposed relationships identified in the model be confirmed, the potential implications afford future nurse educators and nursing students alike the opportunity to transcend existing education paradigms and to embrace fuller and more complete humanistic appreciation of the nursing profession.

SUMMARY AND CONCLUSIONS

The preceding philosophical and historical concept definitions, literature exposition and context of study are intended to afford an overarching view of the proposed model, demonstrating the philosophical heritage in Western thought while providing an investigational structure or framework. The examination of trust as a fundamental human experience in interpersonal relationship and communication has been traced through related and dissimilar concepts and definitions while concurrently demonstrating applicability to nursing theory. Through a combination of concepts and paradigms including general philosophical thought, psychological and psychosocialarche types, and relevant nursing paradigms, an integrated conceptual framework is presented within the context of nursing education.

Potential operationalization of the meaningfulness of the conceptual model includes the possibility of the incorporation and integration of trust-building and trust-promoting activities within nursing educational curricula. Attention to student mood and affect may provide significant clues to student progress in addition to trust.

REFERENCES

- 1. McLaughlin K, Moutray M, Muldoon OT. The role of personality and self-efficacy in the selection and retention of successful nursing students: a longitudinal study. J AdvNurs. 2008; 61: 211-221.
- 2. Pryjmachuk S, Easton K, Littlewood A. Nurse education: factors associated with attrition. J AdvNurs. 2009; 65: 149-160.
- Peterson VM. Predictors of academic success in first semester baccalaureate nursing students. Social Behavior and Personality. 2009; 37: 411-418.
- 4. Fink LD. Creating significant learning experiences. Hoboken, NJ: Josey Bass John Wiley & Sons. 2003.
- 5. ASHE Higher Education Report. Definitions and conceptual framework. New York, NY: John Wiley & Sons. 2007; 32: 7-12
- Lewicki RJ, McAllister DJ, Bies RJ. Trust and distrust: New relationships and realities. Academy of Management Review. 1998; 23: 438-458.
- Rousseau DM, Sitkin SB, Burt RS, Camerer C. Not so different after all: A cross-discipline view of trust. Academy of Management Review. 1998; 23: 393-494.
- 8. Curzon-Hobson A. A pedagogy of trust in higher learning. Teaching in Higher Education. 2002; 7: 265-276.
- 9. Erikson JM. Childhood and society (2nded.). New York: Norton. 1963.
- 10.Bandura A. Self-efficacy: toward a unifying theory of behavioral change. Psychol Rev. 1977; 84: 191-215.
- Bloom BS, Englehart MD, Furst EJ, Hiss WH, Krathwol DR. Taxonomy of educational objectives. The classification of education goals. Handbook I: Cognitive Domain. New York: Longmans. 1956.

- 12. Scarbrough JE. Student-faculty trust and its relationship with student success in pre-licensure Baccalaureate nursing education. Nurse Educ Today. 2013; 33: 919-924.
- 13. Rotter JB. A new scale for the measurement of interpersonal trust. J Pers. 1967; 35: 651-665.
- 14. Parse RR. The human becoming school of thought: A perspective for nurses and other health professionals. Thousand Oaks, CA: Sage. 1998.
- Logan RD. A reconceptualization of Erikson's theory: The repetition of existential and instrumental themes. Human Development. 1986; 29: 125-136.
- 16. Alvernini F, Lucidi F, Manganelli S. Assessment of academic motivation: A mixed methods study. Int J Mult Res Approaches. 2: 71-82.
- 17. Curren MT, Harich KR. Performance attributions: Effects of mood and involvement. Journal of Educational Psychology. 1993; 85: 605-609.
- 18. ShireyMR . An evidence-based solution for minimizing stress and anger in nursing students. J Nurs Educ. 2007; 46: 568-571.
- 19. Nilsen H. Influence on student academic behavior through motivation, self- efficacy, and value-expectation: An action research project to improve learning. Issues in Informing Science and Information Technology. 2009; 6: 545-556.
- 20. Shirey MR. Nurturance: Concept clarification and theory for nursing administration practice. International Journal for Human Caring. 2005b; 9: 65-72.
- 21. Johnson M. Commentary on Gillespie M &McFetridge B. Nurse education: the role of the nurse teacher. Journal of Clinical Nursing 15, 639-644. J ClinNurs. 2007; 16: 2178-2179.
- 22. Wheeless L R, Grotz J. The measurement of trust and its relationship to self-disclosure. Human Communication. 1977; 3: 250-257.

- 23. Dilthey, Wilhelm. Selected works. Volume I: Introduction to the human sciences. Princeton: Princeton University Press. 1989.
- 24. Kant I. Critique of pure reason. New York, New York: Cambridge University Press. 1998.
- 25. Husserl E. Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy Third Book: Phenomenology and the Foundations of the Sciences, trans. T. E. Klein and W. E. Pohl. Dordrecht, Germany: Kluwer. 1980.
- 26. Heidegger M. Being and time: A translation of sein und zeit. (J. Stambaugh, Trans.). Albany, NY: State University of New York. 1996. (Original work published 1953).
- 27.Sartre JP. Being and nothingness: An essay on phenomenological ontology. (H. Barnes, Trans.). NewYork: First Washington Square Trade Press. 1943.
- 28. Saye JW, Brush T. Scaffolding critical reasoning about history and social issues in multimedia-supported learning environments. Educational Technology Research & Development. 2002; 50; 77-96.
- 29. Freire P. Pedagogy of the oppressed. New York, NY: The Continuum Publishing Company. 1993.
- 30. Rogers ME. The science of unitary human beings: current perspectives. NursSci Q. 1994; 7: 33-35.
- 31. Dreyfus SE. Bulletin of Science Technology & Society. 2004; 24: 177-181.
- 32. Giffin K. Interpersonal trust in the helping professions. American Journal of Nursing. 1969; 69: 1491-1492.

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