

Survive or Thrive: Implications of Trinity Paradigm of Intelligence in Nursing Education

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Abstract

The shortage of professional nurses is a matter of great concern for nurse educators and health care organizations, at the national level and internationally. Nurse educators face daily challenges in their role as educators while they strive to transform teaching practices for the future. Many of the issues are new, complex, and require creative approaches. The issue of stress in nursing education, though not new, has manifested itself in new challenging ways that require creative, intuitive, and practical coping strategies. Nurturing students to become creative, intuitive, and mindful will lead to the development of an intelligent being. This paper explores student nurses' perceived academic stressors and their strategies for coping. The Trinity Paradigm of Intelligence (TPI), as a holistic paradigm of human intelligence, will be used as a guide to present the emergent data systematically. The concept of intelligent nursing education will be delineated and implications of the findings in nursing education will be discussed.

Key Words: human intelligence, nursing education, learning and development, stress and coping

Introduction

The shortage of professional nurses is a matter of great concern for nurse educators and health care organizations, at the national level and internationally. Nurse educators face daily challenges in their role as educators while they strive to transform teaching practices for the future. Many of the issues are new, complex, and require creative approaches. The issue of stress in nursing education, though not new, has manifested itself in new challenging ways that require creative, intuitive, and practical coping strategies. Nurturing students to become creative, intuitive, and mindful will lead to the development of an intelligent being. This paper explores student nurses' perceived academic stressors and their strategies for coping. The Trinity Paradigm of Intelligence (TPI), as a holistic paradigm of human intelligence, will be used as a guide to present the emergent data systematically. The concept of intelligent nursing education will be delineated and implications of the findings in nursing education will be discussed.

Literature Review

In her review of literature, Aldwin (1999) recounts publications of more than 20,000 articles on stress and coping processes, in general, in the past two decades. Lowery's (1987) comparison of stress research in nursing and in other disciplines, reveals confusion and inconsistency, both conceptually and methodologically. The focus of stress research in nursing has been on exploring the relationship between stress and job satisfaction, student retention, and health-related issues. Healey and McKay's (2000) research into the effects of coping strategies on job satisfaction among nurses demonstrated a positive relationship between job stressors and mood disturbance in their sample of nurses. The concept of stress has been dealt with at a variety of levels, micro to macro, cellular to the individual and the environmental levels (Schnurr & Green, 2004). Several studies investigated nursing students' stress during the initial clinical experience (Admi, 1997; Jones & Johnston, 1997; Martyn, 2000; Tracey, 1996). The study of stress reactions as a factor in regulation of the immune system as well as

underlying neuroendocrine mechanisms has been a key focus of psychoneuroimmunology (PNI) investigation (Dougall & Baum, 2004). Stress responding is a whole body response that affects more than the physiological systems, psychological processes, and behaviors (Dougall & Baum, 2001). Psychosocial variables such as perceived control, predictability, personality variables, coping, and social support are commonly associated with the severity of stressors and their effects (Dougall & Baum, 2004). Social support also has independent effects on well-being and can be a potent buffer of stress (Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Use of licit and illicit drugs, diet, and exercise are affected by perceptions of stress and are often used as a form of coping (Dougall & Baum, 2004). Stress has been implicated in the onset and exacerbation of chronic fatigue syndrome (Glaser & Kiecolt-Glaser, 1998). Research studies that explore the matter of stress and coping holistically are scarce. Sheu, Lin, and Hwang (2002) attempted to explore perceived stress and the effect of coping behaviors on the physiopsychosocial status of nursing students. Their study indicated that social behavioral symptoms were the most common response to stress.

Theoretical Underpinning and Philosophical Assumptions

The theoretical underpinning for the majority of the stress-related studies is based on the stress, appraisal, and coping theory developed by Lazarus and Folkman (1984). This theory classifies stress according to the degree, type, and situation in which it arises. Coping can be problem focused or emotion focused. Lazarus and Folkman (1984) describe stress as a dynamic and reciprocal relationship between the person and the environment; hence, they argue that stressors, coping, and emotional reactions need to be considered jointly due to their interdependent nature.

For a better understanding of the biological basis of an organism's ability to achieve stability through change or "maintaining homeostasis by expanding and directing energy toward challenges" (Friedman & McEwen, 2004, p. 158), the principle of allostasis is proposed (McEwen, 1998; McEwen & Stellar, 1993). Allostasis refers to the process of adaptation, includes the contributions of genetic factors, early life experiences, and features of lifestyle that determine the nature of the physiological responses to daily life events as well as to the situations that qualify as stressors. Accordingly, allostatic load is the cumulative cost to the organism of going through repeated cycles of allostasis and adaptation. Individuals who fail to meet the demands of stressors use and perturb many key psychobiological mechanisms that have evolved for coping, adaptation, and preservation of the species (Friedman & McEwen, 2004). McEwen (1998) and Seeman and McEwen (1996) posit, "Changing behavior to promote regular exercise, judicious diet, stress reduction, psychological wellness, loving relationships, social support, and a sense of control over one's life, all have a salutary impact on health" (p. 179).

The main tenet of the Trinity Paradigm of Intelligence (TPI) is interdependence from micro to macro levels. Stress will directly and indirectly cause disruptions in such interconnectivity at all levels. Therefore, the paradigm will help in delineating these effects. Human intelligence is where all our thinking, acting, and feelings originate. Implications of human intelligence based on the cognitive approaches have helped *train* individuals at different levels of education to become skillful workers. We have entered a new era where skillfulness alone is not sufficient to survive or thrive. Globally, there is increasing need for skilful workers who are critical thinkers, creative, intuitive, emotionally intelligent, responsible, moral, interdependent, and spiritual. Therefore, a more holistic paradigm of intelligence is needed for learning, understanding, and problem solving in this complex and ever-evolving world. The Trinity Paradigm of Intelligence provides a holistic medium by which human intelligence can be explored and understood. The paradigm defines intelligence as those endeavors that initiate, maintain, and cultivate interdependence. The essence of the TPI is 'interdependence' in three realms: 1) intrapersonal—psycho/physiological, 2) interpersonal—social/environmental, and 3) transpersonal—spiritual/beyond. According to the TPI, disruptions in any of the realms hinder intelligence.

Purpose

The purposes of this qualitative study are: 1) to understand and gain deeper insight into student nurses' perceived academic stressors, and 2) to identify their coping strategies.

Study Design

Due to the sensitivity of the topic and the students' hesitation to share their lived experiences because they feared they would not be heard or not heard fully, the researchers made a great effort to establish trust with the prospective participants at all phases of the research. Researchers reminded students before, during, and after conducting the interviews that confidentiality of data would be maintained. They were also given an opportunity to meet individually with the researchers to expand or add to their stories.

Twenty-eight first-semester junior student nurses (n=28; female n=26, and male n=2) from a midsize university in the mid-eastern region of the United States participated in this study. Five separate focus group meetings were held at the end of three different semesters. Invitations for participation were sent to all of the students in three different cohorts. Great care was taken to include participants in each group who knew and trusted each other.

The university IRB granted permission to conduct the study. Informed consent was obtained from the participants, who were assured that participation in this study was voluntary and would not affect their status in school in any way.

Before starting the focus groups, the students were provided a Stress Assessment form to fill out. The form consisted of three columns that students could use to list their experienced physical signs and symptoms, psychological signs and symptoms, and their coping mechanisms in general. The students were asked not to write their names on the forms if they were not comfortable being identified. This way, the students were put at ease while sharing some of their personal information with only the researcher and not with the rest of the group.

An audit trail was developed that documented each participant's comments and tracked the specific focus group and the transcription page containing the quotations. Member checks and expert check were used to confirm the accuracy of the findings. The question posed to students was, "Tell me about the stressors you have experienced in the nursing program and tell me how you have coped with them."

To gain deeper insight into lived experiences of the student nurses, a hermeneutic phenomenology method was also used. Van Manen (2001) says, "Phenomenological research consists of reflectively bringing into nearness that which tends to be obscure, that which tends to evade the intelligibility of our natural attitude to everyday life" (p. 32). The participants for this phase of the study were those who wanted to share and elaborate on their personal stories with us but were not comfortable doing so in a group interview.

Data Analysis

The interviews were audiotape recorded and transcribed verbatim. Data analysis was performed manually. Coded data revealed 57 factors contributing to students' stress (Table 1) and 20 factors contributing to their coping strategies (Table 2). Subthemes were clustered within the data and themes were identified. Five main themes emerged from the study as follows:

- 1) Academic pressure—for example, test anxiety, pressure about grades, too much emphasis on passing tests and NCLEX, information overload, curriculum arrangement, lack of time for socializing, time management, and study habits.
- 2) Lack of communication—for example, unclear instructions and expectations, lack of coordination among faculty, and lack of formal guidance.
- 3) Threat to self-esteem—for example, feeling insecure, incompetent, and ignorant (especially in clinical areas), being put down, faculty showing favoritism, self-blame, and being blamed for being a novice.

- 4) Fearfulness—for example, afraid of harming a patient, afraid of failing a course, and afraid of making faculty angry.
- 5) Lack of trusting relationships—for example, competitive and non supportive peers, faculty's attitude, and lack of faculty support and responsiveness.

For coping strategies, two themes emerged:

- 1) Physical strategies—for example, getting enough sleep, exercising, working, and taking medications.
- 2) Emotional strategies—for example, talking to others, spending time with the family and relatives, self-reflection, peer support, socializing, going to church, and watching movies.

We have made conscious efforts to establish confidence in interpretation of the meaning of the data or credibility of data by presenting our preliminary findings to our research colleagues in order to achieve collaborative analysis (Carboni, 1995). We maintained an audit trail as a document to assure confirmability and dependability (Lincoln and Guba, 1985).

Table 1. Perceived Stressors

Academic pressure	Fear of failure	Confusion
Instructors changing minds	Feeling sad	Lack of guidance
Feeling pressure	Unclear expectations	Lack of feedback
Ambivalence	Test anxiety	Too many assignments
Time management	Illness	Unclear instructions
Financial stress	Study habits	First hard course
A bad start	Learning only by observing	Lack of group work
Problem with clinicals	Psychological stress	Fear of failing NCLEX
Uncertainties	New environment	New classmates
Blaming self	Negative peer pressure	Difficulty dealing with faculty
Blamed for being a novice	Inadequate training	Ethical stress
Developed sense of fear	Physical stressors	Curriculum arrangement
Course content	Remedial post-facto	Unclear objectives
Didactic/lab contents mismatch	Fear of getting bad grades	Methods of instruction
Faculty's attitude	no coordination (instructors)	Conflicting information
Lots of information	Lack of trust	Treating students differently
Not giving feedback	Mismanagement	Improper remedial course
Feeling of resentment	Feeling of distrust	Receiving negative energy
Misrepresentations	Pretending	Favoritism

Table 2. Used Coping Strategies

Blaming it on the course	Not taking too many courses	Talking to classmates
Taking medication, drugs	Joining support group	Joining study group

Got preceptor's support	Dealing with reality	Family support
Peer support	Worked on time management	Socializing
Working	Self-reflection	Counseling
Spent time with relatives	Going to the library	Getting some faculty support
Playing with pets	Going to church	

Guided by van Manen's (2001) suggested hermeneutic reflection for a qualitative research process, the researchers read and reread the transcripts to isolate thematic statements. The following themes were identified:

Academic and curriculum-related issues—Academic factors were perceived as the most significant stressors by the participants. “The way the curriculum is, I had to take patho, pharm, and foundation all in the same semester...This requires so much memorization, so much material, so much science that I thought it was too difficult for me.” “I think this semester the clinical was so overwhelming for me, there were so much new stuff that you are trying to take in, that you kind of lose track of trying to keep up with all your readings.” A balanced approach to taking courses was suggested as a way to cope with this issue. “I think it was easier to have balance between your classes. Like if I knew I had to have one class that was going to be hard, [in addition] I would pick another course that was maybe easier and more enjoyable and fun.” Many students found tests in nursing courses very challenging. “I came from a pre-med [program]. I was taking all these biologies and chemistries and you know those tests are totally different from nursing tests. [Here] you have two answers [and] both of them seem right. I feel like that there should be some type of preparation classes to teach you how to take these tests.” “We had never taken nursing type of tests before, you had no idea what to expect when you went and took the ...test. It was completely different, I had a degree already from a different school, [and] it was absolutely different from anything I had ever taken before.” Lack of providing adequate guidance and feedback were other areas of concerns. “There wasn't any type of review. They didn't give you any examples of like what we were going to be expected to do. And so, it wasn't real black and white...I never really grasped how I was supposed to study for it.” “Now after you fail a class, they give you that active duty success class which teaches you how to pick out the answers...after you failed the class...it's like pointless.” “...[F]or one of my classes, for all the studying I did probably didn't make a difference. The tests were not based on knowledge, facts, but it was a guessing game.”

Inadequate communication between students and faculty was a matter of great concern. “One of the things as far as learning goes that has aggravated me is when you ask questions and you can never get answers.” On the other hand, a supportive faculty could put students at ease and help them enhance their learning “She told me that I was not on the right track and she corrected me. She showed me step-by-step how to do it and I really appreciate her.”

Issues related to communications—Some of the students learn better if they receive feedback and advice. Not receiving feedback was considered an academic stressor. “One of the things that as far as learning goes aggravated me, is when you ask questions and you can never get answers. In one of my classes, she said look it up!” The fear factor was mentioned as one of the obstacles in the way of student/faculty communications. “I don't know, it's like you are so afraid to say something 'cause you are going to piss somebody off, because you know you're going to see them again!” If presentations of the contents in two different settings were not quite similar, this created some confusion. “I know the professor in lecture would say something, and then we'd go to the lab and she would say something different. And then on the test, of course, both of them are options.”

Issues related to threat to self-esteem—“I almost dropped out last semester after one of my clinical days. I called my mom, I went home crying...I cried for several days after as well, at home, at work....but then...I was not going to let somebody [make] me feel like I was incompetent,” one student said. Blaming self was another issue related to a participant's self-esteem. “I cannot document to save my life. I've looked back at my documentations, [and] there was an error on every other line,

rewriting, sounded like a 5-year-old wrote it. It was awful.” “[T]he feeling of being totally incompetent, like I don’t know what I’m doing. Now, I’m going to go in here and mess up, screw up, and screwing up could harm somebody else.” The lack of support and criticizing a novice learner was expressed by one of the students as a threat to her self-esteem “[When I was starting an IV,] when we finally got it in and wanted to flush it, it didn’t work. She [instructor] said it was dislodged. [W]hen you pulled it out blah, blah, blah and she totally blamed me for it. ...I’m like...I’ve never done this before, you know...I tried. I’m not trying to make an excuse, that was probably because [of] the way I did it.”

Issues related to fearfulness—Several students expressed fearfulness for different reasons. “I failed that one class, I ended up having to have surgery...I was afraid I was going to fail...I put that pressure on myself ‘cause I know if I don’t pass every class I’m out of nursing.” “I went to another school before I actually entered the nursing program. I remember my first instructor, she told me later on...she said your whole body vibrated ‘cause I was so scared.” “I’m still worried about the next semester, getting all these assignments and not being able to get them completed before the class start[s].” Fear of getting bad grades was a matter of great concern. “My biggie is grades. Grades, grades, and grades. I have never ever [done badly] in school except one time in 5th grade and I was about to die. I’m stressed out about grades. So now if I fail another class, you know, I’m screwed.”

Issues related to trusting relationships—Some of the students felt they were given tricky tests. “[S]tudy for any and everything and study again and it’s still not enough. They will find something in the corner of the book that you haven’t even seen.” Some of the students were afraid to voice their concerns in fear of retaliations.” “[A] lot of times people just don’t say anything. Things happen that I wanted to talk [about] to them or follow through with but I wasn’t sure whether I should or not because I was going to have them again and I didn’t want to get on their bad side.” “They [faculty] always say not to worry about the grades, you’re fine...and yet we have this policy where if you get a C- and you can fail twice. So you feel like that’s kind of confusing...they are acting like you are being obsessive/compulsive about your grade and yet we have been told we need to be that way.”

Implications of the Trinity Paradigm of Intelligence

The paradigm defines intelligence as those endeavors that initiate, maintain, and cultivate interdependence (Ghaffari, 2007). The essence of the TPI is “interdependence” in three realms: 1) intrapersonal—psycho/physiological, 2) interpersonal—social/environmental, and 3) transpersonal—spiritual/beyond. According to the TPI, disruptions in any of the realms hinder intelligence.

Stress directly affects the intrapersonal realm of student nurses. Common signs of stress reported by the students are: anxiety, depression, tiredness, frequent headaches, insomnia or oversleeping, weight changes, smoking, drinking, and taking drugs. Other factors were lack of time to exercise, fears of failing courses, fears of failing NCLEX, feelings of inadequacy related to being a novice, a learning style that differs from teaching methods, financial stress, inadequate study habits, and feeling overwhelmed with time, work, and academic pressures. The following excerpts demonstrate some of these factors: “You are supposed to learn everything and it is supposed to be an enjoyable experience but they made me pretty miserable.” “You are under so much stress to do it in a hurry and get it done.” “There is a lot of mental fatigue.” “I began not to sleep or sleep poorly.”

Therefore, perceived academic stressors as presented disrupt the interconnection at the micro level or physiological/psychological level. This is a major threat or hindrance in developing one’s intellectual development, which does not allow any creative thought process. The individual focus will be on dealing with the consequences of inadequate provisions of physiological needs. Some of the students felt “under the gun” and they were trying to prove themselves. Ineffective time management and not being familiar with study rigor caused them to get low grades. These factors immensely affected their self-esteem and self-concept. They stated these factors caused them great sadness and they cried most of the time. Some of the students stated they felt insecure, incompetent, and ignorant. Therefore, the person’s main aim in this circumstance is to survive.

The perceived academic stressors also hindered intellectual development by disrupting connections at interpersonal levels. Some of the factors stated are: lack of trust and unclear expectations set by faculty, lack of communication among faculty, lack of guidance and feedback from faculty, social isolation from family and friends due to academic workload, rumors from peers and faculty, adjustment to staff in clinical environment, competitive and unsupportive peers, new types of academic tests, and set curriculum without balance in hard and easy courses. The following excerpts are to support these statements: "Faculty say different things, answer questions differently." "[T]his semester is the hardest." "I'm uncomfortable the whole time in clinical." "Nursing school around the campus is known as the hardest." Several of the participants believed the academic stressors caused not having enough time to see friends, a marriage falling apart, not having time for counseling, not being able to perform family responsibilities, not being able to go to church, and not having time for any socializing. Not being able to connect with others is another threat to one's intellectual development.

Disruptions in the interpersonal realm hinders one's true development in several ways: 1) inability to connect with family and relatives, who are usually the major source of support and encouragement; 2) inability to connect with self and others and having difficulty locating oneself socially and professionally; 3) inability to communicate with the faculty and instructors, and seeking help; and 4) difficulty in establishing rapport with faculty, classmates, and the patients. Dealing with disruption in the interpersonal or social realm hinders development of interpersonal skills as well as social and emotional intelligence, which may lead to feelings of insecurity and inadequacy. Therefore, the main concern of the individual here is to survive the hardship.

The third realm of the TPI, transpersonal, includes those factors that connect a person to that which is beyond self and others. This can be disrupted by the perceived academic stressors: "I don't have time to join my church group," "I've [got] to study, study, no time for reflection," and "I need lots of help to make it through, but who is going to help me?" Dedicating time and practicing relaxation techniques, meditation, prayers, contemplation, and participating in religious activities immensely help a person to be aware of self, to know his/her place in the continuum of life, and be able to connect with collective consciousness. The students' perceived academic stressors hindered establishing or maintaining such interconnections. Not being aware of these, a student's aim during his/her nursing education becomes to survive the difficulties and life realities and to gain monetary compensations for the performed "nursing job." This brief analysis examined the overall effects of academic stressors using the TPI and demonstrated the effects of perceived academic stressors on intelligent nursing education.

Discussion

While the number of studies and published data on the topic are abundant, in general, lived experiences of nursing students have not demonstrated any substantial improvements as a result of implications of the findings.

Our journey began with curiosity about why the joy of learning is not apparent in students' faces. Data indicated that the students perceive nursing education to be stressful and fragmented. Contrary to the faculty's assumptions that we are educating students to be knowledgeable, compassionate professionals, they are feeling "under the gun," incompetent, insecure, and angry. The TPI was used as a guide to present the emergent data systematically. The TPI defines intelligence as those endeavors that initiate, maintain and cultivate "interdependence" in three realms: intrapersonal, interpersonal, and transpersonal. Disruption in any of these hinders intelligence. Indeed, disruptions were evident in all three realms.

The findings that emerged from this study, while support findings of similar studies, have created a new perspective and deeper insights. Our study explored the perceived academic stressors. Overall, the explored and identified academic stressors in our study concur with findings in similar studies. However, a new perspective arises from the point of exploration of coping skills. While perceived academic stressors have remained the same, the coping skills of the students have greatly changed. This area deserves greater exploration. The participants in this study, while stating that the tests were

unfair and difficult, at the same time eluded to other factors, such as work, inefficient time management, and not being accustomed to studying that much, which eventually have made them fail an exam. A few of the participants stated that if the test questions (sample) had been given to them a day before an exam, they could have gotten an A in that course. Other factors that students mentioned were: "If my parents move down here [with me] then I can study better." "My parents need to provide for me if they want me to succeed in school and graduate." "There are too many assignments; do they [faculty] think we have no life?" Although this area requires further study and exploration, our early hunch is that while the stressors have remained the same, students' coping skills have changed. Knowing reasons for the changes may help faculty, family, and peers to work together to improve students' coping skills and helping them to be successful in the program, in the nursing profession, and in life.

In our study, we have strived to explore the topic holistically. We used the TPI as a guiding paradigm to discuss and present the emergent data. The implications of the findings will help nurse educators to provide intelligent nursing education and nurture nurses who strive to thrive, not just to survive, as people and as professionals.

Emergence (findings) portrays nursing education as a bleak endeavor in which the joy of learning is lacking. This approach has had negative effects on nursing students in their efforts to develop a sense of self and professionalism. This study helped us understand many facets of the diverse student body in nursing. While nursing education is advocating change in the educational process, the reality of a nursing shortage and trying to *train* new nurses have forced many nurse educators to work with very limited resources. Well-trained nurses may be able to survive and help the profession survive. However, for nurses to thrive and evolve in the field, nurse educators must implement an intelligent education system that "nurtures" instead of "trains" nursing students. This will develop and foster each student's mind, heart, and hands.

Implications in Nursing Education

Specific implications from this study include the following:

Model caring—We can foster caring in our students by consistently being role models for them in and out of the classrooms and clinical areas.

Empathy for novice perspectives—Recall the first time we did a new procedure or the first time we walked into a patient's room. Remember we needed lots of encouragement and support.

Guided laboratory practice for confident clinical performance—We need to work closely with our students in the lab and in clinical settings.

Clear academic and clinical expectations—Let's tell students what we expect from them each day and communicate this with other faculty.

Cultivate a fear-free learning environment—Learning is supposed to be enriching. Learning with fear is a threat to self-esteem and self-concept.

Be respectful, trustworthy, and humane—We need to establish a trusting relationship. This elicits communication, fosters caring, and facilitates humane professional interactions.

Any factor, event, or pattern that inhibits holistic emergence of the three realms of the TPI is a major threat to an intelligent nursing education.

Note: Survive or Thrive: Implications of Trinity Paradigm of intelligence (TPI) in Nursing Education was presented at 2004 Biennial Convention of American Nurses Association, Minneapolis, Minnesota.

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