An Investigation of the Relationship between Self-directedness in Learning and Resilience Among Undergraduate Nursing Students

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Background

- Nursing shortage
- Nursing profession searching for alternative ways to increase the number of RN graduates to meet the demand
- Accelerated BSN programs are one solution.
- Differences between ABSN students & TBSN student
- Teaching approach/method the same for both groups
- Nursing is a demanding, dynamic, and ever changing profession
- Every 10 years, one-fourth of all nursing knowledge and nursing practices become obsolete and for technology that time can be as short as 18 months (Allen, 2008, p.13)
- RN's need to be both self-directed and resilient to sustain a long, successful career

Definitions

Self-Directed Learning: refers to both the external characteristics of an instructional process and the internal characteristics of the learner, where the individual assumes primary responsibility for a learning experience (Brockett & Hiemstra, 1991).

Resilience: the process of coping with adversity, challenges, or changes in a manner that results in the "identification, fortification, and enrichment of resilient qualities" (Richardson, 2002). It "embodies personal qualities that enable a person to thrive in the face of adversity" (Connor & Davidson, 2003, p. 76).

Purpose

The purpose of this study is to investigate the relationship between self-directedness in learning and resilience among baccalaureate undergraduate nursing students.

Goal:

- Build upon the understanding of the relationship between SDL and resilience.
- By investigating these relationships within nursing education, both educators and students can better understand how resilience and self-directedness in learning are related.

This study has the potential to add to our understanding of how students learn in the face of adversity as well as identifying specific needs of nursing students that will enable them to move forward into the nursing profession, poised for long term success

Significance

- Providing learner-centered approach to teaching undergraduate nursing

- Foster the development of SDL & Resilience in all undergraduate nursing students

- Development of educational programs that meets the needs of diverse student populations

- SDL + Resilience ⟶ Long-term professional RN career

- Vess suggested a bridge between SDL and positive psychology (gratitude). Ruttencutter added to this bridge with grit. This study is one more plank in this bridge and adds to the body of knowledge related to SDL and positive psychology.

Research Questions

1. What is the relationship between self-directed learning and resilience among baccalaureate undergraduate nursing students?

2. What is the relationship between resilience and the four factors of self-directed learning: Teaching Learning Transaction Components (TL); initiative and control and Learner Characteristics Components (LC); self-efficacy and motivation among baccalaureate undergraduate nursing students?

3. Is there a significant difference between SDL and resilience by type of program, TSBN or ABSN?

4. Is there a significant difference between age, sex, and highest degree earned by type of program, TBSN or ABSN?

Theoretical Framework: SDL
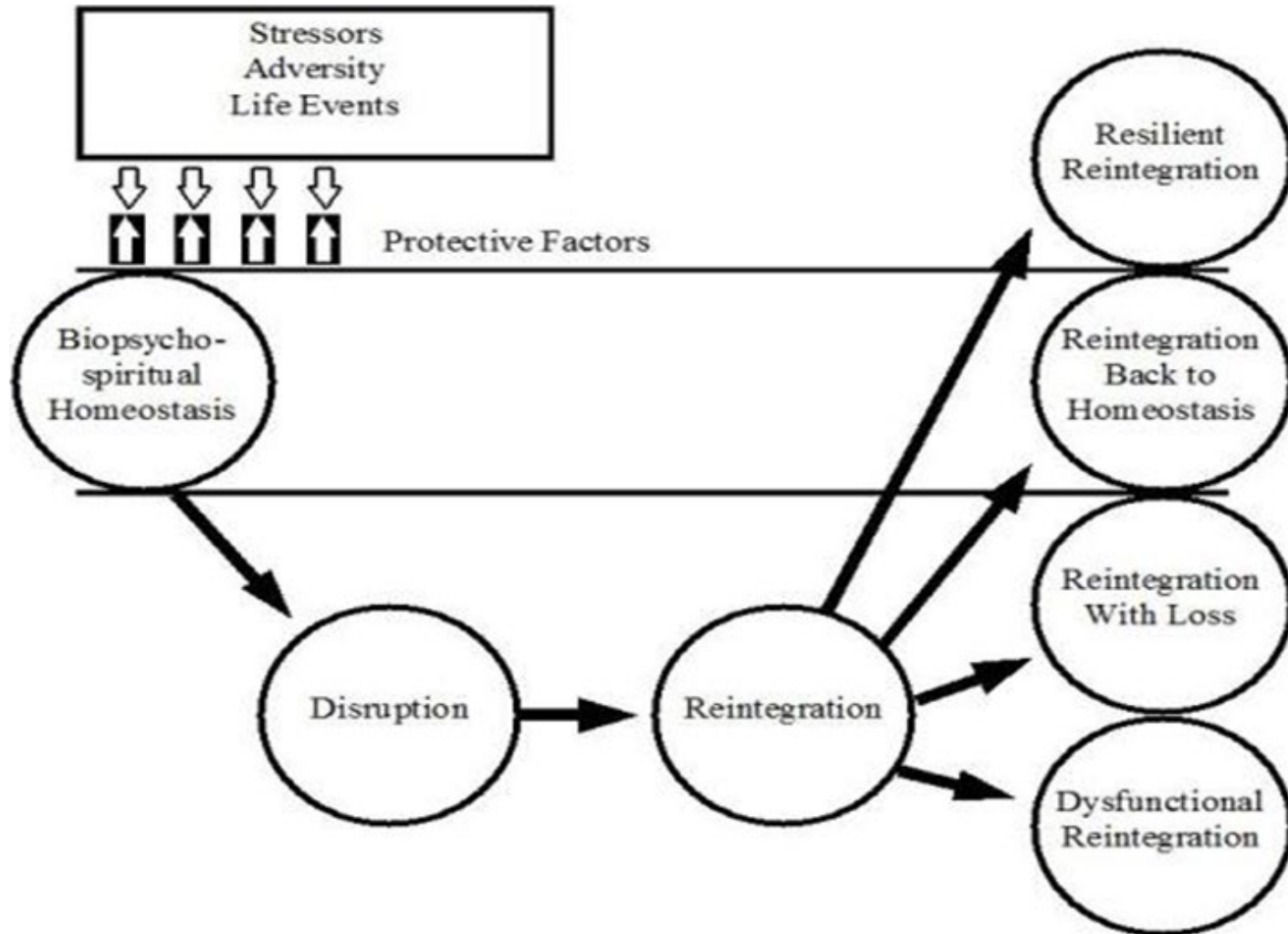
Person Process Context Model: **PPC model**
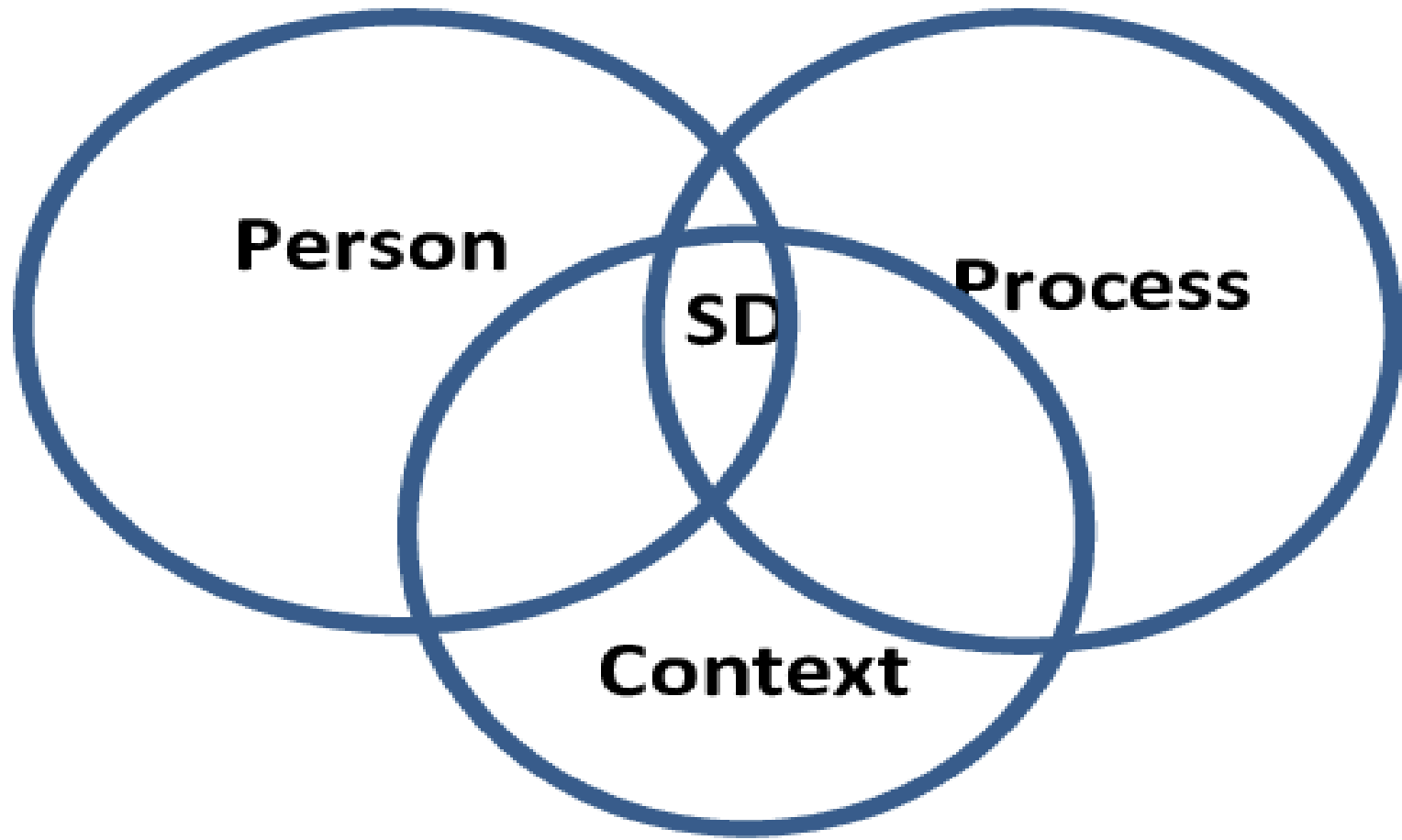
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Theoretical Framework: Resilience

Richardson's Resilience Model (2002)

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Method

- Descriptive, Correlational design

- Undergraduate Nursing students; BSN student in TBSN & ABSN programs within a college of nursing, large, public university in southeastern US

- Factors
  - ✓ SDL, resilience, age, gender, program enrolled in, and highest level of education prior to entering BSN program

- PRO-SDLS, CD- RISC

Sample

- $N = 70$ (21.6% return)

- $M_{age} = 25.06$, $SD = 5.97$; range $= 20 - 48$

- Gender
  - ✓ 85.7% Women ($n = 60$)
  - ✓ 14.3% Men ($n = 10$)

- Type of Program
  - ✓ TBSN $n = 28$ (40%)
  - ✓ ABSN $n = 42$ (60%)

- Highest degree prior to entering BSN program
  - ✓ 38.6% (n=27) no previous college degree
  - ✓ 54.3% (n=38) bachelor's degree
  - ✓ 7.1% (n=5) master's degree

RQ 1: Analysis + Results

What is the relationship between self-directed learning and resilience among baccalaureate undergraduate nursing students?

- Pearson's product-moment
- PRO-SDLS and Resilience: composite scores

		Resilience	SDL
Resilience	Pearson Correlation	1	.553**
	Sig. (2-tailed)		.001
	N	70	70
** Correlation is significant at the 0.05 level (2-tailed).			

There is a significant relationship between SDL & resilience

RQ 2: Analysis + Results

What is the relationship between resilience and the four factors of self-directed learning: Teaching Learning Transaction Components (TL); initiative and control and Learner Characteristics Components (LC); self-efficacy and motivation among baccalaureate undergraduate nursing students?

- Pearson's product-moment
- PRO-SDLS and Resilience: factor + composite scores

		initiative	control	Self-efficacy	motivation
Resilience	Pearson Correlation	.401**	.409**	.520**	.373**
	Sig. (2-tailed)	.001	.001	.001	.001
	N	70	70	70	70
	r^2	16%	17%	27%	14%

There is a significant relationship between resilience and the 4 factors of SDL

RQ 3: Analysis + Results

Is there a significant difference between SDL and resilience by type of program, TSBN or ABSN?

- Independent t-test
- PRO-SDLS and CD-RISC by type of program
- PRO-SDL factors by program type – MANOVA & ANOVA

	Type of Program	N	Mean	Std. Deviation
SDL	TBSN program	28	3.61	.42
	ABSN program	42	3.98	.36

There was a **significant difference** between the type of program and the level of SDL, **t=-3.947, df=68, *p*<.001.**

	Type of Program	N	Mean	Std. Deviation
Resilience	TBSN program	28	3.05	.38
	ABSN program	42	3.25	.40

MANOVA & ANOVA analysis was performed To explore group differences, ABSN versus TBSN, in the four factors of the PRO-SDL; initiative, control, self-efficacy, and motivation

There was a **significant difference** between the type of program and the level of resilience, **t=-2.063. df=68, p=.043**

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RQ 4: Analysis + Results

Is there a significant difference between age, sex, and highest degree earned by type of program, TBSN or ABSN?

- Independent T-test (age), Chi square (sex & degree prior to BSN program)
- Age, Sex, and highest degree earned prior to entering BSN program by type of program

	Type of Program	N	Mean	Std. Deviation	Std. Error Mean
Age	Traditional BSN program	28	21.1071	.62889	.11885
	Accelerated BSN program	42	27.6905	6.47505	.99912

There is a **statistically significant difference in age by type of program** with the ABSN program having significantly older students, **t=-6.543, df=42, p< .001**.

RQ 4: Analysis + Results (cont)

| | | | Type of Program | | |
			Traditional BSN program	Accelerated BSN program	Total
Your Highest Degree Obtained before entering the nursing program:	No previous college degree	Count	27	0	27
		% within Select the option below that best describes your nursing program	96.4%	0.0%	38.6%
	Bachelor's Degree	Count	1	37	38
		% within Select the option below that best describes your nursing program	3.6%	88.1%	54.3%
	Master's Degree	Count	0	5	5
		% within Select the option below that best describes your nursing program	0.0%	11.9%	7.1%

the Chi-square test demonstrates a **statistically significant difference** in highest degree earned prior to entering nursing program by type of program, x^2=69.54, df=2, p<.001.

Findings & Discussion

➢ There is a significant relationship between SDL and Resilience in undergraduate nursing students

- As SDL increases so does resilience

➢ There is a significant relationship between resilience and the 4 factors of SDL; initiative, control, self-efficacy, and motivation

➢ ABSN students are significantly more self-directed & more resilient than TBSN students

➢ ABSN students are significantly older than TBSN students

➢ There is no significant difference in sex between the 2 groups

➢ ABSN students are significantly different in prior degree earned than TBSN students

Implications for Practice

From Undergraduate Nursing student to independent RN professional:

- ABSN & TBSN students need a range of different teaching methods and styles to reach their maximum potential

- Educators must incorporate facets of self-directed learning & Resilience throughout the nursing program and foster that growth

- In students who are already highly self-directed, educators need to allow them to be self-directed and with students who have not developed the skills to be self-directed, educators need to foster that development.

- Resilience requires time, coaching, nurturing by faculty

- We need to develop nursing students into strong, resilient, self-directed nurse leaders who are capable of not only surviving but thriving in a challenging healthcare environment.

Future Directions for Research

- Broader population of undergraduate nursing students

- Longitudinal design (growth of SDL and resilience) during undergraduate education and into professional practice

- Implementation of SDL & Resilience programming/education programs with analysis of the impact

- Qualitative methodologies

Questions