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# Generation Y Nurses' Self-Regulation Behaviors: A Secondary Analysis

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## Objective

Examine age-related differences in self-regulation strategies as measured by The Survey of Academic Self-Regulation (SASR), among early Generation-Y (21-25 years old) and late Generation-Y (26-30 years old) nurses.

## Background

### Generational Differences

The millennial generation (Generation Y) includes people who were born between 1982 and 2003. This generation will grow exponentially in the next decade. Generation Y learners are believed to present a learning challenge because they were greatly influenced by a technology rich environment. A systematic review of the evidence concluded that there was not enough existing evidence to confirm that there are actual differences in learning preferences among Generation Y students and therefore additional research was necessary.

### Parent Study

This study is a secondary analysis of data collected in a previous longitudinal randomized control trial (RCT) that examined the effect of mastery learning on nurse residents' skill and self-regulation practices for indwelling urinary catheter insertion in a simulated learning. Self-regulation was measured using The Survey of Academic Self-Regulation (SASR).

The SASR is organized into six subscales:

- metacognition (what someone is thinking)
- extrinsic motivation (external rewards)
- self-regulation (study strategies)
- personal relevance & control (personal expectations)
- intrinsic motivation (personal mastery)
- self-efficacy (personal beliefs)

The total sample size for the initial study was 39 of which 35 (90%) were Generation Y.

## Theoretical Background

### Self-Regulation

Actions performed by the learner to gain knowledge for example: (1) seeking and organizing information, (2) rehearsing something complex, or (3) getting assistance from others

Defined by three distinct yet interrelated phases: forethought, performance and self-reflection

### The Survey of Academic Self-Regulation

A 63 item self-report questionnaire which measure's participants' report of self regulation practices on a 6-point Likert scale from Strongly Agree (6) to Strongly Disagree (1)

The survey is organized into 6 subscales: Metacognition, extrinsic motivation, self-regulation, personal relevance & control, intrinsic motivation, and self-efficacy.

### Metacognition

The practice of actively planning, assessing, and modifying one's understanding and performance. It is the act of contemplation.

### Metacognition Assessment

Metacognition	Strongly Disagree	Strongly Agree
1 I use available aids like procedure checklists.	1 2 3 4 5 6	6
2 I review the effectiveness of my approach after I finish a task.	1 2 3 4 5 6	6
3 I set goals for myself before providing care.	1 2 3 4 5 6	6
4 When learning is boring I find ways to make it interesting.	1 2 3 4 5 6	6
5 I try to summarize what I am seeing or hearing.	1 2 3 4 5 6	6
6 I keep track of how well I understand my clinical preceptor	1 2 3 4 5 6	6
7 I keep track of resources for providing patient care	1 2 3 4 5 6	6
8 I use specific test-taking strategies.	1 2 3 4 5 6	6
9 I study first and then reward myself later.	1 2 3 4 5 6	6
10 I go beyond what is required to see how much I can learn.	1 2 3 4 5 6	6

This is a sample of phrases asked to assess metacognition.

Participants rate their agreement with each phrase from 1 (strongly agree) to 6 (strongly disagree).

## Methodology

In the initial study, participants were new to practice BSNs. Self-regulation was measured using the SASR: a 63 item self-report questionnaire, alpha coefficient = 0.909. For this secondary analysis, existing SASR data were examined.

Of the initial sample, (N = 39), 33 participants were used for this study creating two groups: Early Gen Y (n = 20) and Late Gen Y (n = 13). The Mann-Whitney U test was used to test for significant differences in the total and sub-scale scores between groups.

## Findings

The late Generation Y group scored higher in all sub-scales except self-regulation and self-efficacy, yet there were no significant differences in these sub-scale scores.

Upon further analysis, it was found that the late Generation Y group contained 86% of all males. An additional test was performed to assess for gender differences between the sub-scales among males and females in the late Generation Y group (males = 6, females = 7). Females in the late Gen Y group scored significantly higher than males on the meta-cognition (MC) subscale (p = 0.008).

Other sub-scales did not show a significant difference.

## Problem Statement



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By the year 2020, people born between 1982 and 2003 will account for half of the workforce and by 2030, it will increase to 75%. Given these statistics, the purpose of this secondary analysis was to examine age-related differences in self-regulation strategies, measured by The Survey of Academic Self-Regulation (SASR), among early (age 21-25) and late (age 26-30) Generation Y nurses.

Identifying and encouraging the preferred methods of self-regulation when clinical practice questions arise may result in clinical competence leading to improved patient care.

## Results

Demographics			
Group	Gender	n	%
Early Gen Y	Female	19	95.0
	Male	1	5.0
Late Gen Y	Female	7	53.8
	Male	6	46.2

Table 1 - Demographics

Sub Scale	Gender	N	Mean	Std. Deviation
Metacognition	Male	6	85.00	8.390
	Female	7	96.71	3.773
Extrinsic Motivation	Male	6	14.17	4.309
	Female	7	10.43	4.353
Self Regulation	Male	6	59.33	6.346
	Female	7	60.71	4.957
Personal Relevance & Control	Male	6	57.33	4.633
	Female	7	57.71	1.890
Intrinsic Motivation	Male	6	45.167	5.1929
	Female	7	48.714	2.8115
Self Efficacy	Male	6	34.67	6.470
	Female	7	31.86	6.744

Table 2 - Late Gen Y Sub-Scale Score by Gender

## Conclusion

Results suggest that late Generation Y female nurses use Meta-Cognition as a preferred self-regulation strategy. This study provides evidence that can be applied to nursing education.

Promotion of self-regulation habits encourages new to practice nurses to use their clinical resources (ie. reference books, procedure manuals) when they are uncertain about the patient care they are providing.

This study was approved by the Villanova University IRB.

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