

# A COMPARISON OF SECOND-DEGREE BACCALAUREATE AND TRADITIONAL-BACCALAUREATE NEW GRADUATE RNS: IMPLICATIONS FOR THE WORKFORCE

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The purpose of this study was to describe the differences between traditional-baccalaureate graduates (TBGs) who had a baccalaureate degree in nursing and no other academic degree or diploma and second-degree baccalaureate graduates (SDGs) who had both a baccalaureate degree in nursing and a baccalaureate or higher degree in a field other than nursing. Using a sample of 953 newly licensed registered nurses (NLRNs), we compared SDGs and TBGs on demographic and work characteristics, including attitudes toward work, intent to stay in their current job, and whether they are searching for a job. TBGs worked slightly more hours per week and were more likely to provide direct care. SDGs were more likely to plan to stay indefinitely in their first job and were less uncertain of plans to stay. SDGs experienced higher family–work conflict and lower workgroup cohesion. Full-time SDGs earn over \$2,700 more income per year. Potential explanations for the salary difference are the greater human capital that SDGs bring to the job and their older age. Understanding the workforce productivity of these two groups is important for both organizational planning and policy for recruitment and retention. (Index words: New graduates; Second-degree nurses; Newly licensed registered nurses; Turnover; Satisfaction; Orientation; Retention) *J Prof Nurs* 25:5–14, 2009. © 2009 Elsevier Inc. All rights reserved.

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**M**ANY NURSING PROGRAMS have implemented second-degree and other postbaccalaureate first-professional degree nursing programs. These programs have grown from the first accelerated second-degree program at St. Louis University about 35 years ago (Ward, Bosco, & Styles, 2003) to 40 programs in 1991 to about 200 today (Curtis, 2006), and more are in the planning stages (American Association of Colleges of Nursing (AACN), 2005).

Programs receiving the most attention are accelerated or fast-track programs, in particular accelerated baccalaureate degree programs. Postbaccalaureate first-professional

degree programs include second-baccalaureate, masters, and doctoral degree programs. These programs generally include all of the nursing classes and clinical experiences that are in traditional baccalaureate programs (AACN, 2005). Many second-degree programs have two tracks. In one track, second-degree students behave as if they were transfer students who were obtaining a second major. These students proceed in their course work similarly to traditional students. Students in the other track, often called “accelerated” or “fast track,” proceed at an accelerated pace, often with a cohort. Accelerated programs have full-time intense instruction with a heavy credit count, generally without any breaks such as summer vacation that traditional students have (AACN, 2005). Accelerated programs sometimes include Web-based instruction, and this delivery method has been found to be effective for students in these programs (Kearns, Shoaf, & Summery, 2004). Finally, students in an accelerated program believed that although clinical experiences were the most overwhelming part of their education, it was also where they learned the best (Pellico, 2004).

Although there is some anecdotal information about second-degree students who are considered to be bright, motivated, involved, older, and hold higher expectations for their education and often plan to get a graduate degree (AACN, 2005), there is little quantitative published data (Curtis, 2006; Ward et al., 2003). There is no research on large, randomly selected, representative samples of practicing second-degree RNs.

### Literature Review

Not enough is known about the similarities and differences between traditional undergraduate program graduates (TBGs) and second-degree graduates (SDGs). Some differences as students have been shown. When compared with other students, second-degree students are older and more responsible, had difficulty with students who were satisfied with meeting minimal academic expectations, preferred courses that involved hard sciences, and were eager to earn a living wage (Sheil & Wassem, 1994). It has also been reported that SDGs (Cangelosi, 2007; Ward et al., 2003) and accelerated students are highly motivated and focused on their goals. Several studies have indicated that the length of the program (1–2 years) is an important factor in attracting students (Cangelosi, 2007; Sheil & Wassem, 1994; Wu & Connelly, 1992). Wu and Connelly (1992) described second-degree baccalaureate students from a sample of 10 colleges ( $n = 166$ ) as older than traditional students and as having biology, psychology, languages, and sociology as the most common college majors. Top reasons for the students to enroll in these programs were employment opportunities, financial stability, and upward mobility (Sheil & Wassem, 1994; Wu & Connelly, 1992). Toth, Dobratz, and Boni (1998) found no differences between traditional students and second-degree students in their attitudes about nursing ( $N = 388$ ). Bentley (2006) found no significance in National Council Licensure Examination (NCLEX) pass rates between accelerated and

traditional students, with the former having a higher pass rate than the traditional students. In contrast, McDonald (1995) found, in comparing traditional and accelerated students, that students in accelerated programs scored higher in nursing performance and on the NCLEX. It has also been reported that the second-degree students (Cangelosi, 2007; Ward et al., 2003) and accelerated students (McDonald, 1995) are highly motivated and focused on their goals.

We have not found any studies of differences between second-degree RNs and traditional degree RNs as new practicing RNs, although there is a considerable amount of literature on new graduates. Hayes and Graf (2006) reviewed the literature on new graduate RNs and described clinical preferences for maternal child and medical and surgical units, as well as unrealistic expectations and frustration with inability to deliver holistic care as well as incomplete socialization. Eventual development of coping strategies and role mastery develops. However, some new RNs have inevitably left either their employers or the profession in frustration before they have developed adequate coping skills and role mastery. Winter-Collins and McDaniel (2000) emphasized the need for extra mentoring and nurturing needed by the new graduate RN to confidently experience the work setting. New graduate RNs feel uncomfortable and unconfident after being hired and find deficiency in skills and knowledge to be their primary difficulties during role transition (Casey, Fink, Krugman, & Propst, 2004) and may be required to take on the demands of leadership roles too early in their careers resulting in lowered self-concept (Cowin & Hengstberger-Sims, 2006). The demands of early required leadership and skill development may lead to new RNs experiencing “multiple discursive dissonance,” which means conflict between these demands (as codified in the “discourses” or written standards and documents used to judge new graduates) and their ability to grow and respond (Hamilton, 2005). New RNs' understanding of leadership expectations, ability to get work accomplished, and ability to manage the demands of the job increases with time; this adjustment period can take between 18 months and 1 year (Halfer & Graf, 2006; Hayes et al., 2006; Jones & Johnston, 1997).

New RNs with significant work experience in other areas may react like other new graduates or conversely rise more easily to a challenge. One benefit second-degree students may have is their greater maturity and experience in the workforce. This could give them some coping advantages in the period immediately after graduation. However, Oermann and Garvin (2002), in a small study of 46 new graduate RNs in three hospitals, 20 of whom were new bachelor of science in nursing graduates, did not find any differences based on the type of nursing program that graduates had completed on the amount of stress they experienced in their first year of work. The study also did not find any significant relationships between the degree of stress and the graduate's age, months of experience as a new graduate, and years of past work experience. Parker, Plank, and Hegney (2003), in a large Australian study of

**Table 1.** Personal Attitudes of NLRNs ( $n = 953$ )

Scale	Definition and Example	Possible Range	$\alpha$	SDG		TBG		$t(df) =$ value	$P$
				$n = 309$	$M (SD)$	$n = 691$	$M (SD)$		
Work–family conflict (Frone, Yardley, & Markel, 1997)	Degree to which an employee's job interferes with his or her family life, e.g., "How often does (did) your job interfere with your responsibilities at home, such as yard work, cooking, cleaning, repairs, shopping, paying the bills, or child care?"	1 = never to 5 = five or more days per week	.896	271	3.27 (1.27)	678	3.23 (1.19)	$t(947) =$ 0.47	.64
Family–work conflict (Frone et al., 1997)	Degree to which an employee's family life interferes with his or her job, e.g., "How often does (did) your homelife interfere with your responsibilities at work, such as getting to work on time, accomplishing daily tasks, or working overtime?"	1 = never to 5 = five or more days per week	.835	271	1.63 (0.78)	677	1.51 (0.66)	$t(946) =$ 2.21	.02
Positive affectivity (Watson & Tellegen, 1985)	Degree of the individual's affirmative mood, e.g., "I live a very interesting life."	1 = strongly disagree to 5 = strongly agree	.848	271	3.69 (0.64)	679	3.55 (0.70)	$t(948) =$ 2.85	.01
Negative affectivity (Watson & Tellegen, 1985)	Degree of the individual's negative mood, e.g., "Often I get irritated at minor annoyances."	1 = strongly disagree to 5 = strongly agree	.850	271	2.62 (0.88)	679	2.76 (0.86)	$t(948) =$ -2.25	.02
Work motivation (Gurney, 1990)	Degree to which work is central to an employee's life, e.g., "The most important things that happen in life involve work."*	1 = strongly disagree to 5 = strongly agree	.782	269	2.01 (0.71)	680	2.10 (0.72)	$t(947) =$ -1.63	.10

\* Scale item "Life is worth living only when people get absorbed in work" dropped.

RNs ( $N = 1,477$ ), found that RNs with more experience generally thought that the adequacy of support for new RNs was better than new graduates did.

Understanding the differences between second-degree and baccalaureate RNs is useful because of the potential policy implications. A second-degree RN can be educated in much less time than a generic RN, but because the SDGs are older, they do not have as long of a potential work career. Understanding which group is more productive in the workforce will help design service payback requirements and financial support.

Understanding how SDGs compare with TBGs will help organizations design recruitment and retention programs for each group. For example, Buerhaus, Donelan, Ulrich, Norman, and Dittus (2006) found that the recruitment strategy that most new RNs perceived to be the most effective was providing tuition benefits. However, it is unclear if second-degree RNs, who have probably been in school for about 5 to 8 years, are equally interested. Good orientation is important in retention, but tailoring these programs to the SDG may be important in retention (Almada, Carafoli, Flattery, French, & McNamara, 2004; Altier & Krsek, 2006; Orsini, 2005).

The purpose of this study was to compare TBGs with SDGs, including information about their work settings, how these new RNs feel about their jobs, and their intention to stay in their current job. Our analysis uses data from the first wave of a large panel study of all new graduates.

## Methods

We used a cross-sectional design with a mailed survey from a larger longitudinal panel design study for this analysis.

### Sample

The sample included newly licensed registered nurses (NLRNs) from 60 geographic regions in 35 states (Alabama, Kentucky, Maryland, Michigan, North Carolina, New Jersey, Nevada, New York, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, West Virginia, Arkansas, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Louisiana, Massachusetts, Maine, Minnesota, Missouri, Ohio, Utah, Virginia, Washington, Wisconsin) and Washington, DC. The NLRNs had been licensed from 5 to 18 months prior to responding to the survey. The sampling frames were obtained from each state's board of nursing in these states and Washington, DC. Initially eligible respondents ( $n = 3,391$ ) returned completed surveys for a response rate of 58% using the American Association of Public Opinion Research (AAPOR) standard response rate #3; AAPOR, 2004). For this analysis, we were able to add additional 138 cases resulting in the response rate of 58% ( $n = 3,391$ ) rather than the 56% reported earlier for the original study (Kovner et al., in press). From this sample, 89.7% of the SDGs worked in hospitals, and 94% of the TBGs worked in hospitals and were selected for this study.

**Table 2.** Work Attitudes of NLRNs (*n* = 953; Continuous Variables)

Scale	Definition and Example	Possible Range	$\alpha$	SDG		TBG		<i>t</i> ( <i>df</i> ) = value	<i>P</i>
				<i>n</i> = 309	<i>M</i> ( <i>SD</i> )	<i>n</i> = 691	<i>M</i> ( <i>SD</i> )		
Job satisfaction (adapted from Quinn & Staines, 1979)	Employee's general affective reaction to the job without reference to any specific job facet, e.g., "How satisfied would you say you are with the job you now have?"	1 = <i>Very dissatisfied</i>  7 = <i>Very satisfied</i>	.844	272	4.90 (1.65)	679	5.28 (1.54)	<i>t</i> (949) = -1.62	.11
Variety (Gurney, Mueller, & Price, 1997)	Degree to which job performance is repetitive, e.g., "How much variety is there in your job?"*	1 = <i>none at all</i> to 5 = <i>a great deal</i>	.672	272	3.42 (0.72)	679	3.412 (0.68)	<i>t</i> (949) = 0.15	.88
Autonomy (Gurney et al., 1997)	Degree to which employees control their job performance,† e.g., "To what extent are you able to act independently of your immediate supervisor in performing your job?"‡	1 = <i>none at all</i> to 5 = <i>a great deal</i>	.732	272	3.75 (0.70)	679	3.76 (0.73)	<i>t</i> (949) = -0.18	.86
Supervisory support (Gurney et al., 1997)	Degree to which supervisor supports and encourages employee, e.g., "Pays attention to what I am saying"	1 = <i>not at all</i> to 5 = <i>to a very great extent</i>	.940	271	3.48 (0.99)	678	3.62 (0.96)	<i>t</i> (947) = -1.01	.31
Workgroup cohesion (Gurney et al., 1997)	Degree to which employees have friends in their immediate work environment, e.g., "Are individuals in your workgroup friendly?"§	1 = <i>not at all</i> to 5 = <i>to a very great extent</i>	.882	272	3.96 (0.83)	679	4.17 (0.73)	<i>t</i> (949) = -3.85	.0001
Distributive justice (Gurney et al., 1997)	Degree to which the an employee's rewards are related to his or her performance inputs into the organization, e.g., "To what extent are you fairly rewarded considering the responsibilities that you have?"	1 = <i>not at all</i> to 5 = <i>to a very great extent</i>	.916	270	2.79 (0.87)	677	2.83 (0.85)	<i>t</i> (945) = -0.57	.57
Promotional opportunities (Gurney et al., 1997)	Degree to which career structures within an organization are available to its employees, e.g., "Promotions are regular"	1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>	.791	269	3.30 (0.85)	677	3.38 (0.79)	<i>t</i> (944) = -1.37	.17
Procedural justice (Fields, 2002)	Degree to which rights are applied universally to all employees, e.g., "People involved in implementing decisions have a say in making the decisions"	1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>	.806	271	3.26 (0.79)	679	3.29 (0.75)	<i>t</i> (948) = -1.55	.12
Organizational commitment (Price, 2001)	Loyalty of employees to their employers, e.g., "I think that my present employer is a great organization to work for"	1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>	.853	271	3.77 (0.80)	680	3.86 (0.75)	<i>t</i> (949) = -1.64	.10
Organizational constraints (Spector & Jex, 1998)	Degree to which situations or things interfere employees' job performance, e.g., "How often do you find it difficult or impossible to do your job because of organizational rules and procedures?"¶	1 = <i>never to 6 = 5 or more days per week</i>	.869	269	2.54 (0.89)	680	2.44 (0.86)	<i>t</i> (947) = 1.53	.13
Quantitative workload (Spector & Jex, 1998)	Amount of performance required in a job, e.g., "Does your job require you to work very fast?"#	1 = <i>never to 6 = 5 or more days per week</i>	.856	271	4.23 (1.10)	680	4.12 (0.97)	<i>t</i> (949) = 1.50	.13

**Table 2.** (Continued)

Scale	Definition and Example	Possible Range	$\alpha$	SDG		TBG		t(df) = value	P
				n = 309	M (SD)	n = 691	M (SD)		
Mentor support (Gurney et al., 1997)	Degree of adequacy of access to an appropriate experienced professional to sponsorship, protectorship, and professional benefactorship, e.g., "How often does someone at your workplace show you how to work successfully within the organization?"**	1 = never to 5 = very often	.864	271	3.03 (0.84)	679	3.14 (0.81)	t(948) = -1.75	.08
Collegial RN–MD relations (Lake, 2002)	Relationship between nurses and physicians, e.g., "Physicians and nurses have good working relationships"	1 = strongly disagree to 4 = strongly agree	.888	270	2.87 (0.63)	677	2.86 (0.62)	t(945) = 0.42	.67

\* Scale item "How similar are the tasks you perform in a typical working day?" dropped.

† Scale item "How much are you left on your own to do your work" dropped.

‡ Scale item "Easy to approach" dropped.

§ Scale item "Do you trust individuals in your workgroup?" dropped.

|| Scale item "There is an opportunity for advancement" dropped.

¶ Scale items "poor equipment or supplies," "other employees," and "inadequate training" dropped. Response item edited for logical consistency.

# Scale item "How often is there a great deal to be done?" dropped. Response item edited for logical consistency.

\*\* Scale item "Listens to your ideas" dropped.

For the study reported here, we selected two groups: TBGs who had a baccalaureate degree in nursing and no other academic degree or diploma and SDGs who had both a baccalaureate degree in nursing and a baccalaureate or higher degree in a field other than nursing.

From the sample of 3,391 valid NLRN respondents, we removed 521 (including 94 missing) who did not work in hospitals, 1,694 who were not baccalaureate prepared (diploma = 98 and associate = 1,596), 6 TBGs who had Master's or doctorates in nursing, and 184 with missing data on part-time (PT)/full-time (FT) status or education resulting in a final sample of 953. Although it is possible that a TBG respondent graduated from a nonnursing undergraduate or graduate program after earning a baccalaureate in nursing, that is very unlikely because all respondents were licensed within the 18 months prior to completing the survey.

### Variables of Interest

The study is based on a model of turnover (Price, 2001). Price has developed and tested a model of turnover in which work attitudes (Tables 1 and 2) are hypothesized to predict satisfaction, organizational commitment, intent to leave, and ultimately, turnover. His model also includes job opportunities. We collected data on work setting characteristics to provide descriptive data about a national representative sample of NLRN.

Based on this model, we asked NLRNs questions about four areas: (a) RN characteristics (e.g., gender, marital status, and positive affectivity); (b) work setting (e.g., unit and setting); (c) attitudes about work (intent to stay, search behavior, satisfaction, organizational commitment, variety, supervisory support, workgroup cohesion, distributive justice, promotional opportunities, proce-

dural justice, organizational constraints, quantitative workload, mentor support, RN–physician relations, family–work and work–family conflict, work motivation, and autonomy); and (d) perceived local and nonlocal job opportunities. If respondents were not working, we asked about their reasons for not working.

In this study, all scales had Cronbach alpha scores of .80 or greater (with the exception of promotional opportunities, autonomy, and variety, which had alphas between .67 and .79) indicating adequate to excellent reliability. Principal components analysis showed that all scales loaded on the appropriate factors (Tables 1–3).

### Data Collection

Data were collected using a 16-page survey that was professionally printed in 8.5 × 11-in. booklet format. Survey questions focused on where the RNs worked or work now. We used the Dillman Tailored Design method (Dillman, 2000), which included multiple mailings to nonresponders. There was an alert letter, a survey that included a \$5 incentive, a reminder postcard, an additional survey, and finally a survey via U.S. Postal Service next day mail.

### Results

Some respondents did not provide answers to all questions; thus, the sample size varied across variables.

#### RN Characteristics

SDGs were more likely to be male, non-White (with twice as many Asian RNs), married, and have children living at home as compared with TBGs (Table 4). Married SDGs were more likely to have higher spousal income and were about 8 years older on average (Table 5). SDGs were less likely to have had an extern experience or speak English



**Table 3.** Work Plans of Working NLRNs (*n* = 953)

Scale	Definition and Example	Possible Range	$\alpha$	SDG		TBG		<i>t</i> ( <i>df</i> ) = value	<i>P</i>
				<i>n</i> = 309	<i>M</i> ( <i>SD</i> )	<i>n</i> = 691	<i>M</i> ( <i>SD</i> )		
Intent to stay (Price, 2001)	Degree of positive affect that an individual has toward the idea of voluntarily leaving the employ of an organization, e.g., "I would like to leave my present employer"	1 = strongly disagree to 5 = strongly agree	.887	270	3.24 (1.01)	679	3.31 (0.97)	<i>t</i> (947) = -0.94	.35
Local job opportunity (Price, 2001)	Likelihood of obtaining jobs in local area as good, worse, or better than current job, * e.g., "How easy or difficult would it be for you to find a job with another employer in the local job market in which you work on live that is as good as the one you have now?"	1 = very difficult to 6 = very easy	.923	268	3.28 (1.23)	677	3.30 (1.23)	<i>t</i> (943) = -0.26	.80
Nonlocal job opportunity (Price, 2001)	Likelihood of obtaining jobs in nonlocal area as good, worse, or better than current job, * e.g., "How easy or difficult would it be for you to find a job with another employer outside the local job market in which you work on live that is as good as the one you have now?"	1 = very difficult to 6 = very easy	.950	264	3.61 (1.31)	675	3.58 (1.32)	<i>t</i> (937) = 0.36	.72
Search behavior (Price, 2001)	Degree to which employees are looking for other jobs	1 = strongly disagree to 5 = strongly agree	.773	269	2.83 (0.41)	679	2.84 (0.43)	<i>t</i> (946) = -0.36	.72

\* Altered response scale from "not easy at all" to "very difficult," "not very easy" to "quite difficult," and added "somewhat difficult."

as a first language. There was no difference in their health status. SDGs reported higher positive affectivity and lower negative affectivity. There was no difference in the number of times each group took the NCLEX.

### Work Setting

SDGs were more likely to have prior work experience outside health care and less likely to have work experience in health care when compared with TBG (Table 4). TBGs were more likely to work full time and have a job that required an RN license than as compared with SDGs. There was a small significant difference in the number of hours more that TBGs actually worked. There was no difference in the months worked, the number of jobs they had had since graduating, overtime worked, work setting, type of unit, type of shift, schedule, whether the hospital was a magnet hospital or unionized, benefits or paid time off (Tables 5 and 6). TBGs were also somewhat more likely to provide direct care than SDGs: SDGs were more often in management or other positions. SDGs were more likely to indicate that they planned to stay indefinitely and were less uncertain of how long they planned to stay than TBGs.

Of the traditional graduates, 628 (92%) worked full time, and 53 (8%) worked part-time; whereas in the second-degree group, 246 (90%) worked full time, and 26 (10%) worked part-time. TBGs earned about \$1,600 less than SDGs in mean income and \$4,500 if the median income is reported (\$50,000 for SDGs vs. \$45,500 for TBGs). The SDG–TBG mean income difference widens to \$2,731 when

PT graduates are removed. All comparisons were significantly different except for FT TBGs and PT TBGs<sup>1</sup>.

### Attitudes and Job Opportunities

There were few differences between the SDGs and TBGs in their work attitudes (Tables 2 and 3). SDGs reported slightly higher family–work conflict and lower work-group cohesion. There were no differences in their intent to stay at their current job, search behavior to look for a new position, their perceptions of promotional opportunity, their work motivation, or perceptions of local and nonlocal job opportunities.

### Discussion

A variety of motivations induce people to enter nursing after earning a nonnursing baccalaureate degree. Educators often comment on how different these RNs seem (AACN, 2005). However, are these differences real? In addition, will any difference that exist translate into either RNs who will stay in their jobs longer, be more satisfied, or contribute to patient care or the nursing profession in ways that are significantly different from conventionally educated baccalaureate RNs? Like Bentley

<sup>1</sup>We tested whether FT and PT incomes were different: FT SDGs = \$49,823 (*SD* = \$10,291), FT TBGs = \$47,092 (*SD* = \$10,006), PT SDGs = \$34,366 (*SD* = \$15,039), and PT TBGs = \$44,243 (*SD* = \$13,786). The PT incomes had small samples (SDGs, *n* = 24; TBGs, *n* = 51) and large *SD*, thus should be interpreted with caution.

**Table 4.** Demographic Characteristics of NLRNs (n = 953); Categorical Variables

Variable	Response Options	SDG (n = 309)	TBG (n = 691)	Chi-square (df, t ratio) = P
Sex	Male	12.13	4.85	(1, 16.01) < .0001
	Female	87.87	95.15	
Ethnic background	White non-Hispanic	77.99	83.46	(4, 9.91) = .04
	White Hispanic	1.87	1.48	
	Black non-Hispanic	0	0	
	Black Hispanic	5.97	5.91	
	Asian	9.70	4.43	
English first language	Other	4.48	4.73	(1, 6.75) = .01
	No	13.24	7.81	
Current marital status	Yes	86.76	92.19	(2, 56.08) <.0001
	Married	55.15	35.94	
Children living at home	Widowed, divorced, separated	7.72	2.06	(3, 28.32) <.0001
	Never married	37.13	62.00	
	No children/none living at home	68.52	83.51	
	All less than 6 years old	12.22	7.66	
Health status	All 6 years or older	15.19	6.48	(4, 1.79) = .78
	Some less than and some 6 or older	4.07	2.36	
	Poor	0.00	0.29	
	Fair	3.69	4.55	
	Good	25.09	24.96	
	Very good	42.07	43.76	
Nonnursing degrees	Excellent	29.15	26.43	(2, 697.00) <.0001
	None	0.00	100.00	
	Baccalaureate	88.24	0.00	
Previous work experience: summer, occasional part time	Masters or doctoral	11.76	0.00	(1, 43.30) <.0001
	No	65.44	41.85	
Previous work experience (job not in health care)	Yes	34.56	58.15	(1, 120.42) <.0001
	No	46.32	81.79	
Previous work experience (job in health care)	Yes	53.68	18.21	(1, 18.15) <.0001
	No	44.12	29.66	
Extern	Yes	55.88	70.34	(1, 31.30) <.0001
	No	74.26	54.63	
Length of time planning to stay in first job	Yes	25.74	45.37	(5, 13.00) = .02
	Less than 1 year	2.22	3.54	
	1 year but less than 2 years	24.07	22.27	
	2 years but less than 3 years	25.56	21.53	
	3 years or more	20.37	19.03	
	Indefinitely	16.67	13.57	
	Do not know	11.11	20.06	

**Table 5.** Demographic and Work-Related Characteristics of NLRNs (n = 953); Continuous Variables

Variable	SDG*		TBG†		t(df) = value	P
	n = 609	M (SD)	n = 309	M (SD)		
Demographic						
Age	267	33.31 (7.75)	672	25.71 (4.34)	t(937) = 19.02	<.0001
Yearly income	268	\$48,439 (\$11,638)	674	\$46,807 (\$10,769)	t(940) = 2.05	.04
Work related						
Spousal income	157	\$55,690 (\$43,264)	289	\$37,185 (\$22,071)	t(444) = 5.98	<.0001
Income from other sources	224	\$1,475 (\$8,472)	591	\$710 (\$5203)	t(813) = 1.55	.12
Months worked since passing NCLEX	272	10.64 (4.57)	680	9.50 (4.40)	t(950) = 1.88	.06
Number of RN jobs since graduating	260	1.177 (0.43)	658	1.14 (0.40)	t(916) = 1.34	.18
Hours actually worked	272	38.38 (6.60)	681	39.63 (6.94)	t(951) = -2.55	.01
Hours of mandatory overtime worked	272	0.65 (2.63)	676	0.68 (2.63)	t(946) = -0.21	.84
Hours of voluntary overtime worked	271	3.32 (4.83)	673	3.53 (4.69)	t(942) = -0.60	.55
Patient load	271	5.15 (3.90)	676	4.74 (3.72)	t(945) = 1.51	.13

\* Second-degree baccalaureates.

† Traditional baccalaureates.

**Table 6.** Work Setting Characteristics of NLRNs ( $n = 953$ ); Categorical Variables

Variable	Response Options	SDG ( $n = 309$ )	TBG ( $n = 691$ )	Chi-square ( $df, t$ ratio) = $P$		
Type of work setting	Academic or medical center	38.15	32.49	(3, 5.98) = .11		
	Community teaching hospital	38.15	36.51			
	Nonteaching hospital	19.63	26.83			
	Other	4.07	4.17			
Orientation: supervised with patients	No	23.11	15.59	(1, 6.98) = .008		
	Yes	76.89	84.41			
Orientation: organizational policies and procedures	No	19.12	12.44	(1, 6.54) = .01		
	Yes	80.88	87.56			
Unit spent most of the working time	Intensive care bed unit	22.14	27.29	(10, 8.88) = .54		
	Step-down transitional bed unit	11.07	11.36			
	General/Special unit	43.17	37.76			
	Operating room	2.21	1.18			
	Postanesthesia recovery unit	0.37	0.15			
	Labor/Delivery room	5.17	6.19			
	Emergency department	6.27	5.75			
	Physician's office	0.00	0.15			
	Outpatient department	0.74	0.15			
	Nonclinical nurse setting	0.00	0.15			
	Other	8.86	9.88			
	Job title	Position: manager	1.12		0.44	(2, 10.09) = .007
		Position: direct care	96.28		99.12	
Position: other		2.60	0.44			
Magnet group	Nonmagnet zip code	85.59	87.28	(1, 0.41) = .52		
	Magnet zip code	14.41	12.72			
Belong to a union	Yes	68.15	72.05	(1, 1.42) = .23		
	No	31.85	27.95			
Type of shift	8-Hour shifts	11.03	13.97	(4, 3.38) = .50		
	10-Hour shifts	1.84	1.47			
	12-Hour shifts	78.68	78.53			
	Flexible schedule	6.62	4.41			
	Other	1.84	1.62			
Work schedule	Day	31.11	28.30	(3, 3.56) = .31		
	Evening	9.63	8.15			
	Night	39.26	45.93			
	Rotating	20.00	17.63			
Importance of benefits	Not important at all	6.99	3.09	(3, 8.07) = .04		
	Not very important	8.82	8.39			
	Somewhat important	34.19	33.28			
	Very important	50.00	55.23			
RN benefit: paid time off	No	3.31	2.35	(1, 0.69) = .40		
	Yes	96.69	97.65			
RN benefit: medical insurance	No	1.88	1.04	(1, 1.07) = .30		
	Yes	98.12	98.96			

(2006), we found no difference in the number of times it took them to pass the NCLEX, but in other ways, the SDG and TBG are somewhat different. Demographically, our findings support those of Wu and Connelly (1992; SDGs,  $n = 234$ ) and Vinal and Whitman (1994; SDGs,  $n = 17$ ). The SDGs are older, which may also explain why a higher proportion are married and have children. The SDGs' age may also explain the higher income of their spouses, although it is possible that one of the reasons they were able to pursue the second-baccalaureate degree is that they have a relatively high spousal income. What is quite striking is that the proportion of SDG Asian RNs is more than double the proportion for TBGs, and the proportion of male RNs is almost triple. Others have also found that accelerated RNs were more diverse than TBGs in race,

culture, and gender (Cangelosi & Whitt, 2005). Sheil and Wasseem (1994) reported that salaries and employment were major motivations in career choice for SDG RNs. If men and Asians hold cultural values that value steady employment and money, this may explain the higher proportion from these two groups; work motivation per se is not different between the SDG and TBG groups, although it could vary within these gender and ethnic subgroups.

SDGs report more family-work conflict than TBGs, which fits with their family circumstances. Possibly, these older SDGs are intent on developing their careers and may have more difficulty balancing their personal and professional lives in the early stages of their careers, particularly the 12-hour shifts, evening, and rotating



shifts commonly worked by the NLRNs. However, differences in shifts were not significant between the two groups. A striking difference between these two groups is the basic difference in affectivity. SDG NLRNs are a more optimistically inclined group. This difference may be the source of some of the intrinsic differences perceived by faculty during school (AACN, 2005). In addition, although there was no difference in the intent to leave their current job or their reported search for new jobs, SDGs were less likely to plan to leave in a year and more likely to plan to stay longer in their first job than were TBGs, resulting in almost half as many SDGs being indefinite about their plans to stay in their first job. The SDGs' plan is consistent with a more mature life phase with its attendant economic realities (Table 4).

As noted, FT SDGs earned over \$2,700 more income. Although these SDGs are somewhat older, age alone should not explain why SDGs have higher incomes than TBGs, as they are all starting as new RNs. SDGs actually worked a slightly smaller number of hours, and there was no difference in overtime hours or type of shifts worked. These wage differences may reflect where each group works. SDGs are more likely to work in academic medical centers, which may pay higher wages. SDGs may be more common in urban areas where these programs are available, so higher urban wages may also explain the higher wages for SDGs. On the other hand, TBGs are more likely to work in higher paying intensive care units but still do not make as much as SDGs do.

Newschwander (1988) found that employers rated accelerated degree students ( $n = 137$ ) significantly higher in planning, evaluation, interpersonal relations, and communication. We suggest that these SDGs bring human capital in the form of other types of education and work experience. The human capital explanation may also explain why these nurses are attracted to more management and other positions so early in their careers. Organizations may more quickly promote them into positions that pay higher wages. On the other hand, alternative possible explanations for higher incomes are that SDGs worked in unionized or magnet hospitals, but our data show no difference.

Rising wages under shortage conditions attract students into nursing programs as the wage available becomes very competitive with other career choices (Ehrenberg & Smith, 2002). Other benefits may also be important.

Only workgroup cohesion was significant and lower among SDGs. New graduates are typically looking for support in the period after graduation, consistent with their need to have strong clinical undergraduate preparation with minimal "fluff" or busy work and high expectations of faculty (Cangelosi, 2007). SDGs, who often have job experience and are older, may have social support systems already established and find workgroup cohesion to be less necessary. Thus, we do not know if SDGs experience less workgroup cohesion because they do not need it and do not seek it out, or because, in fact, their work settings are less cohesive.

Although we reported significant differences based on the conventional .05 significance level, it may be that significance at the .10 level should be considered. For example, by these criteria SDGs have a lower organizational commitment and lower mentor support. Lower mentor support is consistent with the lower proportion of SDGs who experienced orientation that included supervised patient care and orientation on policies and procedures. However, this may also be age related, as SDGs who are older and have more work experience may be less likely to seek out a mentor, although given the skill development expected of NLRNs, this seems unlikely. If anything, some work experience might give SDGs an appreciation of the value of a mentor. An SDG's work motivation is also marginally significant and lower.

Thus, we have found that many of the demographic differences between SDGs and TBGs are consistent with the few quantitative studies that exist (Cangelosi & Whitt, 2005; Vinal & Whitman, 1994; Wu & Connelly, 1992). In addition, this study is the first to examine attitudinal differences, including a difference in the planned length of stay in first job. Fears that the high expectations of these graduates result in greater reality shock when they start work and turnover have not been tested. So far, there is no evidence to think this will happen, but in the second wave of our data, we will be able to test this hypothesis.

### Limitations

Response bias is a concern with mailed surveys. Although 58% response rate is very good for a mailed survey, it is possible that responders were systematically different from nonresponders. Because we did not have data about whether SDGs attended an accelerated program, it is not clear how much of the differences are a reflection of accelerated programs and how much are a reflection of second-degree graduates in general. Respondent-administered surveys raise the question of the validity of the responses. Although there is no reason to believe that participants were not truthful in their responses is a possibility.

### Conclusions

SDGs are an interesting group for the nursing workforce. They seem to have high potential for contributing to the profession and patient care if the conventional wisdom is believed. This is the first indication that in fact there are some significant differences between SDGs and TBGs. Future research includes examining the implications of the cultural diversity of second-degree nursing students versus traditional counterparts and whether SDGs remain in nursing or transition to yet another career (Cangelosi & Whitt, 2005). Future research will contribute to understanding what impact these RNs will have on the workforce and profession.

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