The Staff Nurse Decisional Involvement Scale

Report of Psychometric Assessments

Donna Sullivan Havens ▼ Joseph Vasey

- ▶ **Background:** For decades, enhancing staff nurse decisional involvement in matters of nursing practice and patient care has been identified as a long-term strategy to improve the quality of the nursing work environment and the safety and quality of patient care.
- Objective: To describe psychometric assessments of the Decisional Involvement Scale (DIS), a diagnostic and evaluative measure of nurse decisional involvement.
- Methods: A series of assessments were conducted to evaluate the psychometric performance of the scale. Content validity was assessed by experts in the field. Descriptive statistics were used to examine the use and performance of the scale. The contrasted groups approach was used to assess construct validity. Item analysis was used to explore evidence of the internal consistency of items and subscales across multiple samples. Structural modeling was used to conduct a confirmatory factor analysis using data from two independent samples of staff registered nurses (RNs; n = 849 and 650).
- ▶ Results: Acceptable content validity indexes (CVIs) were independently generated by three content experts. Construct validity was supported, as hypothesized; nurses working on professional practice units scored significantly higher for all items when compared to nurses working on units without professional practice models in place. Internal consistency (coefficient alpha) was high and nearly identical for the total measure and all subscales across the two independent nurse samples. Six subscales were identified using factor analysis, and these were confirmed by structural modeling.
- Conclusion: Psychometric findings support that the DIS is a valid and reliable measure of staff nurse decisional involvement.
- ► **Key Words:** decision making · scale development · shared governance

nce again in the early 2000s, the nation is confronting dissatisfaction of many nurses, a critical nurse workforce shortage, and calls for enhanced quality of

patient care. In addition, a growing body of research presents convincing evidence that the way nurses are organized affects the quality of the working environment and nurse, patient, and organizational outcomes. For instance, features of professional nursing practice models such as a high level of nurse decisional involvement have been empirically associated with better outcomes.

Thus, it is not surprising that major organizations and legislators are urging implementation of organizational models that enhance staff nurse decisional involvement. For instance, the Nurse Reinvestment Act (2002) proposes incentives for hospitals to "improve the retention of nurses and enhance patient care ... by [among other strategies] promoting nurse involvement in the organizational and clinical decision making processes of the healthcare facility." The American Nurses Credentialing Center's Magnet Recognition ProgramTM promotes nursing involvement in decisions about nursing practice and hospital policy. Implementation of organizational features such as decisional involvement that make magnet hospitals successful has been encouraged by the American Hospital Association (2002), the American Nurses Association (2002), the American Association of Critical-Care Nurses (2005), and the Joint Commission on the Accreditation of Healthcare Organizations (2002). In a recent report by the Institute of Medicine (2003), increased nurse involvement in decision making was identified as a major factor in enhancing patient safety. These calls echo what organizational experts (Begun, 1985; Heydebrand, 1983; Scott, 1982), government officials (Kusserow, 1988), and nurse leaders (Aydelotte, 1981, 1983; Maas & Jacox, 1977; McClure, Poulin, Sovie, & Wandelt, 1983; Prescott & Dennis, 1985) have advocated for decades, the need to organize nursing practice in hospitals to enhance staff nurse influence on practice and hospital policy.

Central to any initiative to enhance nurse involvement in decision making is the ability to measure staff nurse decisional involvement. The Decisional Involvement Scale

Donna Sullivan Havens, PhD, RN, FAAN, is Professor and Division Chair, School of Nursing, The University of North Carolina at Chapel Hill.

Joseph Vasey, PhD, The Center for Health Care and Policy Research, The Pennsylvania State University.

376

(DIS) was developed for this purpose (Havens, 1990). While the DIS (Havens & Vasey, 2003) is being used by many to assess the actual and desired distribution of decisional involvement among staff nurses and managers in hospitals, until now detailed results of psychometric evaluation of the measure were not available in the literature (additional information provided by the author expanding this article is on the Editor's Web site at http://www.nursingresearch-editor.com). Therefore, this analysis describes the findings from psychometric assessments of the DIS.

Decisional Involvement

Decisional involvement is defined as the pattern of distribution of authority for decisions and activities that govern nursing practice policy and the practice environment. Development of the DIS was grounded in two bodies of literature on organizationally based professionals: sociology of the professions and professional nursing practice models. Specifically, development of the DIS was grounded in the literature that emphasizes the organization of professional work and professional control over work and working conditions. The work of Scott (1982) and Aydelotte (1981, 1983) is classic in terms of describing arrangements for organizing professionals who work in organizations and professional nursing practice, and served as the guiding framework for the development of the DIS when it was developed in 1990.

From a sociologic perspective, Scott (1982) described three models for structuring the work of professionals who work in healthcare organizations: (a) the autonomous model (administrators delegate the control of most of the professional activities within the organization to the professional staff); (b) the heteronomous model (administrators retain control over most professional activities with elaborate sets of rules and regulations and routine supervision; for example, professional employees are clearly subordinated to an administrative framework with minimal autonomy); and (c) the conjoint model (professional participants and administrators are equal in the power they command and in the importance of their spheres of action). According to Scott, the heteronomous model was the typical model for structuring the work of nurses in hospitals. In contrast, in the conjoint model, nurses and administrators coexist in a state of collaboration, interdependence, and mutual influence; professionals and administrators each serve as the dominant force in certain areas. For example, professionals maintain responsibility for the care of clients and administrators provide the resources to shape the optimal environment needed by professionals to meet client goals. According to Scott, this arrangement promotes increased collaboration between administrators and practitioners to develop and meet organizational goals and it recognizes the autonomy of professionals and the interdependence that professionals and administrators share, as well as the interdependence that nursing shares with other healthcare disciplines.

Aydelotte (1981, 1983) proposed a model for nursing practice similar to Scott's conjoint model, identifying three domains for policy development and administration in nursing: (a) professional nurses have sole authority and responsibility (matters related to patient care and it's improvement, certifications, and performance standards for practitioners); (b) administration has sole authority and responsibility (resource acquisition and allocation, interdepartmental, and institutional relations); and (c) the two share authority and responsibility (policy development and administration of needed resources, scheduling, cost saving, support services, general personnel policies, and the work environment). Aydelotte referred to this arrangement as a professional organizational model that was needed for professional nursing practice. These models of collaborative relationships between administrators and professionals provided the framework for the development of the DIS items. The overriding perspective used to shape the development of the DIS was that of Pointer (1976), which encourages managing with professionals versus managing of professionals.

The Decisional Involvement Scale

The DIS is a tool that can be used in multiple ways to plan and evaluate change in the organization of nursing to (a) measure perceived actual levels of decisional involvement, (b) assess desired levels of decisional involvement, (c) measure decisional dissonance (a gap between actual and desired degree of decisional involvement), (d) identify concordance between staff and management perceptions regarding actual and preferred levels of decisional involvement, (e) identify areas for change, and (f) monitor the effects of strategies implemented to enhance staff nurse decisional involvement. Using the DIS in a program of benchmarking, feedback, and open dialogue between staff and management or administration is suggested as a strategy for implementation of professional practice.

The DIS consists of 21 items that measure actual and desired decisional involvement of staff registered nurses (RNs) on a nursing unit related to six constructs (subscales) empirically identified through factor analysis: unit staffing, quality of professional practice, professional recruitment, unit governance and leadership, quality of support staff practice, and collaboration or liaison activities. The DIS uses a 5-point scale to indicate the degree to which decisions are the responsibility of staff nurses and administration/management (actual decisional involvement). For each item, respondents indicate which nursing group (staff nurses or administration/management) they perceive as having the primary responsibility for the decision or activity on their unit. Response choices are as follows: administration/management only = 1; primarily administration/management with some staff nurse input = 2; equally shared by administration/management and staff nurses = 3; primarily staff nurses with some administration/ management input = 4; and staff nurses only = 5. Results can be considered by individual items, by subscale, or as an overall scale. High scores suggest a high degree of staff RN involvement, a low score suggests a low degree of staff RN involvement, and a midrange score suggests sharing of decision making between administration or management and staff RNs. Another form elicits responses to indicate which group staff nurses perceive should have the primary responsibility for the decision or activity (desired decisional

involvement). Decisional dissonance, the discordance between actual and desired levels of decisional involvement, is assessed by calculating the absolute difference between actual and desired scores. See Havens and Vasey (2003) for more detailed information about the DIS.

Psychometric Assessment of the DIS

Unless otherwise specified, analyses were conducted using data reflecting staff nurse reports of desired decisional involvement. The Desired-Practice Scale was selected for analysis because it represents coherent attitudes about how nurses perceive that decision making should be managed. In contrast, when responding to items about actual practices, nurses might be reporting on behaviors that, for a variety of institution-specific, idiosyncratic reasons, might not reflect a consistent representation of the underlying construct.

Validity

Validity refers to the "determination of whether or not a device or method ... measures what it purports to measure" (Waltz, Strickland, & Lenz, 1991, p. 3).

Content Validity

Content validity refers to the content representativeness or relevance of the items in a measure (Lynn, 1986). Content validity of the DIS was established during scale development by following a two-stage development and judgment process (Lynn 1986; Waltz et al., 1991). First, items were generated following a comprehensive review of the literature on the organization of professionals working in organizations and professional nursing practice models. During this phase, the content domain was identified, the items were generated, and the first draft of the instrument was formulated.

Content validity was further established by a second phase: judgment quantification by content experts that the instrument was content valid. In this phase, three nurse content experts, all doctoral-prepared nurse researchers who had extensively studied and published on staff nurse decisional involvement in the hospital setting, were presented with a specific set of instructions to use when assessing the content relevance of the items and the scale as a whole. Each one of the experts independently reviewed and rated each item on content relevance, judging the items on quality and representativeness of the domain and the objective for which they were written. They also provided input regarding omitted items they viewed as important.

On the second iteration of the review, each expert completed a review of the items and the instrument and conducted a content validity assessment; each expert independently produced a content validity index (CVI) of 1.0 (Havens, 1990). Because the CVI represents the proportion of items that are evaluated as relevant and strongly representing their construct, the findings provide robust support that the items are representative measures of their respective constructs (Waltz et al., 1991).

Construct Validity

Construct validity is an instrument's ability to "... measure the attribute of interest" (Waltz et al., 1991, p. 143), in this

case the degree of staff nurse decisional involvement. To assess the construct validity of the DIS, a confirmatory factor analysis of the instrument was evaluated for two independent samples of staff RNs (n = 849 and 650) working on a variety of acute care units in two academic health centers in two states (Massachusetts and North Carolina). The DIS was administered through internal department of nursing assessments to identify areas for improvement. Hospital researchers shared with the authors data collected from all RN staff completing the surveys, although no respondent demographic characteristics were available. SPSS Amos version 5.0 was used to conduct latent construct structural modeling. Confirmatory factor analysis permits an examination of the simultaneous performance of all six subscales and their corresponding items. To the extent that the model can replicate the relationships in the actual data, construct validity is demonstrated. The structural model is based on the hypothesized relationships between items and constructs. The observed response on each item has two components—the construct that underlies the item and measurement error.

Two issues are addressed using findings regarding the structural model. First, does the model adequately replicate the relationships in the data? This is a question of the degree to which the relationships specified by the theoretical model (between items and subscales and between the subscales themselves) match observed relationships in the data. Goodness of fit can be assessed in multiple and often competing ways (Bentler & Bonett, 1980; Browne & Cudek, 1993). Atheoretic measures of fit, including discrepancy measures (c_{\min} or c_{\min}/df) and the root mean square error of approximation (RMSEA) test the hypothesis that the relationships specified by the model are inconsistent with the data. The c_{\min}/df , also known as relative chi-square, is the minimum discrepancy function divided by the degrees of freedom. The ratio should be close to 1.0 for correct models, but there is considerable disagreement of what an acceptable value is (Carmines & McIver, 1981). Marsh and Hocevar (1985) summarize recommendations from various researchers regarding the

TABLE I. Selected Measures of Fit for Specified, Saturated, and Independence **Measurement Models**

| | Atheoretic I | | Comparison to Baseline Model | |
|-------------|---------------------|-------|---------------------------------|--|
| Model | $\Pi^2 c_{\min}/df$ | RMSEA | NFI | |
| Sample A | | | | |
| Six-scale | 5.160 | 0.070 | .983 | |
| Independent | 181.807 | 0.528 | _ | |
| Sample B | | | | |
| Six-scale | 4.266 | 0.071 | .982 | |
| Independent | 181.807 | 0.528 | _ | |

Note. 1998 data. Scales as defined by Havens (1990). NFI indicates normal fit index; RMSEA, root mean square error of approximation.

| TABLE 2. | Standardized Regression | 1 |
|----------|-------------------------|---|
| Coeffici | ents | |

| Scale | Item | Sample 1 (<i>n</i> = 849) | Sample 2 (<i>n</i> = 650) |
|----------------------------------|------|----------------------------|----------------------------|
| Unit staffing | 1 | .68 | .73 |
| | 2 | .80 | .79 |
| Professional practice | 3 | .76 | .68 |
| | 4 | .78 | .71 |
| | 5 | .77 | .81 |
| | 6 | .68 | .71 |
| Recruitment | 7 | .71 | .71 |
| | 8 | .92 | .94 |
| | 9 | .94 | .95 |
| Governance and leadership | 10 | .70 | .70 |
| | 11 | .74 | .76 |
| | 12 | .71 | .74 |
| | 13 | .72 | .79 |
| | 14 | .65 | .70 |
| | 15 | .86 | .64 |
| Support staff practice | 16 | .83 | .84 |
| | 17 | .85 | .89 |
| | 18 | .86 | .87 |
| Collaboration/liaison activities | 19 | .64 | .72 |
| | 20 | .39 | .44 |
| | 21 | .64 | .59 |

relative chi-square measure (c_{\min}/df) that indicate that, while values in the range of 2-3 represent good fit, values as high as 5.0 may be reasonable. Wheaton, Muthen, Alwin, and Summers (1977) suggested a ratio of 5.0 or less as "reasonable." Carmines and McIver (1981) argue that values less than 3.0 are acceptable but Byrne (1989) believes that a ratio greater than 2.0 is inadequate.

The normed fit index (NFI) can serve as an indicator that estimates where the measurement model falls between a poorly fitting independence model (values close to 0) and a perfectly fitting saturated model (values close to 1). The NFI compares the minimum discrepancy function of the model under consideration to the minimum discrepancy function of the independence model. As such, it can be interpreted as a ratio that indicates how far the specified model is between the poorly fitting independence model and the perfectly fitting saturated model. The closer NFI is to 1.0, the nearer the specified model is to the saturated model. Bentler and Bonett (1980) state that models with indices less than .90 can be substantially improved. A theoretic and normed fit measures of fit for the DIS measurement model are shown in Table 1. The table presents these measures for the saturated, six-scale, and independent models. A saturated model is one that would perfectly replicate the data. Conversely, an independent model represents random or chance relationships between items and scales. A measurement model is judged to work well if it approximates the performance of a saturated model.

The measures reported in Table 1 show that the sixscale model approximates the performance of a saturated model or perfectly explanatory model rather than an independence model. The chi-square value (c_{\min}/df) for both samples is somewhat higher than the rule of thumb suggested by some authors. RMSEA values are approximately .07 for both samples, a value within the range of acceptable fit proposed by Brown and Cudek (1993). NFI values for both samples exceed .98, further suggesting that the models are adequate. These analyses provide evidence of construct validity in that the DIS measurement model closely resembles a saturated model and is clearly superior to an independence model.

TABLE 3. Estimates of the Internal Consistency (Cronbach's Alpha) of the Global DIS Desired Scale and the Six Subscales in the Two Independent **RN Samples**

| | Coefficient Alpha and Item-Total Correlations | | |
|--------------------------------------|--|--------------------|--|
| ltem | Sample 1 (n = 849) | Sample 2 (n = 650) | |
| A. Unit staffing | .79 | .70 | |
| 1 | .54 | .57 | |
| 2 | .54 | .57 | |
| B. Quality of professional practice | .82 | .82 | |
| 3 | .66 | .62 | |
| 4 | .67 | .66 | |
| 5 | .71 | .71 | |
| 6 | .57 | .58 | |
| C. Professional recruitment | .89 | .90 | |
| 7 | .67 | .69 | |
| 8 | .84 | .85 | |
| 9 | .84 | .86 | |
| D. Unit governance and leadership | .84 | .86 | |
| 10 | .61 | .62 | |
| 11 | .68 | .68 | |
| 12 | .66 | .67 | |
| 13 | .66 | .74 | |
| 14 | .59 | .66 | |
| 15 | .51 | .57 | |
| E. Quality of support staff practice | .88 | .90 | |
| 16 | .75 | .78 | |
| 17 | .78 | .83 | |
| 18 | .77 | .79 | |
| F. Collaboration/liaison activities | .71 | .70 | |
| 19 | .58 | .54 | |
| 20 | .55 | .53 | |
| 21 | .47 | .47 | |
| DIS global score | .91 | .95 | |
| | | | |

| | Subscale B, Professional Practice | Subscale C, Recruitment | Subscale D, Governance and Leadership | Subscale E, Support Staff Practice | Subscale F, Collaboration Liaison Activities |
|---------------|--------------------------------------|----------------------------|---------------------------------------|---------------------------------------|---|
| Subscale A | .59 | .48 | .49 | .44 | .44 |
| Unit staffing | .61 | .51 | .57 | .54 | .57 |
| Subscale B | | | | | |
| Professional | | .64 | .73 | .69 | .60 |
| Practice | | .63 | .63 | .67 | .60 |
| Subscale C | | | .72 | .58 | .47 |
| Recruitment | | | .73 | .58 | .57 |
| Subscale D | | | | | |
| Governance | | | | .81 | .65 |
| Leadership | | | | .79 | .63 |
| Subscale E | | | | | |
| Support staff | | | | | .69 |
| Practice | | | | | .68 |

The second issue addressed by the structural model is the relationship between subscales and their constituent items. Items should have relatively strong relationships to their subscales and relatively small error terms. This is demonstrated by large factor loadings. Table 2 shows that loadings range from approximately .60 to .95 and are consistent across both samples. These figures are consistent with low measurement error and factor invariance—the items are strongly related to their scales and their performance is reliably repeatable across samples. These findings mirror the results from the single-scale item analyses. Note that factor loadings for the items in Scale 6 are somewhat lower compared to other scales. Again, this is reflected in the alpha coefficients for this subscale (Table 3), which were around .70, substantially below that of the other subscales.

Table 4 presents correlations between the scores on the six latent constructs. These are somewhat higher than the correlations between the observed subscale scores presented in Table 5. They show the relationships between the predicted, error-free measures of the six constructs. While they are slightly higher than the observed score correlations, the pattern of correlations is similar. Further, the correlations obtained from the two nurse samples are similar. This is consistent with a reliable, construct-valid instrument.

Further evidence of construct validity was reported by Somers (1995). The DIS was administered to contrasted groups known through means other than the instrument to have varying degrees of decisional involvement. The DIS actual and desired forms were completed by 131 staff RNs working on 18 medical-surgical nursing units in two large

TABLE 5. DIS Desired Subscale Correlations for Two Independent RN Samples: Sample I (n = 849)Sample 2 (n = 650)

| | Scale B, Professional Practice | Scale C, Recruitment | Scale D, Governance and Leadership | Scale E, Support Staff Practice | Scale F, Collaboration |
|---------------------------|-----------------------------------|-------------------------|------------------------------------|------------------------------------|------------------------|
| Scale A | .451 | .386 | .383 | .341 | .335 |
| Unit staffing | .480 | .429 | .448 | .433 | .398 |
| Scale B | | .578 | .629 | .594 | .473 |
| Professional practice | | .579 | .534 | .570 | .438 |
| Scale C | | | .645 | .529 | .394 |
| Recruitment | | | .666 | .549 | .471 |
| Scale D | | | | .703 | .505 |
| Governance and leadership | | | | .702 | .488 |
| Scale E | | | | | .550 |
| Support staff practice | | | | | .521 |

TABLE 6. Descriptive Statistics for the Six DIS Subscales (Desired)

| Scale | Statistic | Sample 1 | Sample 2 |
|---------------------------|-----------|----------|----------|
| Decisions related to | n | 845 | 646 |
| unit staffing | Mean | 3.22 | 3.29 |
| | Median | 3.00 | 3.50 |
| | SD | 0.75 | 0.76 |
| Decisions related to the | n | 845 | 646 |
| quality of professional | Mean | 2.98 | 3.00 |
| practice | Median | 3.00 | 3.00 |
| | SD | 0.69 | 0.65 |
| Decisions related to | n | 845 | 645 |
| professional recruitment | Mean | 2.54 | 2.60 |
| | Median | 2.67 | 2.67 |
| | SD | .84 | .84 |
| Decisions related to unit | n | 846 | 645 |
| governance and | Mean | 2.72 | 2.70 |
| leadership | Median | 2.67 | 2.67 |
| | SD | .66 | .68 |
| Decisions related to the | n | 833 | 636 |
| quality of support staff | Mean | 3.01 | 2.95 |
| practice | Median | 3.00 | 3.00 |
| | SD | .70 | .71 |
| Collaboration/liaison | n | 844 | 644 |
| activities | Mean | 3.33 | 3.31 |
| | Median | 3.33 | 3.33 |
| | SD | .67 | .65 |

academic health centers in a large northeastern city in the Mid-Atlantic area. The units were similar in size and the RN staff were similar on demographic and professional characteristics. The first RN comparison group (n = 68)worked on highly acclaimed professional practice model units, which had a mature shared governance model in place for at least 8 years (the hypothesized "high" group). The second RN comparison group (n = 28) worked on units in the same hospital that had not implemented professional practice or shared governance. These units could be described as being organized according to "usual or traditional nursing practice" (eg, unit organization was typical of ordinary nursing units without any specific efforts to implement a shared leadership model). The third comparison group consisted of staff RNs (n = 35) who worked on nursing units that had not implemented professional practice or shared governance in another large teaching hospital in the same city (the hypothesized "low" unit). Analyses (ANOVA) supported the ability of the DIS to discriminate as hypothesized, revealing that nurses on the professional practice unit where nurses were highly involved in decisions about unit governance scored significantly higher for all DIS items than nurses from either of the other two comparison units (actual: F = 24.42, p =.0001, and desired: F = 10.96, p = .0001; Somers, 1995).

Ideally, the performance of the DIS would be compared with the performance of another scale that is conceptually very similar. However, there is no measure that measures the same constructs at the unit level. Preliminary findings are reported from a study in progress at six rural PA hospitals to provide preliminary evidence of convergent validity. Nurses (n = 1,071) completed the DIS and the Practice Environment Scale (PES; Lake, 2002). The PES includes one subscale that assesses nurse participation in hospital affairs. An examination of the items constituting this subscale suggests that although it does not measure exactly the same constructs as the DIS, it is concerned with a related issue. In preliminary analyses, the DIS actual scales were found to be positively correlated with the PES participation in hospital affairs subscale. Correlations ranged from .21 to .28, all significant at the .001 level. Because higher DIS actual scores mean that nurses are more involved in decision making, and higher PES scores mean that there is greater participation of nurses in hospital operations, the positive correlations are expected, although they are not large.

The DIS desired scales were found to be negatively correlated with the PES participation in hospital affairs subscale. This suggests that lower or poorer participation of nurses in hospital operations (as measured by the PES) is reflected by a desire for more nurse involvement in decision making (as measured by the DIS scales). Correlations ranged from -.11 to -.24, significant at the .001 level. Again, while the correlations are not large, they are in the expected direction.

Reliability

DIS total scale and subscale reliability was assessed in terms of internal consistency (alpha). Analyses were based on data from the two independent RN samples described earlier. Table 6 presents descriptive statistics for the whole scale and each DIS subscale for the two samples. For all subscales, and in both samples, scores tended to tightly cluster around the scale midpoint. For each subscale, average and median (50th percentile) scores are similar. The two samples were consistent in the patterns of score distributions, evidence that the subscales operated in the same manner in both samples. This finding supports the hypothesis that the subscales operate in a consistent manner across samples. High scores suggest that respondents believe there should be a high degree of staff RN involvement in decision making and low scores indicate a preference for administration or management taking responsibility for decision making. Midrange scores, as are strongly evident in both samples, suggest a preference for shared decision making between staff and administration/management.

Table 3 presents the estimates of the assessments of internal consistency for the whole scale and the six DIS subscales for the two RN samples. As seen in Table 3, coefficient alpha values are consistently high for the total scale and all subscales across both samples. Within scales, item-total correlations were similar across items. The results show that each subscale demonstrates coherence; constituent items work well together to provide a good estimate of the construct that they claim to measure. Further,

the performance of the subscales is nearly identical across the two independent samples of nurses, implying that internal consistency is a real and repeatable phenomenon.

In an item analysis, each subscale and the items that compose it are considered in isolation from other subscales and items in an instrument. Table 3 shows that the DIS subscales are moderately correlated with one another and that the pattern of correlations is the same across both samples. The correlations presented in Table 3 also show that while the subscales covary, or overlap with one another, to some extent, they represent relatively independent measures of the six dimensions.

Discussion

There are limitations in this analysis. For instance, in several cases, the psychometric assessments presented in this article would have benefited from a description of the demographics of the nurse samples. However, the data used in these assessments were provided by hospitals that had administered the instrument to all staff RNs to assess opportunities for change without collecting information about the demographic characteristics of the RNs. Therefore, all of the assessments could not be put in context of the sample, which limits generalizability. However, new research by the study authors will provide data to overcome this limitation.

In this analysis, the focus was on the psychometric assessment of the desired DIS and not the actual version of the scale. This approach was taken because of the belief that the desired scale represents coherent attitudes about how nurses perceive that decision making should be managed. In contrast, it was felt that when responding to items about actual practices, nurses would be reporting on behaviors that, for a variety of institution-specific idiosyncratic reasons, might not reflect a consistent representation of the underlying construct. It may be critically important to understand the notion of concordance between nurse reports of actual versus desired decisional involvement in order to shape work environments.

In the psychometric assessments reported in this article, evidence has been found to support the reliability and validity of the DIS. Subjective ratings by a panel of subject matter experts indicated that all items are good exemplars of their associated constructs. Additionally, agreement between the experts was high. Analysis of the instrument's performance in nursing environments provided further support. First, mean response profiles were similar across two independent samples of nurses working under similar conditions. Item analyses showed high levels of internal consistency for all scales and for the instrument as a whole. Finally, confirmatory factor analyses demonstrated that the theoretical factorial structure of the instrument is very successful at replicating the observed relationships between items in two independent samples of respondents. Taken together, these findings present promising evidence that the DIS is a reliable and valid instrument for measuring nurses' attitudes and beliefs about their involvement in work-unit decision making.

The literature presents evidence that organizing nursing practice to increase staff nurse involvement in decisions about the content and content of practice produces positive outcomes for patients, staff, and organizations. While there are other measures that may be used to assess related concepts such as shared governance, nurse autonomy, and nurse control over practice, the DIS is unique because it addresses staff nurse actual and desired involvement in specific decisions and it was developed to be applicable and easily understood by those at the forefront of shaping the practice environment at the unit level.

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Corresponding author: Donna Sullivan Havens, PhD, RN, FAAN, School of Nursing, The University of North Carolina at Chapel Hill, CB# 7460, 503 Carrington Hall, UNC-CH, Chapel Hill, NC 27599 (e-mail: dhavens@unc.edu).

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