STAFF NURSE DECISIONAL INVOLVEMENT IN SOUTH KOREA: THE CONCEPT, MEASUREMENT, AND INFLUENCE OF NURSE DECISIONAL INVOLVEMENT ON NURSE JOB SATISFACTION, ORGANIZATIONAL COMMITMENT, AND TURNOVER INTENTION

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ABSTRACT

Jumi Lee: Staff Nurse Decisional Involvement in South Korea: The Concept, Measurement, and Influence of Nurse Decisional Involvement on Nurse Job Satisfaction, Organizational Commitment, and Turnover Intention
(Under the Direction of Donna S. Havens)

Improving the nurse work environment is essential to address the issue of increased staff nurse turnover. Staff nurse decisional involvement has been studied in terms of improving the nurse work environment and reducing staff nurse turnover. Thus, nursing management’s involving staff nurse in decisions at their working unit level would be a good strategy to improve the nurse work environment and reduce staff nurse turnover.

This dissertation is composed of three separate studies:

The purpose of chapter two was to define the concept, theoretical framework, and related factors of staff nurse decisional involvement and to identify knowledge gaps in staff nurse decisional involvement in English-speaking, Western versus non-English-speaking, Asian countries. A total of 16 articles were selected from 102 articles originally retrieved to fill the knowledge gaps in staff nurse decisional involvement using the PRISMA method. The conceptual framework of staff nurse decisional involvement based on the content and context of nursing practice framework was defined, and the findings showed that staff nurses actually were less involved in decisions than they preferred to be both Western and Asian countries.

The purpose of chapter three was to translate the English version of the Decisional Involvement Scale (DIS) (Havens & Vasey, 2003) into Korean (K-DIS) for use in South Korea. The DIS was refactored so that the K-DIS was a five-factor, 19-item measure: Resources and
Support Staff, Collaboration/Liaison Activities, Professional Practice Scope and Workforce for Quality of Care, RN Recruitment, and Leadership. The instrument demonstrated good reliability, but its validity was not strongly supported. Thus, further research on assessing the construct validity of the K-DIS is necessary.

The purpose of chapter four was to examine the influence of staff nurse decisional involvement on nurse job satisfaction, organizational commitment, and turnover intention. A descriptive correlational design was used to analyze data (n=300) from staff nurses working in two university hospitals (i.e., two urban, academic medical centers) in South Korea. The results show that Korean staff nurses preferred more decisional involvement than they actually experienced. The dissonance between the actual and preferred levels was negatively correlated with nurse job satisfaction ($r_s = -.33, p<.0001$) and organizational commitment ($r_s = -.24, p<.0001$). In addition, it was positively correlated with staff nurse turnover intention ($r_s = .30, p<.0001$). Staff nurses’ low decisional involvement in actuality means that staff nurses’ opinions are not reflected in nursing administration decisions to improve the nurse work environment and nursing policies; this may influence nurse turnover.

The clarity of the conceptual framework of the DIS will guide nurse administrators and researchers to apply the results of the K-DIS in nursing administration in South Korea. Further study is necessary to improve the construct validity of the K-DIS and to identify positive outcomes of staff nurse decisional involvement in nursing administration in South Korea.
To my family and friends, especially my parents, I could not have done this without your prayers and love. I love you all.
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<th>Description</th>
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<tbody>
<tr>
<td>ANCOVA</td>
<td>Analysis of Covariance</td>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<td>BT</td>
<td>Back Translation</td>
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<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<td>CFI</td>
<td>Comparative Fit Index</td>
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<td>CONP</td>
<td>Control over Nursing Practice</td>
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<td>CVI</td>
<td>Index of Content Validity</td>
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<tr>
<td>DIS</td>
<td>Decisional Involvement Scale</td>
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<tr>
<td>EFA</td>
<td>Exploratory Factor Analysis</td>
</tr>
<tr>
<td>GFI</td>
<td>Goodness of Fit Model</td>
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<tr>
<td>GLM</td>
<td>General Linear Model</td>
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<td>IFI</td>
<td>Incremental Fit Index</td>
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<td>ILS</td>
<td>Intention to Leave Scale</td>
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<td>IWS</td>
<td>Index of Work Satisfaction</td>
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<tr>
<td>K-DIS</td>
<td>Korean Version of Decisional Involvement Scale</td>
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<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
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<td>MLE</td>
<td>Maximum Likelihood Estimation</td>
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<td>OCQ</td>
<td>Organizational Commitment Questionnaire</td>
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<tr>
<td>PAF</td>
<td>Principal Axis Factoring</td>
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<td>PCA</td>
<td>Principal Component Analysis</td>
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<td>PDAQ</td>
<td>Participation in Decision Activities Questionnaire</td>
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<tr>
<td>PRISMA</td>
<td>Preferred Reporting Items for Systematic Reviews and Meta-Analyses</td>
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<tr>
<td>Abbreviation</td>
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<tr>
<td>RMR</td>
<td>Root Mean Square Residual</td>
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<tr>
<td>RMSEA</td>
<td>Root Mean Square of Error of Approximation</td>
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<tr>
<td>RN</td>
<td>Registered Nurse</td>
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<tr>
<td>$r_s$</td>
<td>Spearman Rank Correlations</td>
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<td>Translation</td>
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CHAPTER 1: INTRODUCTION

Background and Significance

The most important contemporary issues in health care organizations are ultimately related to the ability of the health care system and its practitioners to provide safe high-quality care. However, in South Korea, nurse turnover issues threaten patient safety and capacity to deliver quality nursing care.

Nurses are the largest group (over 50%) of health care professionals providing direct patient care in South Korean hospitals (Ministry of Health & Welfare in South Korea, 2013). Thus, maintaining adequate nurse staffing is very important because the quality of patient care is strongly linked to the performance of staff nurses at the patient bedside (J. Kim & M. Kim, 2011; Yoon & Kim, 2010). However, hospitals in South Korea are experiencing a severe nurse turnover problem. According to the Hospital Nurse Association (2013) in South Korea, in 2013 nurse turnover was 16.9%, surpassing Jones’s (1992) recommendation to keep turnover below 15% to maintain stability in the nursing workforce. In addition, when comparing the number of nurses in South Korea with other Organization for Economic Cooperation and Development (OEDC) countries, the ratio of nurses to population is 4.7 to 1,000 in South Korea and 8.7 to 1,000 in OECD countries (Statistics Korea, 2013). This ratio again demonstrates the potential for increased longed turnover which could lead to work overloads and burnout for the remaining staff nurses, as well as adverse effects on patient care.

There are three factors influencing nurse turnover in South Korea: individual factors,
organizational factors, and national factors. First, the individual factors are age, education, position, marriage status, pay, and career advancement and so forth (J. Kim & M. Kim). Findings from this study relating to individual factors which have been relatively consistent over time will be addressed in the third dissertation manuscript. Second, there is a myriad of variables included in the organizational factors that may lead to increased staff nurse turnover: work overloads, burnout, unsupportive nursing work environment, and low autonomy as professionals and so forth. These may reduce nurse job satisfaction and organizational commitment (Kang, 2012; Kwon & Kim, 2012; Kim & Han, 2013; Kim & Seomun, 2013; Sung, Choi, & Chun, 2011; Sung, Keum, Roh, & Song, 2013). Korean staff nurses reported the lowest scores on the Staffing and Resource Adequacy scale among the five subscales of the Practice Environment Scale of Nursing Work Index (PES-NWI) (Cho, Choi, Kim, Yoo, & Lee, 2011; Kang, 2012) (see Table 1.1). This result may be due to the high nurse to patient ratio.

The legal standard recommended by the Korean Ministry of Health Welfare for the ratio of nurses to patients in South Korea is 1 to 12 (You, 2013). However, only 7.1% of the hospitals observe this ratio, and 59.1% of the hospitals maintain the ratio of 1 to 15-16 (Korean Hospital Nurse Association, 2013; You, 2013) (see Table 1.2). According to You’s (2013) study, comparing this ratio of 1 to 12 in South Korea with 1 to 3 in Japan (Japanese Nursing Association, 2009) and 1 to 4 in the (National Nurses United, n. p) implies that Korean nurses are overworked. In addition, based on the new scoring methods to identify the favorability of nurse practice environments (i.e. unfavorable (scores below 2.5 on one subscale), mixed (scores above 2.5 on 2–3 subscales), and favorable (scores- over 2.5 on 4-5 subscales) (Lake & Friese, 2006), the average score 2.58 on 5 subscales of Korean nurses would suggest a favorable nurse practice environment. However this average score of 2.58 is lower than the
average score of 2.65 for nurses working at the non-magnet hospitals in the USA, and even less than the mean score of 2.95 for nurses working at Magnet hospitals in the USA (Cho et al., 2011; Lake, 2002) (see Table 1.1). In particular, the scores on the subscales of Nurse Participation in Hospital Affairs and Staffing and Resource Adequacy were lower than 2.5 (Cho et al., 2011), suggesting that nurses in South Korea do not have enough opportunities to participate in hospital affairs to advocate to improve their staffing and resource adequacy issues.

Adding insult to injury, due to the heavy workloads (J. Kim & M. Kim, 2011; Yoon & Kim, 2010), even though nurses are professionals, they report having low autonomy and low control over nursing practice. Autonomy and control over nursing practice (CONP) refer to the freedom, power, and authority to make decisions related to professional practice (Weston, 2009). Autonomy can be differentiated into two discrete concepts-clinical and work autonomy: Clinical autonomy means the authority, freedom, and discretion to indicate clinical nursing judgments in the context of an interdependent practice for patient care (Weston, 2008). In contrast, work autonomy was defined as freedom and discretion in work scheduling, work methods, and work criteria to evaluate and achieve goals within the existing structures and operations (Breaugh, 1985; Van der Doef & Maes, 1999; Weston, 2009). Unlike clinical and work autonomy, CONP was defined as freedom, authority, and discretion of nurses to make decisions in the context of nursing practice including organizational structures, governance, rules, policies, and operations (Weston, 2008).

Most staff nurses know well the importance of clinical autonomy and work autonomy and also want to have full status of the both autonomy as professionals. However, they easily overlook the importance of CONP, because their care and attention converge on patient care
rather than organizational structures, governance, rules, policies, and operations (Weston, 2008), which may cause adverse effects to establish the full status of clinical autonomy and work autonomy in South Korea. Especially, under the heavy workloads (J. Kim & M. Kim, 2011; Yoon & Kim, 2010), staff nurses may not have time or energy for decisional involvement for nursing policy and administration. According to the study “Experience of Nurse Turnover,” staff nurses have said that they frequently feel burned out because of the work overload (Lee & Kim, 2008). Staff nurses do not want to join in other activities in hospitals because they feel that they are already too busy to finish routine assignments and tasks of the day (Kim & Han, 2013; Kim & Seomun, 2013; Sung et al., 2013).

Moreover, these working conditions may influence other issues, such as other health professionals’ and the administration’s thoughts about recognizing that the nurse is a professional. They view staff nurses as employees just carrying out the routine jobs of nursing, so they exclude staff nurses from decisional involvement in hospitals about patient care and hospital administration and policy (Wandelt, Pierce, & Widdowson, 1981; Lee & Kim, 2008). As a result, Korean staff nurses have conflicting feelings about themselves as professionals, because they do not have full clinical autonomy and work autonomy in their hospitals (Lee & Kim, 2008). This result may lead to adverse consequences such as high nurse turnover in South Korea. Aydelotte (1983) also said that “The inability to exercise control over clinical practice may produce feelings of career stagnation. This career stagnation and related factors have caused nurses to leave nursing and remain outside the workforce. The end of this result has been a nurse shortage” (p. 836). Not only that, lack of recognition for professional nurses by other influential groups may lead to nurses’ being excluded from decisional involvement in developing the national health policy. As a result, the Korean national health policy is
unsupportive for professional nursing policy and the nursing work environment, so the vicious cycle for nurse turnover continues in South Korea (B. Kim et al., 2013; You, 2013).

Third, the national factors are Korean cultural issues, organizational culture, and unsupportive Korean national healthcare policy for nursing workforce stability (B. Kim et al., 2013; S. Kim & J. Kim, 2012; Y. Kim, S. Kim, & J. Kim, 2013; You, 2013). The Korean culture (i.e., conservatism), influences organizational culture. Especially, as representative organizations that maintain a conservative tendency, hospitals in South Korea have hierarchical atmospheres (Han, 2002; Korean Hospital Nurses Association, 2010; K. Park, S. Park, & Yu, 2014). The current organizational structure of hospitals tends to be flat because of reorganization to reduce the superstructure. However, staff nurses still report hierarchical and authoritative organizational cultures of managers and administrators, which stems from the Asian conservatism-retaining bureaucracy (Im, Kim, Ko, &Lee, 2012; K. Kang, Han, & S. Kang, 2012; Liu, Hus, & Chen, 2015; Park, & Lee, 2011). Gender disparity related to male physician power also exists (Kim, Yim, Jeong, & Jo, 2009; Lee & Kim, 2008). Moreover, Korean nurses typically have a relationship-oriented culture (i.e., collectivism), so they show a tendency to avoid conflicts with silence and to pretend that they maintain affiliation (K. Kang et al., 2012; Lee & Kim, 2008; Sung et al., 2011). Thus, speaking about problems may be seen as breaking the order and affiliation (K. Kang et al., 2012; Lee & Kim, 2008; Liu et al., 2015).

Regarding issues of healthcare policy in South Korea, the current Korean national medical law for nurse staffing shows no in-depth analysis of the reasons for nurse turnover and no deep knowledge about professional nursing practice (B. Kim et al., 2013). Most policies that have been developed have focused only on how to increase the number of nurses (B. Kim et al., 2013; You, 2013). There have been policies such as increasing the number of students admitted
in nursing schools and compensating hospitalization fees to hospitals based on their nurse staffing levels. These tend to be plausible to increase nurse staffing, but this cannot lead hospitals to set adequate staffing for nursing workforce stability (S. Kim & J. Kim, 2012; You, 2013). The reason is that the current healthcare policies for such as hospitalization, health insurance, and DRG fees do not consider nurse employment costs. Thus except for a few large hospitals, most hospitals of small and middle size are just trying to keep the middle or lower level of nurse staffing (S. Kim & J. Kim, 2012). Also, there is no sanction for staffing violations, thus, even so many small and middle-sized hospitals (78.9%) do not report their nurse staffing (You, 2013). As a result, these policies motivated hospitals to decrease nurse staffing grades because cost reduction is better than compensation (Y, Kim, S, Kim, & J, Kim, 2013). Currently, over 25% of the young nurses of the whole body of licensed nurses do not work in nursing (Korean Hospital Nurse Association, 2013). Nevertheless, the Korean government is still suggesting facile policies to increase the number of nurses without considering nursing care quality and the expertise of the nurses (Korean Hospital Nurse Association, 2013; You, 2013).

To resolve high staff nurse turnover in South Korea, we need to track why this situation happens. According to Yu (2007), the most critical reason causing the high staff nurse turnover is the exclusion of staff nurses’ practical opinions and ideas in the decision-making that governs nursing practice policy and administration. Even though staff nurses are at the frontline of hospitals for patient care, they are left out of decisions for improving professional nursing practice and the nursing work environment in South Korea. Therefore, we need a paradigm shift to solve these problems in relation to the current nursing fields of South Korea by going back to staff nurses’ decisional involvement. Thus staff nurses’ DI should be the top priority for nursing management in South Korea for the following three purposes: (a) to reduce nurses’ intentions to
leave and reduce turnover, (b) to improve the nursing work environment and nursing policy, and (c) to attain full professional status for nurses.

**The Key Concepts**

As a key strategy to increase nurse satisfaction, patient safety, safe quality patient outcomes, the importance of the staff nurse participation in decision-making that fosters autonomy and control over nursing practice (CONP) have been supported by nursing literature on Magnet hospitals and patient safety (Weston, 2008). However, the concepts of decisional involvement, shared governance, autonomy, CONP have frequently been confused and commingled in the nursing literature (Weston, 2008). Thus, this confusion makes it more difficult to understand hindering the synthesis of knowledge and application of these concepts in practice. Therefore, to clearly analyze and interpret this study, the key concepts of these terms were defined.

**Staff Nurse Decisional Involvement**

Havens and Vasey (2003) defined *Decisional involvement* as “the pattern of distribution of authority for decisions and activities that govern nursing practice policy and the practice environment” (p. 332). Thus, staff nurse decisional involvement means the staff nurse has authority and responsibility in governance for nursing practice policy and the practice environment.

**Governance**

*Governance* indicates “the maintenance of social, political, and economic arrangement by which practitioners maintain control over their practice, self-discipline, working conditions, and professional affairs, so without governance, there is no autonomy and full professional status is unattainable” (Aydelotte, 1983, p. 830). According to Aydelotte (1983), in order achieve full
professional status, autonomy must be exercised within its defined area of practice. Thus, staff nurse decisional involvement in governance is essential to have full professional status and autonomy.

**Shared Governance**

*Shared Governance* is regarded as a structural model which enhances staff-manager partnership on shared decision making that is for improving nursing practice policy and the practice environment (Porter-O’Grady, 2003). Thus, through the shared governance structure, “nurses can express and manage their practice with a higher level of professional autonomy” (Porter-O’Grady, 2003, p. 251). The professional autonomy entails accountability and responsibility for improving nursing practice quality and patient safety.

**Autonomy: Clinical Autonomy and Work Autonomy**

*Autonomy* is defined as “freedom, power, and authority to make decisions related to professional practice,” which is usually differentiated into two discrete concepts, clinical autonomy and work autonomy (Weston, 2009, p87). *Clinical autonomy* means the authority, freedom, and discretion to indicate clinical nursing judgments in the context of an interdependent practice for patient care (Weston, 2008). In contrast, *work autonomy* was defined as freedom and discretion in work scheduling, work methods, job process, and work criteria to evaluate work and achieve goals within the existing structures and operations (Breaugh, 1985; Van der Doef & Maes, 1999; Weston, 2009).

**Control over Nursing Practice (CONP)**

Unlike clinical and work autonomy, *Control over Nursing Practice (CONP)* is defined as freedom, authority, and discretion of nurses to make decisions related to the organizational
structures, governance, and policies in the context of nursing practice, rather than individual decisions related to clinical practice or work (Weston, 2008).

**Theoretical Framework**

A combination of the professions model (Scott, 1982) and the professional nursing department model (Aydelotte, 1981) provides a theoretical framework for understanding professional organization structures and policy development and administration for professional nurses. This framework is the premise to understand the domains of needed participation of staff nurses in decision making in hospitals and to encourage staff nurse decisional involvement regard to their autonomy and control over nursing practice (CONP) as professional nurses in hospitals. An overview of the key concepts of the combination of the two models will be presented as well as a conceptualization of autonomy and CONP within this theoretical framework.

**Professions Model**

Based on a sociological point of view, Scott (1982) suggested three organizational models for structuring the work of professional participants within hospitals: the autonomous, the heteronomous, and the conjoint professional organizational structure. He discussed each of these structures by describing the relationship between physicians and administrators as a way to explain the models. In the autonomous structure, because of the specialty and great social value, professionals (e.g., physicians) have sole authority and responsibility, and organizational administrators delegate responsibility to the professional group for defining, setting, implementing, and maintaining performance and standards (Scott, 1982). Thus, the professional group has governance and organizes itself to have political, economic, and legal support (Scott, 1982). Although there are clear responsibility discretion and a high priority for the needs of
individual patients (i.e., micro care), peer controls are relatively ineffective and sometimes cause ethical issues (Scott, 1982). In contrast to the autonomous structure, in the heteronomous structure, organizational administrators have solitary authority and responsibility, and professional participants are clearly subordinated to an administrative framework (Scott, 1982). Under this structure, the administrators need to solve conflicts between professionals and other healthcare professionals (indispensable contributors) to deliver care and also consider problems of diluting personal responsibility and limited resources for distribution (Scott, 1982). Thus, for the overall shape of the desired outcome distribution for patients (i.e., macro care), administrators prefer macro care in conditions of cost constriction, which brings a cost-quality trade-off (Scott, 1982). To complement for the weakness of both structures, Scott (1982) suggested the conjoint structure, which is a potentially ideal model for structuring professional work in health organizations. In the conjoint structure, professionals and administrators have an equal distribution of power, and professional and administrators have considerable differentiation in their functions (Scott, 1982). For example, healthcare professionals and other care practitioners specialize in the delivery of micro care for patients, and administrators and managers engage in the delivery of macro care (Scott, 1982).

Under the structure of a hospital, as one professional group of the substructures, nurses’ groups also should be able to influence their professional nursing practice under the conjoint structure for nursing care quality. Thus, the conjoint structure of health organizations should be a precondition for the realization of the professional nursing department model in South Korea.

**Professional Nursing Department Model**

In the professional nursing department model, Aydelotte (1981) suggests three domains that have similar patterns to Scott’s professions model. But focuses on professional nursing
practice policy and administration as following: (a) the *professional nursing practice domain* where professional nursing practice staff have sole authority and responsibility for professional nursing practice, such as nursing practice performance standards and improvement, their career development as professionals, and maintaining good interprofessional relationships with other health professionals (Aydelotte, 1981). In contrast to this, (b) the *nursing administrative domain* where nursing administrative staff have sole authority and responsibility for policies and actions related to resource acquisition, allocations, and interdepartmental and institutional relations (Aydelotte, 1981). The third, (c) *joint professional nursing practice and nursing administrative domain* where the two share authority and responsibility for policy development and nursing administration, such as identification of resources needed, scheduling, cost saving, support service for nursing practice, and improving the nursing work environment (Aydelotte, 1981).

Related to question “How staff nurses can be involved in decisions (i.e., how) as professionals under healthcare organizations (e.g., hospitals), Scott’s (1982) professional model gives guidance for the ideal structure of professional work in hospitals by suggesting the conjoint structure. On the other hand, Aydelotte’s model addresses more specific aspects related to the professional nursing department for encouraging staff nurse decisional involvement—(a) Why staff nurses (i.e., who)? (b) Why is decisional involvement important (i.e., why)? (c) How can staff nurses be involved in decisions (i.e., how)? (d) What fields need the staff nurses’ decisional involvement (i.e., what and where)?—which are also related to clinical autonomy, work autonomy, and control over nursing practice (CONP). First, to address (a) and (b): Staff nurses provide bedside care and can detect a patient’s status and problems most quickly; thus, reflecting staff nurses’ ideas and opinions for supporting staff nurses is fundamental in uncertain and complex hospital settings (K. Kang et al., 2012). In addition, each staff nurse is a
professional having professional qualifications, such as professional education curriculum, license, a code of ethics, and standards of nursing practice (Aydelotte, 1983). Thus, based on professional nursing knowledge and skills, each professional nurse is qualified to have authority and responsibility for doing professional nursing practice (i.e., clinical autonomy & work autonomy), as well as they should be able to develop policy and administration, to advance the work environment and identify nursing resources needed (i.e. CONP) (Aydelotte, 1983). Second, to address (c) and (d): Actually, instituting a correct balance reflecting staff nurses’ and administrators’ authority and responsibility for hospital strategic goals can be challenging (Houston, Leveille, Luquire, Fike, Ogola, & Chando, 2012). In terms of this, Aydelotte’s model (1983) clearly shows which domains need shared authority and responsibility of professional nursing staff and nursing administrations for policy development and nursing administration such as identification of resources needed, scheduling, cost saving, support service, general personnel policies, and nursing work environment. Thus, this like shared governance.

Therefore, the combination of the two models for hospital work structure for professionals and professional nursing departments can be conceptualized with the concepts of autonomy and control over nursing practice within the theoretical framework shown in the following diagram for this study.
Aims

This dissertation is composed of three manuscripts that each contributes to the literature with regards to staff nurses’ decisional involvement in practice and policy in South Korean hospitals. Specifically, the aims are to:

1. Present a literature review to define the concept of nurse decisional involvement with relating factors—attributes, antecedents, and consequences—based on the theoretical framework of decisional involvement, and to identify the knowledge gaps in staff nurse decisional involvement in English-Speaking, Western versus Non-English-Speaking, Asian Countries.

2. Measure the current status of staff nurses’ decisional involvement in South Korea, by revising the Decisional Involvement Scale (DIS) (Havens & Vasey, 2003) for use in
South Korea, and then reporting psychometric assessments of the Korean version of Decisional Involvement Scale (K-DIS).

3. Evaluate the influence of nurse decisional involvement on job satisfaction, organizational commitment, and turnover intention of staff nurses in South Korea.

**Manuscripts**

The three manuscript option was chosen in lieu of a traditional dissertation. Chapter one provides an introduction to the significance of staff nurse decisional involvement in South Korea about the issues of high staff nurse turnover and the importance of nurse autonomy and control over nursing practice. The theoretical framework, key concepts, and aims of the three studies have been described. Chapters two through four of this dissertation present three manuscripts, which will be prepared for publication. Chapter five provides a discussion of the manuscripts, implications of the findings from this work for nursing education, administration and policy in South Korea, and the plans for future study.

Chapter two is titled “From an Integrative Literature Review to a Conceptual Framework for Staff Nurse Decisional Involvement.” The purpose of this component is to identify knowledge gaps in staff nurse decisional involvement to provide evidence for the necessity of the Decisional Involvement Scale (DIS) in South Korea based on the theoretical framework.

Chapter three focuses on the revision and application of the Decisional Involvement Scale (DIS) developed by Havens and Vasey (2003), so this chapter three is titled “Use of the Decisional Involvement Scale (DIS) to Measure Staff Nurse Decisional Involvement in South Korea.” The purpose of this study is psychometric testing of the Korean version of DIS (K-DIS) for staff nurses in South Korea.
Chapter four is titled “The Influence of the staff Nurse Decisional Involvement on Job Satisfaction, Organizational Commitment, and Turnover Intention in South Korea.” The purpose of this study is to examine whether the nurse decisional involvement at the nursing unit-level affects the job satisfaction, organizational commitment, and turnover intention of staff nurses in South Korea.
Table 1.1
Comparison of PES-NWI Scores in the USA and South Korea

<table>
<thead>
<tr>
<th></th>
<th>Mean a ± SD of Nurses in</th>
<th>Mean a ± SD of Nurses in</th>
<th>Mean a ± SD of Nurses in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Magnet Hospitals in the USA (Lake, 2002) (n=1,610)</td>
<td>Non-Magnet Hospitals in the USA (Lake, 2002) (n=689)</td>
<td>Hospitals in South Korea (Cho et al., 2011) (n=733)</td>
</tr>
<tr>
<td>Nurse Participation in Hospital Affairs</td>
<td>2.76 ±0.47</td>
<td>2.44b±0.44</td>
<td>2.45±0.47</td>
</tr>
<tr>
<td>Nursing Foundation for Quality of Care</td>
<td>3.09±0.39</td>
<td>2.83b±0.36</td>
<td>2.86±0.43</td>
</tr>
<tr>
<td>Nurse Manager Ability, Leadership, and Support of Nurses</td>
<td>3.00±0.59</td>
<td>2.68b±0.60</td>
<td>2.68±0.57</td>
</tr>
<tr>
<td>Staffing and Resource Adequacy</td>
<td>2.88±0.62</td>
<td>2.49b±0.62</td>
<td>2.20±0.59</td>
</tr>
<tr>
<td>Collegial Nurse-Physician Relations</td>
<td>2.99±0.52</td>
<td>2.65b±0.37</td>
<td>2.54±0.58</td>
</tr>
<tr>
<td>Composite</td>
<td>2.95±0.40</td>
<td>2.65b±0.37</td>
<td>2.58±0.42</td>
</tr>
</tbody>
</table>

Note. a Potential score range for the mean is 1–4. Higher scores indicate more: Values above 2.5 indicate agreement, values below 2.5 indicate disagreement (Lake & Friese, 2006). b Is significantly less than the corresponding subscale means in the magnet hospitals (p < .0001).

Table 1.2
Comparison of the Ratio of Nurses to Patients a

<table>
<thead>
<tr>
<th>Grade</th>
<th>South Korea (You, 2013) Current Criteria (RN: BOR*)</th>
<th>USA** Ratio of RN to Patients</th>
<th>Japan*** Ratio of RN to Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1: Less 2.5</td>
<td>1:12</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1: 2.5~ less3.0</td>
<td>1:13~1:14</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1: 3.0~ less3.5</td>
<td>1:15~1:16</td>
<td>1:5</td>
</tr>
<tr>
<td>4</td>
<td>1: 3.5~ less4.0</td>
<td>1:17~1:19</td>
<td>1:7</td>
</tr>
<tr>
<td>5</td>
<td>1: 4.0~ less4.5</td>
<td>1:20~1:21</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1: 4.5~ less6.0</td>
<td>1:22~1:29</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1: 6.0</td>
<td>1:30</td>
<td></td>
</tr>
</tbody>
</table>

Note. a Comparison based on medical units
BOB: the average bed occupancy rate per year
REFERENCES


CHAPTER 2: FROM AN INTEGRATIVE LITERATURE REVIEW TO A CONCEPTUAL FRAMEWORK FOR STAFF NURSE DECISIONAL INVOLVEMENT

Introduction

Nurses are not only the frontline workforce for direct patient and family care, but also the essential links, who collaborate with physicians, interact with allied health personnel, supervise assistive personnel, and coordinate patient care among disparate health care professions for the provision of patient care (Miller & Apker, 2002). Thus, in the middle of a rapidly changing and complex healthcare system and environment maintaining, an adequate nursing staff is becoming an increasingly important global issue (Bina et al., 2014; Ugur, Scherb, & Specht, 2015).

Maintaining an adequate nursing staff does not simply mean having a sufficient number of nurses. It means maintaining an adequate number of qualified nurses who are empowered with professional authority, autonomy, responsibility, and accountability for improving patient care and the professional practice environment (Institute of Medicine, 2004). This implies that the healthcare organization has to be decentralized with shared governance to support staff nurses so they can demonstrate their fullest potential in providing safe, high-quality patient care (Institute of Medicine, 2004; Scherb, Specht, Loes, & Reed, 2011). The standards for Magnet designation also consider the importance of shared governance in healthcare organizations with an emphasis on staff nurses' decisional involvement (Kowalik & Yoder, 2010). Based on the notion of shared governance, staff nurses’ decisional involvement is a key component, which has contributed to improving the nursing work environment and increasing nurse recruitment and retention (Kowalik & Yoder, 2010; Scherb et al. 2011).
*Decisional involvement* was defined by Havens and Vasey (2003) as “the pattern of distribution of authority for decisions and activities that govern nursing practice policy and the practice environment” (p. 332). However, the concept of decisional involvement has frequently been confused with decision making only in clinical situations for patient care and sometimes commingled with the concepts of autonomy and control over nursing practice (CONP) in the nursing literature (Weston, 2008). Moreover, the definition of the combined term “decisional involvement” is not included in the dictionary, which could lead to difficulties in understanding and utilizing the concept, especially for those in non-English-speaking countries. The application to other countries with different languages and cultures could mislead nursing management research, perhaps promoting wrong interpretations and unexpected consequences for nursing administration. Thus, defining the concept of nurse decisional involvement may be the first step in applying it globally in nursing management to encourage staff nurse decisional involvement for improving the nursing work environment and thus, patient care. Especially, as an Asian country, South Korea experiences a high increase in staff nurse turnover, threatening nursing care quality and patient safety (Korean Hospital Nurse Association, 2013). Thus, reviewing the Korean literature may provide useful information to other Asian countries in a similar situation and with similar organizational cultures by tracking what the status of nurse decisional involvement is.

The purpose of this literature review is to define the concept of nurse decisional involvement with relating factors—attributes, antecedents, and consequences—based on the theoretical framework of decisional involvement, and to identify the knowledge gaps in nurse decisional involvement in English-speaking, Western versus non-English-speaking, Asian countries.
The detailed process of this review involves (1) sorting nursing literature on nurse decisional involvement; (2) defining the concept of decisional involvement with its attributes, antecedents, and consequences in terms of content and context of nursing practice; (3) exploring the theoretical frameworks of nurse decisional involvement used most frequently in nursing literature and identifying common factors; (4) developing a nurse decisional involvement conceptual framework by synthesizing its attributes, antecedents, and consequences with the common factors of the theoretical frameworks; and (5) identifying the knowledge gaps in nurse decisional involvement status in English-speaking Western versus non-English-speaking Asian countries based on the conceptual framework organized.

Methods

Data Sources, Search Strategy, and Inclusion/Exclusion Criteria

To conduct this integrative review, English and Korean language databases were selected to understand nurse decisional involvement status in English-speaking, Western versus non-English-speaking, Asian countries.

The databases used were Cumulative Index to Nursing & Allied Health Literature (CINAHL), PubMed, Web of Science, Korean Nursing Database, Research Information Sharing Service (RISS), KoreaMed, National Digital Science Library (NDSL), and the Google Scholar database. The search terms used were “nurse AND decisional involvement,” and “nurse AND participation AND decentralization OR shared governance”.

The search strategy was to find nursing research published in English or Korean in peer-reviewed journals. There were no limitations for the date of publication to find the research articles because this is the first integrative literature review for nurse decisional involvement; thus, the intent was to look at the changes in the practice of nurse decisional involvement. A
A three-step search strategy was used. An initial limited search was undertaken to identify optimal search terms, followed by an analysis of text words contained in the titles and abstracts and of the index terms used to describe the article. A second extensive search was undertaken with all identified keywords and index terms. The third step consisted of a search of the reference lists of all identified articles for additional key literature.

The inclusion criteria for selecting articles were: (a) studies dealing with the concept of nurse decisional involvement in governance; (b) studies dealing with similar concepts, such as nurse participation in decentralized or shared governance.

Criteria for excluding studies included (a) studies that were not written in English or Korean; (b) conference proceedings and abstracts only; (c) studies that did not match with the concept of nurse decisional involvement in administrative decisions (i.e., control over context of nursing practice), such as nurses’ decision making in clinical care or ethical dilemmas; (d) nurses’ decision-making style, process, and competency.

From the eight databases enumerated above, 76 English and 26 Korean articles were initially identified. The total yield from the search was 12 English and 4 Korean articles. A summary of the search-and-retrieval process, the exclusion criteria, and the number of articles included is presented in the Appendix as a PRISMA flow diagram (Figure 2.1).

**Data Extraction**

The following data were extracted from the sixteen studies selected: Author (year), design/sample/setting, theoretical or conceptual framework, instruments, independent and dependent variables, related factors of decisional involvement, and main findings.
Figure 2.1  Search and retrieval process of literature

**Search Terms**
“Nurse AND decisional involvement”
“nurse AND participation AND decentralization OR shared governance”

**Data bases**
CINAHL, PubMed, Web of Science, Google Scholar, Korean Nursing Database, Korean Research Information Sharing Service (RISS), Koreamed, Korean National Digital Science Library (NDSL)

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**Identification**

**102 records retrieved**
(76 English and 26 Korean)
: Filtering “Duplicate” in title of articles

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**Screening**

**64 records retrieved**
: Screening for inclusion/exclusion criteria in abstracts and full texts

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**Eligibility**

**14 records retrieved**
: Assessing eligibility in abstracts and full texts

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**Included**

**16 studies (12 English, 4 Korean) retained**

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**Findings**

**Descriptive Characteristics of Reviewed Studies**

A total of 16 articles (twelve English and four Korean articles) were selected from the original 102 articles identified. The sampling and settings from 11 of the articles were from the
U.S. (i.e., English-speaking, Western countries). The other five articles from non-English-speaking Asian countries: the one English article is from Taiwan and the four Korean articles from South Korea.

The 16 articles selected included seven non-experimental descriptive studies, three psychometric assessment studies, one concept analysis, four secondary analyses, and one mixed-method study (see Table 2.1).

The theoretical frameworks used most frequently were (a) the combined two models for hospital work structure for professionals (Scott, 1982) and professional nursing departments (Aydelotte, 1981); (b) structural theory of power in organizations (Kanter, 1977, 1993) (see Table 1). Although ten studies did not identify a theoretical framework, for their studies, five studies used the Decisional Involvement Scale (DIS) (Havens & Vasey, 2003, 2005) based on the combined models of Scott (1982) and Aydelotte (1981).

The Decisional involvement scale (DIS) was most frequently used to measure nurse decisional involvement status—actual and preferred levels—in 10 articles (Bina et al., 2014; Havens & Vasey, 2003, 2005; Houston et al., 2012; Liu, Hsu, & Chen, 2015; Mangold et al., 2006; Scherb et al., 2011; Ugur et al., 2015; Yurek, Havens, Hays, & Hughes, 2015) (see Table 2.1).

Each document was read in its entirety and then examined line-by-line to identify the factors related to decisional involvement. The factors are: shared governance (or decentralization or participative management), formal/informal power, empowerment structure, clinical /work autonomy, professional/organizational autonomy, content/context of nursing practice, control over nursing practice, accountability, responsibility, distribution of authority, collaboration, professional work environment, job satisfaction, professional development, professional
fulfillment, work engagement, work effectiveness, organizational commitment, nurse retention and recruitment, patient outcome, and organizational outcome, which are briefly summarized in Table 2.1.

**Defining the Concept of Decisional Involvement**

The concept of decisional involvement is derived from the combined terms *decision* and *involvement*. The definition of *decision* is “judgement that you make after thinking and talking about what is the best thing to do” or “the process of deciding something” (Decision, n.d.) and *involvement* “involves something, that thing is an important or necessary part or result of it” (Involvement, n. d.) or “take part in it or are affected by it” (Involvement, n. d.). Thus, decisional involvement can be defined as “taking part in the process of deciding something important or necessary, that decision affects the result.”

Researchers have not only differentiated between the involvement in clinical and administrative decisions, but they have also conceptualized involvement into a two-dimensional construct that relates to the content and context of nursing practice (Houston et al., 2012; Kowalik & Yoder, 2010; Laschinger, Sabiston, & Kutszcher, 1997; Yurek et al., 2015). Clinical decision making has frequently been called *decision-making* in the nursing literature, which is linked to involvement in decisions about nursing care activities (i.e., the *content of nursing practice*) for patient care. On the other hand, administrative decisions have been called *decisional involvement*, which is connected with involvement in decisions about organizational process and operating systems (i.e., *context of nursing practice*) to deliver care that ultimately affects nursing practice for patient care (Houston et al., 2012; Kowalik & Yoder, 2010; Laschinger et al., 1997; Yurek et al., 2015).
Based on this content-context framework, we can present conceptual clarity between the two domains of decisions and permit implementation of management interventions to improve nursing practice and the nursing work environment.

**Theoretical Frameworks for Staff Nurse Decisional Involvement**

In the literature, the most frequently used theoretical framework for staff nurse decisional involvement was based on a combination of the professions model (Scott, 1982) and the professional nursing department model (Aydelotte, 1981). These both served as the framework for the development of the Decisional Involvement Scale (Havens & Vasey, 2003, 2005). This theoretical framework provides an understanding of the organization of professional work and professional nurse control over the contents and contexts of nursing practice (see Figure 2.2).

Scott (1982) suggested three models for structuring the work of professionals who work in healthcare organizations: (a) the *autonomous model*, in which professionals have solitary authority because administrators delegate the control of most of the professional activities to the professionals; (b) the *heteronomous model*, in which administrators have solitary authority to control over most professional activities with elaborate sets of rules, regulations, and routine supervision. Thus, professionals are clearly subordinate to the administration with minimal autonomy; and (c) the *conjoint model*, in which professionals and administrators share authority and have equal power by serving as the dominant force in certain areas. For example, professionals maintain responsibility and authority for patient care, and administrators provide the resources to shape the optimal work environment for professionals to be able to meet patient care goals. In this arrangement, professionals and administrators can coexist in a state of collaboration, interdependence, and mutual influence, which promotes recognizing the autonomy of professionals (Havens & Vasey, 2005). Similarly, Aydelotte (1981) suggested the professional
nursing department model by identifying three domains for policy development and administration in nursing: (a) the *professional nursing practice domain*, in which professional nurses have sole authority and responsibility for patient care; (b) the *nursing administrative domain*, in which nursing administrators have sole authority and responsibility for policies and actions for resource acquisition, allocations, and interdepartmental and institutional relations; and (c) the *joint professional nursing practice and nursing administrative domain*, in which both share authority and responsibility for developing nursing policy and administration, such as identification of resources needed, scheduling, cost saving, support service for nursing practice, and improving the nursing work environment.

**Figure 2.2** The theoretical framework of the combination of Scott’s structure model of hospital work for professionals and Aydelotte’s professional nursing departments model

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1 *Note.* The joint professional nursing practice and nursing administrative domain need staff nurse decisional involvement to share authority and responsibility for policy development and nursing administration with nurse administrators.
Another theoretical framework related to decisional involvement is Kanter’s (1977, 1993) theory of structural power in the organization. Kanter’s theory (1977, 1993) is based on relationships between perceptions of work empowerment and two facets of work decision involvement, that is, control over the content and the context of nursing practice (Laschinger et al., 1997) (see Figure 2.3).

**Figure 2.3** The theoretical framework of Kanter’s structural theory of power in organizations.$^2$

According to Kanter (1977, 1993), behaviors and attitudes are shaped primarily in response to an individual’s position and the situations that arise in an organization. Employee

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empowerment evolves from both the formal and informal systems of the organization (Kanter, 1977, 1993): *formal power* results from jobs that allow discretion, provide recognition, and are relevant to key organizational goals, and *informal power* is derived from relationships and alliances with people (e.g., sponsors, peers, subordinates, and cross-functional groups) in the organization. People with formal and informal power are in a position to access job-related empowerment structures (Kanter, 1977, 1993): (a) the *structure of opportunity* (e.g., promotion and career development), (b) the *structure of power* (e.g., source of power for access to information, support, and resources), and (c) the *structure of proportions* (e.g., the social composition of people in approximately the same situation and position, such as males and females). These three structures are important attributes contributing to the overall empowerment of the staff nurse (Laschinger et al., 1997; Mangold et al., 2006; Scherb et al., 2011; Ugur et al., 2015). Nurses who have access to opportunity, information, support, and resources are empowered, and they have control over the content and context of professional nursing practice, which makes their actions possible to improve their autonomy related to patient care and also encourages nurses to be involved in participative management (i.e., shared governance) related to work conditions and work environment (Laschinger et al., 1997; Mangold et al., 2006). In addition, these empowered nurses, in turn, motivate and empower others by sharing the sources of power, resulting in improved organizational effectiveness (Kanter, 1977, 1993; Laschinger et al., 1997).

In summary, Scott (1982) and Aydelotte’s (1981) combined model, the joint professional nursing practice and nursing administrative domain (i.e., the conjoint structure) includes the aspects of the context of nursing practice, and the professional nursing practice domain points to the aspects of the content of nursing practice. Kanter’s theory of structural power in
organizations also follows predictive patterns similar to Scott and Aydelotte’s combined models framework. Kanter’s (1977, 1993) theory shows that organizational empowerment structures under shared governance increased nurses’ empowerment, leading to increased nurses’ control over both the content and context of their practice. This Kanter’s (1977, 1993) theory suggests that increased nurse autonomy in patient care and increased decisional involvement in management have positive impacts on healthcare organizations by improving work effectiveness, nurses’ job satisfaction, and patient satisfaction (Laschinger et al., 1997; Mangold et al., 2006). Based on the common key concepts, such as shared governance, the content of nursing practice (i.e., autonomy in patient care), and the context of nursing practice (i.e., decisional involvement in the administrative realm), these two frameworks could be combined and synthesized as one conceptual framework (see Figure 2.4).

**Figure 2.4** The synthesized conceptual framework for decisional involvement.³

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³ Note. The combination of the two models for hospital work structure for professionals (Scott, 1982) and professional nursing departments (Aydelotte, 1981) is synthesized with Kanter’s (1977, 1993) structural theory of power in organizations.
Defining Antecedents, Attributes, and Consequences of Decisional Involvement

The identified relating factors of decisional involvement were classified into antecedents, attributes, and consequence based on the conceptual framework that was synthesized from Scott and Aydelotte’s combined models and Kanter’s theory.

Antecedents. Antecedent, as cited in the *Oxford Dictionary Online*, is “a thing that existed before or logically precedes another” (Antecedent, n. d.). The concept of decisional involvement has antecedents such as following: (a) shared governance structure, (b) job-related empowerment structure.

Although there are many definitions of “shared governance,” the core definition is a decentralized management approach that gives staff nurses greater authority and control over their practice and work environments (Kowalik & Yoder, 2010; O’May & Buchan, 1999; Scherb et al., 2011; Ugur, et al., 2015). Shared governance originated from the education, business, and management literature, such as the philosophy of Walton’s Deming Management Method (1986) and Kanter’s (1977, 1993) structural theory (Laschinger & Havens, 1996; O’May & Buchan, 1999). Shared governance is often oversimplified and misunderstood as just “giving power to employees.” However, shared governance requires all nurses and management to understand the principles, process, and behaviors of shared governance (O’May & Buchan, 1999; Porter-O’Grady, 2012). According to Kanter (1982), the “building and nurturing shared governance of a collaborative team that is more fully consulted, more fully informed than the ordinary and one that shares responsibility for planning and reaching outcomes” (p. 6). Thus, to implement, disseminate, and enculturate shared governance, the organizational structure has to shift away from a hierarchical, centrally controlled management style to a decentralized management style that shifts roles and power among nurses and managers (Porter-O’Grady, 2001; Kowalik &
Without reconfiguration of the organizational structure to support shared governance, it may be impossible for nurses to participate fully in decisions that affect their practice and work environments (Kowalik & Yoder, 2010). Therefore, a shared governance structure in healthcare organizations has to be a critical premise for nurses to be empowered to control contents and contexts of nursing practice.

Empowerment is defined as “the act of giving somebody the power or authority to do something” (Empowerment, n. d). Kanter (1993) said that employee empowerment evolves from both the formal and informal power that arises from the organization, and individuals who can access opportunity, information, support, and resources are empowered to have control over work conditions that make their actions possible. Shared governance establishes empowerment and promotes decisional involvement (Kowalik & Yoder, 2010; Laschinger et al., 1997; Barden, Griffin, Donahue, & Fitzpatrick, 2011).

Attributes. The concept of decisional involvement has attributes: (a) distribution of authority, (b) collaboration, (c) control over nursing practice (CONP) and autonomy (i.e., clinical autonomy and work autonomy), (d) responsibility, and (e) accountability.

Under shared governance, authority is distributed equally between nurses and administrators, albeit nurses and administrators have considerable differentiation in their functions (Scott, 1982). For example, nurses specialize in patient care, and administrators and managers engage in how to deliver care by supporting what is needed for patient care (Aydelotte, 1981; Scott, 1982). For identification of necessary resources, information, systems, and policy development, nurses and administrators share authority and are equal in power, and practice contributions result in heightened collaboration and interdependence among nurses and
administrators as well as associated healthcare professionals for hospital strategic goals (Aydelotte, 1981, 1983; Havens & Vasey, 2005; Houston et al., 2012; Scott, 1982).

Control over nursing practice (CONP) and autonomy have been known to describe how nurses influence decisions about their practice in the aspects of contents and contexts (Kowalik and Yoder, 2010; Laschinger et al., 1997; Laschinger & Havens, 1996; Weston, 2008, 2010). However, the concepts of CONP and autonomy have frequently been confused and commingled in the nursing literature, which limits synthesization of knowledge and application to practice and research (Weston, 2008, 2010).

To clarify and differentiate between the concepts of CONP and autonomy, two dimensions of autonomy have been distinguished in the nursing literature (Kramer et al., 2008; Weston, 2008). Autonomy was originally conceptualized as both discretion over and independence in work (Rowe, 2010). Within the milieu of clinical practice, nursing practice requires accountability and freedom to make discreet decisions within the interdependent practice (Weston, 2008). Thus, the attribute of nurse autonomy includes discretion in a highly interdisciplinary collaboration, not independent practice (Weston, 2008).

First, the term autonomy in nursing literature is often used as the term clinical autonomy, autonomy over patient care decisions, or control over the content of practice (Kanter, 1993; Kramer et al., 2008; Laschinger et al., 1997; Yurek et al., 2015). The dimension of autonomy involves freedom within existing professional, regulatory, departmental, and organizational rules, and it mirrors the perspective of control (Weston, 2008). Based on the dimension referred to, autonomy in nursing can be labeled into two concepts (Weston, 2008): clinical autonomy refers to “the authority and freedom of the nurse to make nursing care decisions concerning the content of clinical patient care in an interdependent practice” (p. 407). In contrast, work
autonomy refers to “the authority and freedom to exercise decision-making about work process and methods within the existing structures and operations” (p. 407).

Second, organizational autonomy has been referred to in the literature as CONP, autonomy over unit operations, or control over the context of practice (Kanter, 1993; Kramer et al., 2008; Laschinger et al., 1997; Weston, 2008). This refers to decision making related to governing rules and structures; this dimension mirrors the perspective of control over the operations of the unit, department, or organizational domains (Weston, 2008). Therefore, CONP is best used to describe “the authority and freedom of nurses to engage in decision making related to the context of nursing practice including the organizational structures, governance, rules, policies, and operations” (Weston, 2008, p. 407).

Shared governance requires administrators to give authority to nursing staff to make decisions and requires staff to accept responsibility and accountability for outcomes (Porter-O’Grady, 1991). According to Sullivan and Decker (2005), responsibility is defined as “an obligation to accomplish an assignment, while accountability was defined as “the act of accepting ownership for the results or lack thereof” (p. 144).

These two words, responsibility and accountability, have been used interchangeably, but the concepts are different (Swihart, 2006). Responsibility is a task-driven value, so it is defined by isolative functions on specific tasks and routines (Swihart, 2006). Responsibility for some task/routines can be delegated and is evaluated by supervisor (Porter-O’Grady, 1991; Swihart, 2006). In contrast, accountability is a contribution-driven value, defined by outcome (Swihart, 2006). Accountability cannot be delegated, and it is embedded in professional’s roles; it is dependent on partnerships with administrators and other health professionals and shared evaluation (Porter-O’Grady, 1991; Swihart, 2006). In other words, nurses are responsible for
caring for their patients with optimal care quality (Kowalik & Yoder, 2010; Porter-O’Grady, 1991). As professionals, they are also accountable for contributing to the clinical, research, education, and work environment by collaborating with patients, administrators, and other health professionals through decisional involvement in organizational structures, governance, rules, policies, and operations (Kowalik & Yoder, 2010; Weston, 2008). Unlike responsibility, accountability requires ownership and can only be expressed legitimately, effectively, and sustainably by those who own the accountability for doing professional work (Porter-O’Grady, 2012). Therefore, the organizational structure must be designed in a way that ensures that the primary accountability for professional practice (Porter-O’Grady, 2012).

**Consequences.** *Consequence* is defined as “something that happens as a result of a particular action or set of conditions” (Consequence, n. d.). The expected consequences of decisional involvement are (a) positive nurse outcome, (b) positive patient outcome, and (c) positive organizational outcome.

According to Havens and Vasey (2005), enhancing staff nurse decisional involvement in organizational decisions is a core strategy for improving the nursing work environment, which is positively associated with nurses’ job satisfaction (Laschinger, 2008; Laschinger, Leiter, Day, & Gilin, 2009; Leggat, Bartram, Casimir, & Stanton, 2010; Mangold et al., 2006). A better work environment and improved nurses’ job satisfaction have had the effect of increasing nurses’ retention and reducing nurses’ burnout (Jones & Gates, 2007; Lacey et al., 2007), which has led to decreased turnover rates and vacancies (Jones & Gates, 2007; Laschinger, Finegan, Shamian, & Wilk, 2004).

In addition, decisional involvement empowers nurses with the awareness to accept responsibility and accountability for advancing nursing standards and practice (Porter-O’Grady,
2001), which elevated nursing performance for patient care quality (Laschinger, 2008; Leggat et al., 2010) and safety (Armstrong & Laschinger, 2006; Armstrong, Laschinger, & Wong, 2009). Decisional involvement also fosters a respectful and collaborative culture, which improves efficiency and effectiveness at each unit level of a hospital (Grant, Colello, Richle, & Dende, 2010) by enabling nurses to have self-efficacy (Laschinger & Shamian, 1994) and work engagement (Havens, Warshawsky, & Vasey, 2011).

Conclusively, decisional involvement produced empirically better outcomes for nursing workforce issues, such as nurse recruitment, nurse retention, and patient care quality. These results have brought growth in business and financial success, especially to the magnet hospitals (American Nurses Credentialing Center, 2011, n. p.).

To summarize, the conceptual framework of decisional involvement can contribute to better conceptual clarity in the content and context of nursing practice with antecedents and consequences of decisional involvement. This enables us to have a better understanding that staff nurse decisional involvement in the context of nursing practice underlies the contents of nursing practice for patient care. The conceptual framework of the staff nurse decisional involvement is illustrated in Figure 2.5.
**Figure 2.5** The conceptual framework of staff nurse decisional involvement\(^4\)

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\(^4\) Note. The combination of the two models for hospital work structure for professionals (Scott, 1982) and professional nursing departments (Aydelotte, 1981) is synthesized with Kanter’s (1977, 1993) structural theory of power in organizations, which is conceptualized with the attributes, antecedents, and consequences of decisional involvement within a conceptual framework.
Knowledge Gaps in Nurse Decisional Involvement Status in English-Speaking, Western versus Non-English-Speaking, Asian Countries Based on the Conceptual Framework

The 12 articles selected from English-speaking Western countries revealed that a limited number of studies have been conducted that focus on the contextual aspects of decisional involvement.

The majority of these studies were conducted to measure the actual and preferred levels of staff nurse decisional involvement with the DIS developed by Havens & Vasey (2003, 2005). The DIS consists of six subscales—unit staffing, quality of professional practice, professional recruitment, unit governance and leadership, quality of support staff practice, and collaboration or liaison activities (Havens & Vasey, 2003, 2005)—which pertain to the nursing administration’s perspectives (i.e., contexts of nursing practice) that underlie clinical nursing practice (i.e., contents of nursing practice). Most studies commonly show that staff nurses’ levels of actual decisional involvement are significantly lower than their preferred levels of decisional involvement, which means that nurse managers or administrators have been more involved in most decisions (Bina et al., 2014; Houston et al., 2012; Mangold et al., 2006; Scherb et al., 2011; Ugur et al., 2015).

These studies also measured the influential variables that have been linked to the level of decisional involvement. First, Magnet designation, employment status, and hospital type were linked to nurses’ decisional involvement. Houston et al. (2012) compared the differences in actual and preferred decisional involvement among staff RNs and administrators in Magnet, Magnet-aspiring, and non-Magnet hospitals, and found that Magnet hospitals had higher levels of decisional involvement, followed by Magnet-aspiring, then non-Magnet. Also, the findings showed that full-time employment was associated with a significant increase in the actual level score compared to a part-time employment (Houston et al., 2012). Mangold et al. (2006) found
that staff nurses working in an academic medical center had a statistically significant higher mean score in actual and preferred levels of decisional involvement than those employed in a rural healthcare network.

Second, nurses’ individual characteristics (e.g., age, gender, education, years of experience, the number of hours worked, management career) affecting decisional involvement were also examined. Ugur et al. (2015) determined the difference between actual and preferred decisional involvement of staff nurses on the DIS’s subscales related to education level and certification. They found that in preferred levels on the subscale of the quality of support staff practice, staff nurses with master’s certification had a statistically significant higher mean score than those with BSN (Ugur et al., 2015). The relationship between age, gender, education, or years of experience and decisional involvement was not found in other studies (Bina et al., 2014; Houston et al., 2012; Mangold et al., 2006; Scherb et al., 2011).

Laschinger et al. (1997) examined the relationship between empowerment and two different facets of nursing practice—the content (i.e., clinical/ work autonomy) and context (i.e., control over nursing practice) by using structural equation–modeling techniques based on Kanter’s theory of structural power in organizations. The study findings show that formal power influenced nurse empowerment both directly and indirectly through informal power, and empowerment has a strong causal effect on control over both contents and context (Laschinger et al., 1997).

The concept of staff nurse decisional involvement is quite known in the field of nursing administration in English-speaking Western countries. On the contrary, the concept is unknown in Asian countries, so it was hard to find nursing literature about nurse decisional involvement related to the context of nursing practice. The information in general that is available on nurse
decisional involvement for staff nurses is sparse in Asian countries: only three articles dealt with staff nurse decisional involvement (Liu et al., 2015) and participation in decision making in the context of nursing practice (Jo, Jung, & Kim, 1999; Jo & Jung, 1999). The two other articles were about nurse manager decision-making in administration (Yu & Kim, 2011) or human resources management (Yu, 2007). Through the nurse managers’ decisional involvement studies, we can infer the status of staff nurse decisional involvement indirectly.

In Taiwan, Liu et al. (2015) used an internet mixed-method design to explore staff nurses' actual level of decisional involvement, their preferred level of decisional involvement, and the decisional dissonance. She used the same DIS that is used in English-speaking, Western countries. The quantitative findings showed that nurses' actual decisional involvement was significantly lower than their preferred decisional involvement, and the attributing factor to nurses' actual level of decisional involvement included education, type of hospital, and work unit. This finding is similar to the patterns in other studies (Houston et al., 2012; Mangold et al., 2006; Ugur et al., 2015) in the U.S. Most studies in U.S. mainly emphasized the level of involvement; Liu et al. (2015), on the other hand, explored which factors affected nurses’ perceptions on decisional involvement through a qualitative study. The finding was that nurses' perceptions of decisional involvement might be associated with dependence on nurse managers’ leadership style, workload, and the power of consensus to overcome their fear of getting into trouble and gaining confidence to communicate with the administrators. It seems that Asian nurses were not actively involved in decisions due to workload, hierarchical culture, and conservatism (Liu et al., 2015).

In South Korea, there were no articles that used the DIS to examine the status of staff nurse decisional involvement. Anthony (1999) extracted some parts from the Participation in
Decision Activities Questionnaire (PDAQ) and Marquis and Huston (1992) took parts of the Management Decision Making for Nurses, and these measures were used in studies for staff nurses and nurse managers.

First, in the Korean studies for staff nurse decisional involvement, Jo et al. (1997) found that there were significant positive relationships between decentralization, participation in decision making, and organizational commitment. Regarding the decisional involvement status of Korean staff nurses in the public health field, staff nurses had lower mean scores of participation in decision making in the context of nursing practice than the score of decentralized status. This implied that, in spite of decentralization, nurses did not have enough opportunity to participate in decisions in the context of nursing practice due to hierarchical organizational culture and unequal formal power in the organization (Jo et al., 1997).

Jo and Jung (1999) analyzed the relationship of the participation in decision making and the expertise of staff nurses. This study’s finding showed that education level and condition of work had significant influences on staff nurses’ expertise, and staff nurses participated more in caregiving decisions than in decisions on working conditions (Jo & Jung, 1999).

Second, in the Korean studies for nurse managers, Yu & Kim (2011) found a significant correlation between organizational commitment, decentralization, participation in decision making, and job satisfaction among hospital nurse managers. Based on these relationships, they said that nursing managers’ job satisfaction and organizational commitment can be promoted by granting participation in decision making (Yu & Kim, 2011). Nurse managers’ score on organizational commitment was higher than those of staff nurses in Park and Kim’s (2010) study in South Korea. Therefore, based on these findings, we can infer that increasing staff nurse participation in decision making can be a good strategy for improving staff nurses’ job
satisfaction and organizational commitment, and, thus, a good strategy for decreasing staff nurse turnover in South Korea.

Yu (2007) studied nurse managers’ decision making in human resources management. This study’s finding showed that nurse managers’ decision style tended to be more participative than autocratic (Yu, 2007). However, concerning the complexity of tasks, in the case of highly complex tasks, such as staffing, evaluation of RN performance, resolution of conflicts, nursing practice design, and selection of RNs, the nurse managers reported that they usually discussed and made their decisions with their superior managers. In the case of less complex tasks, such as scheduling and training of staff nurses, the nurse managers discussed their decisions with their colleagues or a few senior nurses in the unit (Yu, 2007). From these findings, we can guess that Korean staff nurses were not involved in decision making related to the above human resources issues, which are the aspects of contexts of nursing practice.

To sum up, although staff nurses’ levels of actual decisional involvement were significantly lower than their preferred levels of decisional involvement, the studies’ findings showed that staff nurses are involved in decisions in the context of nursing practice in the U.S. However, there were only a few studies about staff decisional involvement in Asian countries, which implied that Asian nurses might be excluded from decisional involvement in contexts of nursing practice due to workload, hierarchical culture, and conservatism.

**Conclusion**

This integrative literature review has served to define the concept of nurse decisional involvement and to identify knowledge gaps in nurse decisional involvement in English-speaking, Western and non-English-speaking, Asian countries.
The conceptual framework of decisional involvement based on the content and context of the nursing practice framework give better conceptual clarity in the nurse decisional domains for patient care and nursing administration. This conceptual clarity enables us to investigate patient and nurse outcomes, which may be differentially associated with decision making in the areas of content and context of nursing practice, and to implement a redesign of work environments and policies that are most in need of improvement.

Based on the conceptual framework of decisional involvement, we can see that the retrieved articles dealt with nurse decisional involvement in the context of nursing practice, which underlies the contents of nursing practice. The content and context of nursing practice are closely linked; thus, further study for work redesign has to focus on changing one of these elements while addressing the other (Blouin & Tonges, 1996).

The main finding in the literature from Western and Asian countries is that staff nurses were less involved in decisions than they preferred. Thus, healthcare administrators and nurse researchers should look closely at this dissonance and find ways to decrease this decisional dissonance.

Nurses’ decisional involvement with shared governance, empowerment, autonomy, and control over nursing practice has been shown throughout the literature to enhance the nursing practice environment positively and to induce positive patient, nurse, and organizational outcomes. Therefore, staff nurses’ decisional involvement can be the starting point for decreasing the global issue of nurse workforce shortage, by bringing a more positive patient, nurse, and organizational outcomes.
<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Design/ Sample/ Settings</th>
<th>Conceptual Framework</th>
<th>Instruments Used</th>
<th>Variables of study</th>
<th>Related Factors of DI</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liu et al. (2015)</td>
<td>The Internet mixed-method study; Staff nurses (n=125); Regional hospitals &amp; medical centers in Taiwan</td>
<td>Not mentioned</td>
<td>DIS⁴ Online interview</td>
<td>Gender, Age, Education, Years of experience, Workload, Work unit, Type of hospital</td>
<td>Shared governance, Magnetism force (from Magnet hospital study)</td>
<td>Quantitative: Nurses’ actual decisional involvement was significantly lower than preferred decisional involvement. The attributing factor to nurses’ actual decisional involvement included the level of education, type of hospital, work unit and workload. Qualitative: Regarding nurses’ perceptions of decisional involvement, the themes were identified: work Load, dependence on administrators-leadership style, fear of getting into trouble, and the power of consensus to overcome their fear and to gain confidence to communicate with the administrators.</td>
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<tr>
<td>Ugur et al. (2015)</td>
<td>Descriptive, comparative study; Staff nurses (n=214); Midwestern (U.S.) health care organization</td>
<td>Not mentioned</td>
<td>DIS⁴</td>
<td>Gender, Education, Certification, Employment status</td>
<td>Shared governance, Empowerment, Professional work environment, Job satisfaction, Magnet strategy</td>
<td>A statistically significant difference was found between actual and preferred DI of staff nurses, and RNs with more than BSN and MS certification show significantly higher preferred DI for ‘quality of support staff practice’ than RNs with less than BSN. Except this, no difference was found based on educational level and certification.</td>
</tr>
<tr>
<td>Yurek et al. (2015)</td>
<td>Descriptive comparative study of secondary analysis for validity of Decisional Involvement Scale (DIS); Staff nurses (n=1,034); Longitudinal research project in six hospitals in Pennsylvania, U.S.</td>
<td>Combined model¹ (Scott, 1982; Aydelotte, 1981) Kanter’s theory (1977, 1993)²</td>
<td>DIS⁴</td>
<td>Age, Education, Work unit, Years of RN experience, Employment status (full/part),</td>
<td>Shared governance Participation in decision making, Clinical /work autonomy, Professional/organizational autonomy, Content/context of nursing practice, Professional work environment Magnetism</td>
<td>Decisional Involvement Scale (DIS) was measured to identify the factorial validity. The second-order factor model for the content and context of nursing practice showed improved model fit, but the model’s fit was not optimal to the data.</td>
</tr>
<tr>
<td>Bina et al. (2014)</td>
<td>Descriptive comparative study</td>
<td>Not mentioned</td>
<td>DIS⁴</td>
<td>Gender, Age, Education,</td>
<td>Shared governance, Empowerment, Professional work environment,</td>
<td>The actual and preferred DI in 2010 were significantly decreased compared to the DI in</td>
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<tr>
<td>Study</td>
<td>Design</td>
<td>Population</td>
<td>Measures</td>
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<tr>
<td>Houston et al. (2012)</td>
<td>Descriptive, comparative study; Staff nurses (n=1,407); 2 Magnet, 9 non-Magnet, &amp; 3 Magnet aspiring hospitals in the U.S.</td>
<td>Not mentioned</td>
<td>DIS4</td>
<td>Shared governance, Empowerment, Professional work environment, Professional nursing practice, Patient outcome</td>
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<td>There were significant differences in the actual global scale scores according to Magnet status of hospitals. Magnet hospitals showed the highest actual global scale score on average, followed by Magnet-aspiring hospitals, then non-Magnet hospitals.</td>
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<tr>
<td>Scherb et al. (2011)</td>
<td>Descriptive study; Staff nurses (n=320); Midwestern (U.S.) health care network</td>
<td>Not mentioned</td>
<td>DIS4</td>
<td>Shared governance, Structural empowerment, Magnetism (decentralized decision making) Professional work environment, Professional nursing practice, Patient outcome, Organizational outcome, Accountability</td>
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<td>There were statistically significant differences in the actual decisional involvement between nurse managers and staff nurses in the areas of unit governance, leadership, and collaboration/ liaison activities. Nurse managers and staff nurses had statistically significant differences in their preferred decisional involvement in the overall DIS.</td>
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<tr>
<td>Kowalik &amp; Yoder (2010)</td>
<td>Concept analysis study in the U.S.</td>
<td>Not mentioned</td>
<td>Shared governance (participative management), Empowerment, Magnetism force, Professional work environment, Content/context of nursing practice, Autonomy, Control over nursing practice, Distribution authority, Collaboration, Accountability</td>
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<td>The concept analysis was examined for “decisional involvement” to define attributes, antecedents, consequences, model cases, and empirical referents. Shared governance provides the organizational framework and advocates for nurses to have a voice in decision making for their work environment and nursing practice.</td>
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</table>

2004 after a new shared governance structure was implemented. The findings showed the importance of nursing leaders’ role in enhance staff nurse DI, provide adequate resources and information, encourage learning and growth, and recognize staff nurses’ contributions to shared governance.
<table>
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<tr>
<th>Reference</th>
<th>Study Type</th>
<th>Sample Description</th>
<th>Model/Instrumentation</th>
<th>Variables</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>Mangold et al. (2006)</td>
<td>Descriptive study of secondary analysis; Staff nurses (n=196) In the U.S.</td>
<td>Kanter's theory (1977, 1993)</td>
<td>DIS^4</td>
<td>Education, Years of experience, Hours worked, Work unit</td>
<td>Responsibility, Accountability, Positive clinical patient outcome, Job satisfaction, Increased nurse recruitment, Decreased nurse absentees, Decreased turnover</td>
</tr>
<tr>
<td>Havens &amp; Vasey (2005)</td>
<td>Psychometric assessment study of the Decisional Involvement Scale (DIS); Staff nurses (n=849 &amp; 650) In the U.S.</td>
<td>Combined model (Scott, 1982; Aydelotte, 1981)</td>
<td>DIS^4</td>
<td>Shared governance, Empowerment, Professional autonomy in clinical decision making &amp; organizational decision making, Professional work environment, Job satisfaction, Organizational commitment,</td>
<td>There was a significant difference between the actual and preferred DI of staff nurses. Staff nurses preferred to be more involved in DI when compared to their actual involvement.</td>
</tr>
<tr>
<td>Havens &amp; Vasey (2003)</td>
<td>Psychometric assessment study of the Decisional Involvement Scale (DIS) In the U.S.</td>
<td>Combined model (Scott, 1982; Aydelotte, 1981)</td>
<td>DIS^4</td>
<td>Shared governance, Magnetism force, Professional work environment, Autonomy, CONP</td>
<td>The psychometric performance of the Decisional Involvement Scale (DIS) was assessed. Six-subscases with 21-tems were identified by factor analysis and structural modeling. The content validity, construct validity, and internal consistency of DIS were acceptable.</td>
</tr>
<tr>
<td>Kairiksh &amp; Anthony (2001)</td>
<td>Descriptive study of secondary analysis; Staff nurses (n=279) In the U.S.</td>
<td>Donabedian’s model (1988)</td>
<td>DAQ^5</td>
<td>Age, Gender, Education, Position, Years of experience, Nursing practice, Nurse manager’s leadership Competency, Nurse-physician</td>
<td>Decision-making in nursing practice, Condition of work, Organizational structure, process, and outcome</td>
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|                                 |                               |                            |                       |                                                                           | The nurse-physician collaboration was the contributing factor in decision making for both caregiving and condition of work. The nurse manager leadership was significantly positively correlated to participation in decision making.
<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Setting</th>
<th>Measures</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>Laschinger et al. (1997)</td>
<td>Descriptive study of secondary analysis/ Staff nurses (n=101 &amp; n=233)/ Two urban teaching hospitals rural community hospital in the U.S.</td>
<td>Kanter's theory (1977, 1993)</td>
<td>CWEQ², JAS⁷, ORS⁵, JDO², WUDS¹⁰</td>
<td>Gender, Age, Work unit, Years of experience, Type of hospital</td>
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<tr>
<td>Yu &amp; Kim (2011)</td>
<td>Descriptive study; Nurse managers (n=198); Four general hospitals in South Korea</td>
<td>Not mentioned</td>
<td>HAS³, JAS¹⁸, PDMS¹⁴, MSQ¹⁵, OCQ¹⁶</td>
<td>Age, Education, Work unit, Years of manager experience, Span of control (number of RNs), Job-related issues, Job condition-related issues Staffing-related issue Field-related issue</td>
</tr>
<tr>
<td>Yu (2007)</td>
<td>Descriptive correlation study; Nurse managers (n=198); Four general hospitals in South Korea</td>
<td>Not mentioned</td>
<td>HAS³, JAS¹⁸, PDAQ²⁷, MDM¹⁸</td>
<td>Age, Education, Work unit, Years of managerial experience, Work complexity, Type of decision making, Satisfaction with decision making,</td>
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<td>Jo &amp; Jung</td>
<td>Descriptive study;</td>
<td>Not mentioned</td>
<td>Scenario about</td>
<td>Age, Education,</td>
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<td>Year</td>
<td>Study Details</td>
<td>Participants</td>
<td>Measures</td>
<td>Results</td>
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<tr>
<td>1999</td>
<td>Staff nurses (n=342); Four general hospitals in South Korea</td>
<td>Decision-making, JES, Work unit, Years of managerial experience, Expertise</td>
<td>Participation in caregiving decisions and decision-related to working conditions. There was a significant difference among caregiving decisions between the expertise indicators and the variables, such as education level. There was a significant difference among decision for working condition between the expertise indicators and the variables, such as career and self-rating of expertise.</td>
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<tr>
<td>1997</td>
<td>Descriptive study/staff nurses (n=163)/11 Public health clinics in South Korea</td>
<td>Not mentioned, Age, Years of experience, Spending time for major study, Education, Self-evaluation to specialty</td>
<td>Decentralization, Participation in decision-making, Organizational commitment</td>
<td>There were significant differences of career, educational level, and spending time for the major study to the participation in decision-making. There were significant correlations among decentralization, participation in decision-making, and organizational commitment. Decentralization was the best predictor of organizational commitment in the regression model of study.</td>
</tr>
</tbody>
</table>

**Note.** 1. The two combined models for hospital work structure for professionals (Scott, 1982) & professional nursing departments (Aydelotte, 1981)
2. Structural theory of power in organizations (Kanter, 1977, 1993)
3. Structure, process, & outcome model (Donabedian, 1988)
4. Decisional Involvement Scale (DIS) developed by Havens and Vasey (2003, 2005)
6. Work Effectiveness Questionnaire (CWEQ) developed by Chandler (1986)
7. Job Activities Scale (JAS) developed by Laschinger, Kutzsch & Sabiston (1994)
8. Organizational Relationships Scale (ORS) developed by Laschinger, Sabiston, & Kutzsch (1994)
9. Job Description Questionnaire (JDQ) developed by Sims, Szahyi, & Keller (1976)
10. Work Unit Description Scale (WUDS) developed by Lashbrook (1982)
11. Control over Nursing Practice (CONP)
12. Hierarchy of Authority Scale (HAS) developed by Hage & Aiken (1967)
13. Job Authority Scale (JAS) developed by Van & Ferry (1980)
14. Participation in decision-making scale developed by Locke & Schweiger (1979)
16. Organizational Commitment Questionnaire developed by Mowday, Steers, & Porter (1979)
17. Participation in Decision Activities Questionnaire (PDAQ) developed by Anthony (1999)
18. Management Decision Making for Nurses (MDM), eight questions from Marquis & Huston (1992)
REFERENCES


CHAPTER 3: USE OF THE DECISIONAL INVOLVEMENT SCALE (DIS) TO MEASURE STAFF NURSE DECISIONAL INVOLVEMENT IN SOUTH KOREA

Introduction

Maintaining adequate hospital nurse staffing is very important because high-quality, safe patient care is closely linked to the performance of nurses. Nurses are the largest group (over 50%) of healthcare professionals providing direct patient care in South Korean hospitals (Ministry of Health & Welfare in South Korea, 2013). However, patient care quality and safety have been threatened by the great increase in nurse turnover in South Korea (Hospital Nurse Association, 2013), which is attributed to the nurses’ heavy workload, burnout, low autonomy as professionals (J. Kim & Kim, 2011; K. Kim & Han, 2013; M. Kim & Seomun, 2013; Sung, Choi, & Chun, 2011; Sung, Keum, Roh, & Song, 2013; Yoon & Kim, 2010); unsupportive working environments (Kang, 2012; Kwon & Kim, 2012; Sung et al., 2013); and unsupportive Korean national policy for staffing of nurses (B. Kim et al., 2013; S. Kim & Kim, 2012; Y. Kim, Kim, & Kim, 2013; You, 2013). Recently, some studies have been focusing on the nursing work environment regarding nurse turnover in South Korea and have reported on the positive relationships between the nursing work environment and nurses’ job satisfaction, burnout, autonomy, and nursing professionalism (J. Kim, Kim, Kim, Yu, & Lee, 2014; Lee, Gang, & Jung, 2013; Lee & Kim, 2013).

According to Scherb, Specht, Loes, and Reed (2011), enhancing staff nurse decisional involvement in the context of nursing practice is the most fundamental strategy to improve work
environments and to increase nurse recruitment and retention. In addition, a high level of
decisional involvement for staff nurses has been empirically associated with better outcomes in
nurse retention, patient safety, and healthcare organization efficiency (Havens & Vasey, 2003).
According to the Institute of Medicine (2004), nurses’ limited involvement in decisions related to
patient care, working conditions, and hospital policy inhibits professional nursing practice in
terms of patient safety. Therefore, staff nurses’ decisional involvement should be the primary
principle of nursing management in South Korea to improve nursing policy and the nursing work
environment and to reduce nurses’ intentions to leave and nursing turnover.

However, there is no useful scale to measure staff nurses’ decisional involvement in the
aspects of the context of nursing practice in South Korea, and we do not know exactly at what
level staff nurses are currently involved in decision making for nursing policy and the nursing
administration domain in South Korea. A few studies have shown that Korean staff nurses
participated more in caregiving decisions than decisions on working conditions for policy
development and administration (Jo & Jung, 1999; Jo, Jung, & Kim, 1999), and Korean nurse
managers and their superior managers are usually involved in decisions for the nursing
policy/administration domain, such as staffing, evaluation of RN performance, resolution of
conflicts, scope of nursing practice, and selection of RNs (Yu, 2007). From these findings, we
could surmise that South Korean staff nurses might be excluded from decisional involvement in
nursing policy and the nursing administration domain, which is the context of nursing practice, to
improve the nurses’ work environment.

*Decisional involvement* is “the pattern of distribution of authority for decisions and
activities that govern nursing practice policy and the practice environment” (Havens & Vasey,
2003, p. 332), which is the context of nursing practice, or nursing administration domain, and
which is different from decision making in terms of the content of nursing practice for patient care (Laschinger, Sabiston, & Kutscher, 1997; Weston, 2008). Regarding the definition based on the context of nursing practice, the application of the Decisional Involvement Scale (DIS) can be a beginning step to assess the current status of staff nurses’ decisional involvement in South Korea. The DIS clearly shows what domains need staff nurses’ decisional involvement and what level is ideal for staff nurse decisional involvement in the nursing administration domain. Thus, use of the DIS can be a good nursing-management strategy for staff nurses to be encouraged to participate in decision making for improving nursing practice policy and nursing work environments.

Therefore, the purposes of this study were: (a) to translate the DIS into a Korean version, and (b) to assess the psychometric properties of the Korean version of DIS (K-DIS). This study is a basis for applying the K-DIS to a Korean population of staff nurses in a future study.

**Overview of Decisional Involvement Scale**

The decisional involvement scale (DIS) was developed by Havens and Vasey (2003; 2005). The items were generated from a comprehensive review of the literature on the organization of professionals working in organizations and professional nursing practice models (Havens & Vasey, 2005). The theoretical-conceptual framework of the DIS was grounded in a combination of the organizational model for structuring the work of professional (Scott, 1982) and the professional nursing department model (Aydelotte, 1981).

DIS consists of 21 items forming six subscales—*Unit Staffing, Quality of Professional Practice, Professional Recruitment, Unit Governance and Leadership, Quality of Support Staff Practice,* and *collaboration activities* (Havens & Vasey, 2003; 2005). The DIS can be used 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) (Havens & Vasey, 2003; 2005).

The DIS uses a 5-point response format to indicate the actual degree and preferred degree to which decisions are the responsibility of staff nurses and administration/management on the nursing unit: administration/management only = 1 (autonomous model: professional nurses have sole authority and responsibility); primarily administration/management with some staff nurse input = 2; equally shared by administration/management and staff nurses = 3 (conjoint model: the two share authority and responsibility); primarily staff nurses with some administration/management input = 4; and staff nurses only = 5 (heteronomous model: administration has sole authority and responsibility). A high score suggests a high degree of staff RN involvement. In healthcare organizations, however, health professionals and administrators have to collaborate because 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. Thus, the conjoint model is the best for structuring the work of nurses in hospitals (Havens & Vasey, 2003). In the conjoint model, nurses and administrators coexist in a state of collaboration, interdependence, and mutual influence.

The psychometric assessment findings supported that the DIS is a valid and reliable measure of staff nurse decisional involvement (Havens & Vasey, 2005). The confirmatory factor analysis was used to conduct latent construct structuring of DIS with two independent samples of staff nurses (RNs; n = 849 and 650) (Havens & Vasey, 2005). The measures reported that the six subscale model approximated the performance of a saturated model, and the models were adequate based on 1) the chi-square value (cmin/df) for both samples was 5.16 and 4.26; 2) the RMSEA value was .070 and .071 for both samples; and 3) the NFI values for both samples
Further evidence was the convergent validity of the DIS. Although there was no scale to measure the same constructs at the unit level, the practice environment scale (PES) includes one subscale measuring nurse participation in hospital affairs (Lake, 2002; Havens & Vasey, 2005). The preliminary finding showed that the actual scores of DIS were positively correlated with the PES’s subscale—participation in hospital affairs \( (r= \text{ ranged from } .21 \text{ to } .28, p<.001) \), and the preferred scores of DIS was negatively correlated with the PES’s subscale \( (r= \text{ ranged from } -.11 \text{ to } -.24, p<.001) \) (Havens & Vasey, 2005).

The internal consistency reliability of the six subscales of DIS was assessed with data from the two independent samples of staff nurses: the Cronbach’s alpha of each sample was.79 and .70 for the Unit Staffing; .82 and .82 for the Quality of Professional Staff Practice; .89 and .90 for the Professional Recruitment; .84 and .86 for the Unit Governance and Leadership; .88 and .90 for the Quality of Support Staff Practice; and .72 and .70 for the Collaboration or Liaison activities (Havens & Vasey, 2005). In other studies, DIS internal consistency reliability estimates ranged from .61 to .92 (Houston et al., 2012; Liu, Hsu, & Chen, 2015; Scherb et al., 2011; Ugur, Scherb, & Specht, 2015).

**Method**

Based on the purposes of this study, there were two phases: first phase, the reworking of the DIS into a Korean version and, the second phase, the psychometric properties assessment of the K-DIS. The Institutional Review Board at the University of North Carolina at Chapel Hill approved this study.

**The First Phase: Translations of the DIS**

**Forward translation.** The original English version of DIS was translated into two Korean
versions (i.e., T₁ & T₂) by two independent bilingual Korean nursing scholars with Korean as their native language, who were knowledgeable about hospital settings and nursing practice in South Korea. Each translator produced a written report for item content, response options, and instructions for the translation that they completed. Their rationale for their choices and comments for challenging phrases or uncertainties were summarized in the written report. The two translators and a third bilingual and bicultural independent translator (e.g., PI) sat down to integrate the results of the translations, and then produced one common translation (i.e., T₁+₂).

The item, “the unit coverage” was not clear. In a personal communication with Dr. Havens, the developer of the DIS, she clarified the meaning as “determination of enough RNs to provide care.” Each of the discrepancy issues with translation was addressed and resolved by consensus rather than one person compromising their feelings.

**Blind Back-Translation.** The two independent bilingual university-based English specialists with English as their native language created the two back translated-English versions of the DIS (BT₁ & BT₂). They were totally blinded to the original English version of the DIS to avoid information bias (Beaton, Bombardier, Guillemin, & Ferraz, 2000).

The two back translated-English versions of the DIS (BT₁ & BT₂) were compared with the original DIS by the two translators, the PI, and Dr. Havens to check instructions, items and response format, wording, and similarity in meaning (Sousa & Rojjanasrirat, 2011); BT₁ versus BT₂; BT₁ versus the original DIS; BT₂ versus the original DIS. No discrepancies were found, but there were slight ambiguities in the wording for K-DIS. These were resolved by the translation team. Retranslations and back-translations for only the items showing ambiguities were repeated until no ambiguities were found (Sousa & Rojjanasrirat, 2011). The final back-translated version of the DIS was reviewed by the developer, and consensus to use the final Korean version of DIS.
(K-DIS) was reached.

The Second Phase: Psychometric Properties of the pre-K-DIS

Since the DIS was developed for nurses in acute hospitals in the U.S., there would be issues in terms of language, culture, hospital settings, nursing practice, and subjects (Korean nurses). Therefore, it was important to examine if any of those issues had effects on the psychometric properties and structure of the K-DIS. To apply the K-DIS to the Korean nurse population, the following psychometric properties were tested: (a) face validity and content validity; (b) confirmatory factor analysis (to confirm the original factor structure of the DIS in the K-DIS); (c) exploratory factor analysis (to re-examine the structure of the K-DIS); (d) internal consistency and test-retest reliability; and (e) construct validity.

Face Validity and Content Validity

Face validity was considered for the use of the K-DIS by staff nurses in South Korea. Ten monolingual Korean nurses at a general hospital in South Korea evaluated the ease of use, reading level, clarity, and appropriateness of the response formats of the Korean preliminary version of the DIS using a dichotomous scale (e.g., clear or unclear) (Sousa & Rojjanasrirat, 2011). The interrater agreement rating for “clear” was 80% for the ease of use; 80% for the reading level; 91.4% for the clarity; and 80% for the appropriateness of the response format.

Lynn’s (1986) description of content validity assessment was used. Seven Korean experts, consisting of three nursing scholars with a specialty in nursing administration, two nurse managers with at least an MSN degree and over 20 years of nursing experience, and two senior staff nurses with at least an MSN degree and over 10 years of nursing experience at a university hospital evaluated the items of the K-DIS to determine if any content area was not relevant to the overall concept of the context of nursing practice in South Korea. A 4-point scale (irrelevant =1;
unable to assess relevance = 2; relevant = 3; and extremely relevant = 4) for the Index of Content Validity (CVI) (Lynn, 1986) was used to rate the relevance at the item level and scale level for content validity. Each K-DIS item was rated as ‘relevant’ or ‘highly relevant’ by the seven experts, and the overall CVI was .80.

**Sample and Data Collection**

The population of interest was non-managerial registered nurses (RNs). The DIS measures staff nurses’ perspectives on the actual and desired levels of decisional involvement; thus, those nurses indicating that they were either nurse managers (e.g., executive nurses, administrators) or supervisors (e.g., head nurses) were excluded. However, senior nurses, who are called charge nurses in South Korean hospitals, were included because it was not clear that they had a managerial role despite their title (S. R. Kang, 2007; Y. Kim, Choi, & Kim, 2009). Charge nurses were also regarded as senior staff nurses in previous studies for targeting nurse managers and were excluded from the studies’ population (i.e., nurse managers) (S. R. Kang, 2007; Y. Kim et al., 2009; Yu, & Kim, 2011). Also, nurses with less than one year of RN experience were excluded because it usually takes at least one year for new RN graduates to adapt to their fundamental nursing practice and become assimilated (M. H. Lee, 1996; Y. Lee et al., 2013). In addition, since new RN graduates are more likely to focus on their adaptation to fundamental nursing practice rather than decisional involvement for nursing administration, there would be a possibility that their responses would lean to one side—low participation in decisional involvement.

Since the DIS has 21 items (see Figure1), a sample of 210 was determined to be sufficient (desired 10 subjects per item) (Sousa & Rojjanasrirat, 2011). However, the factor patterns emerging from a large-sample factor analysis are more stable than those emerging from a smaller
sample (Sousa & Rojjanasrirat, 2011). Thus, the sample size of over 300 was determined to be adequate for confirmatory factor analysis in this study (Tabachnick & Fidell, 2007).

Before sampling, an email, a letter, or a phone call was sent to hospitals to request their participation in this study. Two university hospitals located in Seoul and Kyung-gido, South Korea, both urban areas with medical centers, agreed to participate, and the Institutional Review Boards at each of the two university hospitals approved the procedures of this study.

A total of 450 questionnaires were distributed to a convenience sample of staff nurses at the two university hospitals, and a total 333 (73.8%) completed questionnaires were returned. Thirty-three questionnaires were excluded for missing data (24), nurse manager respondents (8), and RNs with less than one year of nursing experience responding (1). Thus, a total of 300 (66.7%) usable responses were received. The convenience sample of 300 RNs was all female, 63% staff nurses and 37% charge nurses. The average age was 30.25 (SD= 5.23). The mean years of experience as RN was 7.58 (SD=5.25). Most respondents (84.7%) had a Bachelor’s of Science in Nursing (BSN) degree (69.6%), an MSN (15%), and a Ph.D. (0.3%), and the rest of them had an associate degree (15.3%) in nursing. Participation of individual nurses was voluntary, and completion and the return of the paper-based survey were accepted as evidence of consent to participate in the study.

This study was conducted using scores of the dissonance between the actual and the scores of preferred decisional involvement (i.e., the actual scores subtracted from the preferred scores), which reflects staff nurses’ dissatisfaction with their decisional involvement on target areas. Thus, these identified gaps might show more precise relationships with nurses’ job satisfaction and turnover intention rather than each actual score or preferred score solely showing the relationships with each other.
**Instruments**

Two instruments were used to test the construct validity of the K-DIS: The Index of Work Satisfaction and the Intention to Leave Scale.

**Job satisfaction.** The Index of Work Satisfaction (IWS) (Slavitt, Stamps, Piedmont, & Hesse, 1978), revised by S. Park and Yun (1992) was used to measure staff nurses’ job satisfaction. The IWS consists of 41 items, which constituted seven empirically derived subscales (Pay, Administration, Interaction, Professional Status, Doctor-Nurse Relationship, Task Requirements, and Autonomy). The items were rated on a five-point scale, with one indicating “totally disagree” and five indicating “totally agree.” Higher scores indicate higher levels of satisfaction. In this study, the reliability estimates (alpha) of the IWS subscales ranged from .69 to .90.

**Intention to leave.** Staff nurse intention to leave was measured by the four items of Intention to Leave Scale (ILS) (Lawler, 1983). The ILS (Lawler, 1983) originally consisted of 11 items comprising two subscales (Intention to Leave (4), Cause for Leaving (7)). However, only the four items measuring Intention to Leave, revised by Park (2002), have frequently been used and verified with the Korean staff nurses. Thus, the four items of ILS were used in this study. The items of the ILS were rated on a five-point scale, with one indicating “strongly disagree” and five indicating “strongly agree.” Higher scores signify a higher sense of intention to leave. In this study, the reliability estimates (alpha) of the ILS was .84.

**Data Analysis**

**Confirmatory factor analysis.** The data were analyzed using SPSS® Amos 23.0 was used for Confirmatory Factor Analysis (CFA). CFA was performed to examine if the data from the K-DIS fit the original factor structure of the DIS (Byrne, 2001). The assumptions of a CFA also were assessed: multivariate normality, a sufficient sample size (n >200), and the correct a priori
model specification (Munro, 2005).

There is no consensus about which indices are best; thus, a variety of fit indices are available to assess data-model fit. Chi-square goodness of fit statistics has been most commonly reported, and a nonsignificant chi-square is an indication of fit (the null hypothesis is that there is no difference between the data and the model). However, since the chi-square statistic is greatly influenced by sample size and violations of normality (Byrne, 2001), other fit indices are also used to ascertain model fit: goodness of fit model (GFI), comparative fit index (CFI), and incremental fit index (IFI). The usual range is 0 and 1, with values greater than .90 considered to indicate good fit (Munro, 2005). According to Munro (2005), the CFI is less influenced by sample size than the GFI is, but these two statistics tend to enhance the model fit because they cannot account for the number of parameters included in the model. Thus, the IFI can be used to compensate for this problem (Munro, 2005). The root mean square residual (RMR) and root mean square error of approximation (RMSEA) ranges from 0 to 1, and the closer these indices are to zero the better the fit (e.g., values less than .05 indicate good fit) (Byrne, 2001). According to Byne (2001), the RMR and RMSEA have certain advantages: (a) the RMR is less influenced by sample size because it is based on the residual matrix, unlike other fit indices based on the chi-square statistic, (b) the RMSEA is sensitive to model misspecification by attempting to correct for the number of parameters in the model being tested (Byrne, 2001). Therefore, the RMR and RMSEA were used in this study.

**Exploratory factor analysis.** If the CFA does not support K-DIS structure, an exploratory factor analysis (EFA) would be performed with SPSS® Statistics 23.0. To confirm the factorability of data, the correlation matrix containing multiple correlations($r > .30$), a Kaiser-Meyer-Olkin index for testing sampling adequacy, and Bartlett’s Test for Sphericity were
assessed (Pett, Lackey, & Sullivan, 2003). The principal axis factoring (PAF) explaining common variance was used to confirm the best fit of the factors. The number of factors to be rotated was based on: (a) the scree plot (elbow) examining the eigenvalues (>1) and (b) the chi-square values comparing plus/minus one number of factors from the breakpoint in the data where the scree plot curve flattens out (insignificant chi-square indicates that the number of extracted factors is sufficient) (Pett et al., 2003).

In the social science, we generally expect that psychosocial logical constructs have subcategories that are naturally correlated to some degree (Pett et al., 2003). Thus, an oblique rotation (direct oblimin) was selected because it was hypothesized that the factors of K-DIS would be correlated (Pett et al., 2003). The final structure was confirmed by the following standards: (a) cumulative percentage of variance (>50%) explained by factor structure, (b) the minimum loading of an item (> .40) on a factor; (c) items with strong loadings (> .40) on multiple factors, how close cross loading is considered for an item to be retained; and (c) establishment of minimal reliability and validity with conceptual bases for the K-DIS (Nunnally, 1978; Pett et al., 2003).

To test the homogeneity (i.e., internal consistency or reliability) of the items in the K-DIS, Cronbach’s coefficient alpha was estimated with the cutoff .70 or higher defining considered a sufficient value (Nunnally, 1978; DeVellis, 2012). To assess the stability of the scores over time, test-retest reliability (Pearson correlation coefficient) was evaluated relations of staff nurses (n = 13) in a medical unit at baseline to those two weeks later. Commonly, r > .70 is considered as acceptable (Munro, 2005).

**Construct validity.** Construct validity is concerned with the theoretical relationship of a variable to other variables, which can be assessed indirectly through empirical relationships or matched with the predicted pattern (DeVellis, 2012). The empirical relationships, based on the theoretical relationship, provide some evidence of how well the measure behaves as do the
variables it is supposed to measure (DeVellis, 2012). Thus, construct validity of this study was examined based on Kanter’s (1977, 1993) theory of structural power in organization: The increased work empowerment of staff nurses with the increased nurses’ decision involvement in control over the content and the context of nursing practice leads to positive nursing outcomes (Laschinger et al., 1997). The empirical findings from research in the U. S. are the following: a positive relationship with “nurse job satisfaction” (Laschinger, 2008; Laschinger, Finegan, Shamian, & Wilk, 2004; Leggat, Bartram, Casimir, & Stanton, 2010); and a negative relationship with “nurse turnover intention” (Lacey et al., 2007; Laschinger, Leiter, Day, & Gilin, 2009).

In this study, a higher dissonance score indicated more dissatisfaction of staff nurses with their degree of decisional involvement. Thus, a negative relationship between “of K-DIS’s dissonance score” and “nurse job satisfaction,” and a positive relationship between “dissonance score of K-DIS’s dissonance score” and “nurse intention to leave” would be evidence of the validity of K-DIS.

Construct validity was initiated with the Spearman rank order correlation coefficients because the items of the IWS and ILS had five-point response scales (strongly disagree to strongly agree) (Munro, 2005).

**Results**

**Normality of the data**

Multivariate normality was evaluated using the Shapiro-Wilk test. The null hypothesis for this test showed that the data (dissonance scores between actual and preferred levels of K-DIS) were not multivariate-normal, and the test was significant ($p<.001$), suggesting that the assumptions of multivariate normality were not met in this study. To improve multivariate normality, natural logarithm and square root approaches were used, but the values remained statistically significant. Because data transformation failed, the untransformed data were used for
CFA.

**Confirmatory Factor Analysis**

The testing of the measurement model was recursive and over-identified with 174 degrees of freedom. This study was advised—the minimum was achieved, which meant the estimation process yielded an admissible solution. However, in a quick overview of model fit, the chi-square ($\chi^2$) value was 437.102 with 174 degrees of freedom, and the probability value was <.001. This significant chi-square goodness of fit indicates misfit of K-DIS. Given the findings of the inadequate goodness of fit, other goodness of fit statistics also showed undesirable values: GFI= .87 (ideal >.90) and RMSEA=.073(ideal < .05). Therefore, the measurement model of K-DIS was not confirmed with the original factor structure of the DIS.

**Exploratory Factor Analysis**

As the result of principal axis factoring with oblique rotation, the Kaiser-Meyer-Olkin (KMO) index of .90 (> .9 is considered marvelous) and Bartlett’s Test (3353.995, p < .0001) provided support for the factorability of the K-DIS (Pett et al., 2003).

The elbow of scree test was also clearly seen at five factors, and the chi-square result for the five-factor solution was insignificant (p=.05). This indicates that, statistically, a five-factor model did not significantly deviate from the observed data of K-DIS.

A 19-item, five-factor structure was identified, explaining 67% of the total shared variance (see Table 3.1). Factor I, *Resources & Support Staff*, included five items and explained 39 % of the shared variance. This factor indexed budgetary, equipment/supply, and support staff needs. Factor II, *Collaboration/Liaison Activities*, contained three items, which indexed the collaboration for patient care with other healthcare professionals. This factor explained approximately 9% of the shared variance. Factor III, *Professional Practice Scope & Workforce for Care Quality*, contained six items and addressed nursing practice standards and scope within...
which the RN workforce can take care of patients. It explained 8% of the total variance. Factor IV, *RN Recruitment*, contained three items related to RN interviews and selection, which explained 7% of the shared variance. Factor V, *Leadership*, contained three items addressing evaluation of the nurse leader’s performance and selection and promotion of the leader, which explained 5% of the shared variance.

In testing the internal consistency of the five factors, the Cronbach’s alpha ranged from .75 to .89 (see Table 3.1). The 2week test-retest reliability of Pearson correlation coefficients ranged from .60 to .86 (see Table 3.2). Factor I, *Resources & Support Staff* was .86, which showed it to be very stable, but other Factors (II, III, IV, V) were less stable because the correlations were lower than <.70 (Munro, 2005).

**Construct Validity**

Construct validity was assessed using the Spearman rank order correlation (Munro, 2005). The relationships among K-DIS, IWS, and ILS were assessed (see Table 3.3). The correlation between K-DIS and IWS was $r_s = -0.33 (p<0.01)$, which means that the more dissatisfied the staff nurses’ were with their decisional involvement, the lower their job satisfaction scores were. The K-DIS and ILS were positively correlated ($r_s = 0.30, p<0.01$). This may mean that if nurses were not able to have the degree of decisional involvement they desired, they might consider leaving their position.

However, each factor of the K-DIS was slightly negatively correlated with the IWS, with the resulting correlation ranging from $-0.11 (p<0.05)$ to $-0.32 (p<0.01)$ (see Table 3.4). The correlations for each factor of the K-DIS with the ILS were slightly positive, ranging from $0.19$ to $0.28 (p<0.01)$ (see Table 3.5). Most of the correlation coefficients of each factor of the K-DIS with the IWS and the ILS were below $r_s < \pm 0.30$, except for the collaboration/liaison activities
subscale of the K-DIS and the IWS ($r_s = -0.32, p<0.01$), and the resource & support staff subscale of the K-DIS and the IWS ($r_s = -0.30, p<0.01$). Although the correlations were not large, the relationships were in the expected direction according to the theoretical relationship of Kanter (1977, 1993).

**Discussion**

The purpose of this study was to apply the DIS for use in South Korea (K-DIS) and to test its psychometric properties. The original DIS has been examined and interpreted in the context of the U.S. Because there are a different culture and context in South Korea, it was expected that the K-DIS would have a different structure. As a result, the measurement model of the K-DIS was not confirmed by the CFA. Unlike the original six-subscale structure of the DIS comprised of 21 items, the exploratory factor analyses for the K-DIS data from Korean staff nurses yielded a five-subscale structure comprising 19 items (see Table 3.6). The five factors identified were Resources and Support Staff, Collaboration/ Liaison Activities, Professional Practice Scope and Workforce for the Quality of Care, RN recruitment, and Leadership. Two items of the K-DIS—“Recommendation of disciplinary action for RNs” and “Unit coverage”—were dropped because they did not sufficiently load on any of the factors.

Factor I, Resources and Support Staff contained five items, three items from the original Support Staff Practice subscale and two items from Leadership and Governance subscale. The two items—“Determination of unit budgetary needs” and “Determination of equipment/supply needs,” were originally in the Leadership and Governance subscale to measure staff nurses’ decisional involvement in governing resources, which is also related to the unit leader’s performance for distribution of resources (Havens & Vasey, 2003). However, the extracted Factor I might imply that Korean staff nurses might have viewed the two items as lacking
support (i.e., material resource) for patient care rather than leader’s performance for distribution of resources. The two items of the resource (i.e., the material resources such as budget and equipment/supply) were retained to the factor I *Resources and Support Staff* with the three items of support staff (i.e. the human resources for supporting nursing care). Factor II, *Collaboration/Liaison Activities*, had three items addressing staff decisional involvement on collaborative relations among nurses, physicians, and healthcare providers for optimal patient care (Havens & Vasey, 2003), which was equal to the original subscale. Factor III, *Professional Practice Scope and Workforce for Care Quality*, had five items that were originally on *Unit Staffing* (one item) and *Professional Practice* (four items). The *Scheduling* refers to individual nurses not only are able to decide their preferred working shifts, but they are also able to consider nursing workforce in the unit and allocating a balanced staff to patient ratio every shift for care quality. Thus, the correlations among the five items of factor III imply that the nursing workforce has an effect on defining RNs’ practice scope and improving practice standard for the quality of patient care. Sullivan and Decker (2005) also said that the process of balancing the number of available staff and required staff in a way that allows nursing care to be delivered continuously in an effective and efficient way. Factor IV, *RN Recruitment*, comprised of three items addressing “recruitment,” “interview,” and “selection of RNs for hire on the unit,” is the same as the original subscale of the DIS. Factor V, *Leadership*, had three items addressing “selection of unit leader,” “review of unit leader’s performance,” and “recommendation for RNs’ promotions.”

These five subscales of K-DIS can be viewed as measuring how staff nurses are involved in decisions related to the context of nursing practice in South Korea. The correlation between the subscales of the K-DIS ranged from .34 to .59 (*p*<.01) (see Table 3.7).
In the test of construct validity, the total dissonance score of K-DIS showed that there was a negative relationship between nurses’ job satisfaction ($r_s = -0.33, p < 0.01$) and a positive relationship with nurse intention to leave ($r_s = -0.30, p < 0.01$). However, each subscale of the K-DIS indicated low correlations with each subscale of the job satisfaction and nurse intention to leave. Although the relationships were in the expected direction according to the theoretical relationship of Kanter (1977, 1993), the low correlations of the factors of K-DIS did not support strong evidence of the construct validity of the K-DIS in this evaluation.

To examine convergent validity, the K-DIS would be examined for its association with another conceptually similar instrument. However, there was no instrument located that measured the same or similar construct—decisional involvement in the context of nursing at the unit level, in South Korea. Havens and Vasey (2005) tried to provide preliminary evidence of the convergent validity of using one of the Practice Environment Scale’s subscale—nurse participation in hospital affairs. The findings showed that the PES’s subscale had low positive correlations with the actual score of the DIS ($r = 0.21$ to $.28$), and low negative correlations with the preferred score of the DIS ($r = -0.11$ to $.24$). Although the correlations were not strong to support the convergent validity of the DIS, the direction was in the expectation. This construct validity of the K-DIS showed similar finding patterns as the convergent validity of the original DIS, which was having a low theoretical relationship among the factors.

The construct validity of the original DIS was assessed by a structural equation modeling. The two independent samples were used, and the findings showed that the model adequately replicated the relationship in the data (Havens & Vasey, 2005). In this psychometric assessment, the preferred scores of the DIS were used, because preferred scores represented coherent attitudes about staff nurses’ perspectives on their preferred decisional involvement rather than
the actual policies present in their work setting (Havens & Vasey, 2005). There would be a possibility that actual scores were influenced by a variety of institutional situations and might not consistently represent the underlying construct of DIS (Havens & Vasey, 2005). Unlikely the study of Havens and Vasey (2005), this study’s findings showed higher variabilities in the preferred scores rather than the actual scores (See Table 4.6). There was no consensus which scores are better to reduce variability from these different findings. For this reason, to assess the theoretical relationship of nurse job satisfaction and intention to leave for construct validity, the dissonance scores of K-DIS were used to reflect both aspects of the actual and preferred levels in this study. Although the dissonance scores reflect both aspects of staff nurse decisional involvement in the actual and preferred levels, it less coherent to represent the underlying construct of K-DIS rather than the actual and preferred scores. Thus, the dissonance scores might affect the low correlations for construct validity.

In addition, even though the IWS and ILS were selected to test theoretical relationships for construct validity, they have different constructs from the K-DIS. Pay and Task Requirement subscales of IWS were not matched with the subscales of K-DIS, and the Administration subscale of the IWS measures the constructs at the hospital level, not at the unit level like it does in the K-DIS.

Despite the low correlations, the directions of theoretical relationships were in the theoretical expected direction. The face validity and content validity of the items and scale of K-DIS were assured by Korean staff nurses and experts. The internal consistency reliability was sufficient across the five factors.

Future research

Further research is needed to increase the construct validity of K-DIS. Using preferred
scores of K-DIS can be considered for further assessment of the convergent/divergent and construct validity. The further application in different types of hospital settings is also necessary. In previous nursing literature, there was not enough information to know the staff nurse decisional involvement in the context of nursing practice in South Korea. Therefore, generating more items reflecting the current context of nursing practice in South Korea may be considered.

Limitations

Several limitations exist in this study. First, although the sample produced relatively high response rates (66.7%), this study’s sample was drawn from only two medical centers in urban areas in South Korea, so the generalizability of the findings is limited. A future study should recruit more staff nurses from regional/local hospitals to optimize the representation. Second, the data were obtained through self-report measures (i.e., self-selection bias), so the validity and accuracy of data might be an issue (Munro, 2005). Third, the sample could not meet the asymptotic theory: a randomized and large-size sample can be approximated by normal distributions (Stokes, Davis, & Koch, 2012). The sample could have resulted in a Type II error. Thus, additional research with a randomized and large-size sample is needed for replicability of the dimensions of the K-DIS.

Conclusion

This study has been conducted to create a Korean version of the DIS and to examine the psychometric performance of the K-DIS. The final K-DIS was composed of 19 items, comprising five factors. The five factors were Resource and Support Staff, Collaboration/Liaison Activities, Professional Practice Scope and Workforce for the Quality of Care, RN Recruitment, and Leadership.

This is the first Korean language instrument to measure staff nurse decisional involvement,
which can lead to better understanding of the dynamics of the Korean workforce and the role of nurses in the governance of the work environment. The K-DIS can provide a method for assessing the actual and preferred levels of staff nurse decisional involvement in the context of nursing practice. Based on the dissonance between the actual and preferred levels, this K-DIS could help diagnose desired changes and to evaluate progress toward the integration of staff nurses into organizational decision making for the quality of nursing care and the nursing work environment. However, the findings of the K-DIS for validity were not strongly supported. Thus, further research on assessing the construct validity of the K-DIS is necessary for its application in different types of hospital settings in South Korea.
## Table 3.1

**Revised K-DIS Factor Loadings and Reliabilities**

<table>
<thead>
<tr>
<th>Subscale and Items (variance explained)</th>
<th>Factor Loading</th>
<th>Alphas</th>
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<td>Determination of equipment/supply needs</td>
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<td>Monitoring of standards for RN support staff</td>
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<tr>
<td><strong>Collaboration/Liaison Activities (8.83%)</strong></td>
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<td>Conflict resolution among RN staff on unit</td>
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<tr>
<td><strong>Professional Practice Scope &amp; Workforce for Care Quality (7.79%)</strong></td>
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<td>Definition of scope of RN practice on unit</td>
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<td>Monitoring of RN practice standards</td>
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<td>Evaluation of staff nurse practice</td>
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<tr>
<td><strong>RN Recruitment (6.59%)</strong></td>
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<td>Selection of RNs for hire on the unit</td>
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<td><strong>Leadership (4.83%)</strong></td>
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<td>Selection of unit leader (e.g., nurse manager)</td>
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<td>Review of unit leader's performance</td>
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<td>Recommendation for promotion of staff RNs</td>
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</table>

**Total 66.58% of Variance**
Table 3.2
Revised K-DIS Mean (SD) Subscale Scores and Test-Retest Reliabilities (n=13)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Professional Practice Scope &amp; Workforce for Care Quality</th>
<th>RN Recruitment</th>
<th>Leadership</th>
<th>Resources &amp; Support Staff</th>
<th>Collaboration/ Liaison Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Mean (SD)</td>
<td>r</td>
<td>Mean (SD)</td>
<td>r</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Baseline</td>
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<td>NA</td>
<td>1.10(0.58)</td>
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<tr>
<td>2 weeks</td>
<td>0.76(0.61)</td>
<td>.86*</td>
<td>0.31(0.52)</td>
<td>.65*</td>
<td>1.15(0.60)</td>
</tr>
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</table>

Note. r = Pearson’s r correlation coefficient.
* Correlations significant (p < .05).

Table 3.3
Spearman Rank Correlations for Overall Revised K-DIS with IWS and ILS (n=300)

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>K-DIS a</th>
<th>IWS</th>
</tr>
</thead>
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<tr>
<td>IWS b</td>
<td>-.33**</td>
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<td>ILS c</td>
<td>.30**</td>
<td>-.47**</td>
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</table>

Note. ** Correlations significant (p < .01).
a. K-DIS=Korean version of Decisional Involvement Scale
b. IWS= Index of Work Satisfaction
c. ILS=Intention to Leave Scale
Table 3.4  
**Spearman Rank Correlations Between Revised K-DIS Subscales and the IWS Subscale**  
(n=300)  

<table>
<thead>
<tr>
<th>Index of Work Satisfaction (IWS)</th>
<th>K-DIS factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional Practice Scope &amp; Workforce for Care Quality</td>
</tr>
<tr>
<td>Pay</td>
<td>-.14*</td>
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<tr>
<td>Autonomy</td>
<td>-.18**</td>
</tr>
<tr>
<td>Task requirement</td>
<td>-.20**</td>
</tr>
<tr>
<td>Dr-RNs relationship</td>
<td>-.14*</td>
</tr>
<tr>
<td>Interaction</td>
<td>-.16*</td>
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<tr>
<td>Administration</td>
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<tr>
<td>Professional Status</td>
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<tr>
<td>Total</td>
<td>-.27**</td>
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</table>

*Note.** Correlations significant (\(p < .01\)).

* Correlations significant (\(p < .05\)).

Table 3.5  
**Spearman Rank Correlations Between Revised K-DIS Subscales and ILS (n=300)**  

<table>
<thead>
<tr>
<th>K-DIS factors</th>
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</thead>
<tbody>
<tr>
<td>Professional Practice Scope &amp; Workforce for Care Quality</td>
</tr>
<tr>
<td>Intention to leave (ILS * )</td>
</tr>
</tbody>
</table>

*Note.** Correlations significant (\(p < .01\)).

a. ILS=Intention to Leave Scale
Table 3.6  
*Items on the Original and Revised K-DIS*

<table>
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<tr>
<th>Item</th>
<th>Original DIS Subscale</th>
<th>Revised K-DIS Subscale</th>
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<td>Scheduling</td>
<td>Unit Staffing</td>
<td>PSWQ</td>
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<tr>
<td>Unit coverage*</td>
<td></td>
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</tr>
<tr>
<td>Development of practice standards</td>
<td>Professional Practice</td>
<td>PSWQ</td>
</tr>
<tr>
<td>Definition of scope of RN practice on unit</td>
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<td>PSWQ</td>
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<tr>
<td>Monitoring of RN practice standards</td>
<td></td>
<td>PSWQ</td>
</tr>
<tr>
<td>Evaluation of staff nurse practice</td>
<td></td>
<td>PSWQ</td>
</tr>
<tr>
<td>Recruitment of RNs to practice on the unit</td>
<td>Recruitment</td>
<td>RN Recruitment</td>
</tr>
<tr>
<td>Interview of RNs for hire on the unit</td>
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<td>RN Recruitment</td>
</tr>
<tr>
<td>Selection of RNs for hire on the unit</td>
<td></td>
<td>RN Recruitment</td>
</tr>
<tr>
<td>Recommendation of disciplinary action for RNs *</td>
<td>Governance &amp; Leadership</td>
<td>Leadership</td>
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<tr>
<td>Selection of unit leader (e.g., nurse manager)</td>
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<td>Leadership</td>
</tr>
<tr>
<td>Review of unit leader's performance</td>
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<td>Leadership</td>
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<tr>
<td>Recommendation for promotion of staff RNs</td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td>Determination of unit budgetary needs</td>
<td></td>
<td>Resources &amp; Support Staff</td>
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<tr>
<td>Determination of equipment/supply needs</td>
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<td>Resources &amp; Support Staff</td>
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<tr>
<td>Development of standards for RN support staff</td>
<td>Support Staff Practice</td>
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<td>Collaboration/Liaison Activities</td>
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<td>Relations with physicians re: patient care</td>
<td>Collaboration/Liaison Activities</td>
<td>Collaboration/Liaison Activities</td>
</tr>
<tr>
<td>Conflict resolution among RN staff on unit</td>
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<td>Collaboration/Liaison Activities</td>
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</tbody>
</table>

Note. PSWQ= Professional practice scope & workforce for care quality

* Dropped from DIS after factor analysis.
Table 3.7
Pearson Correlations Between Subscales of the Revised K-DIS (n=300)

<table>
<thead>
<tr>
<th>K-DIS a</th>
<th>M b</th>
<th>SD</th>
<th>Correlation</th>
<th>PWSQ c</th>
<th>Recruitment</th>
<th>Leadership</th>
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<td>Leadership</td>
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<td>.46**</td>
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<tr>
<td>Resources &amp; Support Staff</td>
<td>1.15</td>
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<td>.55**</td>
<td>.52**</td>
<td>.59**</td>
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<tr>
<td>Collaboration &amp; Liaisons</td>
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</tbody>
</table>

Note. ** Correlations significant (p < .01).
  a. K-DIS=Korean version of Decisional Involvement Scale
  b. Range: -.23 to 4.0
  c. PWSQ = Professional practice workforce & scope for quality
Table 3.8
Pearson Correlations Between Revised K-DIS 19 items (n=300)

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</table>

*Note.* All are significant at *p*<.05 except one that is bolded
REFERENCES


CHAPTER 4: THE INFLUENCE OF STAFF NURSE DECISIONAL INVOLVEMENT ON JOB SATISFACTION, ORGANIZATIONAL COMMITMENT, AND INTENTION TO LEAVE ACCORDING TO THEIR DEMOGRAPHIC CHARACTERISTICS

Introduction

Nurses are the largest group (over 50%) of health care professionals providing direct patient care in South Korean hospitals (Ministry of Health & Welfare in South Korea, 2013), and the quality of care for patients is strongly linked to the performance of nursing staff (Moon & Han, 2011). Thus, maintaining adequate hospital nurse staffing is important. However, hospitals in South Korea experience a serious problem with nurse turnover. In addition, prolonged nurse turnover might also spark other nurses’ intentions to leave, increase operating and labor costs, and reduce the efficiency and effectiveness of care provided in hospitals (S. Kim et al., 2013).

Intention to leave is an employee’s plan to quit the present job in the near future and look forward to finding another job (Iverson, 1992), and it is a strong predictor and an immediate precursor of employee’s turnover (Wright & Bonett, 2007). Thus, based on understanding factors affecting nurse intention to leave, hospitals in South Korea need to find effective management ways to reduce the nurse turnover.

According to the systemic review of J. Kim and Kim (2011), nurse job satisfaction, organizational commitment, and job stress are main factors predicting nurses’ intentions to leave. Increased job satisfaction and organizational commitment reduce nurses’ intentions to leave, and high job stress increases the intention to leave (Choi & Ha, 2007).
Job satisfaction is defined as the level of contentment a person feels regarding his or her job (Robert, 1993). According to Robert (1993) study, job satisfaction falls into two categories. First, affective job satisfaction is a person's emotional feeling about the job as a whole (Robert, 1993). Second, cognitive job satisfaction is how satisfied employees feel concerning particular aspects of their jobs, such as pay, hours, or benefits (Robert, 1993). The feeling of job satisfaction is mainly based on an individual's perception of satisfaction; thus, there are challenges in accurately measuring job satisfaction (Robert, 1993). The definition of satisfaction could differ among various people within an organization, depending on each worker's needs and personal and professional goals (Robert, 1993).

According to a literature review on nurse job satisfaction in South Korea, researchers over the past three decades have found the following predictors of, and factors relating to, nurse job satisfaction (Jeong & Jung, 2013): The predictors of job satisfaction are personal awareness/attitude, stress, conflicts, exhaustion, organizational-related factors, work-related factors, leadership, nursing ability, and social support. And, the factors relating to nurse job satisfaction are organizational commitment, nursing outcome, turnover, patient-safety management, job stress, organizational outcome, and nurse empowerment (Jeong & Jung, 2013). Twenty-six studies were included in this literature review. Findings showed that organizational commitment, nursing outcome, patient safety management, organizational outcome, and nurse empowerment each had a positive relationship with job satisfaction, and each intention to leave and job stress had a negative relationship with it (Jeong & Jung, 2013).

Recently, hospital administrators have been interested in organizational commitment because it is not only a good predictor of nurses’ intentions to leave, but it is also recognized as a good way to improve nurses’ retention and job performance (Yu & Kim, 2011).
Organizational commitment is defined as the individual's psychological attachment to the organization. High-organizational commitment decreases nurses’ intentions to leave because the more employees feel an attachment to their jobs, the more they stay and commit themselves to their organizations (Seok, 2013). Organizational commitment is:

Somewhat more stable over time than job satisfaction because the attitudes for organizational commitment are developed slowly and consistently over time as individuals think about the relationship between themselves and their employers.

In addition, organizational commitment includes a strong desire to maintain membership in the organization; thus, it brings willingness to exert considerable efforts (i.e., better performance) for the organization’s goals and values. (Mowday, Steers, & Porter, 1979, p. 226)

Thus, recently, as a management intervention, hospital administrators have been interested in organizational commitment because it is not only good at predicting nurses’ intentions to leave, but it is also recognized as a good way to improve nurses’ retention and job performance (K. Lee, Lee, & Choi, 2013; G. Park & Kim, 2010; Yu & Kim, 2011). However, like job satisfaction, organizational commitment also interacts with other factors like characteristics of each individual and hospital factors (J. Kim, & Kim, 2011). Thus, it is difficult to find a single systemic management intervention that could be broadly used in hospital settings to reduce intention to leave.

To increase organizational commitment, Yu and Kim (2011) suggested decentralization and participation in decision making. The more decentralization an organization has, and the greater the participation in decision making, the greater the employees’ job satisfaction and empowerment through open communication and exchange of ideas (M. Cho, 2000; G. Park & Kim, 2010). As a result, this has positive effects on job performance and organizational achievements (E. Lee, 2004).
Therefore, increasing nurse decisional nurse involvement in healthcare policy and work environment would be a good means to increased job satisfaction and organizational commitment (M. Cho, Jeong, & Kim, 1997; Yun, 1991). The increased satisfaction and commitment should reduce nurse turnover in South Korea.

*Decisional involvement* is “the pattern of distribution of authority for decisions and activities that govern nursing practice policy and the practice environment” (Havens & Vasey, 2003, p. 332), which is different from making clinical decisions for patient care. Decisional involvement is for the context of nursing practice or nursing administration, which underlies the content of nursing practice to deliver high-quality patient care (Laschinger, Sabiston, & Kutszcher, 1997; Weston, 2008).

Decisional involvement based on decentralization is an important factor that has positive relationships with job satisfaction and organizational commitment (Yu & Kim, 2011). Although this was a study for nurse managers, the findings showed the following significant correlations: (a) between decentralization and nurse managers’ job satisfaction and organizational commitment and (b) between participation in decision making and nurse managers’ job satisfaction and organizational commitment’ (Yu & Kim, 2011). In addition, other research findings showed that there were positive relationships between nurses’ demographics (position, education level, working experience as RN, age) and nurse job satisfaction and organizational commitment: the more highly positioned, more highly educated, and more experienced nurses have more opportunities to be involved in decisions and activities that govern nursing practice policy and the practice environment (M. Cho et al., 1997; Choi & Ha, 2007; J. Kim & Kim, 2011; Y. Lee, Gang, & Jung, 2013; G. Park & Kim, 2010; Seok, 2013; Yu & Kim, 2011 ). However, most of the previous studies focused on nurse managers (e.g., head nurses, executive nurses) or a
positive relationship between job satisfaction and organizational commitment. But there is no study for staff nurses that clearly show a direct relationship between staff nurse decisional involvement with nurse job satisfaction, organizational commitment, intention to leave, and demographic characteristics of staff nurses.

Therefore, this study was designed to ascertain that staff nurse decisional involvement has a direct relationship to staff nurse job satisfaction, organizational commitment, and intention to leave (see Figure 4.1). In addition, demographic characteristics of staff nurses were also assessed to know how and what demographic characteristics are in relationship to decisional involvement.

The purposes of this study are: First, to assess the current status of Korean staff nurses’ decisional involvement and to identify the relationship between staff nurses’ demographic characteristics and decisional involvement (i.e., research questions 1 to 4); second, to evaluate the influence of staff nurses’ decisional involvement on job satisfaction, organizational commitment, and intention to leave of staff nurses in South Korea according to their demographic characteristics (i.e., research questions 5 to 7).
According to a systemic review by J. K. Kim and Kim (2011), the two factors—organizational commitment and job satisfaction—are main factors predicting nurses’ intentions to leave; thus, increasing organizational commitment and job satisfaction are good strategies to reduce nurses’ intentions to leave (Choi & Ha, 2007). According to Mowday, Steers, & Porter (1979), organizational commitment is somewhat more stable over time than job satisfaction because the attitudes for organizational commitment are developed slowly and consistently over time as individuals think about the relationship between themselves and their employers. On the other hand, satisfaction reflects more immediate reactions to specific and tangible aspects of the work environment, such as working conditions. Thus, organizational commitment is recognized as a good long-term strategy for improving nurses’ retention and job performance (Seok, 2013; Yu & Kim, 2011). To increase job satisfaction and organizational commitment, more decentralized organization and greater participation in decision-making have been stressed, and positive relationships among them have been shown indirectly (Cho, Jeong, & Kim, 1997; Choi & Ha, 2007; J. K. Kim & Kim, 2011; Y. Lee, Gang, & Jung, 2013; Mowday et al., 1979; G. J. Park & Kim, 2010; Seok, 2013; Yu & Kim, 2011). Therefore, the influence of nurse decisional involvement on job satisfaction, organizational commitment, and staff nurses’ intention to leave in South Korea will be examined.
Methods

Sample and Data Collection

The population of interest was non-managerial direct care registered nurses (RNs). The Korean version of Decisional Involvement Scale (K-DIS) measures staff nurses’ perspectives on the actual and desired levels of decisional involvement; thus, those nurses indicating that they were either nurse managers (e.g., executive nurses, administrators) or supervisors (e.g., head nurses) were excluded. However, senior nurses, who are called ‘charge nurses’ in hospitals in South Korea, were included because their official managerial roles were not clear, and they were also excluded from previous studies for nurse managers (Kang, 2007; Y. Kim, Choi, & Kim, 2009; Yu, & Kim, 2011). In addition, nurses with less than one year of RN experience were excluded because it usually takes over seven months for new RN graduates to adapt to their fundamental nursing practice and become assimilated (M. Lee, 1996; Y. Lee et al., 2013).

Before sampling, an email, a letter, or a phone call was sent to find hospitals for participation in this study. Initially, four university hospitals in Seoul accepted participation. However, due to an outbreak of the Middle East respiratory syndrome (MERS) in South Korea in summer 2015, three hospitals canceled research participation. After the MERS outbreak ended, one other university hospital in Kyung-gido agree to participate. As a result, two university hospitals located in Seoul and Kyung-gido, South Korea, both urban medical center areas participated in this study, and the Institutional Review Board at each of the two university hospitals (i.e., two urban, academic medical centers) approved the procedures of this study.

The data collection was undertaken from July to September 2015 in South Korea. A total of 450 questionnaires were distributed to a convenience sample that included 450 staff nurses at the two university hospitals. Each participant was given a packet with a stamped and self-
addressed envelope, the five questionnaires, and a small gift ($2) to increase response rate. Participants were asked to complete the questionnaires and returned them in the sealed envelope to the PI. Code numbers were placed on the completed questionnaires by the researchers to ensure anonymity. Participation of individual nurses was voluntary, and they could withdraw at any time with no negative ramifications. Completion and return of the paper-based survey were accepted as evidence of consent to participate in the study.

A total of 333 (73.8%) completed questionnaires were returned. Questionnaires with missing data (i.e., nonresponse for more one item of the questionnaires except demographics) (24), on which nurse managers responded (8), and completed by RNs with less than one year of nursing experience (1) were excluded. Thus, the total was 300 (66.7%) usable responses. The sample size (n=300) was deemed to be sufficient based on one sample size calculation (see Figure 4.2) assuming a two-tailed, 5% type I error rate and 90% power (J. Lee, Park, & Yu, 2005).

All the ethical requirements for conducting research and the gathering of data on human participants were met in both of the hospitals and by the Institutional Review Board at the University of North Carolina at Chapel Hill.
Figure 4.2 Sample Size Calculation

One sample Z-test

\[ \begin{align*}
\text{H}_0 & : \mu_{\text{Actual}} = \mu_{\text{Desired}} \\
\text{H}_1 & : \mu_{\text{Actual}} \neq \mu_{\text{Desired}}
\end{align*} \]

(\(\mu_{\text{Desired}}\) is a known constant from the cross-sectional study of AONE)

For a two-sided test, suppose \(\alpha=.05, 1-\beta=.9\),

\[ N = \frac{\sigma^2 (z_{1-\alpha/2} + z_{1-\beta})^2}{(\mu_0 - \mu_A)^2} , \quad \sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_i - \mu)^2} , \quad \text{where} \quad \mu = \frac{1}{N} \sum_{i=1}^{N} x_i . \]

\(\sigma^2 = (0.628)^2\), and \(\mu(\text{diff in } \mu_{\text{Actual}} - \mu_{\text{Desired}}= 2.0-2.19) = 0.19\), (from data of 370 nurses in the USA)

\[ N = (0.628)^2 (1.96^2+1.28)^2 (0.19)^2 = (0.394)10.5/0.036 = 4.1403/0.036 = 115 \]

Thus, sample size \(N=115\)

Instruments

Four questionnaires were used in this research: the Demographic Questionnaire, the Decisional Involvement Scale (DIS), the Index of Work Satisfaction (IWS), the Organizational Commitment Questionnaire (OCQ), and the Intention to Leave Scales (ILS).

Demographics. The demographic questionnaire was designed to obtain demographic information such as gender, age, educational level, current position, type of work unit, experience in years as an RN, and years worked as an RN in the current unit.

Decisional Involvement Scale. Staff nurse decisional involvement status was measured by the Korean Version of Decisional Involvement Scale (K-DIS), with the permission of Donna Havens, who developed the original questionnaire in 1990 (Havens & Vasey, 2003; 2005). The

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Note. Overview for estimating one sample size: There has been no pilot study for Korean nurses. Thus, to estimate the sample size approximately, secondary data from the cross-sectional study of the American Organization of Nurse Executives (AONE) was used. AONE conducted the Care Innovation and Transformation program (CIT) in 2011 and 2012 to improve patient care, hospital performance, and employee satisfaction through the engagement of frontline staff, collaboration, innovation, and leadership development. As a part of CIT, the nurse Decisional Involvement Scale was used. Data were collected from 370 nurses in 48 participating hospitals between June 2011 and May 2012. The permission for data use was approved on Sep 16, 2013.
The original DIS consists of 21 items forming six subscales—unit staffing, quality of professional practice, professional recruitment, unit governance and leadership, quality of support staff practice, and collaboration activities. These six subscales measure staff nurses’ perspectives on the actual and desired levels of decisional involvement and also shows the correct balance between staff nurses and managers in decision making for governing nursing practice policy and administrations (Havens & Vasey, 2003). The DIS uses a five-point scale, and responses indicate the degree to which decisions are the responsibility of staff nurses and administration/management on the nursing unit: administration/management only = 1 (autonomous model: professional nurses have sole authority and responsibility); primarily administration/management with some staff nurse input = 2 (equally shared by administration/management and staff nurses = 3 (conjoint model: the two share authority and responsibility); primarily staff nurses with some administration/management input = 4; and staff nurses only = 5 (heteronomous model: administration has sole authority and responsibility). A high score suggests a high degree of staff RN involvement. However, the conjoint model is the best for structuring the work of nurses in hospitals because nurses and administrators coexist in a state of collaboration, interdependence, and mutual influence for shaping the optimal environment for patient care in the conjoint model (Havens & Vasey, 2003). The construct validity of the DIS has been verified through contrast group approach with a confirmatory factor analysis (CFA) (Havens & Vasey, 2005). The internal consistency reliability of the DIS has been assessed through determination of Cronbach’s alpha and subscale alphas were .79 and .70 for the Unit Staffing; .82 and .82 for the Quality of Professional Staff Practice; .89 and .90 for the Professional Recruitment; .84 and .86 for the Unit Governance and Leadership; .88 and .90
for the Quality of Support Staff Practice; and .72 and .70 for the Collaboration or Liaison activities (Havens & Vasey, 2003, 2005).

The English version of the questionnaire was translated into Korean, and then it was back-translated into English again. The item “the unit coverage” was not clear; Dr. Havens, who is the developer of the DIS, reviewed the back-translated version and clarified the meaning as “enough manpower of RNs to provide care.” In a pilot study, content, conceptual, semantic, and criterion equivalence between the original English version and the translated Korean version of DIS (K-DIS) were examined by five bilingual Korean staff nurses, and the two versions of DIS brought into an agreement. Face validity was assessed by 10 staff nurses in one hospital unit, and content validity was tested by seven Korean expert panels. All findings from the two tests met the criteria (> .80) (Lynn, 1986; Pett, Lackey, & Sullivan, 2003). Confirmatory factor analysis found that the construct of the K-DIS was not fit to the construct of the original DIS. Exploratory factor analysis with oblique rotation identified the 19 items comprising five subscales of K-DIS: Resources and Support Staff, Collaboration/ Liaison Activities, Professional Practice Scope and Workforce for Quality of Care, RN Recruitment, and Leadership. Cronbach’s alpha reliabilities of the K-DIS for this study ranged from 0.75 to 0.89, which indicated acceptable internal consistency (Pett et al., 2003).

**Index of Work Satisfaction.** Staff nurses’ job satisfaction was measured by the Korean version of the Index of Work Satisfaction (IWS) (Slavitt, Stamps, Piedmont, & Hesse, 1978), revised by S. Park and Yun (1992). This consisted of 41 items that constitute seven empirically derived subscales (Pay, Administration, Interaction, Professional Status, Doctor-Nurse Relationship, Task Requirements, and Autonomy). The items were rated on a five-point scale, with 1 indicating “totally disagree” and 5 indicating “totally agree.” Higher scores indicate
higher levels of satisfaction. The Cronbach’s alpha for each subscale ranged from 0.69 to 0.90 in this study.

**Organizational Commitment Questionnaire.** Staff nurses’ organizational commitment was measured by the Korean version of the Organizational Commitment Questionnaire (OCQ) (Mowday et al., 1979), revised by Lee (1996). It has 15 items comprising two subscales: Value Commitment and Commitment to Stay (Lee, 1996). The items are rated on a five-point scale, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” Higher scores signify a higher sense of organizational commitment of staff nurses. The Cronbach’s alpha for each subscale ranged was .85 and .79 in this study.

**Intention to Leave Scale.** Staff nurse intention to leave was measured by the four items of Intention to Leave Scale (ILS) (Lawler, 1983). The ILS (Lawler, 1983) originally consisted of 11 items comprising two subscales (Intention to Leave [4], Cause for Leaving [7]). However, only the four items measuring Intention to Leave, revised by H. Park (2002), have frequently been used and verified with the Korean staff nurses. Thus the four items of ILS were used in this study. The items of the ILS were rated on a five-point scale, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” Higher scores signify a higher sense of intention to leave. In this study, the reliability estimates (alpha) of the ILS was .84.

**Data Analysis**

Statistical analyses were conducted using the SAS version 9.4 statistical package. Before conducting analyses, the data were examined for accuracy in entering, missing data, and normal distribution and outliers. The entire observations were eliminated if any variables were missing, except demographic questionnaire. Average 37.7 items were not responded in the eliminated observations. The common assumptions for the regression analyses of data are the following: (a)
normal distribution of error; (b) homoscedasticity (homogeneity of variance); (c) independent observations; and (d) correct model (Munro, 2005; Turner, 2001).

Normality of data was evaluated using the Kolmogorov-Smirnova and Shapiro-Wilk tests. The null hypothesis that the data arose from a normal distribution for the IWS data was not rejected, but this null hypothesis for dissonance scores of K-DIS, OCQ, and ILS were rejected, suggesting that the assumptions of normality may not be strictly met in this study (see Table 4.1). To assess robustness to this potential violation, the natural logarithm and square transformations were used. The findings showed that all $p$-values across the models applied to untransformed data were consistent with both the natural log and squared transformations (see Table 4.2, 4.3, & 4.4). We interpreted these results as supporting the use of untransformed data, which are reported for this study.

Multicollinearity refers to a situation in which two or more explanatory variables in a multiple regression model are highly linearly related ($r>.05$) (Turner, 2001). The highly linearly related explanatory variables will not adjust the dependent variable over and above the other explanatory variables (Turner, 2001). Thus, one or the other should be removed since they are statistically redundant (J. Lee et al., 2005; Turner, 2001). Multicollinearity among age, experience years as an RN, and worked years as an RN in the current unit was assessed. Since a nurse career is usually first chosen the profession of young undergraduates from nursing school in South Korea, there may be a high possibility of high correlations among the variables. ‘Age and worked years as an RN in the current unit’ ($r=.37$, $p<.001$), and ‘experience years as an RN and worked years as an RN in the current unit’ ($r=.43$, $p<.001$), were moderately correlated. However, ‘age and experience years as an RN’ was a high correlated ($r=.94$, $p<.001$), thus experience years as an RN was removed in regression analyses.
The specific research questions and analysis plan were:

1. **What demographic characteristics (e.g., current position, age, education level, type of work unit, experience years as an RN, and worked years as an RN in the current unit do they show?** Descriptive statistical analyses were used and frequency, mean, and SD were computed.

2. **What are the levels (e.g., actual or desired level) of decisional involvement reported by staff nurses?** Are there significant differences between actual and desired levels of decisional involvement reported by nurses? Paired t-tests were used to test the following hypotheses: \( H_0: \mu_{\text{actual}} = \mu_{\text{desired}} \quad H_1: \mu_{\text{actual}} \neq \mu_{\text{desired}} \)

3. **Do staff nurses agree, as reflected by responding with the same level of both actual and preferred decisional involvement?** How many cases do they equally share decision making with their managers/administrators on both actual and desired levels? Kappa statistics were used to assess their agreement across actual and preferred decisional involvement.

4. **What demographics have significant influences on staff nurse decisional involvement status at the actual, desired, and dissonance levels?** One-way ANOVA was used. To account for multiple comparisons, \( p \)-values were adjusted accordingly with post hoc analysis with Tukey method (Turner, 2001).

5. **Is there a significant negative correlation between nurse dissonance scores in decisional involvement and, respectively, job satisfaction and organizational commitment?** And is there a significant positive correlation between nurse dissonance scores in decisional involvement and nurse intention to leave? Spearman rank correlation was used as a non-parametric method (see Figure 4.3).
6. How does the set of the staff nurse dissonance scores in decisional involvement, job satisfaction, and organizational commitment together estimate nurse intention to leave? Do they interact? Only significant interaction effects and main effects from multiple regression models were included to interpret findings (see Figure 4.4).

7. Are there significant differences for nurses’ intention to leave according to the demographic characteristics when they are equivalent on the covariates—staff nurse dissonance scores in decisional involvement, nurse job satisfaction, and organizational commitment—through ANCOVA models (see Figure 4.5)?
Figure 4.5 GLM Model of ANCOVA for Research Question 7

\[
\text{Intention to leave} = \text{demographics} + \text{Dissonance score of K-DIS} + \text{ILS} + \text{OCQ}
\]

For ANCOVA and multiple regression analyses, the full model fit was first checked, and then non-significant parameters of interaction effects were removed (Munro, 2005; Turner, 2001). The final models were refitted based on parsimony (Munro, 2005; Turner, 2001).

Results

Descriptive Results

The convenience sample of 300 RNs was all female, 63% staff nurses and 37% charge nurses. The average age was 30.25 (SD= 5.23). The mean years of experience as RN was 7.58 (SD=5.25). Most respondents (84.7%) had a Bachelor’s of Science in Nursing (BSN) degree (69.6%), an MSN (15%), and a PhD (0.3%), and the rest of them had an associate degree (15.3%) in nursing. In addition, the respondents averaged 7.58 years (SD= 5.25) of experience as an RN and averaged 4.52 years (SD= 3.40) of work in the current unit (see Table 4.5).

Analysis of Staff Nurse Decisional Involvement Status

The staff nurse’s mean actual rating of decisional involvement was 1.62 (SD=0.41), and the mean preferred rating of decisional involvement was 2.67 (SD=0.51). A statistically significant difference was found between staff nurse actual and preferred decisional involvement \((p< .001)\), which means that Korean staff nurses prefer more decisional involvement than they actually experienced (see Table 4.6)

The score of 3 indicates equally shared decision making by staff and nurse managers. The staff nurses rating of actual and preferred decisional involvement were also evaluated by the five
K-DIS subscales, and all of the differences were statistically significant (all $p < .001$). These findings show that staff nurse decisional involvement was perceived as not equally shared with nurse managers: primarily nurse managers make the decisions on all five K-DIS subscales.

Kappa statistics were used to identify the agreement status of actual and preferred levels of DIS. Simple Kappa ranged from .01 to .13 (where 0.4 or higher is considered as moderate agreement, and 0.8 or higher is considered as excellent agreement) and weighted kappa ranged from .04 to .16. All kappa values were very low, and the eight items’ confidence bounds contained the value 0. Hence the null hypothesis that $k$ is 0 (i.e., there is no agreement) was not rejected at the $\alpha = .05$ level (see Table 4.7). Thus, staff nurses did not agree on the same level of both actual and preferred decisional involvement, which supported the finding that the actual levels of Korean staff nurse decisional involvement were lower than the preferred levels.

The total 5,700 (i.e., 19 items x 300 staff nurses) items indicating the conjoint status of decisional involvement—which means equally shared decision making between staff nurses and managers/administrators—were possible. However, only 391 items reflected conjoint status, representing only 6.86% of the total. Only 127 (42.3%) unique staff nurses reported these 391 conjoint statuses, and the rest of them (57.7%) reported no conjoint status for any of their 19 items. Of these 127 nurses reported equally shared decision making with their nurse managers, an average of 3.07 items (out of 19) of the DIS that were endorsed as conjoint. Therefore, these findings mean that most Korean staff nurses do not perceive themselves as being equally involved in shared decision making with their nurse managers/administrators according to the item domains of DIS.

The influence of demographics on the actual, preferred, and dissonance scores of K-DIS were assessed. The demographics (current position, age, education level, years of experience as
an RN, and years working as an RN on the current unit) did not significantly affect the decisional involvement status of staff nurses at any of the actual, preferred, or dissonance levels. However, type of work unit did affect the staff nurses’ preferred level of decisional involvement \((p = .013)\) but not the actual level \((p = .28)\) or dissonance \((p = .21)\) between the actual and preferred level of decisional involvement. Staff nurses who worked in inpatient care units (medical/surgical/ psychological/ pediatrics/ obstetrics) had a statistically significantly higher mean score \((M \pm SD=2.70 \pm 0.49, p = .013)\) in preferred decisional involvement than those working in outpatient care units \((M \pm SD=2.22 \pm 0.51)\) (see Table 4.8).

**Analysis of Staff Nurse Decisional Involvement with Job Satisfaction, Organizational Commitment, and Intention to Leave**

The dissonance score between the actual and preferred level of decisional involvement reflects staff nurses’ dissatisfaction with their decisional involvement on target areas.

The correlation between the dissonance of K-DIS and the Index of Work Satisfaction (IWS) was negatively correlated \((r_s = -.33, p < .0001)\), and the dissonance of K-DIS and the organizational commitment (OCQ) were negatively correlated \((r_s = -.24, p < .0001)\), which means that the more dissatisfaction staff nurses’ had about their decisional involvement, the lower their job satisfaction and organizational commitment (see Table 7). In addition, the K-DIS and nurse intention to leave (ILS) were positively correlated \((r_s = .30, p < .0001)\), which shows that staff nurses’ dissatisfaction in decisional involvement may influence increasing nurse turnover (see Table 4.9).

**Analysis of Staff Nurse Intention to Leave with Job Satisfaction, Organizational Commitment, and Decisional Involvement**

In the multiple regression models (backward selection), which show the association between the set of the variables (dissonance scores of K-DIS, IWS, and OCQ) and nurse ILS,
there were no significant interaction effects among the explanatory variables (see Table 4.10). After the full models were refitted into the reduced model, only the main effects model showed a significant finding, the association between the set of the variables—dissonance scores of the K-DIS \((X_1)\), IWS\((X_2)\), and OCQ\((X_3)\)— and staff nurses’ ILS \((Y)\) was statistically significant: 
\[
Y_{ILS} = 6.89 + 0.22 \text{dissonance scores of K-DIS} - 0.36X_{IWS} - 0.91X_{OCQ}.
\]
Thus, this reduced model’s null hypothesis was rejected \((R^2=0.44, p<0.0001)\) (see Table 4.11). This \(R^2\) indicates that 44\% of the variance in staff nurses’ intention to leave is explained by the staff nurses’ dissatisfaction with decisional involvement, job satisfaction, and organizational commitment. The staff nurses’ intention to leave would be predicted to be 6.89 when all the dissonance of the K-DIS, IWS, and OCQ scores are adjusted. For every 1 unit increase in IWS score, staff nurses’ intention to leave score is decreased by 0.36 \((p<0.009)\) when adjusting for the dissonance of the K-DIS and OCQ; for every 1 unit increase in OCQ score, the staff nurses’ intention to leave score is decreased by 0.91 \((p<0.0001)\) when adjusting for the dissonance of the K-DIS and IWS. In addition, for every 1 unit increase in dissonance score on the K-DIS, the staff nurses’ intention to leave score is increased by 0.22 \((p<0.003)\) when adjusting for the dissonance of IWS and OCQ. To sum up, staff nurses’ intention to leave would decrease along with the increase in the staff nurses’ job satisfaction and organizational commitment, but it also would increase along with the increase in the staff nurses’ dissatisfaction with decisional involvement.

In the ANCOVA model for research question 7, except for the type of unit, there was no demographics that showed significance. According to the type of unit (medical/surgical units versus outpatient care units), there was a significant difference of staff nurse intention to leave when they were equivalent on the covariates—staff nurses’ dissonance scores in decisional
involvement, nurses’ job satisfaction, and organizational commitment ($R^2=0.45, p<0.0001$) (see Table 4.12).

There was a statistically significant association between the staff nurses’ ILS (Y) and the type of work unit ($X_1$ medical/surgical unit) when the set of the covariate variables—dissonance scores of the K-DIS ($X_2$), IWS ($X_3$), and OCQ ($X_4$)—was adjusted for: $Y_{\text{ILS}}=6.36+0.42X_{\text{medical/surgical unit}} + 0.21X_{\text{dissonance scores of K-DIS}} -0.33X_{\text{IWS}} -0.88X_{\text{OCQ}}$ ($R^2=0.45, p<0.0001$). This finding shows that staff nurses’ intention to leave would increase when staff nurses work in medical/surgical units (versus outpatient care units) with holding for dissonance scores of the K-DIS, IWS, and OCQ ($\beta_1=0.42, p=0.03$). However, when the $p$-values were adjusted according to the Bonferroni method, it was not significant, which means the staff nurses’ demographic characteristics may not significantly influence their intention to leave (see Table 4.13).

To sum up, based on the model parsimony, this multiple regression model (i.e., $Y_{\text{ILS}}=6.89+0.22X_{\text{dissonance of K-DIS}} - 0.36X_{\text{IWS}} -0.91X_{\text{OCQ}}$) was finally fitted in this study to predict staff nurses’ intention to leave in South Korea ($R^2=0.44, p<.0001$). In other words, staff nurses’ intention to leave would decrease along with increasing staff nurses’ job satisfaction and organizational commitment, whereas it would increase as staff nurses’ dissatisfaction with decisional involvement increased.

**Discussion**

**Levels of Staff Nurses Decisional Involvement**

Results of the second research question revealed that there is a statistically significant difference between staff nurses’ actual and preferred decisional involvement scores. Korean staff nurses’ actual decisional involvement was significantly lower than their preferred decisional involvement. The staff nurses preferred more involvement, especially in the areas of
Professional Practice Scope & Workforce for Care Quality and Collaboration Activities, areas that are the foundations for maintaining quality of patient care.

According to Yu (2007), RN Recruitment/Interview/Selection, Nurse Leader Selection/Performance Review, and Resources and Support Staff Acquisition and Distribution are usually seen as nurse managers’ and superior managers’ main tasks and responsibilities in South Korea. In this study, staff nurses’ actual decisional involvement in RN Recruitment, Leadership, and Resources and Support Staff are lower than Professional Practice Scope & Workforce for Care Quality and Collaboration Activities. This finding showed that Korean staff nurses are more involved in making decisions for patient care than for governance of their work unit. This result was also similar to the finding reported by Jo and Jung (1999) and Jo, Jung, and Kim (1999): They identified that Korean staff nurses participate more in caregiving decisions than in decisions about work conditions.

The finding from the third research question identified that Korean staff nurses’ actual and preferred decisional involvement did not reach the level of decision making to be equally shared (i.e., conjoint status) between staff nurses and nurse managers/administrators. Korean staff nurses reported that they experienced more often the conjoint status in the Professional Practice Scope & Workforce for Care Quality and Collaboration Activities subscales rather than the RN Recruitment, Leadership, and Resources and Support Staff Subscales. This finding corresponded with the findings of the second research question.

The portion of the conjoint status has not been reported in previous studies. Thus, limited information is available to interpret Korean staff nurses’ conjoint status compared to staff nurses in other countries.
The fourth research question is related to the influence of demographic characteristics on staff nurses’ decisional involvement. The finding showed no significant association between the demographic characteristics and staff nurses' decisional involvement in this study. Similar to these findings, no relationship was found between demographic characteristics and nurses’ decisional involvement in other studies (Bina et al., 2014, Scherb, Specht, Loes, & Reed (2011); Ugur, Scherb, Specht, & 2015; Yu & Kim, 2011). Liu, Hus, and Chen (2015) reported that educational level (e.g., BSN versus less than a BSN) affected Taiwan staff nurses’ actual decisional involvement. However, they assumed that there might be an additive effect from hospital recruitment policy and work setting on the education level (Liu et al., 2015). Thus, the finding was not sufficient to explore the relationship between education level and decisional involvement.

In this study, there was a significant difference in Korean staff nurses’ preferred decisional involvement by the type of work unit. Staff nurses who worked on medical-surgical units preferred having more decisional involvement than staff nurses on outpatient care units. Liu et al. (2015) evaluated the type of work unit. They reported that staff nurses who worked in a medical-surgical or special unit had a higher level of actual decisional involvement compared to those in other work units. However, no difference was found in their preferred decisional involvement. They also evaluated the type of hospital and found that staff nurses in medical centers had a higher involvement in the actual decision making than those who were not in medical centers. This finding was different from the results of the study by Mangold et al. (2006), who found that type of hospital did not play a role in nurses’ actual decisional involvement. However, staff nurses’ preferred decisional involvement was higher in smaller network sites than in medical centers (Mangold et al., 2006).
These previous findings may have confounding factors that affect these differences. For example, Mangold et al. (2006) suggested the possibility that there was a more intimate work relationship in a smaller network site, which encourages staff nurses to be more involved in decision making. Liu et al. (2015) suggested the possibility that patient acuity in medical centers and medical-surgical or special units might be higher. This may allow staff nurses to collaborate more with other disciplines and increase the opportunity for staff nurse decisional involvement.

According to Grant et al. (2011), patient complexity has important implications for how care and care systems are organized and how resources are allocated. Based on patient complexity in each unit, staff nurses may want to take a more active role in determining the resources and personnel in their working unit, which seems to be related to staff nurses’ different needs for nursing care and settings of patient complexity.

Since little research has been done on staff nurse decisional involvement, it is hard to compare these results with previous research. A common finding was that staff nurses preferred to have more decisional involvement than what they perceived their actual decisional involvement to be. However, it is not clear how demographics (education level, work experience, type of work unit, and work setting) affect staff nurses’ decisional involvement.

**Influences of Staff Nurse Decisional Involvement on Job Satisfaction, Organizational Commitment, and Intention to Leave**

Results of this study revealed that Korean staff nurses’ actual and preferred decisional involvement did not reach the level of equally shared decision making (i.e., conjoint status) between staff nurses and administrators. In the findings of Kappa statistics, the items reflecting conjoint status were only 6.86% of the total. The low proportion of dissonance between the actual and preferred decisional involvement implies staff nurses’ dissatisfaction with their decisional involvement. This can lead to a worse organizational outcome.
The findings of the fifth research question found that the dissonance of K-DIS had a negative correlation with nurse job satisfaction or organizational commitment. Also, the dissonance of K-DIS had a positive relationship with nurses’ intention to leave. Although the correlations were not strong, these findings indicate that Korean staff nurses’ dissatisfaction with their decisional involvement may have an influence on their job satisfaction and organizational commitment. Furthermore, it may also affect their turnover intention.

Previous studies indirectly suggested the relationship between nurses’ decisional involvement and organizational outcomes, such as job satisfaction and organizational commitment. For example, Laschinger et al. (1997) reported that work empowerment had a strong and direct causal effect on decisional involvement in both the content and context of their practice. Other researchers reported that staff nurse empowerment has been found to be significantly related to organizational commitment (McDermott, Laschinger, & Shamian, 1996; Wilson & Laschinger, 1994), and work satisfaction (Whyte, 1995).

More recent studies have reported the level of actual, preferred, and dissonant levels of decisional involvement according to staff nurses’ demographics (Mangold et al., 2016), staff nurses’ and nurse managers’ perceptions (Scherb et al, 2011), Magnet hospital status (Houston et al., 2012), shared governance structure implementation (Bina et al., 2014), and staff nurses’ education level and certification status (Ugur et al., 2015). These studies did not explore what the dissonance of staff nurses’ decisional involvement means nor measure how it influences the organizational outcome in detail.

Regarding this, the findings of the sixth research question are meaningful because the multiple regression models showed the direct influence of dissatisfaction with decisional involvement on Korean staff nurses’ intention to leave. Thus, this finding suggests the possibility
that increasing staff nurses’ decisional involvement in the context of nursing practice can be a good strategy in nursing management to reduce the rate of staff nurse turnover.

To be specific, considering this study’s findings and current issues in nursing in South Korea, the finding that Korean staff nurses were more involved in decisions for patient care rather than governance for their work unit setting might be related to the issues of nurse staffing and resource inadequacy in South Korea (E. Cho, Choi, Kim, Yoo, & Lee, 2011). Korean staff nurses reported lower scores than non-Magnet hospitals on the subscales of Nurse Participation in Hospital Affairs and Staffing and Resource Adequacy on the practice environment scale of the nursing work index (E. Cho et al., 2011; Lake, 2002). This suggests that nurses in South Korea do not have enough opportunities to participate in hospital affairs to advocate for improving their staffing and resource adequacy issues. In addition, in this study, the mean score of Korean staff nurses’ actual decisional involvement is lower than that of the non-Magnet hospitals in the findings of Houston et al. (2012)’s study. Although the Korean version of the decisional involvement scale consists of 18 items (unlike the 21 items of the original decisional involvement scale), this finding suggested that Korean staff nurses are actually less involved in decision making in the context of nursing practice than staff nurses in non-Magnet hospitals in the U.S. Thus, based on these findings, it is possible that Korean staff nurses’ low level of decisional involvement may lead to an unsupportive work environment, which could increase the nurse turnover rate in South Korea.

Therefore, these study findings indicate the need for nurse managers to support and encourage more staff nurse decisional involvement. In addition, as frontline patient caregivers, staff nurses also should have accountability and responsibility for maintaining nursing quality by participating in decisions to improve hospital policy and the nursing work environment for
patient care. Further research needs to provide more evidence for the influence of staff nurses’ decisional involvement on patient, nursing, and organizational outcomes in South Korea.

**Limitations and Suggestions**

The limitations of this study are as follows. First, this study’s sample was drawn from only two urban medical centrum areas in South Korea, so the findings have limited generalizability. Second, this study was based on a survey with self-report measures. Thus, there is a possibility of self-selection bias. Third, the demographics of the RNs who participated in this study were not evenly distributed, so there was a limitation to identifying the relationship between demographic characteristics and staff nurses’ decisional involvement. Fourth, this study data were collected at a single point in time (i.e., cross-sectional). Thus, the findings preclude inferring causation among variables.

In future research, a larger sample size with well-balanced demographics is needed to investigate the relationship between demographic characteristics and staff nurse decisional involvement. In addition, to promote generalizability, staff nurses from different types of work units and different types of hospitals should be recruited. Although this study’s findings showed that staff nurse decisional involvement has significant relationships with their job satisfaction, its correlations with organizational commitment and intention to leave were weak. Thus, a longitudinal study design can be considered to ascertain the relationships by repeated observations of the same variables over long periods of time. Also, structural equation modeling can be used for the causal inferences among the variables in the future studies.

**Conclusion**

Korean staff nurses preferred to have more decisional involvement than they currently have. The findings showed that their demographic characteristics did not affect their actual levels
of decisional involvement. However, their preferred levels of decisional involvement were significantly affected by the type of working unit.

This study’s findings also showed that Korean staff nurses’ dissatisfaction in decisional involvement had an influence on their job satisfaction, organizational commitment, and intention to leave. Therefore, these findings suggested that staff nurse decisional involvement in the context of nursing practice can be a good nursing management strategy to improve their nursing care environment and to reduce staff nurse turnover in South Korea.
Table 4. 1
Tests of Normality

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</tr>
<tr>
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<td>300</td>
</tr>
<tr>
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<td>300</td>
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<tr>
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</table>

* This is a lower bound of the true significance.
a. Lilliefors significance correction

Table 4. 2
Multiple Regression Results across Transformations of ILS

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<th>Square transformed</th>
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<td>SE</td>
<td>p</td>
</tr>
<tr>
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</tr>
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<td>.</td>
<td>0.4580</td>
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<td>0.0060</td>
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Table 4.3
Multiple Regression Results across Transformations of K-DIS

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<td>SE</td>
<td>( p )</td>
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<td>Intercept</td>
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<td>0.0044</td>
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<td>0.9875</td>
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<td>AGE 2.00 (30-39yrs)</td>
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<td>AGE3.00 (40-49yrs)</td>
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<td>.</td>
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Table 4.4
Multiple Regression Results across Transformations of OCQ

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<td>( p )</td>
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<td>AGE3.00 (40-49yrs)</td>
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<td>0.2832</td>
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### Table 4.5
**Finding of Demographics (N=300)**

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<tr>
<th>Variables</th>
<th>Categories</th>
<th>N</th>
<th>%</th>
<th>Min</th>
<th>Max</th>
<th>M(SD)</th>
</tr>
</thead>
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<td><strong>Current position</strong></td>
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<td></td>
<td>Charge RN</td>
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<tr>
<td><strong>Age(years)</strong></td>
<td>20-29</td>
<td>153</td>
<td>51.</td>
<td>23.0</td>
<td>49.0</td>
<td>30.25(5.23)</td>
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<tr>
<td></td>
<td>30-39</td>
<td>127</td>
<td>42.3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>40-49</td>
<td>30</td>
<td>6.7</td>
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<td><strong>Education level</strong></td>
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<tr>
<td></td>
<td>Bachelor’s in Nursing</td>
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<td>65.3</td>
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<tr>
<td></td>
<td>Bachelor’s in another field</td>
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<td>4.30</td>
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<tr>
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<td>Master’s in Nursing</td>
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<td>0.30</td>
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<td></td>
<td>Psychological/ Pediatrics/ Obstetrics</td>
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<td></td>
<td>Specialty units</td>
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<td>Outpatient care units</td>
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<td><strong>Experience in years as an RN</strong></td>
<td>Over 1-5</td>
<td>122</td>
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<td>7.58(5.25)</td>
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<td></td>
<td>6-10</td>
<td>101</td>
<td>33.7</td>
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<tr>
<td></td>
<td>11-15</td>
<td>49</td>
<td>16.3</td>
<td></td>
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<td>16-20</td>
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<td>6.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 21</td>
<td>10</td>
<td>3.3</td>
<td></td>
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<tr>
<td><strong>Years worked as an RN in the current unit</strong></td>
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<td>200</td>
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<td></td>
<td>4.52(3.40)</td>
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<tr>
<td></td>
<td>6-10</td>
<td>87</td>
<td>29.0</td>
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<tr>
<td></td>
<td>11-15</td>
<td>10</td>
<td>3.3</td>
<td></td>
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<tr>
<td></td>
<td>16-20</td>
<td>2</td>
<td>0.7</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Over 21</td>
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<td>0.3</td>
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Table 4.6
Descriptive Statistics and t-test for Actual and Preferred Level of K-DIS (N=300)

<table>
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<tr>
<th>Outcome</th>
<th>Actual</th>
<th>Preferred</th>
<th>Paired difference</th>
<th>95% CI for Mean Difference</th>
<th>r</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Practice Scope &amp; Workforce for Care Quality</td>
<td>2.05 0.58</td>
<td>2.93 0.49</td>
<td>-0.88 0.65</td>
<td>-0.96, -0.81</td>
<td>0.27</td>
<td>-23.51*</td>
<td>299</td>
</tr>
<tr>
<td>RN Recruitment</td>
<td>1.19 0.40</td>
<td>2.21 0.85</td>
<td>-1.02 0.81</td>
<td>-1.11, -0.92</td>
<td>0.34</td>
<td>-21.73*</td>
<td>299</td>
</tr>
<tr>
<td>Leadership</td>
<td>1.26 0.50</td>
<td>2.63 0.69</td>
<td>-1.37 0.77</td>
<td>-1.46, -1.29</td>
<td>0.18</td>
<td>-30.81*</td>
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<tr>
<td>Resources &amp; Support Staff</td>
<td>1.49 0.57</td>
<td>2.64 0.61</td>
<td>-1.15 0.70</td>
<td>-1.23, -1.07</td>
<td>0.29</td>
<td>-28.34*</td>
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<td>Collaboration Activities</td>
<td>2.11 0.75</td>
<td>2.93 0.57</td>
<td>-0.82 0.79</td>
<td>-0.91, -0.73</td>
<td>0.31</td>
<td>-17.92*</td>
<td>299</td>
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<tr>
<td>Overall scale</td>
<td>1.62 0.41</td>
<td>2.67 0.51</td>
<td>-1.05 0.56</td>
<td>-1.11, -0.98</td>
<td>0.26</td>
<td>-32.28*</td>
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* p < .0001
Table 4.7
*Kappa Statistics for Agreement Test (N=300)*

<table>
<thead>
<tr>
<th>Item</th>
<th>N(^a)</th>
<th>Simple Kappa Value</th>
<th>Weighted Kappa Value</th>
<th>95% CL</th>
<th>95% CL</th>
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<td><strong>Professional Practice Scope &amp; Workforce for Care Quality</strong></td>
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<tr>
<td>Scheduling</td>
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<td>0.10</td>
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<td>Development of practice standards</td>
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<td>0.03</td>
<td>0.07</td>
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<td>Definition of scope of RN practice on unit</td>
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<td>0.02</td>
<td>0.01</td>
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<td>Monitoring of RN practice standards</td>
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<td>0.05</td>
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<td>0.001</td>
<td>0.10</td>
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<td></td>
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<tr>
<td>Recruitment of RNs to practice on the unit</td>
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<td>0.03</td>
<td>0.11</td>
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<td>Selection of unit leader</td>
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<td>0.01</td>
<td>-0.01</td>
<td>0.03</td>
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<td>Review of unit leader's performance</td>
<td>24</td>
<td>0.03</td>
<td>0.02</td>
<td>0.003</td>
<td>0.06</td>
</tr>
<tr>
<td>Recommendation for promotion of staff RNs</td>
<td>3</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.02</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Resources &amp; Support Staff</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determination of unit budgetary needs</td>
<td>14</td>
<td>0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>Determination of equipment/supply needs</td>
<td>8</td>
<td>0.02</td>
<td>0.02</td>
<td>-0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Development of standards for RN support staff</td>
<td>13</td>
<td>0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.10</td>
</tr>
<tr>
<td>Specification of number/type of support staff needed</td>
<td>7</td>
<td>0.02</td>
<td>0.02</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Monitoring of standards for RN support staff</td>
<td>14</td>
<td>0.03</td>
<td>0.02</td>
<td>-0.01</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Collaboration Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liaison with other departments re: patient care</td>
<td>35</td>
<td>0.06</td>
<td>0.03</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Relations with physicians re: patient care</td>
<td>48</td>
<td>0.05</td>
<td>0.03</td>
<td>0.002</td>
<td>0.10</td>
</tr>
<tr>
<td>Conflict resolution among RN staff on unit</td>
<td>49</td>
<td>0.09</td>
<td>0.03</td>
<td>0.04</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>391</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.*  
\(^a\) N= Number of Observed Conjoint Items  
\(^b\) ASE= Asymptotic Standard Error  
\(^c\) CL= Confidence Limits
Table 4.8
*Means and SD for the Actual, Preferred, and Dissonance Scores of K-DIS by Demographics (N=300)*

<table>
<thead>
<tr>
<th>Staff Nurse Decisional Involvement</th>
<th>Actual</th>
<th>Preferred</th>
<th>Dissonance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>F-value</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Current position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff RN</td>
<td>1.63(.43)</td>
<td>0.46</td>
<td>2.69(.48)</td>
</tr>
<tr>
<td>Charge RN</td>
<td>1.60(.38)</td>
<td></td>
<td>2.63(.55)</td>
</tr>
<tr>
<td>Age(years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>1.66(.42)</td>
<td>1.30</td>
<td>2.71(.47)</td>
</tr>
<tr>
<td>30-39</td>
<td>1.58(.41)</td>
<td></td>
<td>2.64(.53)</td>
</tr>
<tr>
<td>40-49</td>
<td>1.59(.32)</td>
<td></td>
<td>2.57(.62)</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates degree</td>
<td>1.56(.41)</td>
<td>1.35</td>
<td>2.69(.61)</td>
</tr>
<tr>
<td>BSN</td>
<td>1.65(.42)</td>
<td></td>
<td>2.68(.51)</td>
</tr>
<tr>
<td>MSN &amp; PhD</td>
<td>1.57(.41)</td>
<td></td>
<td>2.62(.41)</td>
</tr>
<tr>
<td>Type of work unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Med/Surgical units</td>
<td>1.64(.42)</td>
<td>1.30</td>
<td>2.70(.49)</td>
</tr>
<tr>
<td>Psych/ Pedi/ Obstetrics</td>
<td>1.56(.40)</td>
<td></td>
<td>2.68(.60)</td>
</tr>
<tr>
<td>Intensive care units</td>
<td>1.64(.38)</td>
<td></td>
<td>2.67(.44)</td>
</tr>
<tr>
<td>Outpatient care units</td>
<td>1.46(.23)</td>
<td></td>
<td>2.22(.51)</td>
</tr>
<tr>
<td>Experience in years as an RN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 1-5</td>
<td>1.66(.43)</td>
<td>1.01</td>
<td>2.74(.47)</td>
</tr>
<tr>
<td>6-10</td>
<td>1.60(.37)</td>
<td></td>
<td>2.65(.47)</td>
</tr>
<tr>
<td>11-15</td>
<td>1.55(.39)</td>
<td></td>
<td>2.58(.64)</td>
</tr>
<tr>
<td>16-20</td>
<td>1.72(.49)</td>
<td></td>
<td>2.51(.40)</td>
</tr>
<tr>
<td>Over 21</td>
<td>1.63(.38)</td>
<td></td>
<td>2.67(.74)</td>
</tr>
<tr>
<td>Years worked as an RN in the current unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>1.64(.43)</td>
<td>0.54</td>
<td>2.72(.48)</td>
</tr>
<tr>
<td>6-10</td>
<td>1.60(.38)</td>
<td></td>
<td>2.61(.56)</td>
</tr>
<tr>
<td>11-15</td>
<td>1.53(.34)</td>
<td></td>
<td>2.37(.60)</td>
</tr>
<tr>
<td>16-20</td>
<td>1.59(.07)</td>
<td></td>
<td>2.41(.41)</td>
</tr>
<tr>
<td>Over 21</td>
<td>1.20(   )</td>
<td></td>
<td>2.33(   )</td>
</tr>
</tbody>
</table>

*Note. *p*<.05*
Table 4.9
Spearman Rank Correlations for the Dissonance of K-DIS with IWS, OCQ, and ILS (N=300)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>K-DIS</th>
<th>IWS</th>
<th>OCQ</th>
<th>ILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>disso-K-DIS a</td>
<td>1.048</td>
<td>0.562</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IWS b</td>
<td>2.764</td>
<td>0.364</td>
<td>-0.33*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCQ c</td>
<td>2.944</td>
<td>0.494</td>
<td>-0.24*</td>
<td>0.56**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ILS d</td>
<td>3.444</td>
<td>0.87</td>
<td>0.30*</td>
<td>-0.47**</td>
<td>-0.63**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. ** Correlations significance (p < .0001).
   a. Disso-DIS=dissonance scores of actual and preferred levels of Decisional Involvement Scale
   b. IWS= Index of Work Satisfaction
   c. OCQ= Organizational Commitment Questionnaire
   d. ILS=Intention to Leave Scale

Table 4.10
Multiple Regressions for the Staff Nurse Intention to Leave with Dissonance of K-DIS, IWS, and OCQ (N=300)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1*</th>
<th></th>
<th>Model 2†</th>
<th></th>
<th>Model 3‡</th>
<th></th>
<th>Model4†‡</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
<td>p</td>
<td>β</td>
<td>SE</td>
<td>p</td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>7.42</td>
<td>2.77</td>
<td>.01</td>
<td>6.69</td>
<td>1.63</td>
<td>&lt;.0001</td>
<td>7.70</td>
<td>0.70</td>
</tr>
<tr>
<td>disso-DIS</td>
<td>-1.22</td>
<td>2.46</td>
<td>.62</td>
<td>-0.43</td>
<td>0.62</td>
<td>0.49</td>
<td>-0.54</td>
<td>0.60</td>
</tr>
<tr>
<td>IWS</td>
<td>-0.83</td>
<td>1.05</td>
<td>0.43</td>
<td>-0.55</td>
<td>0.60</td>
<td>0.36</td>
<td>-0.91</td>
<td>0.29</td>
</tr>
<tr>
<td>OCQ</td>
<td>-0.58</td>
<td>0.92</td>
<td>0.53</td>
<td>-0.33</td>
<td>0.53</td>
<td>0.53</td>
<td>-0.66</td>
<td>0.22</td>
</tr>
<tr>
<td>disso-K-DIS *IWS</td>
<td>0.79</td>
<td>0.97</td>
<td>0.42</td>
<td>0.48</td>
<td>0.24</td>
<td>0.07</td>
<td>0.50</td>
<td>0.24</td>
</tr>
<tr>
<td>disso-K-DIS *OCQ</td>
<td>0.03</td>
<td>0.83</td>
<td>0.97</td>
<td>-0.23</td>
<td>0.18</td>
<td>0.19</td>
<td>-0.21</td>
<td>0.17</td>
</tr>
<tr>
<td>IWS*OCQ</td>
<td>-0.02</td>
<td>0.33</td>
<td>0.94</td>
<td>-0.12</td>
<td>0.17</td>
<td>0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disso-K-DIS *IWS</td>
<td>-0.10</td>
<td>0.32</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note * Adjusted $R^2$ =0.45, df= 7, F =33.86, P< .0001
† Adjusted $R^2$ =0.45, df= 6, F =39.61, P< .0001
‡ Adjusted $R^2$ =0.45, df= 5, F =47.52, P< .0001
†‡ Adjusted $R^2$ =0.44, df= 4, F =58.96, P< .0001
Table 4.11
Main Effects of Multiple Regression Model for the Staff Nurse Intention to Leave with Dissonance of K-DIS, IWS, and OCQ (N=300)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Intention to Leave</th>
<th>Main Effects Model †</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>6.89</td>
<td>0.34</td>
</tr>
<tr>
<td>disso-DIS</td>
<td>0.22</td>
<td>0.07</td>
</tr>
<tr>
<td>IWS</td>
<td>-0.36</td>
<td>0.14</td>
</tr>
<tr>
<td>OCQ</td>
<td>-0.91</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Note *p<.05
† Adjusted $R^2 = 0.44$, $df = 3$, $F = 77.05$, $P < .0001$

Table 4.12
ANCOVA for the Staff Nurse Intention to Leave with Dissonance of K-DIS, IWS, and OCQ According to Demographic Characteristics (N=300)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Intention to Leave</th>
<th>Model †</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>6.36</td>
<td>0.42</td>
</tr>
<tr>
<td>UNIT 1.00- Med/Surgical units</td>
<td>0.42</td>
<td>0.19</td>
</tr>
<tr>
<td>UNIT 2.00- Psych/ Pediatric/ Obstetrics</td>
<td>0.32</td>
<td>0.21</td>
</tr>
<tr>
<td>UNIT 3.00- Intensive care units</td>
<td>0.31</td>
<td>0.21</td>
</tr>
<tr>
<td>UNIT 4.00- Outpatient care units</td>
<td>0.00</td>
<td>.</td>
</tr>
<tr>
<td>disso-K-DIS</td>
<td>0.21</td>
<td>0.07</td>
</tr>
<tr>
<td>IWS</td>
<td>-0.33</td>
<td>0.14</td>
</tr>
<tr>
<td>OCQ</td>
<td>-0.88</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Note *p<.05
† Adjusted $R^2 = 0.45$, $df = 6$, $F = 39.75$, $P < .0001$
Table 4.13
Adjustment for Multiple Comparisons: Tukey

<table>
<thead>
<tr>
<th>Type of work unit</th>
<th>LSMEAN</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00- Med/Surgical units</td>
<td>3.50</td>
<td>1.00</td>
<td>1.00</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>2.00- Psych/ Pediatric/ Obstetrics</td>
<td>3.40</td>
<td>1.00</td>
<td></td>
<td>1.00</td>
<td>0.70</td>
</tr>
<tr>
<td>3.00- Intensive care units</td>
<td>3.39</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>4.00- Outpatient care units</td>
<td>3.08</td>
<td>0.18</td>
<td>0.77</td>
<td>0.79</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


CHAPTER 5: SYNTHESIS OF FINDINGS AND IMPLICATIONS

Increased staff nurse turnover causes work overload for nurses as well as adverse effects on patient care in South Korea (Seok, 2013). In addition, prolonged nurse turnover might also spark other nurses’ intention to leave, increase operating and labor costs, and reduce the efficiency and effectiveness of care provided in hospitals (Kim et al., 2013). Improving nurse work environment has been presented as an important solution so far, but what should we do next? The next step is to understand the main principle and, then, to put the knowledge into practice.

To propose a systemic approach to this issue, this dissertation looked further back into Magnet hospitals. Many studies on Magnet hospitals have found that those Magnet hospitals facilitating staff nurse decisional involvement created and sustained healthy work environments that were associated with decreased nurse burnout and attrition, decreased inpatient mortality, and increased patient satisfaction (Aiken, Haven, & Sloane, 2000; American Nurses Credentialing Center, 2011; Houston et al., 2012; Scott, Sochalski, & Aiken, 1999; Upenicks, 2002). As a result, the American Hospital Association (2002), the American Nurses Association (2002), the Institute of Medicine (2004), and the Joint Commission on the Accreditation of Healthcare Organizations (2002) have advocated the Magnet Recognition Program, which means they have recognized that increased nurse involvement in decision making is a major factor in enhancing the nursing work environment, nurse retention, and patient outcome (Havens & Vasey, 2005).
Based on the result of Magnet hospital research, this dissertation sought a systematic way to increase staff nurse decisional involvement in South Korea. Therefore, this dissertation (1) defined the concept of nurse decisional involvement based on the conceptual framework and reviewed the literature to know the current status of staff nurse decisional involvement in South Korea, (2) translated the Decisional Involvement Scale (DIS) (Havens & Vasey, 2005) into Korean with evaluation of the psychometric properties, and (3) measured the level of decisional involvement of Korean staff nurses and provided evidence that nurse decisional involvement may have an influence on improving job satisfaction and organizational commitment and, at the same time, decrease turnover intention.

Summary of Findings

Study 1: From an Integrative Literature Review to a Conceptual Framework for Staff Nurse Decisional Involvement

The aim of this literature review was to define the concept of staff nurse decisional involvement with its attributes, antecedents, and consequences based on the conceptual framework. This would make it possible to identify the knowledge gaps in nurse decisional involvement in English-speaking, Western versus non-English-speaking, Asian countries.

The literature findings provided a distinction between the content and context of nursing practice and gave better conceptual clarity to the domains of staff nurses’ decisions in patient care and nursing administration. The review findings indicated that the context of nursing practice underlies the contents of nursing practice, which means the organizational process and operating system to deliver care ultimately affects nursing practice for patient care. Based on the findings of literature review, staff nurse decisional involvement is for the context of nursing practice that is for governance of structures and policies of unit, department, and organization in hospitals. In addition, the literature suggested that staff nurse decisional involvement with its
attributes and antecedents (i.e., shared governance, empowerment, autonomy, and control over nursing practice) led to positive consequences in patient, nurse, and organizational outcomes.

The main finding in comparing literature from both Western and Asian countries was that staff nurses were actually less involved in decisions than they preferred. Especially in Korea, the nursing literature was insufficient to know what the status of the staff nurses’ decisional involvement was, and a few studies showed that Korean staff nurses might be excluded from decisional involvement in the context of nursing practice. Therefore, the findings from the literature review about Korean staff nurses provided the motive to translate the Decisional Involvement Scale for Korean staff nurses in the next paper (Study 2).

**Study 2: Measuring Staff Nurse Decisional Involvement in South Korea: Revision of the Decisional Involvement Scale (DIS)**

The purpose of this study was to translate the Decisional Involvement Scale (DIS) into a Korean version and psychometrically evaluate the translated Decisional Involvement Scale (K-DIS) for use with Korean staff nurses in a future study. Forward and back translations were done, and one final Korean version of the DIS was produced with the approval of Dr. Havens, the original developer of the DIS. Face validity, content validity, and a pilot test were done before the assessment of the psychometric properties of the K-DIS. Confirmatory factor analysis findings showed the inadequate model fit of the K-DIS with the original factor structure of the DIS. Thus, principal component analysis and oblique rotation were done to explore the structure of the K-DIS. The findings showed that the K-DIS was composed of 19 items comprising five factors: *Resources and Support Staff, Collaboration/Liaison Activities, Professional Practice Scope and Workforce for Care Quality, RN Recruitment, and Leadership*. Face validity, content validity, internal consistency, and test-retest (after two weeks) of the K-DIS were examined and showed appropriate psychometric properties. However, construct validity was not strongly supported.
Therefore, further research on assessing the construct validity of the K-DIS is necessary for its application in different types of hospital settings in South Korea.

**Study 3: The Influence of Staff Nurse Decisional Involvement on Job Satisfaction, Organizational Commitment, and Intention to Leave According to Their Demographic Characteristics**

This study assessed the current status of Korean staff nurses’ decisional involvement and identified the relationship between staff nurses’ demographic characteristics and decisional involvement. There were significant differences between the actual and preferred levels of staff nurse decisional involvement, and the findings showed that Korean staff nurses preferred more decisional involvement than they actually experienced. Demographic characteristics of Korean staff nurses did not influence the actual levels of decisional involvement. However, their preferred decisional involvement was significantly affected by the type of working unit. This finding means that staff nurses want to take part more in determining the resources and personnel in their working unit, which seems to be related to their different needs for nursing care and settings according to distinct characteristic of patient care complexity.

This study’s findings also show that staff nurses’ dissatisfaction in decisional involvement may have an influence on their job satisfaction and organizational commitment, and, furthermore, it may also affect their turnover intention. Therefore, these findings imply that staff nurses should be involved in decisions about the context of nursing practice to improve their nursing care environment.

**Strengths of the Dissertation**

**Strengths**

This dissertation has strengths as follows: First, the concept of staff nurse decisional involvement was further defined and a conceptual framework was suggested. The conceptual framework of decisional involvement, based on the content and context of nursing practice
framework, provides a better understanding of professional organizational structures, policy development, and administration for professional nurses.

Second, as the first Korean language instrument to measure decisional involvement of staff nurses in South Korea, the K-DIS enables us to measure the current status of Korean staff nurse decisional involvement in terms of the context of nursing practice. This would be helpful to diagnose desired changes and to evaluate progress toward the integration of staff nurses into organizational decision making for nursing care quality and the nursing work environment.

Third, this dissertation suggested that staff nurse decisional involvement is related to nurse job satisfaction, organizational commitment, and intention to leave. This finding means that increasing staff nurse decisional involvement may be a good strategy in nursing management to improve staff nurses’ job satisfaction and organizational commitment. This suggests that staff nurse turnover can be reduced in the long term.

**Limitations**

Several limitations are acknowledged in this study. First, the study sample was drawn from only two urban medical centrum areas in South Korea. Therefore, the study’s findings may not be generalizable to hospitals located in rural areas or other regions of South Korea. Second, the data were obtained using convenience sampling. Thus, self-selection bias might be an issue. Staff nurses who had a strong interest in research using the DIS may have been more willing to complete and return this study questionnaire, and that may have influenced the outcome of this study. Third, the demographics of the RNs who participated in this study were not evenly distributed, so there was a limitation to identifying the relationship between demographic characteristics and decisional involvement of staff nurses in South Korea. Previous studies have reported that education level and type of clinical practice unit affected staff nurse decisional
involvement. Thus, further research is needed to investigate the implications of education level and type of work unit for both preferred and actual decisional involvement with a large sample that has well-balanced demographics.

**Implications for Nursing Management and Research**

K-DIS clearly shows what domains need staff nurses’ decisional involvement and what level is ideal for staff nurses’ decisional involvement in the administration domain, more specifically the domain of policy development and administration of nursing practice, which is closely related to the support system for nursing practice at the unit level. The K-DIS encompasses, for example, *Resources and Support Staff, Collaboration/ Liaison Activities, Professional Practice Scope and Workforce for Quality of Care, Rn Recruitment, and Leadership*. Regarding the ideal level of staff nurses’ decisional involvement, nurse managers and administrators can measure the decisional dissonance between perceptions of actual and preferred levels. They can also assess discordance between actual and preferred levels of involvement to target areas for change to a conjoint state. These identified gaps may be unexplored key variables related to improvement in nurse job satisfaction and organizational commitment.

Based on these characteristics of the K-DIS, the implications for nursing management in South Korea are as follows. First, K-DIS can be a diagnostic tool to create a systemic management intervention that could be broadly used in any hospital setting regardless of interaction factors like the characteristics of each individual and hospital factors. Staff nurses and nurse managers can coordinate their opinions based on a unit setting and their hospital conditions. Second, K-DIS can guide the breaking of hierarchical and bureaucratic conventions in Korean hospitals. Under the Asian bureaucratic culture, subordinates have difficulties in speaking up
about problems, especially if issues are connected with autocratic leadership of managers (Kang, Han, & Kang, 2012; Lee & Kim, 2008; Liu, Hsu, & Chen, 2015). Thus, if nurse managers and staff nurses understand what domains need collaboration, nurses and administrators can coexist in a state of interdependence and mutual influence (Scott, 1982). They can produce more powerful dynamics to develop nursing departments in each hospital. In terms of the powerful dynamics, nurse managers have a vital responsibility to cultivate a professional practice environment that facilitates staff nurse decisional involvement in the content and context of nursing practice.

Aydelotte (1983) emphasized the importance of well-prepared nursing leaders who can facilitate shared governance based on knowledge of nursing practice, inside and outside realities in the organization for goals, and research methods to obtain data and to influence others. Thus, to raise awareness of the importance of staff nurse decisional involvement and shared governance to nurse managers and administrators, the conceptual framework should be delivered to current and potential nurse leaders through education, such as advanced nursing management programs. In addition, it should also be included in the nursing administration curriculum of Korean nursing schools for professional nursing practice in the future.

As a long-term strategy, the K-DIS is proposed as an organizational development tool that reflects staff nurses’ opinions’ on advancing nursing policy and administration. This would be helpful for improving nursing care quality and the nursing work environment, as well as changing the hierarchical organizational culture and structure.

The implications for nursing research are as follows: First, the conceptual framework of the content and context of nursing practice can be used to promote better conceptual clarity for the staff nurses’ decision making in the domains of patient care and nursing administration. This
conceptual clarity enables us to investigate patient and nurse outcomes which may be differentially associated with decision making in the areas of content and context of nursing practice and to implement a redesign of the work environment and policies that are most in need of improvement. Thus, if staff nurse decisional involvement in South Korea is clearly articulated and supported by research findings (qualitative, quantitative, or both), it can be translatable to practice situations. It will then be possible to form theories on the practice theory level (Walker & Avant, 2011). To summarize, the conceptual framework of staff nurse decisional involvement will provide a foundation for producing better nursing, patient and hospital outcomes. The focus model may thereby give rise to the elusive practice theories envisioned in South Korea.

**Conclusion**

Staff nurse decisional involvement has been seen as an important strategy for nurse retention and the creation of positive work environments. The motivation to write this dissertation on staff nurse decisional involvement came from the increasingly high turnover rate among staff nurses in South Korea. The concept of decisional involvement means that staff nurses participate in decisions and activities for governing nursing practice policy and the practice environment. This concept is based on the context of nursing practice that is related to organizational process and operating systems to deliver care that ultimately affects nursing practice for patient care. Thus, the concept of decisional involvement has to be differentiated from clinical decision making in patient care (i.e., the content of nursing practice). Based on the clarification of the concept of decisional involvement, the conceptual framework along with its attributes, antecedents, and consequences provides a better understanding of professional organization structures and policy development and administration for staff nurses.

The main finding of K-DIS showed that Korean staff nurses were actually less involved in decisions than they preferred to be. Based on the theoretical relationships in chapter 3 and the
hypothesized models in chapter 4, the findings showed that Korean staff nurses’ dissatisfaction in decisional involvement had an influence on their job satisfaction, organizational commitment, and intention to leave. Thus, government, health care organizations, and nursing leaders should recognize the association between nurses’ having a strong voice in governing the work and patient care environments and nurse workforce issues, and then they should support improving nurse staffing policies and nurse work environment policies. This would be helpful in increasing nursing outcomes, patient outcomes, and hospital outcomes by reducing cyclical nurse turnover in South Korea. In further research, verifying the construct validity of the K-DIS is necessary for its application in different types of hospital settings in South Korea.
REFERENCES


