

Workplace Empowerment and Magnet Hospital Characteristics

Making the Link

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Objective: To test a theoretical model linking nurses' perceptions of workplace empowerment, magnet hospital characteristics, and job satisfaction in 3 independent studies of nurses in different work settings.

Background: Strategies proposed in Kanter's structural empowerment theory have the potential to result in work environments that are described in terms of magnet hospital characteristics. Identifying factors that contribute to work conditions that attract and retain highly qualified committed nurses, such as those found in magnet hospitals, that can be put in place by nursing administrators is extremely important for work redesign to promote professional nursing practice.

Methods: Secondary analyses of data from 3 studies were conducted—2 of staff nurses and 1 with acute care nurse practitioners working in Ontario, Canada. The Conditions of Work Effectiveness Questionnaire-II, the NWI-R, and measures of job satisfaction were used to measure the major study variables.

Results: The results of all 3 studies support the hypothesized relationships between structural empowerment and the magnet hospital characteristics of autonomy, control over practice environment, and positive nurse-physician relationships. The combination of access to empowering work conditions and magnet hospital characteristics was significantly predictive of nurses' satisfaction with their jobs.

Conclusions/implications: These findings suggest that nursing leaders' efforts to create empowering work environments can influence nurses' ability to practice in a professional manner, ensuring excellent patient care quality and positive organizational outcomes.

Nursing once again faces a serious shortage of nurses as experienced nurses approach retirement and fewer individuals enter the profession. Recent downsizing initiatives have often resulted in heavier workloads for nurses, and reports of poor working conditions, particularly in hospitals, abound in the media. Patient safety is a major concern in this context in which fewer nurses are available to care for patients with much higher acuity than in the past. To address this problem, efforts must be made to improve nurses' working conditions to retain nurses in the system and encourage new recruits to the profession.

Magnet hospital research has shown that nurses are attracted to hospital work environments that promote autonomy and control over the practice environment and that foster good nurse-physician relationships.¹ Aiken argues that these environments facilitate professional nursing practice. Nurses in magnet hospitals have lower levels of burnout and greater job satisfaction than nurses in nonmagnet hospitals.²⁻⁴ Furthermore, research has shown that hospitals with these characteristics have better patient outcomes, including lower mortality rates.^{5,6} Other researchers also have demonstrated a link between nurse-physician collaboration and mortality in intensive care units.^{7,8} Clearly, nursing administrators would be well advised to ensure that these attributes characterize their work environments.

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To date, this research has focused primarily on the provider and patient outcomes associated with magnet hospital characteristics. Less work has been done to identify basic organizational social structures that would promote the development and maintenance of these features. Kanter's^{9,10} notion of structural empowerment is a plausible precursor to "magnetism" in hospital work environments. Kanter argues that social structures within the work environment that provide employees with access to information, support, resources, strong interpersonal relationships, and opportunities to learn and grow are empowering and allow employees to accomplish their work in meaningful ways.

For professionals, meaningful accomplishment of work means being able to practice according to professional standards. Nurses value work environments that provide opportunities to make decisions based on their expertise and professional judgment and to be involved in decisions that affect their working conditions. Strong working relationships with physicians and other health team members are also critical to success. It is reasonable to speculate that when nurses perceive their work environment to be empowering, they will feel more supported to practice in a professional manner and characterize their work environments in magnet-like terms.

Thus, the purpose of the analyses reported here was to test this proposition by examining relationships between nurses' perceptions of workplace empowerment as described by Kanter and their perceptions of the presence of magnet hospital characteristics as described by Aiken et al.¹ This was accomplished by conducting a secondary analysis of data from 3 independent studies of nurses in separate work settings.

Theoretical Framework

Kanter^{9,10} argues that social structures in the workplace influence employee attitudes and behaviors to a greater extent than inherent personality predispositions. Although personal characteristics play a role in employees' workplace behaviors, Kanter maintains that situational conditions can constrain optimal job performance, regardless of positive personal tendencies or predispositions and, therefore, lower organizational productivity. Kanter conceptualizes power as the "ability to mobilize resources to get things done"^{11(p210)} and uses the analogy of an electrical circuit to describe how productive power is achieved and maintained in the work setting. Power is "on" when employees have access to lines of in-

formation, support, resources, and opportunities to learn and grow. When these "lines" or sources of power are unavailable, power is off and effective work is impossible. These lines of power are sources of structural empowerment within the organization.

According to Kanter, these lines of power emanate from the formal and informal systems within the organizations. When jobs are constructed so that there is a lot of discretion or flexibility in how work is accomplished, are central to the overall purpose of the organization, and are highly visible within the organization, they contain high degrees of formal power. When strong relationships among superiors, peers, and subordinates are encouraged within the work setting, the resulting alliances confer informal power. High levels of formal and informal power facilitate access to the lines of power and opportunity that enable employees to accomplish their work meaningfully.

Research Testing Kanter's Theory

There is considerable support for Kanter's theoretical propositions in the nursing population.¹² Consistent support for the relationship between access to empowerment structures, or lines of power and opportunity, and formal and informal power within the work setting has been established in several nursing populations.¹³⁻¹⁶ Perceptions of work empowerment have been linked to many important organizational outcomes, such as job satisfaction,^{14,17,18} organizational commitment,^{19,20} trust in management,^{17,18} accountability for practice,²¹ lower levels of job stress,^{22,23} and empowering leader behaviors.¹⁵

Nurses' perceptions of structural empowerment also are empirically related to workplace characteristics that define magnet hospital settings; that is, autonomy,^{15,24} control over the practice environment,^{14,25} and good nurse-physician working relationships.¹⁶ Although these studies were not specifically designed to link Kanter's theory of structural empowerment to Aiken's conceptualization of magnet hospitals, the results support logical relationships between the two concepts.

Laschinger et al²⁴ reported the results of two studies that linked work empowerment to two facets of decisional power in nursing work settings: (a) autonomy and (b) perceptions of participative management in the work setting. In a study of 101 nurses in a large urban teaching hospital, significant positive relationships were found between nurses' perceived access to empowerment structures and autonomy ($r = 0.52, P = .001$). Formal and informal power and job-related empowerment structures to-

gether explained 34% of the variance in nurses' perceptions of autonomy in their jobs. In the other study, nurses' perceptions of empowerment explained 85% of their perceptions of a participative management philosophy within the work setting.

In a study of 127 nurses in two US urban hospitals, Havens and Laschinger²⁶ found significant relationships between nurses' perceptions of workplace empowerment and the extent of their decisional involvement in matters affecting policy and the practice environment on their work units ($r = .47$ and $r = .33$, for hospitals A and B, respectively). In another analysis of these data, Laschinger and Havens¹⁴ found that empowerment also was strongly related to control over nursing practice ($r = 0.625, P = .001$). Access to empowerment structures and control over nursing practice together explained 51% of the variance in job satisfaction. Huffman²⁵ observed similar correlations between empowerment and control over practice in his study of 82 nurses employed in two Canadian community hospitals ($r = .76, P = .001$ and $r = .68, P = .001$, respectively). These results are consistent with those of McCloskey,²⁷ who found that autonomy was significantly related to job satisfaction, organizational commitment, and intent to stay on the job. These findings provide support for Kanter's contention that work empowerment is associated with employee involvement in decisions related to both the content and the context of practice.

Although Kanter's theory does not address collaboration per se, it is addressed in her concept of informal power; that is, strong alliances with key individuals in the organization who are involved in the work to be accomplished. For nurses, this would include collaboration with physicians. Collaboration with managers, physicians, and peers is critical for effective patient care. In a study of 63 Canadian nurse practitioners, Almost and Laschinger¹⁶ found a significant positive relationship between perceptions of workplace empowerment and collaboration with physicians ($r = .42, P = .0001$). Nurse-physician collaboration was most strongly related to nurse practitioners' perceptions of informal power and support. The combination of empowerment and positive collaborative relationships with physicians explained 50% of the variance in nurse practitioners' perceptions of job strain.

In another study, Laschinger and Havens¹⁴ found that nurses' ratings of relationships with physicians were significantly related to staff nurses' perceptions of job satisfaction ($r = .58$) and work effectiveness ($r = .45$). These findings are consistent with those of

Baggs et al.,²⁸ who found that nurse-physician collaboration was an important predictor of nurses' satisfaction with decision making in critical care settings.

In a recent study, Upenieks²⁹ established a link between magnet hospital characteristics and Kanter's theory of structural empowerment. She surveyed 305 nurses from two magnet hospitals and two comparable nonmagnet hospitals to examine differences in perceptions of the presence of magnet hospital characteristics, workplace empowerment, and job satisfaction. As hypothesized, magnet hospital nurses were significantly more empowered than those in nonmagnet hospitals ($M = 3.55 [1.96]$ and $M = 2.63 [1.99]$, respectively, $t = 8.56, P = .001$).

These studies provide evidence to support the hypothesis that structuring work settings to ensure access to workplace empowerment structures in hospital settings is likely to create work environments that are described in terms of magnet hospital characteristics. The results of magnet hospital research also suggest plausible links to Kanter's structural power in organizations.

Magnet Hospital Research

In a survey of 5006 staff nurses in 32 British hospitals, Rafferty et al.⁴ found that greater control over resources was associated with higher levels of nurse autonomy ($r = .65$) and more involvement in decisions ($r = .21$). This is consistent with Kanter's claim that access to resources and support in the work setting facilitates employee involvement in work processes and, thus, the accomplishment of work. Good nurse-physician relationships were significantly related to greater autonomy ($r = .38$), decisional involvement ($r = .35$), and control over practice environment ($r = .25$). Nurse-physician working relationships are a component of Kanter's concept of informal power in the organization, which influences employee's access to work empowerment structures. All of these magnet characteristics were significantly ($P < .01$) related to higher job satisfaction ($r = .42$), less burnout ($r = .26$), and positive perceptions of the quality of care ($r = .53$).

Other researchers have established links between magnet hospital characteristics and variables related to structural empowerment. Magnet hospital characteristics were associated with higher levels of trust in management ($\beta = .56$) and lower burnout levels ($\beta = -.62$) in a study of 3016 Canadian staff nurses by Laschinger et al.³⁰ These variables explained 39% of the variance in job satisfaction. Similar effects were found for nurse-assessed quality. Magnet hospital characteristics were associated with

higher perceptions of patient care quality ($\beta = .34$). The combination of magnet hospital characteristics, trust, and burnout explained 40% of the variance in perceptions of patient care quality. Loveridge et al³¹ also found a significant relationship between nurses' perceptions of control over their practice environment and burnout in a survey of 1004 California staff nurses.

In another study, Aiken et al³ compared data from the 13 original magnet hospitals with data collected from 7 magnet hospitals identified by the American Nurses' Credentialing Center (ANCC). The latter group had significantly higher levels of nurse autonomy ($M = 3.01$ vs $M = 2.86$) and nurse control over the practice setting ($M = 2.95$ vs $M = 2.65$) than those of the original magnet hospitals. Nurses in ANCC magnet hospitals were significantly less likely than nurses in the original magnet hospitals to report feeling burned out (20.4% ANCC, 29.9% original), emotionally drained (42.2% ANCC, 51.6% original), or frustrated by their work (32% ANCC, 44.9% original). Nurses in ANCC magnet hospitals were significantly more likely than nurses in the original magnet hospitals to report that their units had adequate support systems (63% ANCC, 43% original) and enough RNs to provide high-quality care (70% ANCC, 47% original). A greater proportion of ANCC magnet hospital nurses also reported that they controlled their own practice, participated in policy decisions, and had a powerful chief nursing executive and that the contributions they made were greatly appreciated. These characteristics are consistent with predicted outcomes of empowered work environments described by Kanter.

The most compelling findings of the magnet research program pertain to the links between magnet hospital characteristics and negative patient outcomes. Aiken et al⁵ compared Medicare mortality rates of 39 magnet hospitals to 195 matched control hospitals. After adjustment for differences in predicted mortality for Medicare patients, the magnet hospitals had a 4.6% lower mortality rate, which translates to 0.9 to 9.4 fewer deaths per 1000 discharges. In another study, Aiken et al⁶ compared 10 hospitals with dedicated AIDS units with 10 comparable hospitals treating AIDS patients on general medical units. Of the 10 comparison hospitals, 3 had been determined as being magnet hospitals during previous research.^{32,33} Data were collected from 1205 patients and 820 nurses on 40 units. Patients with AIDS in scattered-bed units in magnet hospitals had lower odds of dying than did AIDS patients in any other setting.³⁴ Magnet hospitals also had significantly

higher levels of patient satisfaction,³⁵ significantly lower rates of nurse burnout,² and lower rates of needle-stick injuries³⁵ than did comparison hospitals.

Aiken and colleagues were among the first to empirically establish a link between nursing working conditions and patient outcomes. This work is extremely salient in current healthcare work environments characterized by increased nursing workloads and higher patient acuity and concerns about both patient and provider safety. Identifying factors that contribute to work conditions that attract and retain highly qualified, committed nurses, such as those found in magnet hospitals, that can be put in place by nursing administrators is extremely important for work redesign to promote professional nursing practice.

Research Hypotheses

Based on theoretical expectations and the preceding review of the literature, the following hypotheses were tested in each of the 3 studies reported here:

1. Higher levels of workplace empowerment are positively related to perceptions of autonomy, control over practice environment, and collaboration with physicians within the work setting (magnet hospital characteristics). *Rationale:* When nurses have access to the resources and support, they must practice in a professional manner and are likely to report high levels of autonomy, control over the practice environment, and strong RN-physician relationships.
2. Higher levels of empowerment and magnet hospital characteristics in nursing work settings are positively related to nurses' job satisfaction. *Rationale:* Nurses who feel empowered to practice professionally by their work environment are likely to be more satisfied with their jobs.

Methods

The studies reported in this article were surveys of nurses conducted in three nursing populations (see overview in Figure 1). Two of the studies surveyed staff nurses: one used a large sample of nurses from urban teaching hospitals throughout the province of Ontario and the other used a sample obtained from 3 rural community hospitals in western Ontario. The third sample consisted of acute care nurse practitioners who worked in hospital settings throughout

Study 1	
Design:	Predictive nonexperimental design
Sample:	233 randomly selected staff nurses employed in urban tertiary care hospitals
Measures:	Conditions of Work Effectiveness—II Nursing Work Index—R Global Job Satisfaction Questionnaire
Study 2	
Design:	Predictive nonexperimental design
Sample:	263 randomly selected staff nurses employed in a network of 8 rural community hospitals
Measures:	Conditions of Work Effectiveness—II Nursing Work Index—R Nurse Job Satisfaction Questionnaire
Study 3	
Design:	Predictive nonexperimental design
Sample:	55 acute care nurse practitioners employed in urban tertiary care hospitals
Measures:	Conditions of Work Effectiveness—II Nursing Work Index—R Global Job Satisfaction Questionnaire

Figure 1. Methods.

the province. Measures of structural empowerment and magnet hospital characteristics were the same for each of the 3 studies, allowing comparison of results. A global measure of job satisfaction was used in 2 of the 3 studies. These tools are described in the methods section for Study 1 to avoid repetition. In Study 2, the Nurse Job Satisfaction Questionnaire (NJSQ)³⁶ was used. This tool is described in the instrumentation sec-

tion of Study 2. The instrument reliability estimates can be found in Table 1.

In the following paragraphs, the methods and results for each study are presented separately. In the discussion section, the results of all 3 studies as a group are interpreted in light of the study hypotheses. The means and standard deviations for all measures used in this study are presented in Table 2.

Table 1. Summary of Cronbach Reliability Coefficients for Study Instruments

Instrument	Study 1	Study 2	Study 3
CWEQ-II	0.87	0.82	0.88
Opportunity	0.81	0.79	0.64
Information	0.86	0.85	0.9
Support	0.78	0.83	0.86
Resources	0.77	0.76	0.76
JAS-II	0.75	0.67	0.68
ORS-II	0.7	0.65	0.57
Global empowerment	0.86	0.83	0.92
NWI-R	0.88	0.87	0.88
Autonomy	0.79	0.78	0.74
Control over practice	0.76	0.75	0.72
Registered nurse-physician Collaboration	0.89	0.85	0.84
Satisfaction	0.84	0.88	0.84

CWEQ-II, Conditions for Work Effectiveness Questionnaire-II; JAS-II, Job Activities Scale-II; ORS-II, Organizational Relationships Scale-II; NWI-R, Nursing Work Index.

Table 2. Means and Standard Deviations for Empowerment and Satisfaction Variables

Instrument	Study 1 (n = 233)		Study 2 (n = 263)		Study 3 (n = 55)	
	Mean	SD	Mean	SD	Mean	SD
CWEQ-II	17.79	3.31	18.37	2.82	20.95	3.08
Opportunity	3.78	0.79	3.83	0.71	4.27	0.53
Information	2.76	0.88	2.72	0.75	3.41	0.9
Support	2.62	0.84	2.79	0.82	3.18	0.88
Resources	2.81	0.78	3.00	0.69	2.51	0.75
JAS-II	2.43	0.85	2.57	0.76	3.15	0.72
ORS-II	3.38	0.76	3.47	0.73	4.40	0.54
Global empowerment	2.83	1.01	3.09	0.9	3.30	1.09
Satisfaction	2.92	0.93	3.05	0.75	3.30	0.9

CWEQ-II, Conditions for Work Effectiveness Questionnaire-II; JAS-II, Job Activities Scale-II; ORS-II, Organizational Relationships Scale.

Study 1

Design and Sample

In this study, data from a subset of a longitudinal study of 237 randomly selected staff nurses who worked in urban tertiary care hospitals in Ontario were used to test the study hypotheses. Nurses in the larger study had responded to a mailed questionnaire designed to test a model derived from Kanter's theory. Details of the study design can be found in Laschinger et al.²³ Nurses who were not involved in management or educational roles were retained in the sample for the analysis reported in this article (n = 233). Nurses from all areas of Ontario were represented in the sample. Nurses worked mostly full-time (64.5%), in medical-surgical (33.3%), critical care (34.7%), maternal child (11.9%), and psychiatric (20.1%) specialty areas. Most were diploma prepared (86.9%). Respondents averaged 44 years of age (SD = 7.70), with 19 years of nursing experience (SD = 8.17) and 10 years' experience in their current workplace (SD = 6.78).

Instrumentation

Three measures of Kanter's concept of empowerment were used: the Conditions for Work Effectiveness Questionnaire-II (CWEQ-II), the Job Activities Scale-II (JAS-II), and the Organizational Relationships Scale-II (ORS-II). All instruments used a 5-point Likert scale, and items were summed and averaged to yield subscale scores ranging from 1 to 5. Higher scores represent higher levels of the construct.

The CWEQ-II, a modification of the original CWEQ,³⁷ measures nurses' perceptions of their access to the 4 work empowerment structures described by Kanter: access to opportunity, information, support, and resources. The CWEQ-II consists

of 12 items (3 for each of Kanter's empowerment structures). The construct validity of the CWEQ-II was substantiated in a confirmatory factor analysis that revealed a good fit of the hypothesized factor structure ($\chi^2 = 279$, $df = 129$, Comparative Fit Index [CFI] = .992, Incremental Fit Index [IFI] = .992, Root Mean Square Error of Approximation [RMSEA] = .054). The CWEQ-II also correlated highly with a global measure of empowerment ($r = 0.56$), providing additional evidence of construct validity. Details of this analysis can be found in Laschinger et al.²³ The JAS-II is a 3-item measure of staff nurses' perceptions of Kanter's concept of formal power. The ORS-II is a 3-item measure of staff perceptions of Kanter's informal power.³⁸ Cronbach alpha reliabilities from previous studies ranged from 0.79 to 0.82.¹⁸ In this study, alpha reliability coefficients for the revised scales were within acceptable limits (range: 0.70 to 0.86).

Laschinger et al.²³ recently validated the factor structure of these measures of empowerment. Based on these results, a total empowerment score was created by summing the subscales of the CWEQ-II, JAS-II, and ORS-II (score range: 6 to 30). In this study, Cronbach alpha for this scale was 0.87 (Table 1). A 2-item global empowerment scale was included for validation purposes. Consistent with previous research, the alpha reliability of this measure was .86. The CWEQ-II correlated positively with the 2-item measure of global empowerment ($r = .56$), as did the total empowerment score ($r = .58$), further supporting the construct validity of the modified instrument.

Magnet hospital characteristics of the work setting were measured by the Nursing Work Index (NWI-R).³⁹ To allow comparisons with previous research, we used the 15 items most frequently used

by Aiken and colleagues; that is, the items that form 3 subscales: nurse autonomy, nurse control over the practice setting, and nurses' relations with physicians. These items were derived from organizational traits reported by magnet hospital staff nurses as being characteristic of their professional work environments.⁴⁰ Items were rated on a 4-point Likert scale and were summed and averaged to yield the 3 subscales. These subscales have consistently demonstrated acceptable internal consistency reliability across studies (Cronbach alpha: autonomy, .75 to .78; control, .79; and nurse-physician relations, .73 to .76).^{3,39} The overall NWI-R Cronbach alpha reliability has been reported as .96.¹ In this study, the alpha reliability coefficients were 0.88 for the total scale, 0.79 for the autonomy subscale, 0.76 for the control over practice subscale, and 0.89 for the collaboration subscale (Table 1).

The Global Job Satisfaction Questionnaire (GJSQ) is a 4-item global measure of job satisfaction adapted from Hackman and Oldham's⁴¹ Job Diagnostic Survey.¹² Individuals rate items on a 5-point Likert scale. This measure has acceptable internal consistency reliability (0.83).^{14,23} In this study, the Cronbach alpha reliability was 0.84.

Results

Nurses believed that their job settings were moderately empowering ($M = 17.9$, $SD = 3.31$) and had moderate levels of magnet characteristics ($M = 2.68$, $SD = 0.55$). These empowerment scores are consistent with those of other studies of staff nurses re-

ported in the literature.¹² The NWI-R scores are somewhat lower than those of magnet hospitals in Aiken's work^{3,39} (Table 3). They were consistent, however, with those of a large Ontario sample of nurses in a study reported by Laschinger.³⁰ As hypothesized, the total empowerment score was strongly related to the total NWI-R score ($r = .61$, $P = .0001$). All empowerment structures were significantly related to the overall NWI-R score (Table 4), the most strongly related being the resources subscale ($r = .55$). Consistent with the second hypothesis, both empowerment and magnet hospital characteristics were significant independent predictors of job satisfaction, explaining 41.5% of the variance ($\beta = .51$ and $\beta = .20$, respectively).

Study 2

Design and sample

The data drawn for this study were part of a larger study of nurses who worked in a network of 8 rural community hospitals in western Ontario. In the original study, nurses responded to questionnaires distributed in their pay envelopes with instructions to return the completed questionnaires to a research office in a local university. The return rate was 77% ($n = 531$). Details of this study can be found in Tuer-Hodes.⁴² The sample for the current analysis consisted of 263 nurses in nonmanagement roles from 3 hospitals that provide tertiary care. Nurses worked full-time (42.4%) or part-time (56.9%) in medical-surgical (34.2%), critical care (39.9%), maternal child (18.1%), and psychiatric (7.8%) specialty areas. Most were diploma prepared (92%). Respondents aver-

Table 3. Means and Standard Deviations for Nursing Work Index Subscales

Instrument	Study 1 (n = 233)		Study 2 (n = 263)		Study 3 (n = 55)		Laschinger, Shamian and Thomson (2001)		Aiken, Havens, and Sloane (2000)		Aiken and Patrician (2000)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	ANCC Magnet	Original Magnet	Magnet	Non- magnet
NWI-R	2.68	.55	2.78	.50	3.20	.46	2.53	.23	2.99	2.83	3.08	2.49
Autonomy	2.59	.65	2.76	.56	3.24	.49	2.51	.27	3.01	2.86	3.40	2.84
Control over practice	2.60	.60	2.71	.59	2.96	.50	2.34	.28	2.95	2.65	3.24	2.48
Registered nurse- physician collaboration	2.87	.72	2.97	.65	3.40	.56	2.86	.30	3.03	2.98	2.16	1.93

ANCC, American Nurses Credentialing Center; NWI-R, Nursing Work Index.

Table 4. Correlations Between Major Study Variables

Variables	Study	Total NWI-R	Control Over			Satisfaction
			Autonomy	Practice	Collaboration	
Total empowerment	1	.605*	.593*	.482*	.438*	.625*
	2	.493*	.462*	.394*	.346*	.394*
	3	.572*	.519*	.585*	.348*	.692*
Opportunity	1	.277*	.279*	.152†	.323*	.397*
	2	.139†	.180*	.057*	.140†	.198*
	3	.297†	.149	.363*	.249†	.388*
Information	1	.397*	.423*	.286*	.300*	.424*
	2	.244*	.252*	.199*	.128*	.144†
	3	.519*	.480*	.523*	.320*	.477*
Support	1	.377*	.436*	.268*	.238*	.437*
	2	.301*	.326*	.179*	.270*	.351*
	3	.385*	.389*	.368*	.227†	.636*
Resources	1	.546*	.390*	.627*	.235*	.338*
	2	.543*	.416*	.574*	.223*	.377*
	3	.399*	.368*	.448*	.147	.455*
Formal power	1	.422*	.454*	.342*	.239*	.521*
	2	.379*	.383*	.311*	.204*	.256*
	3	.366*	.286†	.394*	.253†	.543*
Informal power	1	.442*	.416*	.299*	.449*	.398*
	2	.345*	.264*	.247*	.386*	.185*
	3	.416*	.473*	.340†	.284†	.359*
Global empowerment	1	.540*	.512*	.467*	.355*	.739*
	2	.546*	.497*	.472*	.339*	.518*
	3	.474*	.408*	.490*	.314*	.853*
Satisfaction	1	.503*	.486*	.384*	.418*	-
	2	.542*	.437*	.489*	.373*	-
	3	.520*	.388*	.571*	.368*	-

* $P < .05$.

† $P < .01$.

NWI-R, Nursing Work Index.

aged 44 years of age (SD = 8.06), with 22 years of nursing experience (SD = 8.76) and 12 years' experience in their current workplace (SD = 8.55).

Instrumentation

Nurses completed the CWEQ-II, the NWI-R, and the NJSQ.³⁶ The alpha reliability coefficients for the empowerment measures ranged from 0.65 to 0.85, 0.82 for the total scale. The CWEQ-II also correlated positively with the measure of global empowerment ($r = .58$), further supporting the construct validity of the modified instrument. Alpha reliability coefficients for the NWI-R were 0.87 for the total scale, 0.78 for the autonomy subscale, 0.75 for the control over practice subscale, and 0.85 for the collaboration subscale.

The NJSQ is a 7-item scale that measures nurses' perceptions of job satisfaction on their work units. Items are rated on a 6-point Likert scale, then summed and averaged to create a total score. The instrument has excellent internal consistency reliability

(alpha = .87). In this study, the Cronbach alpha reliability was 0.88.

Results

Nurses in these hospitals also believed that their job settings were moderately empowering (M = 18.37, SD = 2.82), slightly higher than the cross province sample and consistent with those of other studies of staff nurses reported in the literature.¹² NWI-R scores were also moderate (M = 2.78, SD = 0.50), and consistent with those of the original magnet hospitals in Aiken's research.^{3,39} Again, the total empowerment score was strongly correlated with the total NWI-R score ($r = .49, P < .0001$).

Similar to the Study 1 results, all empowerment subscales were significantly related to the overall NWI-R score ($r = .54$), with resources the most strongly related (Table 4). Both empowerment and magnet hospital characteristics were significant independent predictors of job satisfaction explaining 31.5% of the variance ($R^2 = .315, F = 59.3, df = 2,258, P = .0001$;

$\beta = .17$ and $\beta = .49$, respectively). Thus, both hypotheses were supported in these data.

Study 3

Design and Sample

The data for this study were drawn from a larger study of nurse practitioners' perceptions of workplace empowerment. Questionnaires were mailed to all registered nurses who worked as acute care nurse practitioners (ACNP) in the province of Ontario. Sixty-three ACNPs from all areas of Ontario constituted the final sample (return rate = 68%). Details of this study can be found in Almost and Laschinger.¹⁶ Nurse practitioners who indicated they worked in a hospital were retained in the sample for the analysis reported here ($n = 55$). ACNPs averaged 41 years of age ($SD = 5.69$), with 18 years of nursing experience ($SD = 6.83$), 5 years of nurse practitioner experience ($SD = 3.18$), and 10 years experience in their current workplace ($SD = 6.53$). Most (98.2%) were master's prepared.

Instrumentation

ACNPs completed the CWEQ-II, NWI-R, and GJSQ. The alpha reliability coefficients for the empowerment measures ranged from 0.57 to 0.90. The CWEQ-II also correlated positively with the measure of global empowerment ($r = .72$), further supporting the construct validity of the modified instrument. The NWI-R alpha reliabilities were 0.88 for the total scale, 0.79 for the autonomy subscale, 0.74 for the control over practice subscale, and 0.84 for the collaboration subscale. The alpha for the GJSQ was 0.84.

Results

Nurse practitioners' ratings of work empowerment were higher than those in either sample of staff nurses ($M = 20.96$, $SD = 3.08$) as were their ratings of workplace magnet hospital characteristics ($M = 3.20$, $SD = 0.46$). Their empowerment scores were similar to those of nurse managers in previous research.^{20,43} NWI-R scores were similar to those of staff nurses in magnet hospitals in Aiken's work.^{3,39} The study hypotheses were also supported in these data. Similar to the findings of Studies 1 and 2, the total empowerment score was strongly correlated with the total NWI-R score ($r = .57$, $P = .0001$). Again, access to empowerment structures was significantly related to the overall NWI-R score (Table 4). However, in contrast to the studies with staff nurses, access to information was most strongly related to the overall NWI-R ($r = .52$).

The combination of empowerment and magnet hospital characteristics were significant predictors of job satisfaction, explaining 50% of the variance ($R^2 = .502$, $F = 26.25$, $df = 2,52$, $P = .0001$; $\beta = .59$, and $\beta = .19$, respectively).

There was some support for Aiken's¹ claim that nurses who work in more specialized areas are more likely to experience positive working conditions based on their more homogeneous knowledge and experience.² Nurse practitioners' NWI-R scores were considerably higher than those of the staff nurses in the other samples. Acute care nurse practitioners are highly specialized in a particular field and thus enjoy greater autonomy and control over their work, as well as close relationships with physicians. In one community hospital in Study 2, nurses who worked in maternal-child and psychiatric specialties had significantly higher NWI-R scores than those on general medical-surgical units. These differences were not observed, however, in the broader cross-province sample of nurses.

Discussion

The results of the analyses of these 3 independent data sets support the hypotheses proposed in this study linking structural empowerment and magnet hospital characteristics. The results support the idea that work environments that provide access to information, support, and resources and opportunities to learn and grow, as well as flexible job activities and strong alliances with coworkers, including physicians, can create work settings that support professional practice in the magnet hospital research.

Access to resources was strongly related to magnet hospital characteristics in all samples but was the most important empowerment structure for staff nurses in both urban teaching hospitals and rural community hospitals. This is consistent with Aiken's belief that sufficient staffing to allow high-quality professional nursing care is a key component of magnet hospital work environments. Adequate staffing makes it possible to have the time to deliver the kind of care nurses expect of themselves. When this is not possible, nurses often feel frustrated and betrayed by management.

In all groups, access to support was also important. When nurses work with others who are supportive, practicing in a truly autonomous manner is more feasible, increasing opportunities to be creative, productive, and effective.⁴⁴ Research has shown that nurses who perceive their managers to be collaborative and supportive are more satisfied and more likely to stay with an organization.^{45,46} Nurses in Stichler's⁴⁷ study were more satisfied in work environments char-

acterized by a spirit of teamwork and by responsive and considerate management, in which nurses were given authority and autonomy to make decisions regarding patient care.

Both formal and informal power were important predictors of magnet hospital characteristics. The importance of good alliances with peers and other health professionals supports Aiken's claim that good nurse-physician relationships are key features of magnet hospital settings. Effective alliances are possible when there is mutual respect among parties and commitment to common goals (in this case, high-quality care).⁴⁸ When relationships are grounded in mutual trust and respect, communication is enhanced, greater levels of cooperation and shared decision making are possible, assertiveness is less threatening, and coordination of patient care is optimized.⁴⁹ Lack of collaboration can lead to fragmentation of care, patient dissatisfaction, and poor outcomes. Also, the importance of having a job that is structured to allow flexibility in the way work gets done is consistent with the idea that the nature of professional work is not routine and must be flexible enough to allow individualized attention to client situations to be effective. Nurse autonomy is constrained when roles are structured according to a rigid set of rules and regulations that hinder nurses' ability to act in a timely manner based on their expert judgments of the client's status.

Access to information was positively related to nurses' perceptions of magnet hospital characteristics in their work settings. However, for the community hospital nurses, the relationship was not as strong as in the other samples. This could be result from access to information not being an issue in these small rural hospitals, in which size made information sharing possible. On the other hand, access to information was the most important empowerment structure for nurse practitioners. Nurse practitioners often serve as coordinators for the health-care team by obtaining test results; communicating patients' needs and care with other healthcare providers; communicating with physicians, staff nurses, and families; and referring patients to other specialized services. Therefore, obtaining timely information from others is key and benefits the organization as well as the patient. When timely information is available, needless treatment delays are avoided. This allows nurse practitioners to execute their role professionally.

The various dimensions of empowerment were significantly related to all magnet hospital features. All empowerment structures were significantly related to perceptions of autonomy in the work set-

ting, although access to resources and support were the most important (Table 5). Access to resources was the most strongly related empowerment structure to control over practice environment in all studies. Informal power was most strongly related to positive nurse-physician relationships. These relationships are theoretically logical and consistent with numerous studies of these variables in the literature from other perspectives.

The results of these 3 studies from different nursing populations provide evidence for the link between empowerment and magnet hospital characteristics. These results support the relevance of using strategies derived from Kanter's theory of workplace empowerment in attempts to create nursing work environments that foster professional nursing practice and promote job satisfaction and commitment among staff nurses. See Figure 2 for a summary of the key findings.

Limitations

The limitations of this study are related to limitations associated with each of the 3 studies. Given the cross-sectional nature of these studies, the findings must be viewed with caution. As is the case with most mail surveys, none of these studies achieved 100% return, limiting the generalizability of the findings to a certain extent. Although the subjects in Study 1 were randomly selected from throughout the province, only nurses with complete data for the two measures were used in the analysis reported in this article. In Study 2, the sample is limited to nurses working in 3 community hospitals in 1 geographic area in the province. The experience of participants in these settings may differ from those in other settings. Also, Study 2 nurses completed a different job satisfaction tool, making strict comparison of results to the other studies problematic. In Study 3, although all available nurse practitioners from the provincial college list were surveyed, it is possible that some may have been omitted from the sampling frame if they did not provide the college with permission to use their names for research purposes. Replication of the study with other samples would provide an opportunity to test the hypotheses across a wider sample. However, the support for the hypotheses proposed a priori allows generalization to theory and offsets these limitations somewhat.⁵⁰

Implications for Nursing Administration

Nursing administrators can use the results of this research by examining workplaces for structural factors

Table 5. Average Correlations Across Studies

	Total Magnet Hospital Characteristics Score	Autonomy	Control Over Practice Environment	Collaboration
Total empowerment score	.556	.524	.487	.377
Resources	.496	.391	.549	.201
Informal power	.401	.381	.295	.373
Formal power	.389	.374	.349	.232
Information	.386	.381	.336	.249
Support	.354	.385	.271	.245
Opportunity	.234	.202	.190	.237

that act as barriers to staff nurses' access to empowerment structures that can support professional practice; that is, nurses' autonomy, control over the practice environment, and good nurse-physician relationships. According to Clifford,⁵¹ professional practice is impossible without support systems that remove barriers between nurses and patients. Care systems and structures that maximize the use of the clinical expertise of nurses are critical to achieving this goal. To enable truly professional practice, managers will have to focus less on control and more on the coordination, integration, and facilitation of nurses' work. This can be accomplished by providing access to information, resources, and support that are needed to achieve professional and organizational goals.

Nurses must have input into the design of their work environments if such structures are expected to empower nurses in their practice. Control over the context of nursing practice environments may be increased by management support of participa-

tive management practices, shared governance systems, decentralization, and the creation of autonomous work units. Patient-focused care systems emphasize point-of-care decision making and the importance of alliances with other healthcare team members, calling to mind Kanter's claim for the importance of informal power in organizations for accomplishing work.

Nurses' access to information about organizational policies and happenings can be increased by means of "information hotlines" on voicemail or e-mail systems. Management can stay in touch with staff through periodic surveys and in regularly scheduled open forums to discuss work issues. Sharing information openly and honestly builds trust in the organization. Visibility of nurse managers at all levels in the clinical setting is an important indicator of support and gives clinical nurses the opportunity to demonstrate their clinical expertise and to be recognized for their skills. It is crucial that all levels of nursing management are

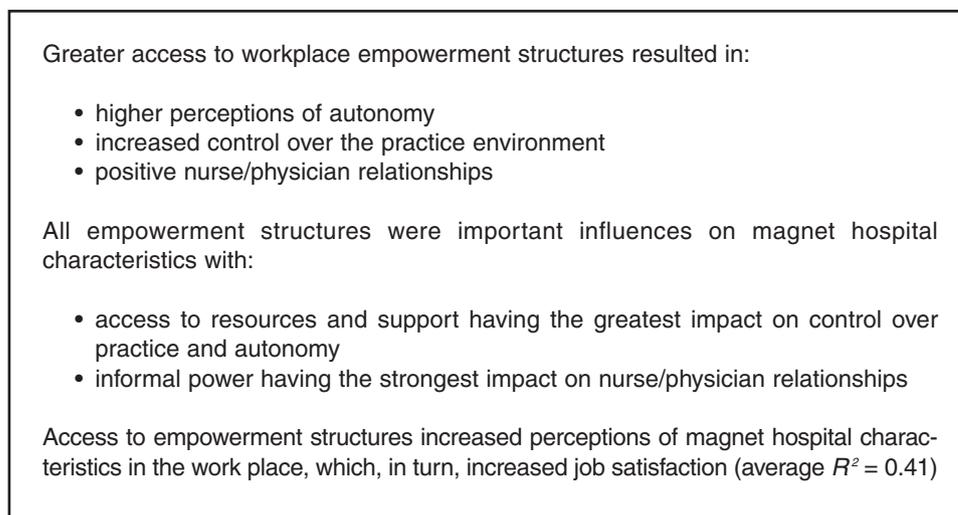


Figure 2. Key findings.

genuinely committed to a shared vision fostering empowered behavior in staff.

Finally, access to opportunities to learn and grow is an important component of a hospital's magnetism. Professional development programs, including inservice and continuing education programs for both staff and managers, are important mechanisms for continuously improving staff knowledge and expertise. Clinical advancement programs, such as career ladders, provide a means for recognizing nurses' experience and expertise. Other strategies that can be used to increase perceptions of empowerment and the creation of "magnetized" work environments can be found elsewhere.^{52,53}

Summary and Conclusions

The results of this study support the proposed link between Kanter's work empowerment structures and Aiken's notion of magnet hospital characteristics. Theoretically proposed relationships between workplace empowerment and features of magnet hospitals that support professional practice were

empirically supported in data from independent studies conducted in 3 different nursing populations. Although further research is needed to validate this work, the findings of this study are both relevant and timely for nursing administrators who are faced with work environment constraints that demand doing more with less, yet preserving the essential elements of professional nursing practice. As nursing faces yet another shortage, every effort must be made to create work environments that attract and retain highly qualified professional nurses to ensure that patients continue to receive the quality of care they deserve and that the profession continues to maintain high standards of nursing practice.

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