

The Relationships of Structural Empowerment, Psychological Empowerment and Organizational Commitment in Staff Nurses in Saudi Arabia

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ABSTRACT

Aim: This study aimed to examine and compare the relationship between empowerment and organizational commitment in Saudi and non-Saudi registered nurses working in Saudi Arabia. The factors that predict organizational commitment among the two study population were also studied.

Methods: The study employed a descriptive comparative multivariate correlational research design and self-administered and a convenience sample of inpatient nurses (N = 398) in three governmental hospitals in Saudi Arabia. Paper and pencil questionnaires were used to collect data. Data analysis was performed using descriptive statistics, correlation analyses, one-way ANOVA, and multiple regressions with moderation analyses.

Results: Statistically significant positive partial correlations were found between empowerment and organizational commitment. Non-Saudi nurses perceived higher levels of empowerment and commitment compared to Saudis. Psychological empowerment had a small moderation effect on the relationship between structural empowerment and continuance commitment. Study findings suggest that fostering empowering environment can improve nurses' retention and commitment.

Conclusions: Structural empowerment, psychological empowerment and organizational commitment have positive relationships among each other. Findings of this study may assist the nursing authority figures understand the relationships between empowerment and organizational commitment among nurses and facilitate the necessary changes to improve the current working conditions.

Keywords

Empowerment, Nurse Retention, Organizational commitment, Saudi Arabia, Work environment.

Introduction

The nursing shortage and the high turnover rate can negatively impact an organization's capacity to meet patients' demands and standards of quality of care [1]. An unsupportive practice environment is reported by researchers as a major contributing factor to the nurse shortage and turnover behaviors [2,3]. Globally,

researches revealed that nurses who work in an unsupportive climate report uncertainty and disempowerment. When coupled with high organizational demands, these nurses develop low commitment, which in turn can contribute to nurse disengagement and withdrawal from an organization.

Employee empowerment is a multifaceted concept. In the organizational context, empowerment in nursing has been studied from two main perspectives: structural empowerment and psychological empowerment. Both structural and psychological

empowerment of employees may hypothetically affect job attitudes, including organizational commitment. In her theory, Kanter [4,5] posited that structural empowerment is achieved by having an access to six workplace power structures, including: (1) opportunity (i.e. job advancement and professional growth prospects), (2) support (i.e. guidance and feedback received from superiors, peers, and subordinates), (3) information (i.e. knowledge about organizational plans, decisions, and environmental relationships), (4) resources (i.e., human and financial resources), (5) formal power (i.e., job visibility and flexibility) and informal power (i.e., current state of affairs inside the organization). These empowerment structures provide nurses with the opportunity to actively participate in decision making processes in an organization and create more control over the work environment, which in turn, may influence the behavior and attitudes of nurses in the workplace [4,5]. Psychological empowerment, on the other hand, involves giving employees power or autonomy over certain task-related activities without deserting the responsibilities and accountabilities associated with it [5]. Spreitzer theorized that individuals who are psychologically empowered believe having a sense of job significance (i.e., meaning) and the ability (i.e., competency) to perform and deliver on the organizational objectives, perceive themselves as active participants with a sense of control in shaping organizational outcomes (i.e., self-determination), and feel that the assigned roles and responsibilities do make a difference (i.e., impact); therefore, are more willing to stay committed to an organization. Based on the common definition developed by Meyer et al. [7], organizational commitment refers to information regarding factors that may influence an individual to leave the organization. According to Meyer et al. [7], forms of employee commitment to an organization include: affective, continuance and normative. *Affective organizational commitment* (AOC) is the employee's emotional attachment to, identification with, and involvement in the organization, which results in employees staying in the organization because of wanting to do so. *Continuance organizational commitment* (COC) refers to an individual's awareness of the relative advantages and disadvantages associated with staying or leaving an organization. *Normative organizational commitment* (NOC) involves remaining with the organization because an individual employee feel morally obligated to stay due to fear of the potential disappointment when leaving the organization or teammates.

Worldwide, arguments exist regarding the importance of examining the phenomenon of nurse empowerment and organizational commitment to understand the current problem of nurse shortage and turnover [8,9]. Although empowerment has several outcomes, such as job satisfaction and decreased work stress, organizational commitment is the major outcome necessary for organizational sustainability and development. Globally, structural empowerment has been demonstrated to have a significant measurable impact on nurses' outcomes when psychological empowerment, or the psychological state a nurse must experience for empowerment interventions, is also present [10]. Structurally and psychologically empowered employees are proactive, productive, satisfied, and willing to make greater contributions for the success of the

organization [8,11]. In turn, nurses become less likely to leave the organization and level of commitment to an organization will improve. Accordingly, it can be concluded that the relationship between empowerment and organizational commitment is a significant matter of concern.

Background

Parallel to the global research, is the national view of nursing in the Saudi work environment where disempowerment, emotional exhaustion, dissatisfaction with payment, workload, and leadership support, and lack of educational and promotion opportunities are cited as a rationale for a decline in commitment and an increase of intent to leave either the organization or the profession [12,13]. Asiri et al [13] emphasized empowerment of nurses working in the Saudi health care settings offers opportunities for more active, autonomous and responsible involvement in operational decision making as well as personal learning and development. Consequently, nurses can develop a sense of self-worth, autonomy, role meaningfulness, engagement, morale and job satisfaction and organizational commitment [13]. As a result, the quality of nursing working conditions and staff nurses' retention rates may be improved [13,14]. When examining the variations, nationality was regarded as a confounding factor affecting nurses' perceptions on empowerment and organizational commitment. Such differences have been highlighted by previous studies, such as those found between nurses from Malaysia and England [15], Arab and non-Arab nationalities in Saudi hospital settings [13], and American and Filipino nurses working in USA [16]. Despite the vast amount of international research, in Saudi Arabia, there remains a lack of explanation of the factors that define work empowerment and contribute to organizational commitment in the workplace. During the literature research and following an expansion of the search period to include articles from (2007-2018), only two scholarly papers [13,17] were found to be related to examining the variables of empowerment and organizational commitment in the Saudi context. The nursing studies in the Saudi context focused mainly on the form of psychological empowerment and reported findings consistent with the global trend, documenting a significant relationship between empowerment and organizational commitment. Those research studies were mainly conducted to assess certain dimensions of empowerment, such as nurses' leadership, managerial support, obstacles of competence and performance of nurses [12,18]. There is a little explanation of the factors that define work empowerment and contribute to organizational commitment in the workplace. The review revealed a gap in this area of research that should be thoroughly investigated to build an understanding about nursing working conditions and nurses' perceptions of empowerment and organizational commitment. Due to differences in the cultural context and in the healthcare system in Saudi Arabia, the perspectives and evaluations of empowerment and organizational commitment as well as recommended interventional strategies may differ from those found in the Western countries [19]. Therefore, it was crucial to investigate the phenomenon in the Saudi context to build an understanding about the existing working conditions and factors

that staff nurses perceive as disempowering or non-motivating to stay committed to an organization. Thus, the primary purpose of this study was to examine and compare the relationships among nurses' perceptions of structural empowerment, psychological empowerment and organizational commitment in two main groups: Saudi and non-Saudi registered staff nurses working in inpatient units in Saudi Arabia. The study addressed the following research questions:

1. What are the relationships among structural empowerment, psychological empowerment, and organizational commitment in Saudi and non-Saudi registered staff nurses working in inpatient units?
2. What are the differences between Saudi and non-Saudi registered staff nurses working in inpatient units with structural empowerment, psychological empowerment, and organizational commitment?
3. What factors predict organizational commitment among Saudi and non-Saudi registered staff nurses working in inpatient units?

The study proposed the following hypotheses:

H1. Structural empowerment and psychological empowerment have a positive relationship with organizational commitment in Saudi and non-Saudi registered staff nurses working in inpatient units.

H2. There are differences between the perceptions of Saudi and non-Saudi registered staff nurses of empowerment and organizational commitment.

H3. Psychological empowerment moderates the relationship between structural empowerment and organizational commitment in Saudi and non-Saudi registered staff nurses working in inpatient units.

Methods

Design

The study employed a descriptive comparative correlational cross-sectional research design to answer the research questions and determine what factors predict organizational commitment among the two study populations.

Data Collection

The theoretical framework of this study was based on Kanter's (1977, 1993) Theory of Structural Empowerment and Spreitzer's [6] Theory of Psychological Empowerment. Structural empowerment was measured using the Conditions of Work Effectiveness Questionnaire-II (CWEQ-II) which was developed by Laschinger et al [10] to measure the six components of Kanter's theory. The CWEQ-II consists of 19 self-reported items across six subscales as a measure of the respondent's perception of structural empowerment rated on a 5-point Likert scale ranges from low perceptions indicated by (1 = none) to high perceptions of access to empowerment structure indicated by (5 = a lot). Four subscales reflect the dimensions of structural empowerment: opportunity, support, information and resources and the two other subscales: Job Activities Scale (JAS) is to measure formal power and Organizational Relationships Scale (ORS) is to measure informal power. With the exception of the informal power subscale, each subscale consists of three items. For the present study, the overall Cronbach's alpha reliability coefficient for the 19-structural

empowerment (CWEQ-II) items of the six subscales was .95. Summing the means of six subscales yields a composite structural empowerment score ranging between 6 and 30; with higher scores representing stronger perceptions of structural empowerment. Scores ranging from 6 to 13 are described as low levels of empowerment, 14 to 22 as moderate levels of empowerment, and 23 to 30 as high levels of empowerment [10].

Psychological empowerment was measured using the Psychological Empowerment Scale developed by Spreitzer [6]. The instrument consists of 12 self-reported items that measure the four dimensions of psychological empowerment conceptualized by Spreitzer (1995) and Thomas and Velthouse (1988): meaning, competence, self-determination, and impact. In this study, the overall Cronbach's alpha reliability coefficient for the 12 items comprising the four subscales of the PES scale was .89, with (.88) for meaning, (.81) for competence, (.78) for self-determination and (.87) for impact. Each dimension on this scale is measured by three items on a 5-point Likert scale with (1 = strongly disagree) and (5 = strongly agree). The mean score of each subscale ranges between 1-5; with higher mean scores indicating higher levels of psychological empowerment.

Organizational commitment was measured using the Three-Component Commitment Model (TCM) [7]. The TCM model by Meyer et al. [7] was designed to operationally measure three forms of employee commitment to an organization: desire-based (affective), cost-based (continuance), and obligation-based (normative). Each subscale is measured by a six item (18 total items), 7-point Likert scale with (1 = strongly disagree) and (7 = strongly agree). Without producing a composite scale-level score, nurses' perception of organizational commitment was measured by assessing the individual mean for each subscale, yielding a subscale mean score ranging between 1-7, with higher mean scores representing stronger perceptions of organizational commitment. For the present study, the overall Cronbach's alpha reliability coefficient for the 18 items of the three subscales comprising the TCM scale was .81, with (.76) for affective commitment, (.76) for continuance commitment, and (.72) for normative commitment.

To ascertain consensual validity and ensure that the wording of statements in the questionnaire met the objective of the study and the instructions were clear with no ambiguous, inaccurate, incomprehensive, or culturally inappropriate terms or questions, the skills of three bilingual nursing experts who spoke Arabic and English were used to review the bilingual version of the questionnaire. The expert panel's feedback was used to reword any items as indicated. The changes were made on 12 items of the Arabic version. The changes mainly included rewording of the Arabic statements that appeared redundant or misunderstood to read in the same fashion as the English version. The necessary modifications were made prior to finalization of the instruments for the main study.

Ethical approval for the study was obtained from the Saudi Ministry of Health and the Ethics Committees of the three participating hospitals. Approval to use copyrighted materials

(CEWQ-II, PES, and TCM) was obtained from the original authors. A self-administered, paper and pencil questionnaire was used to collect data from a convenience sample of full-time Saudi and non-Saudi registered nurses ($N = 398$) working in inpatient units. The exclusion criteria included: part-time nurses, nurses who spent less than three months in current unit, nurse students, non-bedside and nurse administrators such as nurse managers, nurse educators, and assistant nurse managers. The study took a place in three governmental hospital settings in Eastern Province, the largest province of Saudi Arabia by area, including: King Fahad Specialist Hospital-Dammam (KFSH-D), Qatif Central Hospital, and Dammam Medical Complex. Data collection was planned over a three-month period. Completion and return of questionnaire implied consent to participate in the study. Nurses were asked to place the completed anonymous questionnaire in the envelope and return it to a secured box located in each participating inpatient unit of the three hospital settings. Every week over the three-month period, the primary investigator made a follow-up visit to the three participating hospitals to track the response rate and collect the completed questionnaires. A total of 450 questionnaires were distributed in the three targeted hospital settings. In response, a total of 406 were returned, yielding a response rate of 90.2%. Following data cleaning, responses with more than 10% missing data were excluded ($n = 8$). Thus, an overall ($N = 398$) questionnaires that provided a final adequate sample size for coding and statistical analyses.

Data Analysis

Using SPSS (v.22), descriptive statistics were computed for the demographic data. Partial Pearson's r was used to test the first research question and related hypothesis through examining the correlation among the research variables while controlling for the confounding factors. The second research question was tested using one-way ANCOVA, a combination of ANOVA and regression analyses to compare the means of the two independent study groups (Saudis vs. non-Saudis). The third research question was tested using one-way ANOVA analyses to predict the significant and insignificant predictors of organizational commitment. The moderation effect proposed in third hypothesis was tested using a series of Ordinary Least Squares linear multiple regressions (OLS) to predict if the *moderator variable* (i.e. psychological empowerment) actually *moderates* the relationship between the *independent variable* (i.e. structural empowerment) and the *dependent variable* (i.e. organizational commitment).

Results

Details of sample demographics descriptive analyses are presented in Table 1. Through Bonferroni post hoc test adjustment for multiple comparisons, nationality, hospital setting, work unit and length of work shift were regarded as confounding factors leading to significant variations of nurses' perceptions toward empowerment and organizational commitment. Overall, based on nationality, the results of a one-way ANOVA revealed a statistically significant mean difference between Saudi and non-Saudi nurses in total structural empowerment ($F(1, 392) = 152.40$, $p < .001$), all dimensions of psychological empowerment and in the three types of organizational commitment. However, the effect

size of these differences was statistically significantly small ($\eta^2 = .01 - .28$) (Table 2).

Table 1: Descriptive Analysis of Sample Demographic Characteristics (N=398).

Variable and Category	Frequency (n)	Percentage (%)
Gender		
Male	49	12.3
Female	346	86.9
Age		
20-29	114	28.6
30-39	188	47.2
40-49	38	9.5
"50 and more"	4	1.0
Nationality		
Saudi	221	55.5
Non-Saudi	173	43.5
Ethnicity		
Arab	222	55.8
Asian	87	20.6
Indian	82	20.6
Other	1	.3
Educational Level		
Diploma	166	41.7
Associate Degree	5	1.3
Bachelor	202	50.8
Master	5	1.3
Doctoral	1	.3
Other	2	.5
Monthly Salary Range		
SR 1,500-5,000 (\$400 - \$1,333 US)	42	10.6
SR 5,001-10,000 (\$1,334 - \$2,666 US)	214	53.8
SR 10,001-15,000 (\$2,667- \$4,000 US)	121	30.4
> SR 15,001 (> \$ 4,001 US)	7	1.8
Length of Nursing Experience		
3-6 months	11	2.8
7-12 months	23	5.8
1-2 years	11	2.8
3-5 years	85	21.4
6-10 years	164	41.2
> 10 years	98	24.6
Work Unit		
Medical	99	24.9
Surgical	136	34.2
Critical Care ICU	75	18.8
Pediatrics	35	8.8
Trauma	5	1.3
Burn Unit	8	2.0
Other	38	9.5
Time Spent in Current Unit		
3-6 months	26	6.5
7-12 months	21	5.3
1-2 years	50	12.6
3-5 years	115	28.9
6-10 years	132	33.2
Length of Regularly Shift		
8 Hours	75	18.8
12 Hours	150	37.7
Both 8 and 12 Hours	44	11.1

Table 2: Mean Difference and One-way ANOVA Comparing Nationality Groups on Research Variables.

Variables and Subscales	Saudi (n = 221)	Non-Saudi (n = 173)	Mean Difference	df	F	p	ηp ²	
<i>M (SD)</i>		<i>M (SD)</i>		<i>M (SD)</i>				
Total Structural Empowerment	17.19 (4.63)	22.65 (3.97)	19.52 (5.16)	Between Group	1	152.40	.000	.28
Within Group				392				
Total				393				
PES- Meaning	3.96 (.88)	4.53 (.59)	4.20 (.83)	Between Group	1	53.69	.000	.12
PES- Competence	4.33 (.72)	4.46 (.52)	4.38 (.64)	Within Group	392	4.08	.044	.01
PES- Self Determination	3.79 (.83)	4.21 (.61)	3.98 (.77)	Total	393	29.39	.000	.07
PES- Impact	3.29 (.99)	3.88 (.79)		3.55 (.96)	39.98		.000	.09
Affective Commitment	4.13 (1.22)	4.74 (1.11)	4.39 (1.21)	Between Group	1	26.70	.000	.06
Continuance Commitment	4.82 (1.20)	4.42 (1.09)	4.64 (1.18)	Within Group	392	11.60	.001	.03
Normative Commitment	4.25 (1.36)	4.66 (.88)	4.42 (1.18)	Total	393	11.89	.001	.03

Note. PES=Psychological Empowerment Scale. df = Degree of Freedom. ηp² = Partial-Eta Squared.

Table 3: One-Way ANOVA Results Controlling for Confounding Variable: Hospital Setting.

Variables and Subscales		df	Mean Square	F	p	ηp ²
Total Structural Empowerment	Between Groups	2	1677.16	91.86	.000	.32
	Within Groups	395				
	Total	397	18.26			
PES- Meaning	Between Groups	2	15.68	25.39	.000	.11
	Within Groups	395	.62			
	Total	397				
PES- Competence	Between Groups	2	1.37	3.35	.036	.02
	Within Groups	395	.41			
	Total	397				
PES- Self Determination	Between Groups	2	10.49	19.43	.000	.09
	Within Groups	395	.54			
	Total	397				
PES- Impact	Between Groups	2	23.51	29.27	.000	.13
	Within Groups	395	.80			
	Total	397				
Affective Commitment	Between Groups	2	28.57	21.39	.000	.09
	Within Groups	395	1.336			
	Total	397				
Continuance Commitment	Between Groups	2	5.17	3.78	.024	.02
	Within Groups	395	1.37			
	Total	397				
Normative Commitment	Between Groups	2	12.48	9.18	.000	.04
	Within Groups	395	1.36			
	Total	397				

Note. PES=Psychological Empowerment Scale. df = Degree of Freedom. ηp² = Partial-Eta Squared

Demographic Covariates

Hospital Setting

Based on hospital setting, the results of one-way ANOVA revealed a statistically significant difference among nurses on total structural empowerment, all dimensions of psychological empowerment and all types of organizational commitment (Table 3).

Work Unit

The highest statistically significant mean difference was for Pediatrics Unit on the total structural empowerment ($M = 21.68$, $SD = 4.39$) and on psychological empowerment meaning (PEM) ($M = 4.43$, $SD = .60$). Burn Unit scored the highest statistically significant mean difference on PEC ($M = 4.79$, $SD = .17$), self-

determination (PED) ($M = 4.50$, $SD = .47$) and PEI ($M = 3.88$, $SD = .89$). For organizational commitment, the greatest statistically significant mean difference was for Pediatrics Unit ($M = 5.36$, $SD = .95$) on AOC, and for Burn Unit on both COC ($M = 5.84$, $SD = 1.11$) and normative (NOC) ($M = 5.39$, $SD = .52$). However, there was statistically insignificant mean difference between work unit and the four dimensions of psychological empowerment.

Length of Work Shift

Compared to other shift lengths, those who worked a 12-hour shift, had the highest statistical significant mean difference on total structural empowerment ($M = 22.87$, $SD = 3.98$), and on all dimensions of psychological empowerment PEM ($M = 4.48$, SD

= .53), PEC ($M = 4.46, SD = .49$), PED ($M = 4.19, SD = .52$), and PEI ($M = 3.84, SD = .79$), as well as on the forms of organizational commitment: AOC ($M = 4.93, SD = 1.12$), COC ($M = 4.57, SD = .99$), and NOC ($M = 4.75, SD = .88$).

Research Question 1 and Hypothesis 1

While controlling for the covariates, the total structural empowerment was found to have a statistically significant positive but weak partial correlation with psychological empowerment. In particular, the four dimensions of psychological empowerment demonstrated the strongest statistical significant partial correlation with *informal power* ($r = .39, .30, .37, .46, p < .001$), respectively (Table 4).

Total structural empowerment demonstrated the strongest statistically significant positive partial correlation with AOC ($r = .47, p < .001$) and the weakest but insignificant partial correlation with COC. Psychological empowerment demonstrated an overall statistically significant weak positive partial correlation with commitment, with the strongest being between NOC ($r = .33$) with *impact*, and the weakest between *competence* with AOC and NOC ($r = .19$) and for *meaning* with COC ($r = .11$).

Research Question 2 and Hypothesis 2

Overall, the non-Saudi group scored statistically significantly higher on total structural empowerment ($M = 22.08, SE = .46$) than Saudis ($M = 18.72, SE = .52, p < .001$). Additionally, the non-Saudi group scored higher but statistically insignificant levels on all of psychological empowerment dimensions. For organizational commitment, the non-Saudi group also perceived higher but statistically insignificant levels on affective and normative commitment than the Saudi group. Of exception, Saudi nurses demonstrated better but statistically insignificant level of COC ($M = 4.72, SE = .15$) as compared to non-Saudi nurses ($M = 4.41, SE = .14, p = .14$) (Table 5).

Research Question 3 and Hypothesis 3

At 95% CI [-.05, -2.74], while maintaining affective commitment constant, one additional point increase in total structural empowerment and psychological empowerment estimates would result in (Estimate = -.02) negative point increase on affective commitment. This total model concluded that psychological empowerment did not statistically significantly moderate the relationship between structural empowerment and affective commitment ($\beta = -.01, t(396) = -1.94, p = .053$) (Table 6).

Table 4: Partial Correlation Pairs Matrix between the Research Variables.

Variables and Subscales	Opp	Res	Info	Sup	FP	IP	Total	PEM	PEC	PED	PEI	AOC	COC	NOC
Opp	1.00													
Res	.45	1.00												
Infor	.47	.58	1.00											
Sup	.58	.52	.62	1.00										
FP	.48	.63	.59	.53	1.00									
IP	.49	.54	.57	.60	.58	1.00								
Total	.72	.77	.82	.79	.82	.79	1.00							
PEM	.30	.29	.32	.27	.18	.39	.38	1.00						
PEC	.14	.19	.13	.15	-.01*	.30	.19	.59	1.00					
PED	.29	.28	.19	.24	.15	.37	.30	.47	.62	1.00				
PEI	.28	.32	.31	.36	.35	.46	.43	.35	.36	.58	1.00			
AOC	.29	.36	.42	.33	.41	.39	.47	.30	.19	.18	.31	1.00		
COC	.07*	.04*	.05*	.10	.06*	.17	.09*	.11	.16	.16	.23	.07	1.00	
NOC	.27	.33	.33	.36	.29	.34	.41	.28	.19	.24	.33	.43	.39	1.00

Note. All partial correlation coefficient correlations (r) presented were statistically significant with $p < .05$. Correlations denoted with * were statistically insignificant at $p \leq .05$. Opp = Opportunity. Res= Resources. Info =Information. Sup = Support. FP = formal power. IP = informal power. Total =Total Structural Empowerment. Psychological empowerment: PEM = meaning. PEC =competence. PED= self-determination. PEI= impact. Organizational Commitment: AOC = affective. COC= continuance. NOC= normative.

Table 5: Pairwise Comparisons Between Saudi and Non-Saudi Nurses: Covariates Controlled.

Dependent Variable	(I) Nationality	(J) Nationality	Mean Difference (I-J)	Std. Error	Sig. ^b	95% CI for Difference ^b	
						LB	UB
Total Structural Empowerment	Saudi	Non-Saudi	-3.35*	.85	.00*	-5.02	-1.69
PES- Meaning	Saudi	Non-Saudi	-.23	.16	.16	-.54	.09
PES- Confidence	Saudi	Non-Saudi	-.06	.13	.67	-.31	.19
PES- Self Determination	Saudi	Non-Saudi	-.09	.14	.48	-.37	.17
PES- Impact	Saudi	Non-Saudi	-.28	.18	.12	-.63	.07
Affective Commitment	Saudi	Non-Saudi	-.03	.24	.89	-.49	.43
Continuance Commitment	Saudi	Non-Saudi	.31	.25	.21	-.18	.80
Normative Commitment	Saudi	Non-Saudi	-.38	.22	.09	-.81	.06

Note. Based on estimated marginal means. * The mean difference is significant at the .05 level. b = Adjustment for multiple comparisons: Bonferroni. CI= Confidence Interval (LB= Lower Bound, UB= Upper Bound).

Table 6: Regression Estimates: Empowerment and Affective Commitment (1st Moderation Model).

95% Confidence Interval								
Variables	Estimate	SE	Lower	Upper	β	<i>t</i>	<i>df</i>	<i>p</i>
(Intercept)	4.37	0.05	4.27	4.47	0	396	84.77	<.001
CWEQ Total Structural Empowerment	0.59	0.09	0.41	0.78	0.32	396	6.34	<.001
PES Impact	0.34	0.07	0.2	0.48	0.27	396	4.85	<.001
PES Self-Determination	-0.21	0.09	-0.39	-0.02	-0.13	396	-2.19	0.029
PES Competence	0.18	0.11	-0.03	0.39	0.09	396	1.65	0.099
PES Meaning	0.19	0.09	0.02	0.36	0.13	396	2.22	0.027
Total Moderation Model	-0.02	0.01	0.05	-2.74	-0.01	396	-1.94	0.053

Table 7: One-way ANOVA Results: Empowerment and Normative Commitment (2nd Moderation Model).

Variables	<i>SS</i>	<i>df</i>	<i>F</i>	<i>p</i>	η^2
Model	138.11	6	21.37	<.001	0.24
CWEQ- Total Structural Empowerment	15.83	1	14.7	<.001	0.03
PES- Meaning	6.23	1	5.78	0.017	0.01
PES - Competence	1.05	1	0.97	0.325	0
PES- Self -Determination	0.13	1	0.12	0.725	2.36
PES- Impact	23.52	1	21.84	<.001	0.04
Total Moderation Model	0.92	1	0.86	0.355	0

Table 8: Regression Estimates: Empowerment and Continuance Commitment (3rd Moderation Model).

95% Confidence Interval								
Variables	Estimate	SE	Lower	Upper	β	<i>df</i>	<i>t</i>	<i>p</i>
(Intercept)	4.65	0.06	4.54	4.77	0	397	81.69	<.001
CWEQ_Total Structural empowerment	-0.23	0.1	-0.43	-0.02	-0.13	397	-2.19	0.029
PES-Meaning	0.07	0.09	-0.11	0.26	0.05	397	0.77	0.443
PES -Competence	0.19	0.12	-0.04	0.42	0.12	397	1.63	0.105
PES -Self-Determination	-0.12	0.1	-0.33	0.08	-0.08	397	-1.15	0.249
PES- Impact	0.24	0.08	0.09	0.39	0.19	397	3.12	0.002
Total Moderation Model	0.0355	0.01	0.01	0.06	0.01	397	2.76	0.006

Likewise, the second interaction regression model indicated that empowerment was not statistically significant predictor of normative commitment ($\eta^2 = .002$, $F(1, 397) = .86$, $p = .355$) (Table 7). Of exception, the third total moderation model indicated that empowerment was statistically significant predictor of continuance commitment ($F(1, 397) = 7.63$, $p = .006$). Overall, the interaction term of this model indicated that psychological empowerment, with trivial size effect, did statistically significantly moderate the relationship between structural empowerment and continuance commitment ($\beta = .01$, $t(397) = 2.76$, $p = .006$) (Table 8).

Discussion

Confounding Variables

During the additional analyses, hospital type, work unit and length of work shift were found to have a confounding effect when examining the variations of perceptions on empowerment and organizational commitment among the participants of this study.

Hospital Setting

Based on the hospital setting, this study revealed a statistically significant difference among nurses on empowerment and commitment. Empowerment can be viewed from different angles depending on the context [20]. Yaseen [20] found that nurses perceived higher structural empowerment and psychological empowerment at hospitals with Magnet® status compared to

non-Magnet® hospitals. Stimpfel et al. [21] found a positive relationship between Magnet® status and higher nursing quality of care, concluding that Magnet® settings attract and retain nurses by enriching the environments with empowerment structures, leading to an optimization of quality nursing care. For the hospital settings included in this study, organizational culture, levels and operationalization of empowerment structures, job-related conditions, and sample characteristics might have affected the relationships among the research variables and might also have attributed to the difference in nurses' perceptions toward empowerment and commitment.

Work unit

In comparison with nurses from other units, the statistically significant higher mean difference empowerment and commitment found among intensive care and burn care nurses in this study may be attributed to the notion that working in such areas is perceived to be challenging and exciting with its high speed and rapid changing environment. In these challenging work units, the continuous individual development, the supportive atmosphere and well-functioning teamwork, having an appropriate mix of jointly developed goals, developing a sense of self-esteem and belief in one's ability to manage work tasks, all in turn, lead to developing an inner sense of strength and power and commitment to the workplace [22]. For pediatric nurses, the high levels of

empowerment and commitment found in this study may be related to the perceptions of self-efficacy in caring for pediatric population. When taking care of a sensitive population such as pediatrics, self-efficacy, which reflects an individual's beliefs about the competence and ability to perform tasks and improve performance, is expected to be a key element in developing an inner sense of power and a feeling of doing good [23].

Length of work shift

As compared to other work shift categories, the findings of the present study indicated that those who worked a 12-hour shift had the highest statistically significant mean difference on empowerment and organizational commitment. Comparably, Ahmad and Oranye [15] found that type of employment (part versus full-time) had a positive association with structural empowerment among English nurses, but had no significant association with structural and psychological empowerment among Malaysian nurses. A possible explanation is that those working less shift hours or those having part-time job opportunities or more stable work shift hours might have more time and opportunity to engage in other activities such as research, social, family and personal affairs. The amount and quality of work-life balance, work culture, role seniority, compensation level, opportunity to achieve goals, amount of pressure or expectations, all could be a reason for the difference between length of regular shift and perceptions of empowerment and commitment found among nurses in this study.

Research Question 1 and Hypothesis 1

The majority of the findings of the present study indicated a statistically significant weak positive partial correlation between empowerment and organizational commitment. This correlation reinforces the findings of previous studies on empowerment and organizational commitment conducted in Western countries [24-27] and in non-Western countries [15,13,28]. The partial correlation coefficient between empowerment and commitment in this study provided additional empirical support for both Kanter's [4,5] and Spreitzer's [6] theories of empowerment.

In comparison with other forms of organizational commitment among nurses in the present study, while the strongest statistically significant positive correlation was found between psychological empowerment and normative commitment, structural empowerment appeared to have the strongest partial correlation with affective commitment. This provides additional empirical support to the large body of scholarly papers demonstrating the value of affective organizational commitment as having the strongest and most consistent relationship with desirable organizational outcomes [25,26].

It is possible that the confounders (hospital setting, working unit and length of working shift) might have played a role in these relationships. Confounding variables may wholly or partially account for the observed effect so the results do not reflect the actual relationships. In the present study, ANCOVA and multiple linear regressions were used to control for potential confounder variables. However, confounding can persist, even after adjustment

leading to a possibility for inaccurate assumptions about the form of the relationship between confounder and research variables may lead to inaccurate conclusions about these [29].

Research Question 2 and Hypothesis 2

As compared to Saudi nurses, non-Saudi nurses felt more empowered (structurally and psychologically) and had more affective commitment. Such differences have been highlighted by previous studies, such as those found between nurses from Malaysia and England [15], Arab and non-Arab nationalities in Saudi hospital settings [13], and American and Filipino nurses working in the USA [16]. In the present study, these differences may be because of non-Saudi nurses being a minority group coming from or belonging to a high-power distance culture and where having an authoritarian voice might create an impression of managerial incompetence. Kanter (1993) proposed that people from certain ethnic groups, particularly those who are ethnic minorities, can be treated differently in organizations. Ethnic minority groups might feel stressed socially isolated, unsupported, powerless, and present low or no commitment to the organization. However, belonging to a minority group and high-power distance culture might have led to acceptance of inequality and display of better perceptions and behaviors toward organization. This may explain the finding of affective commitment being more prominent among non-Saudi nurses compared to their Saudi counterparts.

In contrast, the overall low levels of empowerment and commitment reported by Saudi nurses in the present study might be related to the low status of nursing as a profession in Saudi Arabia. The Saudi society has difficulty in accepting nursing as a professional career. The literature indicated that some major reasons for Saudis not to consider nursing as a possible future career or think of leaving the profession included: low social status, facing criticism from family and public due to poor perception of nursing, cultural values and community beliefs [19]. Thus, it is possible that Saudi nurses might have developed an inner sense of feeling disempowered which affects perceptions of empowerment and organizational commitment revealed in this study.

Research Question 3 and Hypothesis 3

A number of theorists posited psychological empowerment may be the most important contributor of positive employee outcomes and may serve as an underlying mediating variable for the effects of structural empowerment on employees' behaviors and organizational outcomes [6,30]. That is, employees feel psychologically and intra-personally empowered, and in turn, display positive behaviors toward the organization. In nursing practice, in contrast to the findings of O'Brien (2010), psychological empowerment was found to have a mediating role between structural empowerment and burnout [29]. Kebriaei et al. [28] and Royer [27] found that organizational commitment mediated the relationship between empowerment and intent to leave attitudes. Laschinger and Havens [30] reported positive responses to a work environment are more than the employees' ability to access empowerment structures. Structural empowerment must lead to an inner sense of empowerment in the individual in order to have a positive effect on the employee and organizational outcomes [31].

It is likely that professional organizational membership fostered the development of psychological empowerment and the feeling of work importance with an impact on others and organizational outcomes as whole. Thus, it could be suggested that nurses in the present study developed a sense of intra-personal control because of feeling empowered to act and influence the workplace culture, and in turn, developed a certain level of commitment and emotional attachment to the organization.

The findings of this study must be interpreted in the context of some limitations. The cross-sectional and descriptive nature of data must be given meticulous consideration. The use of this research design limits the generation of strong statements of cause and effect. Additionally, the use of convenience sampling method from three hospital settings and from one region of Saudi Arabia limits the generalizability to other regions and populations in Saudi Arabia. The data were collected from bedside nurses and may not be reflective of all Saudi and non-Saudi nurses. However, the large and diverse sample in this study, represented by including multiple settings for data collection might result in enhancing the generalizability of the findings to other populations if further studies were carried out in similar contexts.

Conclusions

Findings of this study revealed a difference between Saudi and non-Saudi nurses in perceptions of empowerment and organizational commitment. Non-Saudi nurses perceived higher levels of empowerment and commitment compared to Saudi nurses. Additionally, with trivial effect, psychological empowerment was found to be a moderator between structural empowerment and continuance commitment. These findings provided indications for the need of further investigations and interventional plans by the Saudi Ministry of Health to assess the existing working conditions and improve nursing work environment to enhance nurses' empowerment. Specific areas for future research may address the effect of nurses' empowerment and commitment on organizational outcomes, such as nurses' performance, job satisfaction, retention and intent to leave as well as examining the effect of interventional strategies that might improve empowerment and commitment levels among nurses.

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