

Review Article

Structural Empowerment among Frontline Nurses in Hong Kong: A Study on the Moderating and Mediating Effect of Self-Esteem

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- Structural empowerment

Abstract

This study examined Kanter's theory of structural empowerment by exploring the moderating and mediating effect of self-esteem. Participants were frontline nurses (N = 556) of an acute hospital in Hong Kong. Results of the study indicated that structural empowerment was associated with job satisfaction only among nurses with high self-esteem. It was beneficial to positive well-being of nurses with moderate self-esteem but was detrimental to positive well-being among nurses who were low in self-esteem. The impact of only one of the components of structural empowerment (i.e., access to opportunity) was mediated by self-esteem. Self-esteem played a more important role in moderating than in mediating the effects of structural empowerment. The overall findings suggested that to facilitate positive outcomes, personality factors should be considered in the implementation of structural empowerment. Results of this study were discussed with reference to the three different motivational patterns of self-esteem, viz., self-derogation, self-protection, and self-acquisition.

INTRODUCTION

Kanter's theory of structural empowerment has been widely applied to the nursing field [1,2]. Structural empowerment includes four components: opportunity for growth and development, sharing of information, rendering of support, and availability of resources. These components are conceptualized as antecedent conditions of positive outcomes and effective organizational behavior. Personality factors are inconsequential in the empowerment process. Nonetheless, from an interactive perspective, organizational behaviors are not solely a result of structural characteristics of the work environment, but also affected by personality characteristics of the individuals [3,4]. Not all nurses would respond similarly to the empowerment process. Nurses who are competent and value growth and accomplishment may be accepting to challenging task and are likely to benefit from structural empowerment. Other nurses who are insecure and less competent may find the empowering environment stressful and feel threatened by its demands. They may be less readily empowered by structural elements in the workplace.

A study found that nurses with healthy self-esteem tended to perceive organizational changes as challenging and were

more proactive in dealing with difficulties. On the other hand, nurses with low self-esteem perceived the changes as adding heavy pressure on them and were undermined by organizational transformation [5]. In a series of five studies, it was observed that employees of high self-esteem were more positively influenced by management consideration of input than were their low self-esteem counterparts [6]. The above studies suggested that self-esteem may function as a moderator in the empowerment process. However, self-esteem itself may also be subject to changes under environmental influence [7]. For example, after participation in a series of eight 1.5 hour training sessions, nurses reported that their self-esteem was enhanced and they were able to handle job more effectively [8]. Another study showed that relational devaluation such as criticism and rejection resulted in lowering of self-esteem, whereas positive relational evaluations such as success and praise enhanced self-esteem. The enhancement of self-esteem in turn led to positive outcomes and organizational behavior [9]. Hence, it is also plausible that self-esteem may act as a mediator in the empowerment process.

This study was conducted to explore the possible moderating and mediating effect of self-esteem in the empowerment process. Job satisfaction and psychological well-being which were two

prominent issues of nursing professions in Hong Kong were selected as outcome measures. Rosenberg's global self-esteem scale [10], a widely used instrument in cross-national studies, was adopted to measure self-esteem.

Western studies indicated that subjects tend to exhibit positive self-evaluation in response to Rosenberg's self-esteem scale [11]. The mean or median are generally higher than the conceptual midpoints of the scale. However, researchers usually classify subjects who score below the mean or median as low self-esteem, though many of them may score around the conceptual midpoint. That is, they may actually be moderate in self-esteem. It has been contended that these individuals are characterized by protective motivation with a propensity to avoid social disapproval [11]. In contrast, individuals with high self-esteem is associated with acquisitive motivation and tend to seek social approval. The protective and acquisitive motivational pattern of self-esteem would be taken into consideration when performing data analysis in this study.

MATERIALS AND METHODS

This study was conducted in a major acute hospital in Hong Kong. Approval for the study was granted by the Ethics and Research Committee of the hospital. A questionnaire which included items on demographic characteristics and measuring instruments was designed for data collection.

MEASURING INSTRUMENTS

Conditions for Work Effectiveness Questionnaire

Structural empowerment was measured by the *Conditions for Work Effectiveness Questionnaire (CWEQ)* [12]. *CWEQ* measured structural empowerment by four 4-item subscales, viz., opportunity for growth and development, sharing of information, rendering of support, and availability of resources. Items of the subscales were rated on a 5-point Likert scale (0 = none, 4 = a lot). The total raw scores of each subscale were transformed to scale scores with possible scores ranged from 1 to 5. The total scale scores of the four subscales served as indicator of access to structural empowerment, with higher scores indicated greater access to structural empowerment. Based on data from this study, reliability of the four subscales of *CWEQ* was satisfactory (Cronbach $\alpha = .79$ to $.80$) with access to structural empowerment attained a Cronbach α of $.90$.

Rosenberg Global self-esteem Scale

The scale consisted of 10 items (e.g., "I feel that I have a number of good qualities") to which respondents were asked to answer on a 4-point scale (1 = strongly disagree, 4 = strongly agree) [10]. Higher scores indicated higher level of self-esteem. Reliability based on data from the present study was highly satisfactory (Cronbach $\alpha = .91$).

Job Satisfaction Scale

This was a 5-item scale developed specifically to measure job satisfaction among the nurses [13]. Participants indicated their responses to the test items (e.g., "Generally, I am satisfied with my job") on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree). Higher scores indicated greater job satisfaction. Cronbach α based on data from this study was $.79$.

General Health Questionnaire -12

The 12-item version of the *General Health Questionnaire (GHQ-12)* was used to measure psychological well-being [14]. The *GHQ-12* of the present study adopted a "Yes-No" response format. Half of *GHQ-12* were positive items (e.g., "able to enjoy your normal day-to-day activities") which measured positive well-being, whereas the reversely scored negative items (e.g., "feeling unhappy and depressed") indicated negative well-being. The total scores provided a measure of overall psychological well-being, with higher scores indicated higher levels of well-being. Reliability of *GHQ-12* was examined in this study and found to be satisfactory. Cronbach α of positive well-being, negative well-being, and overall well-being was $.73$, $.85$, and $.81$ respectively.

Data Collection Procedure

Frontline nurses working in various practice areas of the acute hospital were invited to participate in this study. Participation was voluntary and anonymous. They were given a set of questionnaire with a covering letter which explained the purpose of the study and how the questionnaire was to be completed. They were requested to complete the questionnaire within a week and drop it in a box placed in the ward.

Characteristics of Respondents

A total of 556 questionnaires (response rate = 51%) were completed and valid for data analysis. About 66% of the respondents were below 35 years old, 8% reached the age of 45 or above, the rest (26%) were aged between 35 and 44 years old. Half of the respondents (51%) came from the medical and surgical department and about 20% from both the operation theatres and pediatrics department. The rest (29%) were nurses from other areas of practices (e.g., ICU, Orthopedics, ENT, oncology, etc.). Most of the respondents (86%) were female nurses and unmarried (59%). Around 15% of them were nursing officer, 76% staff nurses, and 9% enrolled nurses.

RESULTS

Preliminary analysis showed that overall psychological well-being and negative well-being were not significantly related to structural empowerment. The following analysis focused on positive well-being as one of the outcome measures.

Moderating Effect of Self-esteem

Hierarchical multiple regression analysis indicated that except for access to opportunity, self-esteem was a significant moderator in the empowerment process (see Table 1).

The *Beta* coefficients of the interaction term indicated that structural empowerment exerted differential effects on the nurses. Nurses with higher self-esteem reported higher levels of job satisfaction than did those lower in self-esteem. Nurses with relatively lower self-esteem tended to enhance their positive well-being to a greater extent than those with higher self-esteem.

To further examine the possible effects of motivational patterns of self-esteem, nurses were divided into three groups with reference to the conceptual midpoint (25.0) and the statistical midpoint (mean) of 29.8 obtained in this study. Thus, self-esteem score ≤ 24 , 25-29, and ≥ 30 were classified as low,

moderate, and high self-esteem. Correlations of empowerment and outcome measures were examined separately for the three groups (see Table 2).

Correlations between empowerment and job satisfaction were found to be significant only among nurses high in self-esteem. Among nurses of low self-esteem, the correlations were generally negative in direction, though not statistically significant.

In general, access to structural empowerment was negatively related to positive well-being among nurses who were low in self-esteem, but the relationship was positive among nurses with moderate self-esteem. No significant effect on positive well-being was found among nurses with high self-esteem.

Mediating Effect of Self-esteem

Results of the multiple regression analysis showed that self-esteem mediated the impact of access to opportunity. Access to

opportunity was related to job satisfaction (*Beta* = .13, *p* < .01) and positive well-being (*Beta* = .11, *p* < .01), but the *Beta* values diminished significantly to .08 and .06 respectively when self-esteem was controlled for. Yet, self-esteem remained a significant predictor of job satisfaction (*Beta* = .41, *p* < .001) and positive well-being (*Beta* = .44, *p* < .001) in the regression equations. These findings confirmed that the effect of access to opportunity on job satisfaction and positive well-being was mediated by self-esteem.

DISCUSSION

Self-esteem acts as a moderator where the antecedents are access to information, support, and resources. It serves as a mediator only in the relationship between access to opportunity and outcome measures. The overall results suggest that self-esteem plays a more important role as a moderator than as a mediator in the empowerment process.

Compared with hierarchical multiple regression analysis, ANOVA presents a clearer picture of the moderating effect of self-esteem: (a) structural empowerment is related to job satisfaction only among nurses of high self-esteem (self-esteem score ≥ 30); (b) positive relationship between structural empowerment and positive well-being is found among nurses of moderate self-esteem (self-esteem score = 25 - 29), but the relationship is negative among nurses low in self-esteem (self-esteem score ≤ 24). The findings reflect the differential effects of the motivational patterns of three levels of self-esteem. The motivational pattern that characterizes low, moderate, and high self-esteem may be respectively referred to as self-derogation, self-protection, and self-acquisition. In view of the findings on the three groups of nurses, it appears that a simple dichotomization of subjects into low vs. high self-esteem or a linear multiple regression analysis of the total sample would not be fully reflective of the actual functionality of self-esteem.

Results of this study are discussed with reference to the three motivational patterns of self-esteem. As previously pointed out, nurses with moderate self-esteem tend to present themselves in a self-protective manner which is characterized by a propensity to avoid social disapproval [11]. A Chinese proverb - "Not for meritorious achievement, but striving for making no errors" - aptly describes the self-protective motivation. In contrast, nurses with high self-esteem exhibit a propensity of self-acquisitive or self-enhancing motivation. They are more active in seeking social approval and gaining prestige through meritorious achievement. However, it has been documented that the tendency towards self-enhancement is weaker in East Asian (where collectivism is highly valued) than people in Western countries (where individualism is dominating) [15]. Apparently, nurses with self-protective motivation fit in better with the Hong Kong ecological culture of collectivism in which harmonious relationship and the ability to get along, rather than self-success or the ability to get ahead, is highly valued [16-18]. They enjoy better status of well-being because their behaviors and values are in congruence with the ecological cultural context [19,20] and access to structural empowerment further enhances their sense of positive well-being.

Nurses with self-protective motivation also show greater

Table 1: Interaction Term of Structural Empowerment and Self-esteem Regressed on Job Satisfaction and Positive Well-being.

	ΔR^2	Beta
Job satisfaction as outcome		
Structural empowerment X self-esteem	.01	.10**
Opportunity X self-esteem	.003	.05
Information X self-esteem	.01	.07+
Support X self-esteem	.03	.14***
Positive well-being as outcome		
Structural empowerment X self-esteem	.02	-.13***
Opportunity X self-esteem	.003	-.06
Information X self-esteem	.02	-.14***
Support X self-esteem	.01	-.08*
Resources X self-esteem	.02	-.13***

+*p* < .10. **p* < .05. ***p* < .01. ****p* < .001

Table 2: Relationship of Access to Structural Empowerment with Job Satisfaction and Positive Well-being among Low, Moderate, and High Self-esteem Groups.

	Low ^a (n = 61)	Moderate ^b (n = 188)	High ^c (n = 307)	Total (N = 556)
Job satisfaction as outcome				
Structural empowerment	-.05	.06	.25***	.16**
Opportunity	-.09	.07	.16**	.13**
Information	.05	-.05	.17**	.08*
Support	-.07	.02	.28***	.15**
Positive well-being as outcome				
Structural empowerment	-.04	.11	.16**	.12**
Opportunity	-.24*	.17*	.04	.11**
Information	-.01	.14*	.06	.11**
Support	-.28*	.16*	.02	.06
Resources	-.21*	.17*	.06	.09*
Resources	-.25*	.16*	.03	.08*

^aSelf-esteem scores below the conceptual midpoint (≤ 24).
^bSelf-esteem scores ranged from conceptual midpoint to mean values (25-29).
^cSelf-esteem scores above the mean value (≥30).
 p* < .05. *p* < .01.

concern of communion goals (e.g., affiliation, closeness) [16,21]. Access to structural empowerment may increase their efficacy in achieving these goals more than agentic goals (e.g., status, power). A concern with communion goals is also congruent with the collectivist culture, thereby enhance their well-being. In contrast, nurses (high in self-esteem) with self-acquisitive motivation are more concerned with agentic goals. Structural empowerment increases their capability to achieve these goals which leads to greater satisfaction with job performance in the workplace than that in general life situations as indicated by positive well-being.

Nurses (low in self-esteem) with self-derogative motivation are dominated by feelings of inadequacy, ineptness, inferiority, and lack of confidence. They may experience anxiety when access to structural empowerment and perceive the situations as threatening because of their feelings of inadequacy. The greater the access to structural empowerment, the more damaging it is to their sense of well-being. This may account for the negative relationship between structural empowerment and positive well-being among nurses low in self-esteem.

While the impact of access to opportunity on outcome measures is not moderated by self-esteem, it is mediated by self-esteem. In this study, access to opportunity is measured by access to training programs for new learning and gaining new skills and knowledge on the job. It is most directly related to the enhancement of nurses' ability to accomplish their tasks effectively. Accomplished task effectively promotes self-esteem as self-esteem is closely associated with feeling of competence, sense of agency, and perceived mastery of environment. Such feelings are expected to lead to job satisfaction and positive well-being.

The overall results of this study suggested that low self-esteem is a personality weakness that may be an obstacle to fostering of structural empowerment. Fortunately, self-esteem can be promoted to a higher level by training programs [8]. With improvement in self-esteem, nurses would be more likely to perceive access to empowerment as a challenge and able to benefit from the empowering process, thereby leading to job satisfaction, positive well-being, and, high quality of patient care.

CONCLUSION

Structural empowerment exerts differential impacts on nurses with different levels of self-esteem. This study expands Kanter's model of structural empowerment by showing that personality differences need be considered in the implementation of empowerment in the workplace. The findings implicate that workshop preparing vulnerable participants for the empowering environment may enhance the positive impacts of structural empowerment. With a challenging and satisfying working environment, it should help recruit and retain committed nursing staff in the health care system.

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