

EFFECTS OF EMPOWERING IN-SERVICE TRAINING
PROGRAM TO IMPROVE JOB SATISFACTION AMONG
NURSE AIDES IN LONG TERM CARE FACILITIES

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ABSTRACT

Background: Nurse aides play a pivotal role in the healthcare team which could lead to job dissatisfaction with high levels of staff turnover.

Purpose: The purpose of this study was to evaluate the effects of empowering in-service training program to improve job satisfaction among nurse aides in long term care facilities.

Methods: A non-equivalent control group design was conducted. Purposeful sampling was employed from Tao-yuan area. A total of 95 nurse aides subjects were recruited, and divided to experimental and control groups. The empowering in-service training program involved the

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curriculum content to include the cognition of Workplace difficulties, social interaction communicates and the pressure manages and refuses technique etc. Both experimental and control groups took pre-test in order to set baseline, and only the experimental group obtained 6-weeks classes regarding to empower in-service training program. The experimental group took post-test immediately after intervention in order to evaluate the instant effect of teaching programs. Data was analyzed by using descriptive statistics, the One Way ANCOVA was conducted to find the differences in immediately effect for experimental and control groups.

Results: The findings of this study showed that (1) the mean total job stressors in post-test was 1.21 (SD = ±.42) for the experimental group, and 1.48 (SD = ±.66) for the control group. The mean total job satisfaction in post-test was 3.57 (SD = ±.57) for the experimental group, and 3.24 (SD = ±.77) for the control group. (2) total work stressors, task stressors, and relational stressors, there were significance differences in experimental group after the empowering in-service training program; (3) in the effect of job satisfaction aspect, total job satisfaction, internal satisfaction and external satisfaction, there were significant statistical significances after the training program.

Conclusion and implications for practice: These results could provide information as supplementary for nurse aids in-service in long-term care facilities, and to increase their job satisfaction.

Key words: nurse aides, work stressor, job satisfaction, empowerment

Introduction

The proportion of the population aged 65 years and older in Taiwan was 11.15% in 2012. This is expected to rise to 20% in 2026, at which time, the country would become a super-aged society (The Ministry of the Interior, 2010). The supply of certified nurse's aides available to provide quality care for our aging elders has become an increasingly urgent issue over the last two decades (Howe, 2014). Back et al. (2009) addressed the quality of health and healthcare services begins with the frontline healthcare workers (i.e., the nurse, nurse aide, or home health worker and so on.). Healthcare aides play a pivotal role in the healthcare team (Norton et al., 2012). Direct care providers in long-term care facilities have a difficult job (Zimmerman et al., 2005). Park et al. (2010) addressed that nursing assistants, who have the most involvement with direct care for residents and the most frequent contact with family members, need help to cope with the many behavioral problems associated with dementia and conflicts with family members. This shortage of workers is clearly significant of the nursing home industry, which expect an future need for these workers (stone, 2004).

According to Xiang et al. (2014), workplace stress is a common problem with broad effect in professional life. Stress was more often reported by nurse aides (Zimmerman et al., 2005). Ejaz et al. (2008) defined concept of stress in terms of personal and work conditions (e.g., ability to pay bills, constant shift changes) that create worries. Nursing assistants had higher stress from residents' aggressive behaviors (Park et al., 2010). According to Lin et al. (2009) and Schaefer & Moos (1993), work stressors indicates: (1) task stressors, including general and healthcare job tasks; (2) system stressors, including workload, work procedure, institutional planning and maintenance; and (3) relational stressors, including colleagues and supervisor relationship.

The relationship between healthcare aides' work and burnout is well documented (Yeatts et

al., 2007). Healthcare work can induce high organizational stress because healthcare workers often face conflicting demands from their supervisors and patients. Additional factors that can lead to stress in healthcare workers include close contact with human suffering and death, job role ambiguity, staff shortage, and the requirements of shift work (Back et al., 2009). Park et al. (2010) investigated 267 nursing staff members in 10 long-term care facilities, finding that nursing assistants reported higher stress levels than nurses from caring for the residents with aggressive behaviors ($t=-2.28, p = .040$).

Nurse's aides are frequently excluded from team communication and decision-making, which often leads to job dissatisfaction with high levels of staff turnover (Howe et al., 2014). Job satisfaction is important for nursing home staff and nursing home management, as it is associated with absenteeism, turnover, and quality of care (Castle et al., 2006). Determinants of job satisfaction include the work environment and the personality of workers. In operationalizing the work environment, it is most often split into multiple domains such as supervisors, pay, and promotion opportunities (Castle et al., 2006). According to Laschinger et al. (2004), empowered employees are generally more satisfied with their job, and enhance perceptions of empowerment can have enduring positive effects on employees. Healthcare aides who feel empowered have reported experiencing less burnout and feel more committed to and satisfied with their jobs (Cready et al., 2008). Herzberg et al. (1959) presented a two-factor theory wherein job satisfaction is composed of intrinsic and extrinsic factors. Intrinsic factors are motivating factors centered on personal achievement, recognition, responsibility, advancement, growth, and the work itself. Although the absence of these factors is not necessarily dissatisfying, when present, they can be a motivational force. Extrinsic factors are related to the external working environment such as supervision, working conditions, co-workers, pay, policies and procedures, job security, status, and personal life (Herzberg et al., 1959).

Job satisfaction has also been linked to turnover. Given the negative impact of job dissatisfaction on both the employee and the organization, empowerment may be one way of preventing job dissatisfaction and its corresponding negative effects. Certainly, there is evidence to suggest that empowerment improves job satisfaction (Laschinger et al., 2004). Strategies such as empowering work teams can have a positive impact on staff performance and resident care (Barry et al., 2005). There are numerous studies that have concluded that training can result in reduced turnover. Healthcare aides have remarkably high levels of job efficacy. Strategies to empower this workforce may reduce cynicism and draw on their high levels of job efficacy (Norton et al., 2012). Numbers of researchers have reported that properly focused training is likely to improve problem solving among nurse aides and reduce job stress (Coogl et al., 2007; Menne et al., 2007).

Norton et al. (2012) indicated that the ability of healthcare aides to engage in quality improvement initiatives at the bedside. The need for education concerning the concepts of improvement and measurement in this effort is critical. Empowerment in the workplace is a popular idea that has permeated both the popular and scientific literature (Laschinger et al., 2004). Castle et al. (2006) investigated 251 caregivers (i.e., Registered Nurses, Licensed Practical Nurses, and Nurse Aides) to examine: job satisfaction scores of these caregivers and what characteristics of these caregivers are associated with job satisfaction. The study found that overall nursing home caregivers are satisfied with the work and coworkers, but are less satisfied with promotional opportunities, superiors, and compensation. Previous studies have shown a consistent association between job satisfaction and turnover and intent to turnover of nurse aides. Castle et al. (2007) investigated the relationship between job satisfaction and intent to leave and turnover in nurse aides, and found a significant negative correlation between the two variables. Lee et al. (2013) investigated 1283 nurses at seven hospitals in Taiwan. They found that

to reduce nurses' intention to leave their organization, nursing administrators may offer more focused interventions to improve the supportive milieu with job security and professional recognition, work arrangement and workload, work or home life balance, and nursing staffing and patient care. There is a contradictory issue related to work stress and job satisfaction. The purpose of the current study was to evaluate the effects of improving job satisfaction intervention in nurse aides in long term care facilities. It was expected that nurse aides receiving interventions would experience enhanced job satisfaction.

Methods

Design and Sampling

Subjects were recruited from long-term and complex continuing care units in a large geriatric teaching hospital. Inclusion criteria involved being a day shift nurse aides working more than 24 h/week on the geriatric teaching hospital. Those subjects were then randomly divided into experimental and control groups. Before empowerment education intervention occurred, a pretest was given to both groups. Only the experimental group received a total of 12 hours of an empowerment education programs during a 6 week period. An immediate post-test was also administered just after the empowerment education intervention occurred. All participants signed a written consent form before the start of the study, and confidentiality of responses was assured.

Instrumentation and Measurement

work stressor questionnaire

The work stressor survey was administered pre and post-program as a validated 49-item Likert scale questionnaire modified from its original format that has been used previously to measure work stressor for nurse aides in health care organizations (Lin et al., 2009). The tool is composed of three subscales. These subscales included: task stressors, system stressors, and relational stressors. In the work stressor questionnaire, respondents are asked to rate each item as to how

characteristic it was of their work stressor on a scale from (1) not at all to (5) a lot, with higher scores indicating greater perceived workplace stressor. The Cronbach's α was .88 for the current study.

Job satisfaction questionnaire

We adopted a previously validated Job Satisfaction Scale developed by Yeh et al(2004). This self-assessment scale includes 20 items addressing two subscales to measure an individual's job satisfaction, including inner satisfaction and external satisfaction. Scoring of the job satisfaction scale used a 5-point Likert scale ranging from 1 point (very dissatisfied) to 5 points (very satisfied). Cronbach's α was .83 for the current study.

The Intervention of Empowerment Education

The intervention of empowerment education for nurse aides was developed by referencing related literature (Castle et al., 2007; Coogl et al., 2007; Norton et al., 2012; Park et al. 2010) . Teaching materials, teaching plans and a brochure for the empowerment programs were utilized in our intervention program. The empowering in-service training program involved the curriculum content to include the cognition of Workplace difficulties, social interaction communicates and the pressure manages and refuses technique etc. Other concepts implemented included: increasing self-efficacy, emotional adaptation, and positive thinking according to the subjects' characteristics. The program ran once a week for six weeks, with each session lasting two hours. The empowerment program, comprised three individual sessions. Each 2-hour session was taught by researcher. In the first lesson, the investigator introduced information concerning nurse aides with work stress and explained the empowerment education intervention program. The second introduced methods of enhancing behavior-based abilities. The third covered appropriate techniques for self-management, including emotional adaptation, the

behavior contract and self-control. At the end of the class, participants were encouraged to discuss the information and concerns with the group. Subjects would immediately receive positive reinforcement once the teaching goals were reached.

Data Analysis

The statistics application SPSS/Windows 17.0 (SPSS, Inc., Chicago, IL) was used for data archiving and statistical analysis. To describe the distribution of demographic data, work stressor and job satisfaction, we used descriptive statistics expressed in terms of frequency, percentage, mean, and standard deviation. An analysis of variance (ANCOVA) was used to examine more closely the relationship between perceived training availability and each outcome measure, and a *p* value of less than .05 was considered statistically significant.

Ethical considerations

Approval for the research was obtained from Institutional Review Board. The objectives of the study and the questionnaire were explained to all participants and respondents were assured of the anonymity and confidentiality of their responses. Participation in the study was voluntary. All participants provided signed informed consent to participate. The privacy of the participants was protected by keeping the questionnaires in confidence and in the possession of the investigator only.

Results

Characteristics of the Subjects

A total of 95 subjects fully participated in this study. The experimental group was comprised of 48 members with an average age of 31.95 (SD = ± 8.08); the control group consisted of 47 members with an average age of 38.95 (SD = ± 11.42). The mean service length was 22.23 months (SD = ± 18.92) for the experimental group, and 22.93 (SD = ± 12.95) for the control group. The intervention and control groups did not differ on any of the demographic characteristics, and the

two groups for equivalence on each of the outcome measures prior to the intervention.

The Effect on reducing work stressor Through Empowerment Education

The average scores of the pretest and the post-test for two work stressors are presented in Table 1. The results showed that the post-test score was obviously increased in both groups; although, the experimental group's score was lower than that of the control group. However, the pretest and post-test scores of the experimental group was lower than those of the control group. An examination of ANCOVAs shows that the participation in work stressor exchange due to the intervention is shown in Table 2. There was a significant difference by the education intervention in the post-test for the total stressors between the two groups ($F=5.53, p=.02$). Also, the score in the experimental group was lower than in the control group. This can be explained by the intervention program's positive effect on the total stressors of subjects in the experimental group. Twelve weeks after the education activities were completed, the post-test score was significantly reduced in the experimental group. This result indicated that the health education intervention effectively reduced work stressor in the experimental group. On the other hand, there was a significant difference in the posttest for task stressors between the two groups ($F=6.43, p=.01$). Also, the score in the experimental group was lower than in the control group. This can be explained by the intervention program's positive effect on the 6.43 of subjects in the experimental group. Furthermore, there was a significant difference in the posttest for relational stressors between the two groups ($F=5.69, p=.02$). This indicated that the education program had a positive effect on reducing the relational stressors in the experimental group. There was no significant difference caused by the education intervention in the post-test for the System stressors between the two groups ($F=2.37, p=.12$). The immediate effect on System stressors, induced by the intervention, was not apparent.

Table 1 Comparison of the Variable Score Distribution Between the Experimental and Control Groups

variables	Experimental Group		Control Group	
	Pre-test	Post-test	Pre-test	Post-test
	M±SD	M±SD	M±SD	M±SD
Total workstressors	1.17±.34	1.21±.42	1.13±.49	1.48±.66
Task stressors	1.49±.39	1.49±.39	1.27±.41	1.74±.61
Relational stressors	1.10±.46	1.11±.50	1.10±.58	1.44±.80
System stressors	1.01±.52	1.03±.66	1.03±.67	1.26±.81
Total job satisfaction	3.56±.57	3.57±.57	3.44±.42	3.24±.77
Internal satisfaction	3.66±.56	3.68±.56	3.53±.46	3.36±.78
External satisfaction	3.45±.62	3.47±.64	3.36±.48	3.13±.81

Table 2 Summary of the stressors ANCOVA Scores for the Experimental and Control Groups

Variable	Sums of Square	df	Mean of Square	F	p	Adjusted mean	
						Experimental group	Control group
Total work stressors				5.53	.02	1.21	1.48
Groups	1.72	1	1.72				
Error term	28.57	92	.31				
Task stressors				6.43	.01	1.49	1.74
Groups	1.67	1	1.67				
Error term	23.97	92	.26				
Relational stressors				5.69	.02	1.11	1.44
Groups	2.60	1	2.60				
Error term	42.07	92	.45				
System stressors				2.37	.12	1.03	1.26
Groups	1.30	1	.48				
Error term	50.66	92	.55				

The Effect on improve job satisfaction Through Empowerment Education

As shown in Table 1, the average test result score of the post-test for improving job satisfaction was increased in the experimental group, but was decreased in the control group. In addition, the score of the posttest significantly rose in the experimental group, while the score obviously decreased in the control group. An examination of ANCOVAs shows that the participation in job satisfaction exchange of the intervention on total job satisfaction is presented in Table 3. There was a significant difference in the immediate test for total job satisfaction between the two groups ($F=5.12, p=.02$). Also, the score in the experimental group was higher than in the control group.

This can be explained by the intervention program’s positive effect on the total job satisfaction of subjects in the experimental group. With regard to internal and external satisfaction, results showed significant differences the two groups ($F=4.94, p=.02, F=4.83, p=.03$ respectively). Also, the score in the experimental group was higher than in the control group. This can be explained by the intervention program’s positive effect on the internal and external satisfaction of subjects in the experimental group.

Table3 Summary of the job satisfactions ANCOVA Scores for the Experimental and Control Groups

variables	Sums of Square	df	Mean of Square	F	p	Adjusted mean	
						Experimental group	Control group
Total job satisfaction				5.12	.02	3.56	3.24
Groups	2.40	1	2.43				
Error term	43.16	92	1.972E-5				
Internal satisfaction				4.94	.02	3.66	3.36
Groups	2.30	1	2.30				
Error term	42.90	92	.46				
External satisfaction				4.83	.03	3.47	3.13
Groups	2.61	1	2.61				
Error term	49.65	92	.54				

Discussion

This current study examined the effects of intervention on nurse aides by employing a set of empowerment education on strategies improve their job satisfaction and reduce work stressors. Results showed that the post-test scores for total work stressors, task stressors and relational

stressors in experimental group were lower than in the control group. These findings indicated that the intervention did affect the total work stressors, task stressors and relational stressors for those nurse aides. The results of our study were consistent with previous finding that demonstrated significant difference in massage therapy after the completion of an intervention program (Back et al., 2009). This finding similar to previous studies (Coogl et al., 2007; Menne et al., 2007) which properly focused training is likely to improve problem solving among nurse aides and reduce job stress. System stressors, in experimental group was no significant difference caused by the education intervention in the post-test. This result differ from that of the study done by Mackenzie et al. (2006), in which they pointed out that mindfulness training is a promising method for helping those in the nursing profession manage stress. According to Lin et al. (2009) and Schaefer & Moos (1993), system stressors, including workload, work procedure, institutional planning and maintenance. Some of the reasons that might be responsible for this ineffectiveness include the use of a purposive sampling instead of a random sampling method. In addition, our analyses included a self-report of work stressor from nurse aides. This measure may not be precise, given the potential embarrassment in being fired as opposed to work stressor.

The results showed that the immediate post-test score for total job satisfaction, in the experimental group were higher than in control group. This finding was quite similar to previous studies reporting that training is positively related to nurse aides attitudes (Coogle et al., 2007; Ejaz et al., 2008; Owens, 2006). Those who perceived training always available when needed scored higher on job satisfaction by management, and self-esteem. This study showed that a significance in job satisfaction among participants with internal satisfaction, and external satisfaction. This is a finding that is also consistent with prior studied (Back et al., 2009; Castle, 2007).

As this study targeted a hospital population, it may be subject to regional limitation. Our analyses included a self-report of work stressor and job satisfaction from nurse aides. This

measure may not be precise, given the potential embarrassment in being fired as opposed to work stressor and job satisfaction. Thus, it is likely that this measure represents involuntary work stressor and job satisfaction. Moreover, since the study was conducted purposeful sampling in the nursing homes, findings may be different in other types of long-term care facilities such as group home and geriatric hospital. Future research with broader spectrum including various types of long term care services would warrant a better insight into differences in long term care facilities.

Conclusion

This study highlights the potential of empowerment education to be used with nurse aides to treat and prevent stress-related problems and to improve job satisfaction. This study demonstrated that the total work stressors, task stressors, relational stressors, total job satisfaction, internal satisfaction and external satisfaction in the experimental group were affected by the empowerment educational intervention. We postulated that it may be particularly well suited to nurse aides, not only because they are in obvious need of stress reduction but also because empowered employees are generally more satisfied with their job, and enhance perceptions of empowerment can have enduring positive effects on employees. The findings of this study provide insights for nursing administrators, politicians, and managers in order to develop healthy work units. The administrators of long term care facilities may be able to reduce nurses' turnover intention by improving their level of job satisfaction.

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