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AN ANALYSIS OF WORLDWIDE FACTORS AND INFLUENCES AFFECTING WORK SATISFACTION IN NURSES

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Abstract:
The large body of research on nurses' job satisfaction and the variables affecting it is examined in this study.
High turnover and widespread shortages of nurses have become worldwide issues. It's critical to comprehend nurses' job happiness because it impacts hospital care quality and influences nurses' decisions to remain in or leave the field. There are numerous contributing aspects to the complex phenomena of job happiness. Numerous reasons of happiness and discontent have been identified by researchers, including: Work environment: This includes physical workspace, relationships with managers and coworkers, workload, and autonomy. Compensation and benefits: pay, opportunities for advancement, and job security are all significant factors. Recognition: Getting recognition from superiors and coworkers is a major source of motivation. The nature of the work itself: Nurses who find their work interesting and challenging generally have higher levels of job satisfaction. Research from a variety of nations has demonstrated the importance of these factors for nurses globally.

Keywords: workload, autonomy, pay, recognition, job satisfaction, nurses, absenteeism.

Introduction:

According to Kingma (2001), there is a global nursing shortage and high nurse turnover. This issue is becoming more significant for both developed and developing nations (Cavanagh, 1990; Blegen, 1993; Hancock, 1998; Lee, 1998; Aiken et al., 2001; Fang, 2001; Lu et al., 2002). Because of this, worries over the hiring and retaining of nursing personnel are growing in some nations (Lundh, 1999). While many factors have been associated with nurse turnover, the most commonly mentioned factor—job satisfaction—deserves consideration because it has been connected to it the most (Cavanagh and Coffin, 1992; Blegen, 1993; Irvine and Evans, 1995). The large body of empirical research on nurses' job satisfaction and related variables is examined in this review. People who work in organizations as well as those who research them are both very interested in the topic of job satisfaction. In addition to being a key component of organizational phenomena theory and research ranging from job design to supervision, it is one of the variables most commonly examined in organizational behavior research (Spector, 1997). The conventional approach to measuring job satisfaction concentrates on an employee's overall job satisfaction.

But what makes a job satisfying or unsatisfying depends not only on the job itself, but also on what people expect from their jobs. Maslow's seminal work from 1954 suggests that human needs fall into a five-level hierarchy that goes from physiological needs to safety to belongingness to love and esteem to self-actualization. Some researchers have approached job satisfaction from the perspective of need fulfillment based on Maslow's theory (Kuhlen, 1963; Worf, 1970; Conrad et al., 1985). However, this approach has lost popularity as cognitive processes are given more attention than underlying needs, leading to the rise of the attitudinal perspective in job satisfaction research (Spector, 1997). This approach differs from the traditional view, as Herzberg and Mausner (1959) formulated the two-factor theory of job satisfaction and proposed that satisfaction and dissatisfaction are two distinct, and occasionally even unrelated, phenomena. The study identified "motivators"—that is, elements inherent to the work itself and the experience of doing it—as well as "satisfiers" of the job, such as responsibility, achievement, acknowledgment, and the labor itself. The study identified extrinsic elements, also referred to as "hygiene" aspects, as "dissatisfactions" with one's job.

International Comparisons and Review of Key Components

These factors included working conditions, administration, salary, supervision, business policy, and interpersonal relations. Thus, job satisfaction is the emotive orientation that an employee has toward his or her work (Price, 2001). Herzberg and Mausner's motivation-hygiene theory has dominated the research of the nature of job satisfaction and created the basis for the development of job satisfaction assessment . It may be regarded as an overall sentiment regarding the work or as a connected constellation of attitudes regarding different elements or characteristics of the work. While the facet technique is used to investigate which aspects of the job lead to happiness or dissatisfaction, the global approach is employed when the entire attitude is of interest. Spector (1997) provided an overview of the key components of job satisfaction based on an analysis of the most widely used instruments. These components included compensation, personal development, advancement, coworkers, benefits, fringe benefits, job conditions, and the nature of the work and the organization. Chances, acknowledgment, safety, and oversight.

Identifying the literature Using computerized databases, the literature on nurses and occupational satisfaction was located. The British Nursing Index (1985–2004), PsycINFO (1974–2004), Medline (1966–2004), and CINAHL (1982–2004) were the electronic databases that were utilized to find the pertinent literature. A few Chinese databases were also utilized, including the China Academic Journal (1985–2004) and the China Medical Academic Conference (1985–2004). In addition to nurses following the OVID interface search rules, key phrases and comparable phrases were used in the subject search to optimize the amount of relevant material. Out of all the databases that were searched, 1189 published research papers were found. Before the papers were included in the literature evaluation, their abstracts or complete texts were reviewed. Of the studies, 1,808 were found to be irrelevant, and 47 of low quality (the research methodology, including data analysis, was not apparent). In order to find earlier foundational sources, the reference lists of the chosen publications were also scrutinized.

The concept of job satisfaction has garnered a lot of attention, which is not surprising considering that it has been linked to performance in the workplace (Landeweerd & Boumans, 1988). Scholars have endeavored to delineate the diverse constituents of workplace contentment, evaluate the corresponding significance of every component of job fulfillment, and scrutinize the impact of these constituents on employees' productivity (Burnard et al., 1999). The literature on the sources of job satisfaction among nurses has reported a variety of findings from both quantitative and qualitative studies. Aiken et al. (2001) found that the highest levels of job dissatisfaction among nurses were found in the United States (41%), followed by Scotland (38%), England (36%), Canada (33%), and Germany (17%).

Within a year of data collection, one-third of nurses in England and Scotland and over one-fifth of nurses in the US intended to leave their jobs. What was more startling, though, was that across all countries, 27–54% of nurses under 30 expected to leave within a year of the data collection. In terms

of the work environment, compared to over half in the other three nations, only roughly one-third of nurses in Canada and Scotland felt that they actively contributed in creating their own schedules. In contrast, nurses in the United States (57%) and Canada (69%) expressed greater satisfaction with their salaries, while nurses in Germany (61%) expressed greater satisfaction with opportunities for advancement. Similarly, Adamson et al. (1995) discovered that British nurses felt more dissatisfied than Australian nurses ($p < 0.001$). Compared to Australian nurses, British nurses believed they had a lower professional status (po0.01), a worse rapport with hospital administration (po0.01), and less suitable working conditions (po0.01). Additionally, they expressed less satisfaction with their professional structure and more conflict between the idealistic view of work acquired during training and actual work practice (po0.01).

Nurse Job Satisfaction

In addition, the British nurses reported feeling less appreciated by physicians, hospital managers, and other allied health professionals (po0.01), and they were more concerned about the lack of communication between nurses and doctors. Different measures of nurses' job satisfaction reveal different sources of satisfaction, but overall, there was no significant difference between Australian and British nurses regarding the perceived amount of autonomy of the medical profession (p. 40.01). Comparative information is best provided by the results of many research that used the same scales, especially when it comes to some cross-cultural data. For instance, a series of studies (Tovey and Adams, 1999; Adams and Bond, 2000) employed the Ward Organizational Features Scales developed by Adams et al. (1995) to gather data from nurses regarding their opinions of the various ward life aspects and the influence they had on care organizations. Six sets of measures totaling fourteen sub-scales with ratings on a 4-point Likert scale (1=strongly disagree, extremely terrible, or very difficult) made up the tool.

The ward's physical environment, professional nursing practice, professional working relationships, ward leadership, nurses' influence, and job satisfaction are all rated as 4 (strongly agree/very excellent influence/very easy). Using this questionnaire, Tovey and Adams (1999) found that key sources of nurses' dissatisfaction included working relationships, particularly those with management, a lack of staff, professional concerns about poor standards of care, and external work pressure. The test-retest reliabilities of the scales were good, with a correlation coefficient of 0.7 or above (Adams et al., 1995). Adams and Bond (2000) discovered that the majority of nurses gave the ward's amenities, services, and layout favorable ratings (mean 43, respectively). Job satisfaction and the cohesiveness of the ward nursing team (r ¼ 0.51, po0.001), staff organization (r ¼ 0.46, po0.001), the degree of professional practice attained in the ward (r ¼ 0.46, po0.001), and cooperation with medical staff (r ¼ 0.41, po0.001) showed the best relationships.

Additionally, the degree of cohesion among ward nurses (R2 ¼ 0.26), the level of collaboration with medical staff (R2 ¼ 0.20), and the perception of staff organization (R2 ¼ 0.20) were found to be the most significant contributors to nurses' job satisfaction. Nolan et al.'s (1995) Job Satisfaction Questionnaire was also used in a number of studies conducted in various nations to evaluate nurses' morale and job satisfaction (Nolan et al., 1995, 1998; Lundh, 1999). It consists of sixteen items that cover perceptions of change over the past year, work environment characteristics, and general morale and satisfaction. A 5-point Likert scale is used to rate responses, ranging from "strongly agree/increased a lot" to "strongly disagree/decreased a lot." Nolan et al. (1995) found that nurses' perceptions of their ability to provide high-quality patient care and their ability to form strong professional relationships with their coworkers were the main drivers of job satisfaction. When combined, these were responsible for over half of the additional compliments that were received. Nolan et al. (1998) also discovered that one of the most important elements determining job satisfaction was that the great majority of respondents (85%) thought their work was fascinating.

In terms of morale and job satisfaction, 35% of respondents said that their morale had declined over the previous year, and 69% said that overall morale had declined. In a similar vein, over 90% of respondents found their work to be interesting, and the majority of respondents also believed that their

superiors respected them (68%). On the other hand, 55% of respondents stated that they did not believe the organization's leadership to be especially democratic and that they had few opportunities to influence managers' decisions. Price (2002) not only provided a general overview of reported job satisfaction, but also used the Mueller and McCloskey's (1990a, b) Satisfaction Scale to explore key areas of job satisfaction.

Unveiling Nurse Dissatisfaction: Exploring Measurement Tools and Key Factors

nearly 75% of respondents reported that their stress levels had increased over the last 12 months, while important aspects of their job satisfaction, like satisfaction with pay and overall working conditions, had decreased. 31 elements covering eight dimensions—extrinsic rewards, scheduling, balancing work and family, coworkers, interaction chances, professional opportunities, praise and recognition, control, and responsibility—are included in the 5-point Likert scale (5=very satisfied, 1=very dissatisfied). The validity ranged from 0.53 to 0.75, and the global scale's correlation coefficient was reported as 0.89. The scale showed positive correlations with other validated satisfaction measures. The findings showed that 58% of the respondents were generally happy with their jobs. They found that, on average, coworkers and extrinsic rewards provided the highest level of satisfaction (mean = 3.8 and 3.5, respectively), whereas professional opportunities and their level of control and responsibility caused the greatest amount of unhappiness (mean = 2.7 and 2.6, respectively).

Annual leave, nursing peers, and hours worked were the individual items on this scale that nurses were most satisfied with (79%, 78%, and 76% of respondents scored 4 or 5, respectively). The items that nurses were least satisfied with were compensation for working weekends, control over work conditions, and childcare facilities (55%, 55%, and 46% of respondents scored 1 or 2, respectively). Wang (2002) found, using the same scale, that Chinese nurses were more dissatisfied than satisfied (mean = 2.51) and primarily dissatisfied with pay (mean = 1.85) and job promotion (mean = 1.97). From a different angle, Lee's (1998) cross-sectional survey used the Index of Work Satisfaction (Stamps and Piedmonte, 1986) to examine the level of job satisfaction regarding six job components (autonomy, professional status, pay, interaction, task requirements, and organizational policies). 15 sets of paired comparison statements are used in the first section to discuss the relative relevance of each of the six job components.

The second section measures the subjects' current levels of satisfaction with each of the six components using a 44-item Likert scale. Respondents must select one of seven options, ranging from "strongly disagree" to "strongly agree." The findings indicated that nurses reported higher levels of discontent with task requirements (mean = 2.81), higher levels of unhappiness with professional standing (mean = 4.17), and higher levels of dissatisfaction with overall job satisfaction (mean = 3.46). Their contentment with autonomy was not significantly correlated (r ¼ 0.11, p40.1) with their level of demand for autonomy being below the mid-score of the sub-scale. both occupational liberty and their personal demand for autonomy. Tzeng (2002a, b) has also observed that nurses' discontent may stem from differences between expectations and reality. 92 items total, including 8 job satisfaction scales and 8 importance indicators (indirect working environment, direct working environment, salary and promotion, self-growth, challenging work, interaction with patients, leadership style, and working atmosphere) were included in the specially created Nurses' Job Satisfaction and Perceived Importance Questionnaire for the study. For work satisfaction items, responses were provided on a 5-point Likert scale ranging from 1 (least important) to 5 (most important), and for importance items, the range was 1 (least satisfied) to 5 (most satisfied).

Nurse Job Satisfaction and Its Impact: Exploring Correlates and International Perspectives

With the exception of the indirect working environment scale, all of the measures showed statistically significant correlations with their correlative scales ($p < 0.05$) according to Pearson correlation analysis. In conclusion, job satisfaction among nurses is an important concept, as levels of job satisfaction may impact the global nursing workforce. The nurse sample identified factors such as

salary and promotion as highly important but highly unsatisfactory, as well as the indirect working environment (a hospital's policies, benefits, leisure activities, housing, parking, and vacation policy) (Table 2). The literature shows that the sources of job satisfaction are generally similar, despite the reported studies' differences in the levels of job satisfaction among nurses. These sources include physical working conditions, relationships with coworkers and managers, pay, promotions, job security, responsibility, manager recognition, and work hours. It also appears that compared to nurses without university education, nurses with tertiary education were less happy with their professions.

Healthcare providers face a significant issue with absenteeism due to its high cost and correlation with avoidable work-related stress (Matrunola, 1996). Numerous studies have examined the relationship between job satisfaction and nursing absenteeism, burnout, nurses' intention to quit, and turnover; however, the results are inconclusive. Siu's (2002) study of nurses in Hong Kong discovered that job satisfaction, age, psychological distress, and involvement (the organization's level of commitment toward its employees) were significant predictors of absenteeism for sample 1; and organization (the worker-organization interaction) (b = —0.70, po0.01), involvement (b = —0.51, po0.05), and occupational type (b = 0.33, po0.001) were significant predictors of absenteeism for sample 2. The very small sample sizes, the mismatched gender ratios, the mismatched occupational type, the relatively low response rate in sample 2 (57%), and the use of self-reported absence and illness may all contribute to the discordant results.

These conflicting findings imply that additional Chinese nurses should participate in this kind of research. On the other hand, Matrunola's (1996) investigation of English nurses revealed no connection between absenteeism and job satisfaction. The findings should not be generalized due to the small sample size. A 2003 South Korean study by Lee et al. revealed that work overload, rotating shifts, and interpersonal conflict were the most commonly cited reasons given by nurses for wanting to quit their jobs. Individual traits, job stress, and personal resources accounted for a total of 24%, 15%, and 35% of the variance for depersonalization, emotional weariness, and personal accomplishment, respectively. It was also notable that burnout was more common among nurses who worked night shifts at tertiary hospitals, experienced higher levels of occupational stress, and demonstrated lower levels of cognitive empathy and empowerment,7.

Conclusion:

The majority of WHO member states have reported having insufficient nurse resources (Kingma, 2001). Developed nations have two challenges: an aging nursing staff and an aging population that is increasing the need for nursing care (Buchan, 2001). In the wake of global trade liberalization, which was sparked by developed countries increasing their international recruitment to meet their needs for a health-care workforce, nurses have been migrating abroad more frequently in search of better opportunities and compensation. This has resulted in a "skills drain" in many developing nations (Kingma, 2001). Because of the greater mobility of the nursing workforce, it is important to pay attention to the factors that influence nurse turnover. The empirical literature suggests that a number of organizational, professional, and personal variables are related to job satisfaction among nurses, which has been identified as a key factor in nurses' turnover. Although the literature identifies common issues worldwide, it is possible that different issues have greater significance in different countries due to the social context of the different labor markets.

References:

1. Adams, A., Bond, S., 2000. Hospital nurses’ job satisfaction, individual and organizational characteristics. Journal of Advanced Nursing 32 (3), 536–543.
2. Adams, A., Bond, S., Arber, S., 1995. Development and validation of scales to measure organisational features of acute hospital wards. International Journal of Nursing Studies 32 (6), 612–627.

3. Adamson, B., Kenny, D., Wilson-Barnett, J., 1995. The impact of perceived medical dominance on the workplace satisfac- tion of Australian and British nurses. Journal of Advanced Nursing 21, 172–183.
4. Aiken, L., Clarke, S., Sloane, D., Sochalski, J., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A., Shamian, J., 2001. Nurses' reports on hospital care in five countries. Health Affairs 20 (3), 43–53.
5. Al-Aameri, A.S., 2000. Job satisfaction and organizational commitment for nurses. Saudi Medical Journal 21 (6), 531–535.
6. Barrett-Lennard, G.T., 1978. The relationship inventory: later development and adaptation. JSAS: Catalog of Selected Documents in Psychology 8, 1–33.
7. Beck, A.T., Weissman, A., Lester, D., Trexler, L., 1974. The measurement of pessimism: the hopelessness scale. Journal of Consulting and Clinical Psychilogy 42, 861–865 (Cited in Matrunola, P., 1996. Is there a relationship between job satisfaction and absenteeism? Journal of Advanced Nursing 23, 827–834).
8. Benner, P., 1984. From Novice to Expert. Addison-Wesley, Menlo Park, CA.
9. Blau, G.J., Boal, K.P., 1987. Conceptualizing how job involvement and organizational commitment affect turn- over and absenteeism. Academy of Management Review12, 288–300.
10. Blau, G.J., Lunz, M., 1998. Testing the incremental effect of professional commitment on intent to leave one's profes- sional beyond the effects of external, personal and work- related variables. Journal of Vocational Behavior 52, 260–269.
11. Blegen, M., 1993. Nurses' job satisfaction: a meta-analysis of related variables. Nursing Research 42 (1), 36–41.
12. Breaugh, J.A., 1985. The measurement of work autonomy. Human Relations 38, 551–570 (Cited in Seo, Y., Ko, J., Price, J.L., 2004. The determinants of job satisfaction among hospital nurses: a model estimation in Korea. International Journal of Nursing Studies 41, 437–446).
13. Buchan, J., 2001. Nurse migration and international recruit- ment. Nursing Inquiry 8, 203–204.
14. Burnard, P., Morrison, P., Phillips, C., 1999. Job satisfaction amongst nurses in an interim secure forensic unit in Wales.
15. Australian and New Zealand Journal of Mental Health Nursing 8, 9–18.
16. Cavanagh, S., 1990. Predictors of nursing staff turnover.
17. Journal of Advanced Nursing 15, 373–380.
18. Cavanagh, S., Coffin, D., 1992. Staff turnover among hospital nurses. Journal of Advanced Nursing 17, 1369–1376.
19. Chu, C.I., Hsu, H.M., Price, J.L., Lee, J.Y., 2003. Job
20. satisfaction of hospital nurses: an empirical test of a causal model in Taiwan. International Nursing Review 50, 176–182.
21. Cohen, A., 1998. An examination of the relationship between work commitment and work outcomes among hospital nurses. Scandinavia Journal of Management 14, 1–17.
22. Cohen, A., 1999. Relationships among five forms commitment: an empirical assessment. Journal of Organizational Beha- viour 20, 285–308.
23. Conrad, K.M., Conrad, K.J., Parker, J.E., 1985. Job satisfac- tion among occupational health nurses. Journal of Com- munity Health Nursing 2, 161–173.
24. Cyphert, S.T., 1990. Employee absenteeism: an empirical test of the brook model. Ph.D Thesis, The University of Iowa, Iowa. (Cited in Chu, C.I., Hsu, H.M., Price, J.L., Lee, J.Y., 2003. Job satisfaction of hospital nurses: an empirical test of a causal model in Taiwan. International Nursing Review 50, 176–182).
25. Dailey, R.C., 1990. Role perceptions and job tension as predictors of nursing turnover. Nursing Connections 3 (2), 33–42.
26. Edwards, A.L., 1959. Edwards Personal Preference Schedule. Psychological Corporation, New York (Cited in Lee, F.-K., 1998. Job satisfaction and autonomy of Hong Kong registered nurses. Journal of Advanced Nursing 27, 355–363).

27. Fang, Y., 2001. Turnover propensity and its causes among Singapore nurses: an empirical study. International Journal of Human Resource Management 12 (5), 859–871.
28. Gauci Borda, R., Norman, I.J., 1997a. Testing a model of absence and intent to stay in employment: a study of registered nurses in Malta. International Nursing Studies 34 (5), 375–384.
29. Gauci Borda, R., Norman, I.J., 1997b. Factors influencing turnover and absence of nurses: a research review. Interna- tional Journal of Nursing Studies 34 (6), 385–394.
30. Gruneberg, M.M. (Ed.), 1976, Job Satisfaction—A Reader.
31. Macmillan Press, London.
32. Hancock, C., 1998. Keeping staff means demonstrating to nurses that they matter. Nursing Times Research 3 (3), 165–166.
33. Herzberg, F., Mausner, B., 1959. The Motivation to Work, second ed. Wiley, New York.
34. Hingley, P., Cooper, C.L., 1986. Stress and the Nurse Manager.
35. Wiley, Chichester.
36. House, J.S., 1981. Work Stress and Social Support. Addison Wesley Publishing Company, MA (Cited in Seo, Y., Ko, J., Price, J.L., 2004. The determinants of job satisfaction among hospital nurses: a model estimation in Korea. International Journal of Nursing Studies 41, 437–446).
37. Iris, B., Barrett, G., 1972. Some relations between job satisfaction and job performance. Journal of Applied Psychology 56, 301–304.
38.) 113–99Cited in Lee, H., Song, R., Cho, Y.S., Lee, G.Z., Daly, B., 2003. A comprehensive model for predicting burnout in Korean nurses. Journal of Advanced Nursing 44 (5), 534–545.(
39. Maslach, C., Jackson, S.E., 1986. Maslach Burnout Inventory Manual (2nd). Consulting Psychologists Press, Palo Alto Calif (Cited in Aiken, L., Clarke, S., Sloane, D., Sochalski, J., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A., Shamian, J., 2001. Nurses' reports on hospital care in five countries. Health Affairs 20(3), 43–53).
40. Maslow, A., 1954. Motivation and Personality. Harper and Row, New York.
41. Matrunola, P., 1996. Is there a relationship between job satisfaction and absenteeism? Journal of Advanced Nursing 23, 827–834.
42. Mehrabian, A., 1994. Manual for Emotional Empathic Tendency Scale (EETS). Available from Albert Mehrabian, 1130 Alta Mesa Road, Monterey, CA 93940 (Cited in Lee, H., Song, R., Cho, Y.S., Lee, G.Z., Daly, B., 2003. A comprehensive model for predicting burnout in Korean nurses. Journal of Advanced Nursing 44 (5), 534–545).
43. Mitchell, M.B., 1994. The effect of work role values on job satisfaction. Journal of Advanced Nursing 20, 958–963.
44. Motowidlo, S., Packard, J.S., Manning, M.R., 1986. Occupa- tional stress: its causes and consequences for job perfor- mances. Journal of Applied Psychology 4, 618–629.
45. Mowday, R.T., Steers, R.M., Porter, L.M., 1979. The measurement of organizational commitment. Journal of Vocational Behavior 14, 224–227.
46. Mueller, C.W., McCloskey, J.C., 1990a. Nurses' job satisfac- tion: a proposed measure. Nursing Research 39 (2), 113–117 (Cited in Price, M., 2002. Job satisfaction of registered nurses working in an acute hospital. British Journal of Nursing 11(4), 275–280).
47. Mueller, C.W., McCloskey, J.C., 1990b. Nurses' job satisfac- tion: a proposed measure. Nursing Research 39 (2), 113–117.
48. Nolan, M., Nolan, J., Grant, G., 1995. Maintaining nurses' job satisfaction and morale. British Journal of Nursing 4 (19), 1148–1154.
49. Nolan, M., Brown, J., Naughton, Nolan, J., 1998. Developing nursing's future role 2: nurses' job satisfaction and morale. British Journal of Nursing 7 (17), 1044–1048.
50. Packard, J., Motowidlo, S., 1987. Subjective stress, job satisfaction and job performance of hospital nurses. Research in Nursing and Health 10, 253–261.
51. Price, J.L., 2001. Reflections on the determinants of voluntary turnover. International Journal of Manpower 22 (7), 600–624.

52. Price, M., 2002. Job satisfaction of registered nurses working in an acute hospital. British Journal of Nursing 11 (4), 275–280.
53. Price, J.L., Mueller, C.W., 1981. Professional Turnover: The Case for Nurses. Lowa State University Press, Ames (Cited in Cavanagh, S., 1990. Predictors of nursing staff turnover. Journal of Advanced Nursing 15, 373–380).
54. Price, J.L., Mueller, C.W., 1986b. Absenteeism and Turnover Among Hospital Employees. JAI Press, Greenwich, CN (Cited in Chu, C.I., Hsu, H.M., Price, J.L., Lee, J.Y., 2003. Job satisfaction of hospital nurses: an empirical test of a
55. the workplace. Journal of Organizational Behaviour Man- agement 8, 141–157 (Cited in Chu, C.I., Hsu, H.M., Price, J.L., Lee, J.Y., 2003. Job satisfaction of hospital nurses: an empirical test of a causal model in Taiwan. International Nursing Review 50, 176–182).
56. Weiss, D., Dawis, R., England, G., Lofquist, L., 1967. Manual for the Minnesota Satisfaction Questionnaire. Work Ad- justment Project, Industrial Relations Center, University of Minnesota, Minnesota (Cited in Mitchell, M.B., 1994. The effect of work role values on job satisfaction. Journal of Advanced Nursing 20, 958–963).
57. Worf, M.G., 1970. Need gratification theory: a theoretical reformulation of job satisfaction/dissatisfaction and job motivation. Journal of Applied Psychology 54, 87–94.
58. Wu, X.J., Zhang, X.J., Gao, F.L., 2000. A study on the relationship between nurses' intention to quit and work stress. Chinese Journal of Nursing 35 (4), 197–199 (in Chinese).
59. Yin, J.-C.T., Yang, K.-P.A., 2002. Nursing turnover in Taiwan: a meta-analysis of related factors. International Journal of Nursing Studies 39, 573–581.
60. Redfern, S.J., 1981. Hosptial Sisters: Their Job Attitudes and Occupational Stability. Royal College of Nursing, London (Cited in Gauci Borda, R., Norman, I.J., 1997a. Testing a model of absence and intent to stay in employment: a study of registered nurses in Malta. International Nursing Studies 34(5), 375–384).
61. Rizzo, J.R., House, R.J., Lirtzman, S.F., 1970. Role conflict and ambiguity in complex organizations. Administrative Science Quarterly 15, 150–163.
62. Rose, R.M., Jenkins, C.D., Hurst, M.W., 1978. Air Traffic Controller Health Study: A Prospective Investigation of Physical, Psychological and Work-Related Changes. Uni- versity of Texas Press, Austin (Cited in Dailey, R.C., 1990. Role perceptions and job tension as predictors of nursing turnover. Nursing Connections 3(2), 33–42).
63. Rosse, J.G., Rosse, P.H., 1981. Role conflict and ambiguity: an empirical investigation of nursing personnel. Evaluation and the Health Professional 4, 385–405.
64. Seo, Y., Ko, J., Price, J.L., 2004. The determinants of job satisfaction among hospital nurses: a model estimation in Korea. International Journal of Nursing Studies 41, 437–446.
65. Siu, O.L., 2002. Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. Journal of Advanced Nursing 40 (2), 218–229.
66. Siu, O.L., Cooper, C.L., 1998. A study of occupational stress, job satisfaction and quitting intention in Hong Kong firms: the role of locus of control and organizational commitment. Stress Medicine 14, 55–66 (Cited in Siu, O.L., 2002. Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. Journal of Advanced Nursing 40(2), 218–229).
67. Spector, P.E., 1997. Job Satisfaction: Application, Assessment, Causes, and Consequences. SAGE Publications, London.
68. Stamps, P.L., Piedmonte, E.B., 1986. Nurses and Work Satisfaction: An Index for Measurement. Health Adminis- trative Press, USA (Cited in Lee, F.K., 1998. Job satisfac- tion and autonomy of Hong Kong registered nurses. Journal of Advanced Nursing 27, 355–363).