This item is the archived peer-reviewed author-version of:

Intraorganizational communication and job satisfaction among Flemish hospital nurses : an exploratory multicenter study

Reference:

Vermeir Peter, Downs Cal, Degroote Sophie, Vandijck Dominique, Tobback Els, Delesie Liesbeth, Mariman An, De Veugele Myriam, Verhaeghe Rik, Cambré Bart,- Intraorganizational communication and job satisfaction among Flemish hospital nurses : an exploratory multicenter study
Workplace Health & Safety : Promoting Environments Conducive to Well-Being and Productivity / American association of occupational health nurses - ISSN 2165-0799 - 66:1(2018), p. 16-23
Full text (Publisher's DOI): <https://doi.org/10.1177/2165079917703411>
To cite this reference: <https://hdl.handle.net/10067/1664210151162165141>

**INTRA-ORGANIZATIONAL COMMUNICATION SATISFACTION AND JOB
SATISFACTION AMONG FLEMISH HOSPITAL NURSES: AN EXPLORATORY
MULTICENTER STUDY.**

ABSTRACT

Intra-organizational communication affects job satisfaction and turnover. The goal of this study was to explore relationships between communication and job satisfaction, intention to leave and burnout among Flemish hospital nurses. A multicenter questionnaire study was conducted in three hospitals using the Communication Satisfaction Questionnaire, the Turnover Intention subscale of the Questionnaire on the Experience and Evaluation of Work and the Maslach Burnout Inventory. A visual analogue scale measured job satisfaction. The mean job satisfaction score was 7.49/10 (± 1.43). 6.9% of the nurses (93/1,355) showed a high intent to leave and 2.9% (41/1,454) (had a score indicative of burnout. All dimensions of communication were associated with job satisfaction. Low scores on any dimension of communication satisfaction were associated with higher intent to leave and indications of burnout, except 'relationships with employees'. Our findings support the need for management interventions enhancing efficient communication and ensuring high-quality care and patient safety.

Keywords: communication satisfaction, job satisfaction, nursing, turnover intention, burnout, patient safety.

BACKGROUND

In an era of resource limitations, nursing effectiveness is an important goal but is hampered by nurse shortage and high turnover (Hayes et al., 2012; Kingma, 2001). Job satisfaction is clearly related to improved performance, less turnover and decreased burnout and can be influenced by communication satisfaction.

Inter-professional teamwork is achieved through interactive efforts among team members on the basis of good communication and respect for each other's roles. There should be room for the contributions of each team member; not only do the technical skills of the team, such as knowledge and experience, contribute to improving patient safety, but non-technical skills, such as communication, team size, psychological composition and the way the team is run, can affect team performance. Despite recent emphasis on these non-technical skills, communication problems within healthcare teams remain a frequent cause of reduced patient safety (Courtenay, Nancarrow & Dawson, 2013; Vermeir et al., 2015). In an analysis by the Joint Commission for Hospital Accreditation, 70% of 2,455 accidents in healthcare were caused by defective and faulty communication within a team (Leonard, Graham & Bonacum, 2004).

These communication deficiencies can arise from critical information not being communicated between team members, misinterpretation of information or from conflicting relationships or unclear roles and job descriptions. These issues can result in medical errors and adverse health outcomes. In addition, communication deficiencies have an economic impact, including a lower quality and safety of care and less access to care (Brock et al, 2013; Vermeir et al., 2015).

In non-healthcare settings, communication has been studied as a contributor to job satisfaction and job performance (Pincus, 1986). Others have found a positive association between communication satisfaction and job satisfaction among nurses (Manojlovich & Antonakos, 2008). In particular, communication satisfaction with one's supervisor has been shown to be associated with greater organizational commitment (Moideenkutty, Blau, Kumar & Nalakath, 2001) and can prevent nurse turnover in healthcare settings (Blegen, 1993). Low job satisfaction can also lead to high turnover, which negatively influences quality of care. Moreover, this turnover causes additional recruitment and training costs for the organization (Probst, Baek & Laditka, 2010). Furthermore, patient satisfaction is also influenced by nurse job satisfaction. More specifically, high job satisfaction is associated with high motivation, which in turn is associated with high patient satisfaction about the received care (Tzeng, 2002). Job dissatisfaction is also associated with burnout among healthcare staff (Piko, 2006).

PURPOSE

The aim of this multicenter study was to explore relationships between communication satisfaction and job satisfaction and intention to leave and burnout in a large sample of Flemish hospital nurses.

METHODS

Participants

Nurses with different backgrounds (registered nurses, midwives and executive nurses) were recruited to participate in a questionnaire study in three Flemish (Northern part of Belgium) hospitals, including one university teaching hospital and

two general hospitals (Ghent University Hospital, 1,062 beds; AZ Groeninge, Courtrai 1,065 beds, Sint Vincentius, Deinze, 170 beds).

Procedure

All nurses in the three hospitals were reached through their head nurses and the nursing department. Questionnaires were distributed and completed between February 1st, 2015 and March 15th, 2015. The study was approved by the Ethical Committee of the Ghent University Hospital (central ethical committee number EC 2015/0052) and the local ethical committees of the two other hospitals. All potential respondents were informed about the study through an information letter.

Measurement

Data were collected by means of three instruments: the Communication Satisfaction Questionnaire (CSQ, Downs and Hazen (1977), the Turnover Intention subscale of the Questionnaire on the Experience and Evaluation of Work (Dutch abbreviation VBBA), (van Veldhoven M & Meijman, 1994)) and the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996). To measure job satisfaction, a visual analogue scale (VAS) was used. The first section of the questionnaire included sociodemographic and work-related questions (age, sex, degree, department, years of experience).

The CSQ was translated into Dutch. In a second step, an expert panel (consisting of nursing directors (n = 4), communication experts (n = 4), health care managers (n = 6) and head nurses (n = 6)) adapted the questionnaire to the healthcare setting. Subsequently, the questionnaire was pilot-tested by 15 nurses, resulting in minor changes to the item formulation. The expert panel reviewed the questionnaire again,

and a final version was approved. The CSQ consists of eight dimensions, each consisting of 5 items with Likert-scale scoring from 1 (very satisfied) to 7 (very dissatisfied). Hence, the CSQ provides individual item scores, with lower values indicating higher satisfaction. The following eight dimensions are included in the questionnaire: General Organizational Perspective (GOP), Organizational Integration (OI), Personal Feedback (PF), Relationship to Superiors (RSup), Horizontal and Informal Communication (HIC), Relationship with Employees (REmp), Media Quality (MQ) and Communication Climate (CC).

GOP concerns the broadest type of information about the organization as a whole. This dimension includes notifications about changes, the organization's financial standing, and the overall policies and goals of the organization. OI revolves around the degree to which individuals receive information about the immediate work environment so they feel they are a vital part of the organization. PF focuses on the adequacy of receiving an estimate of one's strengths and weaknesses in performance. All levels of the organization receive this information in some fashion, and PF is generally one of the most sensitive dimensions for participants. RSup includes both upward and downward aspects of communicating with superiors, with openness to ideas being a key variable. HIC concerns the degree to which horizontal and informal communication among non-hierarchical relationships is accurate and free-flowing. REmp focuses on management perceptions of their upward and downward communication and relationships with employees. MQ reviews reactions on the adequacy of important communication channels in keeping people informed. CC depicts the perceptions of the general atmosphere in which people work; it is often seen as a measure of the organization's health. Some descriptions of climate

include formal/informal, closed/open, supportive/non-supportive, and individualistic/team-oriented.

An exploratory factor analysis of the CSQ evaluated the reliability of the multidimensional nature of the questionnaire (Tavakol & Dennick, 2011). For data analysis, the answers 'very (dis)satisfied', '(dis)satisfied' and 'rather (dis)satisfied' were grouped, and the category 'indifferent' remained as supplied. To calculate the number of (dis)satisfied or indifferent nurses for the eight dimensions, the averages of the five corresponding items were used. Additionally, the means and standard deviations of each item were calculated (range: 1-7).

The Turnover Intention subscale of the VBBA assesses the intention to search for another job and/or leave the organization in general and in the coming year. This subscale consists of 4 yes/no items. 'Low turnover intention' was defined as < 2 , 'average turnover intention' as 2 and 'high turnover intention' as ≥ 3 positive answers.

The Maslach Burnout Inventory measures three aspects of burnout syndrome: emotional exhaustion, depersonalization ('cynicism') and personal accomplishment ('competence').

Job satisfaction was measured with an unmarked VAS from 0 to 10. A score of 5 was set as the cut-off score for job (dis)satisfaction.

Statistics

Analyses were performed with the SPSS statistical package (version 22.0).

Descriptive analyses are reported as numbers and percentages, means and standard deviations, and medians and inter-quartile ranges (IQR) where appropriate. Bivariate analyses were performed to identify differences between groups (X^2 for categorical

variables, Mann-Whitney U test to compare continuous variables between two groups, Kruskal Wallis test to compare continuous variables between more groups). Post-hoc analyses were performed by interpreting the standardized residuals of χ^2 tests or by pairwise comparisons after Kruskal-Wallis tests. Significance was set at $p \leq 0.05$.

RESULTS

Reliability of the CSQ

An exploratory factor analysis confirmed the multi-dimensional structure of the CSQ's individual-level variables with reliable scales for the eight dimensions. Cronbach's alpha values are presented in Table 1.

Respondent characteristics

Out of a total of 3,371 nurses approached for participation, 1,454 completed the questionnaire, resulting in an aggregated response rate for the three hospitals of 43.2%. In Table 2, the participants' characteristics are listed. The majority were female (87.0%), and the mean age was 40.23 ± 10.99 years. Most of the participants were ward nurses (79.6%), and 64% had a bachelor's degree. The average work experience was 17.09 ± 11.20 years. More than half of the participants worked full-time, 22.4% worked 80% of full-time, and 8.9% worked half-time.

Job satisfaction

Within the entire group, the mean job satisfaction score was $7.49 \pm 1.43/10$ (median = 8, IQR 7-8.5) (Figure 1). A total of 103/1,436 (7.2%) nurses had a score ≤ 5 , indicating job dissatisfaction.

Dissatisfaction was associated with the type of department in which the nurses worked. Significantly more nurses working in outpatient clinics were dissatisfied compared to other departments ($p = 0.012$). Secondly, more nurses working part-time were dissatisfied than full-time nurses ($p = 0.004$). Third, an association between job dissatisfaction and years of experience was demonstrated, as dissatisfied nurses reported significantly more years of experience ($p = 0.026$).

Communication satisfaction

Table 3 lists the distribution of satisfaction categories for the eight dimensions of the CSQ. The average scores for each item of the CSQ for all participants are shown in an online supplement. Nurses were most satisfied with the extent to which their supervisor trusted them (2.59 ± 1.24) and least satisfied with information on the organization's financial standing and the accomplishments and/or failures of the organization (4.09 ± 1.25 and 4.09 ± 1.20). Supervisors were more likely to be dissatisfied with the information overload they faced (4.12 ± 1.32).

Turnover intention

Overall, most nurses showed a low intent to leave (811/1355; 59.9%), while almost seven percent (93/1355; 6.9%) showed a high and one third (451/1355; 33.3%) showed an average intent to leave.

Burnout

Among all participants, 41/1,454 (2.9%) had a score on the Maslach Burnout Inventory indicative of burnout. Differences between the hospitals were not significant ($p = 0.148$).

Overall, 21.9% (313/1430) of the nurses had low scores on the subscale 'personal accomplishment'. Emotional exhaustion and depersonalization were less frequently problematic (18/1,430, 12.4%, and 153/1,432, 10.7%, respectively).

Associations

All dimensions of communication satisfaction were significantly correlated to job satisfaction (all $p < 0.001$, 'Relation with Employees' = 0.005, Table 4). All dimensions were also associated with turnover intention (all $p < 0.001$), except for 'relationships with employees' ($p = 0.225$). Scores on the communication satisfaction dimensions were lowest among nurses with high intent to leave. Finally, all dimensions of communication satisfaction were associated with indications of burnout (all $p < 0.001$), except for 'relationships with employees' ($p = 0.391$). Scores on the communication satisfaction dimensions were higher (hence indicating dissatisfaction) among nurses with indications for burnout.

DISCUSSION

Main findings

This study on communication satisfaction and job satisfaction in Flemish hospital nurses demonstrated overall high levels of job satisfaction and communication satisfaction. The different dimensions of communication satisfaction correlated with job satisfaction, and low levels of job and communication satisfaction were associated with higher levels of intent to leave and burnout, respectively.

The average job satisfaction score was 7.5/10; comparisons with international samples are shown in Table 5 and substantiate similar scores in different time periods and different healthcare settings. Only 7.2% of our sample indicated job

dissatisfaction compared to 22% in the subset of Belgian nurses within a large European study and 24% in the United States (Aiken et al., 2012; McHugh, Kutney-Lee, Cimiotti, Sloane & Aiken, 2011). Differences in methodology (namely a VAS with a cutoff score in the present study compared to a simple dichotomous question in the 2 other studies) may explain the differences reported.

In our study, nurses working in outpatient clinics were more likely to be dissatisfied. We speculate that this finding is due to relocation of nurses who could no longer fulfill the physical requirements of hospital wards to polyclinics. However, the mental requirements of polyclinical work are often more challenging and the job content is different, as it is more difficult to establish a true and long relationship with patients due to either a single contact, shorter contact times or a combination of both. Less interaction could decrease nurses' feelings of personal accomplishment and hence job satisfaction (Kudo et al., 2010; Lu, While & Barriball, 2005). Lastly, constant collaboration with other health care professionals (e.g., physicians, paramedics) can lead to a diminished feeling of autonomy, which can be demanding for nurses working at polyclinics (Adams & Bond, 2000; Finn, 2001).

Nurses working part-time were more likely to be dissatisfied. Previous research on part-time employment and job satisfaction is contradictory, with inconsistent results ranging from a negative association (Iseke, 2014), a lack of any association or a positive association (Thorsteinson, 2003). Job discrepancies, i.e., mismatches between job characteristics and employee preferences and abilities (Iseke, 2014), may account for differences in job satisfaction. These differences could be due to less involvement with the hospital or the department or receiving less information on patients (Ferrazzo, Filippi, Meneghetti & Palese, 2012).

Thirdly, dissatisfied nurses had more years of experience. In a meta-analysis, years of experience alone did not influence job satisfaction. Instead, years of experience is likely associated with (the perception of) a current higher workload than that in the initial career phase, and a higher (perceived) workload induces stress, which negatively influences job satisfaction (Blegen, 1993).

Communication satisfaction was rather poor, with a wide range between 38.8% to 73.5% satisfaction indicated by nurses on the different subscales. The general organizational perspective was the most problematic subscale, along with media quality and communication climate, which indicates that communication in the organizational context of the hospital is insufficient. This result is similar to the findings of a recent study among South African nurses on communication satisfaction (Wagner, Bezuidenhout & Roos, 2015). However, it is noteworthy that 25-30% of the nurses were indifferent about communication in the organizational context, which may represent a particular concern regarding organizational involvement. The relationship with a supervisor, on the other hand, was positively appreciated: 65.2% to 81.8% of the nurses were satisfied with this item, which was significantly better than the score reported in public hospitals in South Africa (48.5% to 59.2%) (Wagner et al., 2015). Satisfaction with supervisor communication was previously found to positively influence overall job satisfaction (Grieshaber, Parker & Deering, 1995; Probst, Baek & Laditka, 2010). In the present study, communication satisfaction was lowest in the university hospital, possibly due to the slower and more cumbersome communication structures within the larger hospital and the larger distance between the employees and the management of the hospital.

Turnover intention among the participants was lower than in previous research among nurses (Aiken et al., 2012; McHugh, Kutney-Lee, Cimiotti, Sloane & Aiken,

2011) and may be related to the high levels of job satisfaction and communication satisfaction observed in the present sample.

Finally, symptoms of burnout were examined. Slightly less than 3% of the participants had scores indicative of burnout. This percentage is lower than the 25% self-reported feelings of burnout in Belgian nurses (Aiken et al., 2012) and 22% estimated burnout reported in a large U.S. study (McHugh, Kutney-Lee, Cimiotti, Sloane & Aiken, 2011). However, it should be noted that methodological differences hamper a true comparison between these studies.

STRENGTHS AND LIMITATIONS

This study is the first to investigate communication satisfaction among nurses on such a large scale. The multicenter design enabled obtaining a large sample and permitted comparisons among hospitals. By including questions on turnover intention and burnout, we were able to collect information on two relevant topics in present-day nursing. Another strength of this study was its usefulness for management purposes. Detailed information could be generated on communication satisfaction that may serve to guide communication improvement interventions.

However, the limitations of this study should also be acknowledged. The most important limitation is the fact that not all nurses participated. Because we do not have information on the non-responders, we cannot exclude selection bias. Moreover, we did not include a benchmark with other sectors.

CONCLUSION

This study demonstrated high levels of communication and job satisfaction in a large sample of Flemish hospital nurses, as benchmarked against other hospital settings.

Compared to the literature, low intent to leave and burnout were documented in the current study. Moreover, job dissatisfaction was associated with polyclinical work, part-time employment and longer work experience. Communication satisfaction was associated with job satisfaction, intent to leave and burnout. Areas for improvement on different dimensions of communication satisfaction were identified. Hence, a strategy for structured and preemptive enhancement of different dimensions of communication within the hospital organization from the working floor to the top and back seems warranted.

IMPLICATIONS FOR NURSING MANAGEMENT

- Nurses with higher communication satisfaction experience higher job satisfaction.
- There is a direct link between supervisor communication and nurses' trust in their supervisors.
- Nurses view their relationship with their managers as an important factor in their overall sense of job satisfaction.
- An open communication climate is advocated, facilitated by supportiveness, involvement in the decision making process, trust and confidence.

Acknowledgments

The authors thank Ms. Marie Blankaert for providing administrative support. The authors thank all the nurses from the three participating hospitals (Ghent University Hospital, AZ Groeninge, Sint Vincentius).

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflicts of Interest

The authors declare that there is no conflict of interest.

REFERENCES

- Adams, A., & Bond, S. (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing*, 32, 536-543. doi:10.1046/j.1365-2648.2000.01513.x.
- Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D. M., Busse, R., McKee, M., ... & Tishelman, C. (2012). Patient safety, satisfaction, and quality of hospital care: Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ*, 344, e1717. doi:10.1136/bmj.e1717.
- Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research*, 42, 36-41. doi:10.1097/00006199-199301000-00007.
- Brock, D., Abu-Rish, E., Chiu, C. R., Hammer, D., Wilson, S., Vorvick, L., & Zierler, B. (2013). Interprofessional education in team communication: Working together to improve patient safety. *BMJ Quality & Safety*, 22, 414-423.
- Courtenay, M., Nancarrow, S., & Dawson, D. (2013). Interprofessional teamwork in the trauma setting: A scoping review. *Human Resources for Health*, 11, 57. doi:10.1186/1478-4491-11-57.
- Debra, L. (1991). The relationship between primary health care practitioners' job satisfaction and characteristics of their practice settings. *Nurse Practitioner*, 16(5), 46-55.
- Downs, C. W., & Hazen, M. D. (1977). A factor analytic study of communication satisfaction. *Journal of Business Communication*, 14, 63-73. doi:10.1177/002194367701400306.

- Dunaway, L. J. (2008). Job Satisfaction Among Nevada Nurse Practitioners: ProQuest.
- Ferrazzo, M., Filippi, M., Meneghetti, G., & Palese, A. (2012). Determinants of the choice of part time employment and nurses' satisfaction: A multicentre descriptive study. *Assistenza Infermieristica e Ricerca: AIR*, 31, 207-213. doi:10.1702/1211.13409.
- Finn, C. P. (2001). Autonomy: An important component for nurses' job satisfaction. *International Journal of Nursing Studies*, 38, 349-357. doi:10.1016/S0020-7489(00)00065-1.
- Gandhi, S., Sangeetha, G., Ahmed, N., & Chaturvedi, S. K. (2014). Somatic symptoms, perceived stress and perceived job satisfaction among nurses working in an Indian psychiatric hospital. *Asian J Psychiatr*, 12, 77-81. doi:10.1016/j.ajp.2014.06.015
- Grieshaber, L. D., Parker, P., & Deering, J. (1995). Job satisfaction of nursing assistants in long-term care. *The Health Care Manager*, 13, 18-28.
- Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Laschinger, H. K., & North, N. (2012). Nurse turnover: A literature review—an update. *International Journal of Nursing Studies*, 49, 887-905. doi:10.1016/j.ijnurstu.2011.10.001.
- Iseke, A. (2014). The part-time job satisfaction puzzle: Different types of Job discrepancies and the moderating effect of family importance. *British Journal of Industrial Relations*, 52, 445-469. doi:10.1111/bjir.12019.

- Keith, A. B., Coburn, A. F., & Mahoney, E. (1998). Satisfaction with practice in a rural state: perceptions of nurse practitioners and nurse midwives. *J Am Acad Nurse Pract*, 10(1), 9-17.
- Kingma, M. (2001). Nursing migration: Global treasure hunt or disaster-in-the-making? *Nursing Inquiry*, 8, 205-212. doi:10.1046/j.1440-1800.2001.00116.x.
- Kudo, Y., Kido, S., Shahzad, M. T., Shida, K., Satoh, T., & Aizawa, Y. (2010). Enhancing work motivation for Japanese female nurses in small to medium-sized private hospitals by analyzing job satisfaction. *The Tohoku Journal of Experimental Medicine*, 220, 237-245. doi:10.1620/tjem.220.237.
- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: The critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(Suppl. 1), i85-i90. doi:10.1136/qhc.13.suppl_1.i85.
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: A literature review. *International Journal of Nursing Studies*, 42, 211-227. doi:10.1016/j.ijnurstu.2004.09.003.
- Manojlovich, M., & Antonakos, C. (2008). Satisfaction of intensive care unit nurses with nurse-physician communication. *Journal of Nursing Administration*, 38, 237-243. doi:10.1097/01.NNA.0000312769.19481.18.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual*. Press: Consulting Psychologists.
- McHugh, M. D., Kutney-Lee, A., Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). Nurses' widespread job dissatisfaction, burnout, and frustration with health

- benefits signal problems for patient care. *Health Affairs (Project Hope)*, 30, 202-210. doi:10.1377/hlthaff.2010.0100.
- Misener, T. R., & Cox, D. L. (2001). Development of the Misener Nurse Practitioner Job Satisfaction Scale. *J Nurs Meas*, 9(1), 91-108.
- Moideenkutty, U., Blau, G., Kumar, R., & Nalakath, A. (2001). Perceived organisational support as a mediator of the relationship of perceived situational factors to affective organisational commitment. *Applied Psychology*, 50, 615-634. doi:10.1111/1464-0597.00076.
- Piko, B. F. (2006). Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies*, 43, 311-318. doi:10.1016/j.ijnurstu.2005.05.003.
- Pincus, J. D. (1986). Key contributor to effectiveness-the Research. *Journal of Nursing Administration*, 16, 19-25.
- Probst, J. C., Baek, J. D., & Laditka, S. B. (2010). The relationship between workplace environment and job satisfaction among nursing assistants: Findings from a national survey. *Journal of the American Medical Directors Association*, 11, 246-252. doi:10.1016/j.jamda.2009.08.008.
- Schiestel, C. (2007). Job satisfaction among Arizona adult nurse practitioners. *J Am Acad Nurse Pract*, 19(1), 30-34. doi:10.1111/j.1745-7599.2006.00187.x
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd.
- Thorsteinson, T. J. (2003). Job attitudes of part-time vs. full-time workers: A meta-analytic review. *Journal of Occupational and Organizational Psychology*, 76, 151-177. doi:10.1348/096317903765913687.

- Tzeng, H. M. (2002). The influence of nurses' working motivation and job satisfaction on intention to quit: An empirical investigation in Taiwan. *International Journal of Nursing Studies*, 39, 867-878. doi:10.1016/S0020-7489(02)00027-5.
- Veldhoven, M. J. P. M., & Meijman, T. F. (1994). *Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA)*. Nederlands Instituut voor Arbeidsomstandigheden NIA..
- Vermeir, P., Vandijck, D., Degroote, S., Peleman, R., Verhaeghe, R., Mortier, E., ... Vogelaers, D. (2015). Communication in healthcare: A narrative review of the literature and practical recommendations. *International Journal of Clinical Practice*, 69, 1257-1267. doi:10.1111/ijcp.12686.
- Wagner, J. D., Bezuidenhout, M. C., & Roos, J. H. (2015). Communication satisfaction of professional nurses working in public hospitals. *Journal of Nursing Management*, 23, 974-982. doi:10.1111/jonm.12243.

Tables

Table 1

Cronbach's Alpha Values of the Dutch Version of the CSQ

FACTOR	CRONBACH'S α
Factor 1 'General organizational perspective'	0.874
Factor 2 'Organizational integration'	0.761
Factor 3 'Personal feedback'	0.857
Factor 4 'Relation with supervisor'	0.942
Factor 5 'horizontal informational communication'	0.859
Factor 6 'Media quality'	0.879
Factor 7 'Communication climate'	0.889
Factor 8 'Relation with employees'	0.799

Table 2

Participants' Characteristics

	N	%
Hospital (n = 1,452)		
University hospital	891	61.4
General hospital 1	160	11.0
General hospital 2	401	27.6
Sex (n = 1,435)		
Male	186	13.0
Female	1,249	87.0
Age (mean and SD)	40.23	10.99
Function (n = 1,448)		
Ward nurse	1,153	79.6
Staff function nurse	5	0.3
Specialist nurse	47	3.2
Social nurse	10	0.7
Psychiatric nurse	11	0.8
Midwife	99	6.8
Head nurse	94	6.5
Care manager/head of nursing	5	0.3
Other	24	1.7
Department (n = 1,419)		

Surgery	247	17.4
Internal medicine/geriatrics	368	25.9
Mixed	62	4.4
Critical care	302	21.3
Psychiatry	20	1.4
Medico-technical department	102	7.2
Polyclinic	73	5.1
Maternity/pediatrics	130	9.2
Other	115	8.1
Educational level (n = 1,430)		
Certified nurse	373	26.1
Bachelor's degree	915	64.0
Master's degree	103	7.2
PhD degree	1	0.1
Other	38	2.7
Years of experience (mean and SD)	17.09	11.20
% Employment (n = 1453)		
50	130	8.9
60	28	1.9
70	21	1.4
75	136	9.4
80	326	22.4

90	43	3.0
100	767	52.8
Other	2	0.2

Table 3

Percentage of Nurses Classified as Satisfied, Indifferent or Dissatisfied, per Dimension

Items	Satisfied	Indifferent	Dissatisfied
General organizational perspective	38.8	31.3	29.9
Organizational integration	68.5	19.5	12.0
Personal feedback	60.6	20.0	19.3
Relation with supervisor	73.5	13.9	12.5
Horizontal informational communication	58.8	25.4	15.7
Media quality	53.2	25.6	21.1
Communication climate	50.3	26.1	23.5
Relation with employees	57.9	25.6	16.5

Table 4

Correlations between CSQ Dimensions and Job Satisfaction

	GOP	OI	PF	RSup	HIC	MQ	CC	REmp
Correlation	0.307	0.426	0.435	0.442	0.456	0.396	0.454	0.210

General Organizational Perspective (GOP), Organizational Integration (OI), Personal Feedback (PF), Relationship to Superiors (RSup), Horizontal and Informal Communication (HIC), Relationship with Employees (REmp), Media Quality (MQ), Communication Climate (CC).

Table 5

Job Satisfaction Scores among Nurses in Other Studies

Authors	Scores
Debra, 1991	8.1/10
Keith, Coburn and Mahoney, 1998	7.4/10
Misener and Cox, 2001	7.3/10
Schiestel, 2007	7.8/10
Dunaway, 2008	7.7/10
Gandhi et al., 2014	8.1/10