



Rinnakkaistallenne / Self-archived publication

Source: Koivisto, J.-M., Multisilta, J., Haavisto, E. (2021). Surgical nurses' experiences with intrinsic work motivation: a focus on autonomy, competence and relatedness. *Hoitotiede*, 33, (2), 102-111.

Surgical nurses' experiences with intrinsic work motivation: a focus on autonomy, competence and relatedness

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ABSTRACT

Fostering employee well-being and creating positive workplace culture provides important competitive advantages for recruiting workers. The key factor influencing well-being at work is the intrinsic motivation experienced by employees. Ryan and Deci's self-determination theory on human motivation distinguishes intrinsic and extrinsic motivation. Three basic psychological needs that must be satisfied to foster intrinsic motivation are autonomy, competence, and relatedness. The aim of the study was to describe surgical nurses' experiences with their intrinsic work motivation. A descriptive qualitative study was conducted at a single Finnish hospital. For data collection, 12 nurses participated in three focus-group interviews. Deductive and inductive content analyses were used. The experience with autonomy refers to the possibility of having influence and a sense of control over one's work. The experience with competence arises from meaningful work tasks, self-efficiency and feedback. The experience with relatedness relates to doing good for others and feeling a sense of community and an appreciation of one's profession on a social level. Making managerial appreciation visible in workplace communities and developing methods for daily feedback could improve opportunities for nurses to experience intrinsic motivation and thus increase well-being at work.

TIIVISTELMÄ

Kirurgisten sairaanhoitajien kokemuksia sisäisestä työmotivaatiosta

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Työntekijöiden hyvinvoinnin edistäminen ja positiivinen työpaikkakulttuuri ovat merkittäviä kilpailuetuja työntekijöiden rekrytoinnissa. Keskeinen työhyvinvointiin vaikuttava tekijä on työntekijöiden kokemus sisäisestä motivaatiosta. Ryanin ja Decin itseohjautuvuusteoria erottaa sisäisen ja ulkoisen motivaation. Itseohjautuvuusteorian mukaan sisäisen motivaation kehittymisen edellytyksenä on ihmisen kolmen psykologisen perustarpeen, autonomian, kyvykkyyden ja yhteisöllisyyden, tyydyttyminen. Tämän laadullisen tutkimuksen tavoitteena oli kuvata kirurgisten sairaanhoitajien kokemuksia sisäisestä työmotivaatiosta. Tutkimus toteutettiin yhden sairaalan kirurgisella osastolla. Aineisto kerättiin focus group -haastattelulla (n = 3), joihin osallistui kaikki osaston 12 sairaanhoitajaa. Aineisto analysoitiin deduktiivisella ja induktiivisella sisällön analyysillä. Tulosten mukaan autonomian kokemus viittaa mahdollisuuteen vaikuttaa omaan työhön sekä työn hallinnan tunteeseen. Kokemus kyvykkyydestä syntyy merkityksellisistä työtehtävistä, minäpystyvyyden tunteesta ja palautteen saamisesta. Yhteiskuuluvuuden tunteen kokemus liittyy mahdollisuuteen tehdä hyvää muille ihmisille, yhteisöllisyyden tunteeseen sekä hoitotyön sosiaaliseen arvostukseen yhteiskunnassa. Johdon tuki

Saapunut 21.02.2021

Hyväksytty julkaistavaksi 19.04.2021

Keywords: surgical nursing, work motivation, intrinsic motivation, autonomy, competence, relatedness

ja arvostus sekä jatkuvan palautteen saaminen päivittäisestä työstä ovat tärkeitä sairaanhoitajien sisäisen työmotivaation kokemisen kannalta. Työyhteisöissä tulisi kehittää tapoja, joilla työntekijöiden arvostaminen tehdään näkyväksi. Lisäksi työpaikoilla tulisi kehittää erilaisia päivittäisen palautteen antamisen menetelmiä.

Asiasanat: kirurginen hoitotyö, työmotivaatio, sisäinen motivaatio, autonomia, kyvykkyyks, yhteenkuuluvuus

What is already known about the research topic?

- Motivation plays an important role in the well-being of employees in the workplace.
- Basic psychological needs that must be satisfied to foster intrinsic motivation are autonomy, competence, and relatedness.
- Nurses' work motivation is influenced by both intrinsic and extrinsic motivational factors.

What new information does the article bring?

- The autonomy experienced by nurses is affected by the ability to have an influence on their work as well as feeling in control.
- Nurses' experience with competence arises from having meaningful work tasks, feeling a sense of self-efficiency, and receiving feedback.
- Nurses' experience with relatedness emerges from the opportunity to do something good for other people, and to feel a sense of community and social appreciation of the profession.

What is the significance of the research for nursing, nursing education and management?

- In healthcare management, more attention could be paid to promoting nurse autonomy. This may help enhance patient safety and decrease nurse turnover.
- Workplace communities should develop standard practices of giving nurses continuous feedback in their day-to-day work.
- Healthcare management should be encouraged to give nurses recognition for their work, since this may lead to an increase in well-being at work and decrease burnout.

Introduction

The world currently faces a shortage of nurses, and many employers are finding it challenging to recruit enough skilled and motivated healthcare workers (World Health Organization [WHO] 2020). It's estimated that 35%–60% of nurses leave the profession in their early careers (Eckerson 2018), which is especially worrying for the substantial reduction this means for the global health workforce, especially in developed countries (WHO 2020). Employing motivated nurses is highly important; intrinsically

motivated nurses provide safe patient care (Toode et al. 2015). The quality of care is associated with high-ranking hospital work environments (Aiken et al. 2012). The motivation experienced by employees is a key factor influencing workplace well-being (Deci & Ryan 2008). Of great concern at this time is hospital nurses—even more than community nurses—experiencing emotional exhaustion and depersonalisation. For hospital nurses, motivation and empathy are strongly correlated, and a significant mitigating factor for these is burnout. (Dor et al. 2021.) Globally, hospitals cannot afford

to lose any nurses from burnout or any other condition. Nurse turnover is a major financial problem that causes direct and indirect costs for healthcare organisations (Roche et al. 2015). Fostering employee well-being and creating positive workplace cultures present important competitive advantages when recruiting workers and making sure they remain in the nursing field (Hahtela et al. 2015, Li et al. 2019).

Ryan and Deci's (2000) self-determination theory (SDT) on human motivation makes a distinction between two types of motivation: intrinsic and extrinsic motivation. Intrinsic motivation refers to the desire to do an activity for its own sake and the inherent satisfaction it generates. Extrinsic motivation refers to the performance of an activity to gain some external outcome. In self-determination, three main intrinsic needs are involved: autonomy, competence, and relatedness. When these three innate psychological needs are satisfied, self-motivation is enhanced. (Ryan & Deci 2000). Autonomy refers to an individual's ability to act of their own will and control their lives and behaviour. Competence refers to the development of knowledge and skills, and mastery over tasks important to individuals and society in general. A sense of relatedness arises when individuals feel connected to others and are able to do good for others through their actions.

The three psychological needs mentioned above act as predictors of employee well-being (Ryan & Deci 2008). Employees whose basic psychological needs are satisfied are more committed to their organisations and less prone to change jobs (Van den Broeck et al. 2010). Of particular importance is autonomous motivation, which 'involves behaving with a full sense of volition and choice' (Deci & Ryan 2008). Intrinsically motivated individuals feel enthusiasm for their work, not just the external rewards from their jobs (Gagne & Deci 2005). Autonomous motivation fosters nurses' proactive

work behaviour, such as monitoring patient status. Workgroup commitment enhances nurses' self-determination in pursuing their nursing activities. (Galletta et al. 2019.) Autonomous motivation is especially important in preventing nurses from leaving the profession (Fernet et al. 2017). Working then, under that type of external motivation, causes fatigue at work, especially for new nurses. This leads them to develop sub-optimal motivation towards their work and thus may impair their well-being at work. (Austin et al. 2020.) On the other hand, the same factor can act as an intrinsic or extrinsic motivator. For example, feedback given by the management can be perceived differently depending on the situation: if feedback is given to improve the quality of care or the well-being of nurses, then it has a positive effect on work engagement, whereas giving feedback that emanates from rules and regulations is perceived as negative. Regarding the latter, that feedback can become one of the factors leading to burnout. (Giesbers et al. 2021.)

Appreciation has been ranked by nurses as the most effective motivational factor (Kantek et al. 2015). Other motivational factors include personal values and characteristics (Koch et al. 2016), training (Perreira et al. 2016), financial incentives (Perreira et al. 2016, Deressa & Zeru, 2019), good collaboration (Perreira et al. 2016, Ahlstedt et al. 2019), suitable working hours (Toode et al. 2011), opportunities to help others (Koch et al. 2014, Ahlstedt et al. 2019), interpersonal support and respect among colleagues and physicians (Ahlstedt et al. 2019) and meaningful work (Perreira et al. 2016, Ahlstedt et al. 2019). For younger nurses, work motivation and autonomy are important contributors to work satisfaction, but, for them, supportive leadership is especially significant (O'Hara et al. 2019).

This study was part of a larger project to develop a gamification intervention and evaluate its effects on nurses' work motiva-

tion. The results of the intervention study are described in another article. As for the success of the intervention implementation in a hospital setting, it was important to understand the motivation experienced by participating nurses in the development and implementation of the intervention. Thus, the aim of this study was to describe surgical nurses' experiences with their intrinsic work motivation.

Method

Data Collection

This qualitative descriptive study was conducted in one surgical ward at a central hospital in Finland. Purposive sampling (Burns & Grove 2005) was used to recruit nurses. Participation was intended for the entire nursing staff of one ward since the purpose was to involve all the nurses in the development of the gamification intervention. A ward with a small number of staff members was selected. All the nurses ($n = 12$) working in the ward participated in the study. In December 2017, three focus group interviews were conducted, each with four nurses, in a room in their workplace, without interference from other participants (Doody et al. 2013). The nurses were asked to describe their intrinsic work motivation. The audio-recorded interviews lasted for a total of 134 minutes and were transcribed verbatim. The researcher who collected the data was a person from outside the ward who did not know the ward nor any of the nurses prior to the study.

Analysis

The data were analysed by using deductive and inductive content analysis (Elo & Kyngäs 2008). First, one researcher (JMK) carefully reviewed the interview transcripts several times to become familiar with the data. Second, a categorisation matrix was cre-

ated for deductive analysis, based on Ryan and Deci's (2000) SDT on three innate psychological needs (autonomy, competence and relatedness). Third, original phrases and sentences, and reduced expressions of original phrases and sentences, were identified and coded into the matrix. Fourth, the codes were inductively synthesised into subcategories. At this point, the research group critically assessed the analysis and reached consensus on refining the subcategories.

Ethical Considerations

The study followed accepted scientific practice (Finnish Advisory Board on Research Integrity 2012). Permission to conduct the study was obtained from the chief physician at the central hospital. Ethical approval was obtained from the Ethics Committee of Satakunta Higher Education Institution on 27 December 2017. The participants gave their consent to participate after they were informed about the procedures involved in the research and the length of time of participation. They were told that participation was confidential and voluntary and that refusal to participate would not result in any consequences or affect their work in any way. Further, they were informed that they could withdraw from the study at any time without consequences.

Findings

All participants were registered nurses with at least one year of work experience in surgical nursing. Most of the nurses were permanently employed, while some had fixed-term contracts.

The nurses' experiences with intrinsic motivation in their day-to-day work were described through three main categories: Experience with autonomy, experience with competence and experience with relatedness (Figure 1).

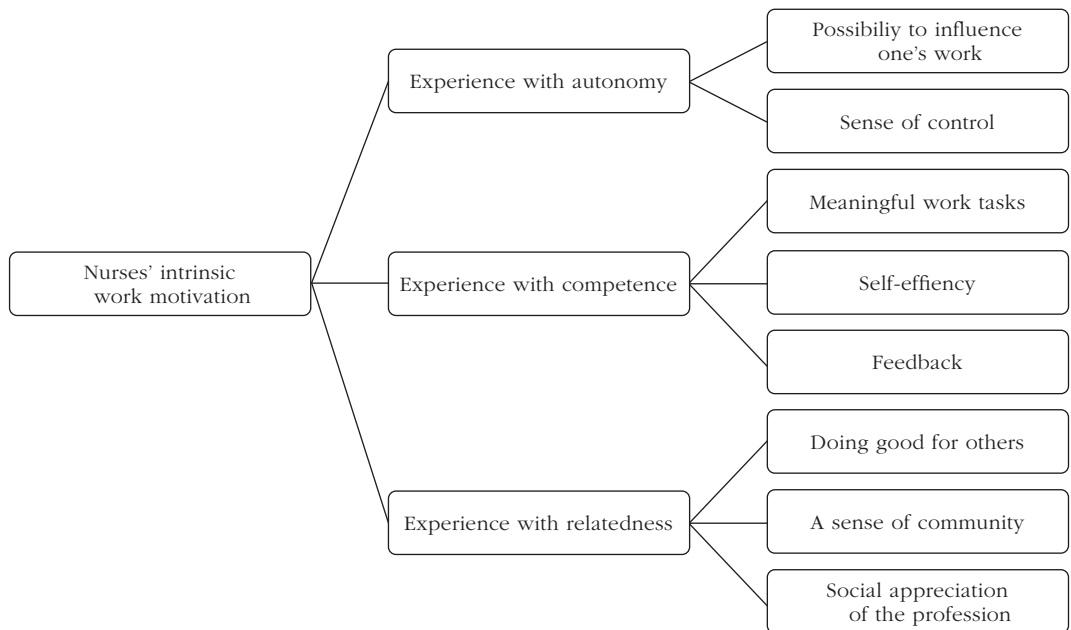


Figure 1. Nurses' experiences with intrinsic motivation in their day-to-day work

Experience with Autonomy

The experience with autonomy consisted of the possibility of having an influence and a sense of control over one's work (Figure 1). First, the possibility of having influence over one's work refers to the ability of contributing to a workplace culture and influencing the ways things are done, as well as what decisions are made and how work shifts are decided. The nurses felt that they had opportunities to change the ward's practices and had been able to influence how work was done. Scheduling their shifts was important, as it increased equality among the nurses. There were some negative comments related to management culture.

'We actually have our own workplace culture and habits here that are a bit different from how things used to be'. [FG2]

'Work is managed from above, and you will not get a moment of peace to do work because the operation of the ward is changing all the time'. [FG2]

Second, a sense of control refers to certainty about the future of the ward and the continuation of work. The nurses expressed concerns about disruptions to their sense of control and changes to the national healthcare sector. Overall, the participants claimed that management's decisions were not far-reaching enough, and no one knew about upcoming operational changes in the ward. Work could not be done properly with it constantly changing.

'I know, however, that there will be work; the work will continue. It's a different matter with how it will continue'. [FG3]

'Actually, that [continuation of work] is where the uncertainty about the future comes from; it has really reduced the joy of work'. [FG3]

Experience with Competence

The experience with competence consisted of meaningful work tasks, self-efficien-

cy and feedback (Figure 1). First, meaningful work tasks refer to work engagement, the versatility of work tasks and the challenges of work. Variations in work tasks affect the meaningfulness of work. Challenging patient cases that demand strong expertise created interest in work, while simple patient cases reduced motivation. The challenge for the nurses was to manage a variety of factors related to different medical specialties, and, importantly, keeping up to date with new information. The nurses felt that time passed quickly when they were excited about the job.

'I feel it comes from this variety. We have so many specialties and I like that. There is not one that is the same. That's what makes it meaningful.' [FG1]

'Yes, in that way, it becomes interesting when there are somewhat bigger and more special issues, when something really needs to be taken care of and requires a little change in thinking.' [FG2]

Second, self-efficiency consists of having expertise, managing challenging situations and creating routine. The nurses reported that they had good knowledge of their field and rarely faced situations when they did not know what to do. They described expertise as understanding to which specialists they needed to turn. A sense of satisfaction arises from managing numerous sick patients with few resources. Creating routine aided the performance of daily tasks.

'I know a lot of things in this area, and I rarely have situations where I do not know how to act.' [FG3]

Third, feedback referred to having positive, negative and no feedback. Praise from colleagues, patients, and their relatives motivated the nurses. A common view among the interviewees was that they did not get any praise from management and, indeed,

no longer even expected it. At ward meetings, patient complaints were always mentioned, while positive issues were never discussed. A job well done went unnoticed. Interviewees suggested that a negative thing, such as a patient complaint, could be said in a more positive manner. In general, the participants expressed that small salaries did not reward nurses, and they did not believe that their wages would ever improve.

'No one says that I've discharged that patient well, or "Thank you. Good work".' [FG2]

'Good feedback motivates you. You get it too rarely. But it motivates you.' [FG3]

Experience with Relatedness

The experience with relatedness consists of doing good for others, a sense of community and social appreciation of the profession (Figure 1). First, doing good for others refers to the ability to help patients and to interact with different people. The nurses felt that it was important that they could do good for others and reported that helping patients felt special.

'Well, for example, you can really do something for another person.' [FG1]

'It is a good feeling if you have done something to improve their quality of life.' [FG1]

Second, a sense of community refers to a good atmosphere in the ward and confidentiality in the workplace community. The relationships between all the staff members were described as good. A good atmosphere motivated the respondents to make their best contributions to the work community. The interviewees felt that they were committed to asking for help from each other and could seek out information together.

All the participants described that they sincerely desired to help others in everyday tasks. An atmosphere of confidentiality also made it possible to share knowledge and skills with others.

'And we have a terribly good working community. It's good to be here.' [FG1]

'Everyone is always ready to help each other' [FG2]

'It helps to get practical knowledge from them, from colleagues.' [FG3]

Third, social appreciation of the profession refers to the valuing (or lack thereof) of professional competence, recognition of professional skills and recognising professionals' voices. The participants unanimously expressed that the nurses' professional skills were not appreciated. Some suggested that nurses' voices were not heard. Participants expressed their feelings that management did not show appreciation for the nurses' work. They also expressed concerns about the poor reputation of the nursing profession in society. However, some believed that doctors appreciated nurses' work. One participant stated that better wages would show some sign of appreciation.

'I wonder about the bad reputation of our profession in the hierarchy of work and in society.' [FG3]

'This is something that you hear: [nurses' work] is hard to measure. Only neglect and deficiencies are noticed. This is a little bit like a cleaner's job: it is only visible when it stops being done.' [FG3]

Discussion

The aim of this study was to describe surgical nurses' experiences with their intrinsic

work motivation. The results showed that employees' well-being can be ensured by satisfying their needs for autonomy, competence and relatedness in the workplace, which fall in line with previous studies (Van den Broeck et al. 2010, Fernet et al. 2017). From the perspective of the autonomy they experienced, the surgical nurses felt that they had the opportunity to influence their ways of working, and they found that motivating. Consistent with previous literature (Deci & Ryan 2008, Toode et al. 2011, Fernet et al. 2017), this study found that a nurse's need for autonomy is satisfied when they have control over their tasks and work-related decision-making. This autonomy experienced by nurses is significant for patient safety: autonomous motivation fosters proactive behaviour (Galletta et al. 2019). This is evident in surgical nursing when, for example, a nurse recognises a deteriorating patient, an element at the core of postoperative care. On the other hand, the nurses felt that work was being managed from above, which diminished their sense of control. According to the results, continuous changes in the ward somewhat disturbed the nurses' experience with autonomy. Not being informed about changes early enough reduced nurses' motivation and sense of well-being in the workplace. This is an important observation, since previous results have shown that autonomous motivation prevents nurses from leaving the profession (Fernet et al. 2017).

Based on these results, managing diverse situations and having challenging patient cases made nurses feel that they were competent in their work, with this experience of competence enhanced by positive feedback from colleagues and patients. Very little information was found in the previous literature on the importance of feedback in nurses' work motivation. Positive feedback may not have been considered an important motivational factor. An important finding of this study was that work that was

done well was not praised by management. A possible explanation for this might be that managers are not used to giving constant or daily feedback on the work they expect employees to do well. Another explanation may be that ward managers fail to provide feedback in such a way that nurses understand the reason why it's being given, e.g., quality of care or regulations (Giesbers et al. 2021). Failing to receive recognition for one's work may decrease motivation and have serious effects on well-being at work (Ahlstedt et al. 2019), and at worst cause burnout (Giesbers et al. 2021).

One obvious finding to emerge from the analysis was that their contributing to the improvement of patients' quality of life was a significant factor in nurses' intrinsic work motivation. Another important finding was that support and respect between colleagues had a positive impact on work motivation, while lack of support and appreciation from management reduced well-being at work. The study's results confirm previous findings of the importance of appreciation for the profession as a motivational factor (Kantek et al. 2015). Employers, therefore, should invest in developing supportive hospital-practice environments in which nurses can feel appreciated for their professional competence and for providing the best possible patient care. Doing so could decrease turnover (Li et al. 2019) at a relatively low cost. Maintaining good work motivation in hospitals is also economically important, as nurse turnover is expensive (Roche et al. 2015). Organisations cannot afford this on top of other financial burdens in health care, such as increasing workforce shortages and ageing populations. Improving workers' intrinsic work motivation could increase the attractiveness of the nursing field, helping to ensure the availability of skilled labour.

Trustworthiness

Trustworthiness is assessed by addressing its credibility, dependability and transferability (Burns & Grove 2005). When considering credibility, appropriate data collection as well as appropriate selection of participants and data analysis is essential (Graneheim & Lundman 2004). In this study, the focus-group interview was selected as the best data collection method for obtaining in-depth information on the perspectives of nurses. In addition, focus-group interviews can expect to provide richer data than an individual approach (Doody et al. 2013). Purposive sampling allowed for the study to have informants with the best knowledge. The limited amount of research material and the low number of informants can be seen as a limitation. However, the nurses provided a comprehensive perspective on the intrinsic motivation, and data saturation was achieved. The strength of the study was having two researchers (JKM, EH) conduct the analysis. Objectivity was considered, as the researchers actively sought to be aware of their attitudes and beliefs to prevent them from affecting the research. The careful reporting of results and the use of original quotations from the participants enhanced its credibility (Lincoln & Guba 1985). Dependability refers to the consistency of the research process and method (Lincoln & Cuba 1985). The question was the same in all focus groups. Dependability was verified through exact description of the research process. Context description allows for an assessment of the transferability of the results (Graneheim & Lundman 2004). The results can be transferred to similar nursing contexts. In addition, transferability will be confirmed later by an intervention study.

Conclusion

Overall, the results showed that nurses experienced intrinsic motivation, while a need for autonomy, competence, and relatedness were satisfied. However, issues emerged that reduced motivation. This study highlights the importance of managerial support and appreciation in nurses' work motivation. The practical implication of the results is that workplace communities should develop ways of making mutual respect and appreciation visible. Another significant finding to emerge from this study is the importance of getting continuous feedback on day-to-day work; it is recommended that various methods of giving daily feedback in the workplace be developed. Further research should be conducted to develop and explore different ways of mak-

ing appreciation visible and for giving feedback to both employees and employers. These, in turn, could improve opportunities for nurses to feel intrinsically motivated and thus increase their well-being at work, which could lead to a reduction in nursing shortages.

Acknowledgements

This study was supported by Regional Council of Satakunta.

AREAS OF RESPONSIBILITY

Conception and design: JMK, JM, EH, acquisition of data: JMK, analysis of data: JMK, EH, drafting the manuscript: JMK, revising manuscript critically: JMK, JM, EH

REFERENCES

- Ahlstedt C., Eriksson Lindvall C., Holmström I. & Muntlin Athlin Å. (2019) What makes registered nurses remain in work? An ethnographic study. *International journal of nursing studies* **89**, 32–38.
- Aiken L., Sermeus W., Van den Heede K., Sloane DM., Busse R., McKee M., Bruyneel L., Rafferty A. M., Griffiths P., Moreno-Casbas M. T., Tishelman C., Scott A., Brzostek T., Kinnunen J., Schwendimann R., Heinen M., Zikos D., Strömseng Sjetne I., Smith H. L. & Kutney-Lee A. (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.
- Austin S., Fernet C., Trépanier SG. & Lavoie-Tremblay M. (2020) Fatigue in new registered nurses: A 12-month cross-lagged analysis of its association with work motivation, engagement, sickness absence and turnover intention. *Journal of Nursing Management* **28**(3), 606–614.
- Burns N. & Grove S. K. (2005) *The Practice of Nursing Research: Conduct, Critique, and Utilization*. St. Louis: Elsevier Saunders.
- Deci E. & Ryan R. (2008) Facilitating optimal motivation and psychological well-being across life's domain. *Canadian Psychology* **49**(1), 14–23.
- Doody O., Slevin E. & Taggar L. (2013) Focus group interviews in nursing research: part I. *British Journal of Nursing* **22**(1), 16–19.
- Dor A., Mashiach Eizenberg M. & Halperin O. (2019) Hospital Nurses in Comparison to Community Nurses: Motivation, Empathy, and the Mediating Role of Burnout. *Canadian Journal of Nursing Research* **51**(2), 72–83.
- Eckerson CM. (2018) The impact of nurse residency programs in the United States on improving retention and satisfaction of new nurse hires: An evidence-based literature review. *Nurse Education Today* **71**, 84–90.
- Elo S. & Kyngäs, H. (2008) The qualitative content analysis process. *Journal of Advanced Nursing* **62**(1), 107–115.
- Fernet C., Trépanier S. G., Demers M. & Austin S. (2017) Motivational pathways of occupational and organizational turnover intention among newly registered nurses in Canada. *Nursing Outlook* **65**(4), 444–454.
- Finnish Advisory Board on Research Integrity. (2012) *Responsible conduct of research and procedures for handling allegations of misconduct in Finland*. <http://www.tenk.fi/fi> (21.4.2021)
- Gagne M. & Deci E. (2005) Self-determination theory and work motivation. *Journal of Organizational Behavior* **26**, 331–362.
- Galletta M., Vandenberghe C., Portoghese I., Allegrini E., Saiani L. & Battistelli A. (2019) A cross-lagged analysis of the relationships among workgroup commitment, motivation and proactive work behaviour in nurses. *Journal of Nursing Management* **27**, 1148–1158.
- (Suzanne) Giesbers APM., Schouteten RLJ., Poutsma E., van der Heijden BIJM. & van Achterberg T. (2021) Towards a better understanding of the relationship between feedback and nurses' work engagement and burnout: A convergent mixed-methods study on nurses' attributions about the 'why' of feedback. *International Journal of Nursing Studies* **117**:103889.

- Graneheim U. H. & Lundman B. (2004) Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today* **24**(2), 105–112.
- Hahtela N., Paavilainen E., McCormack B., Helminen M., Slater P. & Suominen T. (2015) Nurses' perceptions of workplace culture in primary health care in Finland. *International Nursing Review* **62**(4):470–478.
- Kantek F., Yildirim N. & Kavla İ. (2015) Nurses' perceptions of motivational factors: a case study in a Turkish university hospital. *Journal of Nursing Management* **23**(5), 674–681.
- Koch SH., Proynova R., Paech B. & Wetter T. (2014) The perfectly motivated nurse and the others: workplace and personal characteristics impact preference of nursing tasks. *Journal of Nursing Management* **22**(8), 1054–1064.
- Li B., Li Z. & Wan Q. (2019) Effects of work practice environment, work engagement and work pressure on turnover intention among community health nurses: Mediated moderation model. *Journal of Advanced Nursing* **75**(12), 3485–3494.
- Lincoln Y. S. & Guba E. G. (1985) *Naturalistic Inquiry*. Newbury Park, London, New Delhi: Sage Publications Inc.
- O'Hara MA., Burke D., Ditomassi M. & Palan Lopez R. (2019) Assessment of Millennial Nurses' Job Satisfaction and Professional Practice Environment. *The Journal of Nursing Administration* **49**(9), 411–417.
- Perreira TA., Innis J. & Berta W. (2016) Work motivation in health care: a scoping literature review. *International Journal of Evidence-Based Healthcare* **14**: 175–182.
- Ryan R. M. & Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* **55**(1), 68–78.
- Roche M. A., Duffield C., Homer C., Buchan J. & Dimitrelis, S. (2015) The rate and cost of nurse turnover in Australia. *Collegian* **22**(4), 353–358.
- Toode K., Routasalo R., Helminen M. & Suominen S. (2015) Hospital nurses' working conditions in relation to motivation and patient safety. *Nursing Management* **21**(10), 31–41.
- Toode K., Routasalo R. & Suominen S. (2011) Work motivation of nurses: A literature review. *International Journal of Nursing Studies* **48**, 246–257.
- Van den Broeck A., Vansteenkiste M., Witte H., Soenens B. & Lens W. (2010) Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology* **83**(4), 981–1002.
- World Health Organization. (2020) *State of the world's nursing 2020*. <https://www.who.int/publications/i/item/9789240003279> (21.4.2021)

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