



What makes registered nurses remain in work? An ethnographic study

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ABSTRACT

Background: Registered nurses' work-related stress, dissatisfaction and burnout are some of the problems in the healthcare and that negatively affect healthcare quality and patient care. A prerequisite for sustained high quality at work is that the registered nurses are motivated. High motivation has been proved to lead to better working results. The theory of inner work life describes the dynamic interplay between a person's perceptions, emotions and motivation and the three key factors for a good working life: nourishment, progress and catalysts. **Objectives:** The aim of the study was to explore registered nurses' workday events in relation to inner work life theory, to better understand what influences registered nurses to remain in work.

Design: A qualitative explorative study with an ethnographic approach.

Methods: Participant observation over four months; in total 56 h with 479 events and 58 informal interviews during observation; all registered nurses employed at the unit (n = 10) were included. In addition, individual interviews were conducted after the observation period (n = 9). The dataset was analysed using thematic analysis and in the final step of the analysis the categories were reflected in relation to the three key factors in theory of inner work life.

Results: *Nourishment* in a registered nurse context describes the work motivation created by the interpersonal support between colleagues. It was important to registered nurses that physicians and colleagues respected and trusted their knowledge in the daily work, and that they felt comfortable asking questions and supporting each other. *Progress* in the context of registered nurses' work motivation was the feeling of moving forward with a mix of small wins and the perception of solving more complex challenges in daily work. It was also fundamental to the registered nurses' development through new knowledge and learning during daily work. *Catalysts*, actions that directly facilitate the work, were highlighted as the possibility to work independently along with the opportunity to work together with other registered nurses.

Conclusion: This study has a number of implications for future work and research on creating an attractive workplace for registered nurses. Working independently, with colleagues from the same profession, integrated with learning, visible progress, and receiving feedback from the work itself, contribute to work motivation.

What is already known about the topic?

- Shortage and turnover of registered nurses are some of the problems and consequences that negatively affect healthcare quality and patient care.
- Autonomous work motivation is important to work organizations, because it impacts on the employees' well-being at work and on organizational efficiency.
- A positive interplay between a person's perceptions, emotions and

work motivation affects the dynamic system in a constructive direction improving work performance and possibilities to solve complex work-related problems.

What this paper adds

- A more comprehensive understanding of registered nurses work motivation, which provide a contextualization for related quantitative study results.

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- An opportunity for registered nurses to work independently, in a friendly atmosphere with colleagues from the same profession and in a trusting collaboration with the physicians, are of great importance to work motivation.
- Receiving feedback from the work itself, integrated with learning and a visible progress in registered nurses daily work contribute to work motivation.
- New knowledge for future research and work aiming at creating attractive workplaces, which may lead to that registered nurses remain in work.

1. Introduction

Nurses have an important organizational function in healthcare (Allen, 2018). Therefore, from a global perspective, the shortage and turnover of nurses at all levels of healthcare are issues critical to resolve (Hayes et al., 2012). Furthermore, the current lack of staff and the expected turnover mean that, by 2030, approximately 40 million new health and social care jobs will be required globally (WHO, 2016). The challenge is however not only to attract new nurses, it also to make them stay in the profession. In European countries, burnout is linked to nurses' intention to leave their profession (Heinen et al., 2013). Five years after graduating, 20% of registered nurses in Sweden strongly intended to leave the profession and this was linked to high levels of burnout (Rudman et al., 2014). In addition, nurse work-related stress, dissatisfaction and burnout are some of the problems and consequences that negatively affect healthcare quality and patient care (Aiken et al., 2012; Liu et al., 2018; McHugh et al., 2011; Nantsupawat et al., 2016). The World Health Organization (WHO) Global Strategy on Human Resources for Health highlighted work motivation and satisfaction as two of the most important factors for resolving problems with recruiting and retaining staff in the healthcare sector (WHO, 2016). Therefore, we need to study what makes registered nurses motivated to remain in work.

1.1. Work motivation

Motivation at work is generally defined as a drive to do something, with the focus on what energizes and gives direction to do the work tasks (Ryan and Deci, 2017). Furthermore, according to the Self-determination theory, there is a distinction between controlled motivation versus autonomous motivation (self-motivated). Controlled work motivation occurs when the employees work because of external regulation in order to get something. Autonomous motivation occurs when the employees work for self-selected goals or because of enjoyable work tasks (Ryan and Deci, 2017). Autonomous work motivation is important to work organizations, because it impacts on the employees' well-being in the workplace and on the organizational profitability (Ryan and Deci, 2017). Three basic human psychological needs are important for motivation. The first is the need for a perception of autonomy; the second is the need to feel competent and to be able to operate effectively; the third is the need for relatedness, the feeling of belonging (Gagné and Deci, 2005; Ryan and Deci, 2000).

Previous research has identified some factors affecting nurses work motivation. Toode et al. (2011) identified five categories in a review

study of nurses' work motivation. The first category covers work-place characteristics, including the importance of good collaboration, high autonomy, and opportunities to learn. The second category covers working conditions, including salary and the possibility to combine work with private life. The third category covers personal characteristics, including academic level and age. The fourth category covers individual priorities, including work meeting certain individual needs and values. The last category covers internal psychological states, including experience of the meaningfulness of the work. Furthermore, a scoping literature review identified ten similar themes that influence healthcare employees' work motivation: work performance, organizational justice, salary, status, personal characteristics, work relationships, autonomy, organizational identification, training, and meaningfulness of work (Perreira et al., 2016). However, as these review studies mostly were using cross-sectional self-administered questionnaire, Perreira et al. (2016) identified a need of a more comprehensive understanding of work motivation in health care organisation. One way to approach work motivation and deepen our knowledge further is to use an ethnographic approach. Moreover, Toode et al. (2011) discussed the need of using modern theories of work motivation to add new knowledge. We will therefore use the theory of inner work life to study work motivation in a nursing context.

1.2. Theoretical framework

The theory of inner work life has been useful in understanding more about work motivation. This knowledge can support managers and employees to create and enable a better work environment where employees want to remain. The theory focus on employees in industries composed primarily of professionals who need to solve complex problems creatively in daily work (Amabile and Kramer, 2011). To our knowledge, however, the theory of inner work life has not been used in a nursing context, even though similar criteria are present, such as the need to solve complex problems during daily work. Therefore, more knowledge of this theory in relation to the nursing context may support creation of a work environment where registered nurses want to remain.

This theory describes a dynamic system, an interplay between a person's perceptions, emotions and work motivation (Amabile and Kramer, 2011). The theory presents three key factors (triggers): nourishment, progress, and catalysts. These key factors affect the dynamic system in a positive direction towards high work performance. The first key factor, nourishment, is interpersonal support including respect, encouragement, emotional support and affiliation. The second key factor, progress, is the power of meaning and accomplishment. This included events that signified progress such as small wins, breakthroughs, forward movement and goal completion. The third key factor, catalysts, are events that directly facilitate the work such as clear goals, sufficient resources, allowing autonomy and a positive climate. This theory has two setbacks; inhibitors, actions directed at the work that actively hinder work; and toxins, directed at the person and discouraging or undermining the person's work (Amabile and Kramer, 2011) (Fig. 1).

Another significant factor for achieving a positive effect at work is the importance of reflecting on both opportunities and problems.

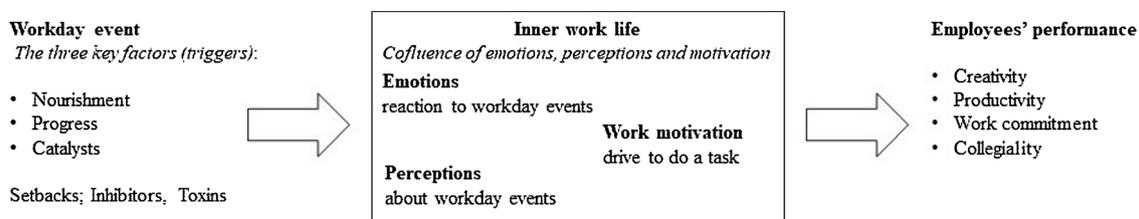


Fig. 1. An outline of the theory of inner work life framed from work of Amabile and Kramer (2011).

However, problem-focused perspectives continue to be the most common in organizational research (Amabile and Kramer, 2011; Cameron and McNaughtan, 2014; Latham and Pinder, 2005). Therefore, the aim of the study was to explore registered nurses' workday events in relation to inner work life theory to better understand what influences registered nurses to remain in work.

2. Methods

2.1. Study design

The study had a qualitative explorative design with an ethnographic approach and used participant observation, informal interviews during observation and individual interviews. Participant observation has been seen to connect the researcher to the basic human experiences. This method provides insights into the unspoken elements embodied in gestures and physical movements (Guest and Marilyn, 2012; Patton, 2015). Furthermore, informal interviews during observation deepened the observation in the field to better understand the inner perspective with perceptions and emotions (Patton, 2015). Additional individual interviews gave the participants more time to reflect on what affects their personal motivation in their daily work.

2.2. Sample and setting

The setting for this study was a clinical decision unit linked to an emergency department at a university hospital in Sweden. The unit had a capacity of six beds for medical and surgical patients with unclear diagnosis. The purpose of the unit was to provide more time for investigations and observations. A decision was taken within 23 h as to whether a patient was fit to go home or needed to stay in hospital. The patients' health status, care demands and treatments varied and could change quickly over time. Registered nurses took advanced nursing decisions and organized complex workdays with coordination of consulting, investigations, observations, administering medications and treatments, and necessary caring actions. Either two registered nurses or one registered nurse and one assistant nurse worked together. In total, there were ten registered nurses and five assistant nurses employed at the unit. Physicians, who were on-call and had responsibility for the medical decisions, changed every week and shared the office at the unit with the registered nurses and assistant nurses. Given our research question, we selected a unit with a good reputation at which registered nurses wanted to work. In addition, this specific unit was selected based on our access to the field and because of the similar working conditions as other hospital registered nurses, even though the patient flow was higher than on other units.

A total sample of all registered nurses ($n = 10$), eight females and two males employed at the unit, participated in the participant observation and informal interviews during observation. Nine registered nurses participated in the individual interviews after the observation period. At the time of the interviews, one registered nurse was on leave and could therefore not participate. The participants' average age was 32 years (range 23–57 years).

2.3. Data collection and procedure

The registered nurses, the assistant nurses and the physicians who were on duty, received verbal information about the study together with an information sheet before data collection began. In line with the ethnographic approach, the first author attended various meetings, conducted interviews with the manager, and gathered background facts in order to understand the field before participant observations and interviews began. Data collection was conducted in 2016.

2.3.1. Participant observation and informal interview during observation

The first author conducted participant observation and informal

interviews during observation over a four-month period, spread over 7 days (total 56 h). A total of 479 events and 58 informal interviews during observation were documented. In regard to the research question and for ethical reasons, the fieldwork focus was on situations when registered nurses were in-between bedside work and did not interfere with work tasks. The informal interviews during observation were conducted in connection with events. The first author asked questions such as: "How do you feel now?" and "What are you thinking now?" Every new event and informal interview during observation were recorded with the start and end time together with the place and who said what. In addition, environmental factors, nonverbal events, number of employees, number of patients and the first author's reflections were noted. The handwritten field notes, taken during the observations, were transcribed into texts immediately after each session. All authors read all field notes during the observation process. It was decided to end participant observation when the information power was reached and saturation met the purpose of the inquiry (Malterud et al., 2015; Patton, 2015).

2.3.2. Individual interviews

Individual interviews were conducted to supplement the participant observation and the informal interviews during participant observation. The individual interviews were held by the first author soon after the final observation period in a separate place near the unit. Nine individual interviews were completed. They lasted 18–42 min (median 29 min) and were audio-taped and transcribed. All interviews began with 'broad survey' questions such as: "You worked today (or yesterday), how was your day?" Participants were invited to discuss their emotions, perceptions and motivation in various situations that had occurred during their workday. Questions were similar to; "You said earlier when you worked: This was a good handover. What is a good handover for you?" Participants were invited to comment on any issues which they felt to be significant in their work as a registered nurse.

2.4. Data analysis

A thematic analysis approach according to Braun and Clarke (2006) was performed on all data from participant observations, informal interviews during observations and individual interviews. The first step in data analysis was reading and re-reading of all data. The second step in the thematic analysis involved coding when the registered nurses expressed positive, work-related motivation. The data were of interest when registered nurses expressed that something gave them energy in a positive direction, according to the definition of motivation (Ryan and Deci, 2017). This was expressed in words to each other or directly to the researcher. The third step involved examining the codes and collated data to identify significant broader patterns of meaning by creating categories. Coding and categorizing is only one part of the process and it is important not to get lost in segmentation (Coffey and Atkinson, 1996). Therefore, the fourth step involved checking the categories against the dataset, to ensure that they told a convincing story from the data and answered the research question. In the last step, all the identified categories were reflected in relation to the three key factors of the theory of inner work life; *nourishment* (interpersonal support), *progress* (events signifying progress) and *catalysts* (events that directly facilitate the work) (Amabile and Kramer, 2011).

The analysis programme Nvivo 11 was used to manage the empirical data, and the first author performed the main analysis. To ensure analysis consistency, the three co-authors read the dataset, and consensus was obtained for each identified category.

2.5. Ethical considerations

The project followed the guidelines of the Helsinki Declaration and was approved by the Regional Ethical Review Board in Sweden (dnr 2015/491) (World Medical, 2013). No patients were involved in this

Table 1

Findings of registered nurses' work motivation linked to interpersonal support, as reflected by the key factor Nourishment, in the theory of inner work life.

Work motivation linked to interpersonal support (the nourishment factor)	
Subcategory	Category
Relaxed, short, non-patient-related conversations, see the person behind the professional role A friendly response makes a difference in the positive direction See how colleagues feel, talk to each other, stand up for each other Sandwiches every Friday	Solidarity and a friendly atmosphere
Dare to be open with not knowing everything and listening to each other's knowledge Provide support during the daily work	The registered nurses felt comfortable to ask for and to provide support to others
Work-related dialogue is ongoing between registered nurse colleagues regarding decisions in daily work Good cooperation between registered nurses and physicians Physicians listen to the registered nurses' opinions and knowledge	Respect and trust knowledge in the daily work

study. The registered nurses, physicians and assistant nurses at the unit, received written and verbal information on the study. Participants (registered nurses) also gave their informed written consent. Participants were informed their participation was voluntary and they could leave the study without giving any reason. Data was processed and stored ensuring confidentiality. All participants are given fictitious names.

3. Findings

The findings are presented to reflect the three key factors in the theory of inner work life.

3.1. Work motivation linked to interpersonal support (the nourishment factor)

The first three categories highlight the importance of how registered nurses supported each other, show solidarity, in a friendly atmosphere and felt comfortable when asking for help. Moreover, it was important that physicians and colleagues respected and trusted the registered nurses' knowledge in the daily work (Table 1).

The first category, *solidarity and a friendly atmosphere*, described when colleagues saw each other behind the professional role; they were pleasant to each other in daily situations giving a relaxed and cheerful

Table 2

Findings of registered nurses' work motivation linked to progress as reflected by the key factor Progress in the theory of inner work life.

Work motivation linked to progress (the progress factor)	
Subcategory	Category
Make the work progress visible for themselves and others Control of the situation	Great with small wins and control in daily work
Collaboration with shared problem solving and feeling of moving forward There are adequate tasks in manageable flow forward, giving focus and concentration This works in the flow with patients in collaboration with the rest of the organization and physicians	The work is flowing forward, knowing the next step
Solving problems is satisfying and energizing Satisfied when own opinion is taken into account and registered nurse succeeds with challenging cooperation Enjoys having many different and complex tasks when it is possible to handle them	Breakthrough and cope with challenges
Learning from the daily work with; patients, diagnoses and different caring tasks Learning by teaching others Learning together with registered nurse colleagues Learning from physicians	Progress in learning during the daily work

atmosphere. For instance, they talked to each other about how they felt and stood up for each other during the daily work. Another positive effect was a shared good experience, such as the sandwiches offered by the employer every Friday, something registered nurses and their colleagues talked positively about even on other days.

The registered nurses who is to work this evening has arrived at the unit. "I'm working tomorrow evening." Carmen said. Nicola responded "Are you? Then we will be working together, nice. It will be fun working with you. Today with you (looks at Lou) and tomorrow with you." Nicola looks happy and sounds very positive, this also spreads to the others. It is a warm and relaxed atmosphere in the unit office between the colleagues. (Event) "We are a good team. We see each other, how we feel, and we help each other out. We have a good dialogue going between us." (Informal interview during observation)

The category, *the registered nurses felt comfortable to ask for and to provide support to others*, describes when registered nurses, physicians and other colleagues felt comfortable telling others if there was something they did not understand or lacked knowledge on. Furthermore, they listened to each other and supported each other when needed. The following category, *respect and trust knowledge in the daily work*, was important for motivation as well as for a good atmosphere, with continuous work-related dialogue between registered nurses, based on respect and trust in each other's knowledge. In addition, they described it as positive when the physicians in the daily work respected their profession and knowledge.

Nicola asks: "Is he to have pain relief if needed?" Lou answers directly, "Yes, that's right." Lou reads the descriptions of medicines. RNs discuss with each other the reasonableness of being able to give this in relation to other medicines and the status of the patient. (Event) The physician asks Nicola; "Can we talk about how many times we need to check-up on the patient?" They work together to find the best solution. (Event) "It is very important for me to be able to ask without being ignored." It is about being able to help each other on an equal footing." (Individual interview)

3.2. Work motivation linked to progress (the progress factor)

The following four categories highlight the motivation of moving forward with a mix of small wins combined with complex challenges in the work. Furthermore, the own development through new knowledge and learning during the daily work was highly valued (Table 2).

The category, *great with small wins and control in daily work*, reflects the visible progress in daily work. A cornerstone of collaboration between colleagues was the day activity whiteboard, which displayed the patients' names together with the main information about them and

their care plan. This made work progress visible, and they could tick off tasks that were finished. Moreover, registered nurses expressed that this was their own work tool which they used in a way they had decided together, and which gave a feeling of control. Other ways to make the progress visible was own notes and checklists. The next category, *the work is flowing forward, knowing the next step*, highlighted when registered nurses had a strong focus and concentration with adequate tasks in a manageable flow forward.

It is morning with five patients, one registered nurse, and one assistant nurse. Kelly, leads the work and makes many decisions in the ongoing work with tasks, for example, taking blood samples, distributing medicines, infusions and dialogues with physicians and patients. The researcher asks Kelly on the way to the medication administration room; “How do you feel now?” and Kelly answers “Good. Things went smoothly.” (Event, Informal interview during observation)

The category, *breakthrough and cope with challenges*, was the motivation when registered nurses managed to resolve challenging complex tasks by their own efforts or together with a registered nurse colleague. Challenges were related to cooperation, for instance in a complex situation with multiple parallel assignments that required quick decisions or prioritisation. Examples of situations include when many patients arrived at the same time; when patients deteriorated; or when the registered nurses managed to solve challenges to coordinate a large number of different patient investigations. Furthermore, registered nurses expressed motivation when they managed to solve complicated caring tasks or managed to handle challenging situations regarding communication with physicians and consultants.

“The patient feels sick,” Alex says. Casey and Alex are reading the documentation from the Emergency Department at the same time and Casey says “Why didn’t she have the [medicinal product], if she was feeling sick? ... Pancreas is surgically removed. That could be it. Does she have diabetes? She has a lot of vomiting.” Alex continues “She has epilepsy..”. Casey lights up and says with emphasis “Yes, that’s why!” Alex turns to the assistant nurse. “Then we will have to give [medicinal product] when she eats”. This is said decisively, Alex and Casey look satisfied. (Event)

The category, *progress in learning in the daily work*, was the great driving force and the motivation in the daily work for learning through new diagnoses, different caring tasks or administration of medicines and technology. Moreover, knowledge grew and moved the learning process forward when registered nurse colleagues discussed together, supported each other and taught new colleagues and students during the daily work. Registered nurses valued highly that physicians had time to answer their questions and explain current issues related to the patient’s diagnosis, treatments or about different examinations.

“We do not divide the patients between us; instead we work together with all patients and try to help each other. Then you learn from one another and it is more fun to work”. (Informal interview during observation) “Developing is the most important thing, just as nobody likes to stagnate. It feels like I am learning all the time, so it will not be boring.” (Individual interview)

3.3. Actions that directly facilitate the work in relation to work motivation (the catalyst factor)

The final three categories show the importance of clear patient-related goals, the registered nurses’ own goals and the medical goals. Moreover, our findings also identified that the Registered nurses appreciated being able to work independently but with the opportunity to work together with other registered nurses on the right tasks and with sufficient resources (Table 3).

The category, *sufficient resources and the opportunity to work together on right tasks* was when registered nurses’ have enough with time in

their daily work. Moreover, physicians and registered nurses shared the unit office, which appears to be a fundamental prerequisite for close collaboration between physicians and registered nurses. Furthermore, the registered nurses described it as positive that they sometimes worked together with the possibility to support each other and learn from each other. Registered nurses appreciated when the assistant nurses, or other staff, did the non-patient related tasks, for example cleaning beds or taking care of kitchen tasks and stores.

Dara and Julian are well structured when moving between documentation, monitoring of EKG, answer questions from physicians and patients, take blood samples, give infusions and perform ECGs. Dara and Julian work quietly, harmoniously and systematically, and the registered nurse who has the time to take the next priority task, does so. The researcher asks what Dara thinks about this morning. “It is a lot more fun to work with another registered nurse. You share everything, you can help each other; when necessary we can discuss things with each other. The only negative may be that it is easier to forget the assistant nurse work, like the dishwasher at night. Apart from that, I can only see positive sides working with another registered nurse.” (Event, Informal interview during observation)

The category, *possibility to work independently*, was essential to work motivation with possibility to influence their own work, make own decisions and solve problems, sometimes in collaboration with other registered nurses. A permissive atmosphere at the unit, with the opportunity to learn from failures and successes, was necessary to make it possible to work independently. This was an element employees created together with each other and together with the manager, for example when they discussed different aspects of the work environment at workplace meetings. In addition, registered nurses participated in creating a permissive atmosphere in the daily work by sharing their own shortcomings with colleagues or by supporting each other in difficult situations. Furthermore, it was important that there were opportunities for the registered nurses to propose their own suggestions in dialogues with physicians and managers. The last category, *being able to work towards goals: registered nurses’ own goals and the medicals goals*, describes the importance of goals communicated by the physicians during the rounds or in other situations. These goals made it possible for registered nurses to create a plan of their own goals for the daily work.

4. Discussion

We conducted this study with an ethnographic approach to explore registered nurses’ workday events in relation to inner work life theory to better understand what influences registered nurses to remain in work. This study highlights the work motivation created by interpersonal support, the work motivation created by progress, and actions that directly facilitate the work in relation to work motivation.

4.1. Work motivation linked to interpersonal support

Our findings highlighted the motivation at work when registered nurses felt a sense of solidarity and supported each other in a friendly atmosphere. For instance, they felt comfortable when asking for help. This finding correlates with the theory of inner work life and the importance of providing nourishment to each other in a positive organizational climate (Amabile and Kramer, 2007), even though this theory is mainly based on research from fields other than healthcare. In addition to solidarity and a friendly atmosphere, our findings showed that the physicians’ respect and trust in the registered nurses’ knowledge in the daily work appeared to be fundamental to work motivation. According to previous research, this could have an impact on turnover and quality of care. For instance, Galletta et al. (2016) argue that high quality collaboration with physicians at the group level would make a difference in preventing nurses’ turnover intention.

Table 3

Findings of registered nurses' work motivation linked to actions that facilitate the work in relation to work motivation as reflected in the key factor catalysts in the theory of inner work life.

Actions that facilitate the work in relation to work motivation (the catalyst)	
Subcategory	Category
Opportunity to take a break Registered nurses' colleagues are scheduled together and can help and support each other in their daily work Registered nurses get the right support from other professions; right competence in the right place Physicians and registered nurses share unit office, natural meeting place	Sufficient resources and the opportunity to work together on right tasks
Possible to make own decisions, solve problems and work independently A permissive atmosphere and the opportunity to learn from failures and successes Possible and comfortable with proposing new own suggestions	Possibility to work independently
Registered nurses create their own goals in the daily work at the unit Physicians' clear medical goals for patients The daily activity whiteboard shows the goals, what needs to be done each day.	Being able to work toward goals; registered nurses' own goals and the medicals goals

4.2. Work motivation linked to progress

The progress linked to registered nurses' work motivation mainly consists of two elements, feedback from the work itself and learning during the daily work.

Firstly, there appears to be a positive impact on work motivation from his or her own progress during the daily work. The registered nurses acquire knowledge and felt satisfactions when performing work tasks, without specific feedback from managers; in other words, the feedback from the work itself. Feedback from the work itself can be seen in light of the human need to feel competent, as exemplified by the registered nurses being able to manage different tasks (Ryan and Deci, 2017), and the progress factor in the theory of inner work life, with the power of progress providing meaningfulness and motivation during the work day (Amabile and Kramer, 2011). This could be of interest for the healthcare organization, because feedback from the work itself gives each employee an increased possibility of influencing his or her own work motivation. Furthermore, previous research has shown that self-motivated employees (autonomous motivation) have an impact on the organizational profitability (Ryan and Deci, 2017).

Secondly, we found that learning in the daily work seems to be explicitly motivating. Registered nurses were learning when they handled complex challenges on their own or together with other registered nurses. Moreover, they were learning by teaching others, for instance students or new colleagues. Nurses as teachers are in line with the Magnet hospital model in which the nurses are expected to welcome and support students and to be involved in educational activities (American Nurse Credentialing Center, 2018). This model is a credential of organizational recognition of nursing excellence, which places emphasis on leadership, nurses' personal and professional growth and development as well as evidence by nursing. Moreover, Magnet hospitals are associated with lower levels of nurse job dissatisfaction and burnout (American Nurse Credentialing Center, 2018; Chen and Johantgen, 2010; Kelly et al., 2011).

4.3. Actions that directly facilitate the work in relation to work motivation

When the unit manager together with colleagues made it possible for registered nurses to work independently, this tended to have a positive impact on work motivation. Autonomous nursing care is also an element of the Magnet model, in which the nurses are expected to practice autonomously, which is consistent with professional standards (American Nurse Credentialing Center, 2018; Chen and Johantgen, 2010). Furthermore, previous research has identified that the nurses' feeling of autonomy has an effect on work motivation (Toode et al., 2011). This knowledge, however, does not highlight how motivation by autonomy happens during the workday. Our findings provide an

opportunity to better understand the link between autonomy and work motivation in the registered nurses' daily work, such as influencing their own work, making own decisions and solving problems. These findings are also of interest considering that autonomous, motivated employees experience less exhaustion, burnout and illness (Ryan and Deci, 2017).

Moreover, there appeared to be an impact on motivation when registered nurses had the opportunity to work together with other registered nurses. It specifically highlights motivation generated by the opportunity to discuss work-related challenges and to support each other in the daily work with someone of the same profession. These findings reflect those of a previous ethnographic study on professional collegiality and peer monitoring among nursing staff. That study highlighted a positive spirit of cooperation and mutual aid as important (Padgett, 2013). However, registered nurses often work with their own patients and do not have the time or an organization that facilitates working together with other registered nurses

Another notable finding is that when the assistant nurses or other staff undertook the non-patient related tasks, this tended to impact positively on registered nurses' motivation. This supported the theory of inner work life, describing the importance of providing resources, and providing sufficient time and help with the work (Amabile and Kramer, 2011). Notwithstanding, discussions are ongoing internationally on the importance of the right task being done by the right profession. In the UK, for example, there are ongoing programmes and research into training healthcare support workers to relieve nurses work (Sarre et al., 2018). We suggest that the managers should identify strategies how they can strengthen the registered nurses' independent and autonomous work at an individual level with the focus on their professional tasks, in combination with the opportunity to work together with other registered nurses.

Surprisingly, there was no focus on salary during the observations even though this is an important issue (Perreira et al., 2016; Ryan and Deci, 2017; Toode et al., 2011). This may be a result of the questions we asked or may reflect that salary is not relevant during the daily work. Another explanation may be that salary is a hygiene factor and not primarily an autonomous motivation factor (Herzberg et al., 1959; Scheuer, 2000)

4.4. Limitations and strengths

A strength in this study is the ethnographic approach with the triangulation: participant observations and informal interviews during observations together with individual interviews. This method provided an opportunity for first-hand experience and enabled us to get closer to the actual events, behaviours, and verbal and nonverbal communication in specific situations and contexts (Patton, 2015). A limitation is

that one researcher undertook the data collection, but to avoid bias all researchers team members participated in the process of reading, listening to the recorded interviews, and analysing the empirical data. Two more limitations might be the sample size and the Swedish context. One strength, however, is the total sample of all registered nurses at the unit.

5. Conclusion

The theory of inner work life may have impact on the field of advance nursing science and knowledge, but this study may also add a broader use of the theory. We have identified three main elements in registered nurses workday events in relation to theory of inner work life and work motivation. Firstly, a friendly atmosphere and the physicians' respect and trust in the registered nurses' knowledge, appeared to be fundamental to work motivation. Secondly, the importance of visible progress, receiving feedback from the work itself, and to learn and improve their knowledge in daily work. Finally, an opportunity for registered nurses to work independently, together with other registered nurses, tended to have a positive impact on work motivation. We believe our findings may have implications for future work and research of the aim to create attractive workplaces for registered nurses. Focusing on work motivation in light of the three key factors (triggers) in the theory of inner work life, has deepened the understanding of what influences registered nurses to remain in work. Therefore, we suggest future studies to use this theory in different healthcare environments and from different health professional perspectives in order to add more knowledge into the field.

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Conflict of interest

None

References

- Aiken, L.H., Sermeus, W., Van den Heede, K., Sloane, D.M., 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., Sjetne, I.S., 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 (7851) 20–20.
- Allen, D., 2018. Translational mobilisation theory: a new paradigm for understanding the organisational elements of nursing work. *Int. J. Nurs. Stud.* 79, 36–42.
- Amabile, T.M., Kramer, S.J., 2007. Inner work life. *Harv. Bus. Rev.* 85 (5), 72–83.
- Amabile, T., Kramer, S., 2011. *The Progress Principle: Using Small Wins to Ignite Joy, Engagement, and Creativity at Work*. Harvard Business Review Press, Boston, Mass.
- American Nurse Credentialing Center, A., 2018. Forces of Magnetism. American Nurse Credentialing Center. (Accessed 17 August 2018). <https://www.nursingworld.org/organizational-programs/magnet/history/forces-of-magnetism/>.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3 (2), 77–101.
- Cameron, K., McNaughtan, J., 2014. Positive organizational change. *J. Appl. Behav. Sci.* 50 (4), 445–462.
- Chen, Y.-M., Johantgen, M.E., 2010. Magnet Hospital attributes in European hospitals: a multilevel model of job satisfaction. *Int. J. Nurs. Stud.* 47 (8), 1001–1012.
- Coffey, A., Atkinson, P., 1996. *Making Sense of Qualitative Data: Complementary Research Strategies*. Sage, Thousand Oaks, Calif.
- Gagné, M., Deci, E.L., 2005. Self-determination theory and work motivation. *J. Organ. Behav.* 26 (4), 331–362.
- Galletta, M., Portoghesi, I., Carta, M.G., D'Aloja, E., Campagna, M., 2016. The effect of nurse-physician collaboration on job satisfaction, team commitment, and turnover intention in nurses. *Res. Nurs. Health* 39 (5), 375–385.
- Guest, G.E., Marilyn, Mitchell, 2012. *Collecting Qualitative Data; a Field Manual for Applied Research*. Ringgold, Inc, Portland.
- 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. *Int. J. Nurs. Stud.* 49 (7), 887–905.
- Heinen, M.M., van Achterberg, T., Schwendimann, R., Zander, B., Matthews, A., Kózka, M., Ensio, A., Sjetne, I.S., Casbas, T.M., Ball, J., Schoonhoven, L., 2013. Nurses' intention to leave their profession: a cross sectional observational study in 10 European countries. *Int. J. Nurs. Stud.* 50 (2), 174–184.
- Herzberg, F., Mausner, B., Snyderman, B.B., 1959. *The Motivation to Work*. Wiley, New York.
- Kelly, L.A., McHugh, M.D., Aiken, L.H., 2011. Nurse outcomes in magnet® and non-magnet hospitals. *JONA: J. Nurs. Adm.* 41 (10), 428–433.
- Latham, G.P., Pinder, C.C., 2005. Work motivation theory and research at the dawn of the twenty-first century. *Annu. Rev. Psychol.* 56 (1), 485–516.
- Liu, X., Zheng, J., Liu, K., Baggs, J.G., Liu, J., Wu, Y., You, L., 2018. Hospital nursing organizational factors, nursing care left undone, and nurse burnout as predictors of patient safety: a structural equation modeling analysis. *Int. J. Nurs. Stud.* 86 (Oct), 82–89. <https://doi.org/10.1016/j.ijnurstu.2018.05.005>.
- Malterud, K., Siersma, V.D., Guassora, A.D., 2015. Sample size in qualitative interview studies: guided by information power. *Qual. Health Res.*
- 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 Aff. (Millwood)* 30 (2), 202–210.
- Nantsupawat, A., Nantsupawat, R., Kunaviktikul, W., Turale, S., Poghosyan, L., 2016. Nurse burnout, nurse-reported quality of care, and patient outcomes in Thai hospitals. *J. Nurs. Scholarsh.* 48 (1), 83–90.
- Padgett, S.M., 2013. Professional collegiality and peer monitoring among nursing staff: an ethnographic study. *Int. J. Nurs. Stud.* 50 (10), 1407–1415.
- Patton, M.Q., 2015. *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. SAGE Publications, Inc, Thousand Oaks, California.
- Perreira, T.A., Innis, J., Berta, W., 2016. Work motivation in health care: a scoping literature review. *Int. J. Evid.-Based Healthc.* 1.
- Rudman, A., Gustavsson, P., Hultell, D., 2014. A prospective study of nurses' intentions to leave the profession during their first five years of practice in Sweden. *Int. J. Nurs. Stud.* 51 (4), 612.
- Ryan, R.M., Deci, E.L., 2000. Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemp. Educ. Psychol.* 25 (1), 54–67.
- Ryan, R.M., Deci, E.L., 2017. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Press, New York, NY, US.
- Sarre, S., Maben, J., Aldus, C., Schneider, J., Wharrad, H., Nicholson, C., Arthur, A., 2018. The challenges of training, support and assessment of healthcare support workers: a qualitative study of experiences in three English acute hospitals. *Int. J. Nurs. Stud.* 79, 145–153.
- Scheuer, S., 2000. *Social and Economic Motivation at Work: Theories of Work Motivation Reassessed*. Copenhagen Business School Press, Copenhagen.
- Toode, K., Routasalo, P., Suominen, T., 2011. Work motivation of nurses: a literature review. *Int. J. Nurs. Stud.* 48 (2), 246–257.
- WHO, I., 2016. *Global Strategy on Human Resources for Health: Workforce 2030*. World Health Organization 2016. WHO Library Cataloguing-in-Publication Data, Switzerland.
- World Medical, A., 2013. World medical association declaration of Helsinki: ethical principles for medical research involving human subjects. *JAMA* 310 (20), 2191–2194.