Factors that foster or prevent sense of belonging among social and health care managers

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Abstract

Purpose – The purpose of this study is to identify factors that foster or prevent sense of belonging among frontline and middle managers in social and health-care services in Finland.

Design/methodology/approach – The data have been collected among social and health-care managers ($n = 135$; 64 per cent nursing managers) through two open-ended questions in a questionnaire concerning sense of community. The results of the open-ended questions have been analyzed using qualitative content analysis.

Findings – Among managers, six categories of factors that foster sense of belonging (open interaction, effective conversation culture, support and encouragement, common values, a shared vision of the work and its objectives and structure of leadership) and five categories of factors that prevent sense of belonging (negative work atmosphere, lack of common time, structural solutions in the organization, problems that occur in the organizational level and problems related to leadership and management) have been identified.

Practical implications – The resulting information can be used to develop sense of belonging among managers at all levels of organization (horizontal and vertical).

Originality/value – Paying attention to the quantity and quality of interaction and to structural solutions in the organization can affect the sense of belonging among frontline managers and middle managers.

Keywords Content analysis, Sense of belonging, Middle managers, Frontline managers, Health and social services

Paper type Research paper

Introduction

Sense of belonging appears to be an important element in developing and managing one's relationship with others (Hagerty *et al.*, 1996). Using a concept–analysis strategy proposed by Walker and Avant (1988), Hagerty *et al.* (1996) defined the concept of sense of belonging (in psychiatric nursing) as "the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment." The defining attributes of sense of belonging are:

- the persons' experience of being valued, needed or important with respect to other people, groups or environments; and
- the persons' experience of fitting in or being congruent with other people, groups or environments through shared or complementary characteristics.

According to Hagerty *et al.* (1992, 1996), belonging should be considered from psychological, sociological, physical and spiritual perspectives. Sociologically, belonging connotes membership in groups or systems and it can be observed and described through behavioral referents, such as membership in groups and social networks.

Related to the concept of sense of belonging is sense of community (Edwards, 2011). The concept of sense of community has been defined as:

> A feeling that members have of belonging, a feeling that members matter to one another and the group, and a shared faith that members' needs will be met through their commitment to be together (McMillan and Chavis, 1986).

According to McMillan and Chavis (1986), the model of sense of community consists of four elements: membership, influence, integration and fulfillment of needs and shared emotional connection. The element of membership refers to a feeling of belonging to or being part of a group. The dimension of membership consists of five attributes that work together to create the membership element: boundaries, emotional safety, sense of belonging and identification, personal investment and a common symbol system. The attribute of sense of belonging and identification involves the feeling, belief and expectation that one fits into the group and has a place there, a feeling of acceptance by the group and a willingness to sacrifice for the group (McMillan and Chavis, 1986).

In their investigation, Burroughs and Eby (1998) used theoretical foundations to operationalize the construct of psychological sense of community in the workplace (PSCW). According to them, sense of belonging is one of the six dimensions of PSCW. The dimension of sense of belonging addresses the trust and security component of membership and the extent to which individuals in a group are well known to each other and willing to help each other; in essence, the "feeling of acceptance by the group and a willingness to sacrifice for the group" (McMillan and Chavis, 1986, p. 19). Sense of belonging occurs when members of the workplace community identify with one another and have feelings, beliefs and expectations that they fit in the organization and have a place there.

According to Winter-Collins and McDaniel (2000), sense of belonging is an important aspect to study because of the impact interpersonal relationships have on an individual, and an individual's sense of belonging in an environment is dependent on the strength of relationships within that environment. In previous work-related studies on health care, sense of belonging was connected to work engagement (Bishop, 2013), job satisfaction (Winter-Collins and McDaniel, 2000; Lim, 2008) and team work (McKenna and Newton, 2008). In these studies, the target group was nursing staff members. The review of previous studies showed us that little research has been done from the perspective of sense of

belonging among managers. In this study, which is part of a larger study, researching managers' sense of community, the focus is on the sense of belonging among managers.

Purpose

The purpose of this study is to describe the factors that foster or prevent sense of belonging among social and health-care managers (frontline and middle managers).

Subjects and methods

Design

A qualitative descriptive approach was used to explore the factors that foster or prevent sense of belonging among social and health-care managers working in social and health-care services in central Finland. The method of content analysis was used to analyze the data based on two open-ended questions in a broader questionnaire for sense of community (Lampinen *et al.*, 2015).

Participants

A total of 135 frontline and middle managers working in social and health-care services in central Finland participated in the study. Most of the participants were female ($n = 122$), and their age varied from 28 to 65 years (mean = 51.3). Most of the respondents had a higher academic degree (89.3 per cent). The professional background of the respondents was mostly nursing (63.9 per cent), social work (18.5 per cent) or medical doctor (9.8 per cent). Less than half of the respondents (40.9 per cent) were working in the joint social and health-care sector. The work experience in social and health-care sector among the research participants varied from 5 to 42 years (mean = 24.9). The work experience in managerial position varied from four months to 38 years (mean = 11.1), and the work experience in current position varied from less than a year (4 months) to 33 years (mean = 5.0). Of all the respondents, 91.1 per cent were full-time managers, the remainder working as part-time managers.

Data collection

The data were collected from March to May 2013 through a questionnaire developed for a study measuring sense of community. The questionnaire contained two open-ended questions:

   Q1. What are the factors that foster sense of belonging among managerial community?

   Q2. What are the factors that prevent sense of belonging among managerial community?

The questionnaire was based on a systematic literature review conducted by Lampinen *et al.* (2013).

Data analysis

Qualitative content analysis, as described by Granheim and Lundman (2004), was used to evaluate the answers for the open-ended questions. First, the data produced by the responses were read carefully through several times to obtain a sense of the whole. After that, the data were divided into meaning units. Units of analysis were single words, phrases or sentences. The meaning units were abstracted and labeled with codes. This resulted in 329 initial codes. Of these, 186 included into the factors that foster, and 143 into the factors that prevent, sense of belonging among managers. The various codes were compared on the

basis of differences and similarities, and sorted into sub-categories which were then combined into categories. Finally, six categories of factors that foster sense of belonging among frontline managers and middle managers and five categories of factors that prevent sense of belonging among frontline managers and middle managers were identified from the analysis of the data. The concepts of credibility, dependability and transferability as defined by Granheim and Lundman (2004) were taken into account to describe the various aspect of trustworthiness (Granheim and Lundman, 2004). Co-researchers worked in close co-operation at all stages of the analysis process. The analysis process and the results have been described so that readers can form a clear understanding of the analysis process and findings (Granheim and Lundman, 2004; Elo and Kyngäs, 2007). The background information of the study group is briefly described to evaluate the transferability of the research results. Factors that weaken credibility of the study are discussed in the section *limitations*. Examples of the procedures are shown in Table I.

Ethical considerations
It this study, ethical aspects of the scientific process were followed (The Finnish Advisory Board of Research Integrity, 2012). Participation in the study was voluntary and based on informed consent. Privacy and confidentiality were maintained throughout the study.

Meaning unit	Code	Sub-category	Category	Theme
"Fortunately, there was one supervisor colleague with whom you could discuss work-related matters, ask questions and give advice to etc." "Getting help and offering it when necessary" "That you can ask when you face challenging situations and, in turn, you can help the other person when they are in the same situation"	Ask for and give advice To receive and offer help Can ask for and offer help in challenging situations	Helping each other	Support and encouragement	Factors that foster sense of belonging among frontline managers and middle managers in social and health-care services
"Encouraging one another and guiding each other in work-related issues" "Giving feedback to each other. Encouraging each other" "Supportive attitude towards the other person"	Mutual encouragement Mutual encouragement Supportive attitude	Encouraging (each other)		
"Sharing good work practices" "The experience that we are in this together, in other words: sharing pros and cons of the work gives you strength" "Sharing experiences and information"	Sharing work practices Sharing pros and cons of the work Sharing experiences	Sharing work experience		

Results

From the 135 survey respondents, 83 participants (61 per cent) responded to the first open-ended question (*What are the factors that foster sense of belonging among managerial community?*), and 86 participants (63 per cent) responded to the second question (*What are the factors that prevent sense of belonging among managerial community?*). From the analysis of the data, we identified six categories of factors that foster a sense of belonging and five categories of factors that prevent a sense of belonging among frontline managers and middle managers in social and health-care services in Finland (Figures 1 and 2).

Factors that foster sense of belonging among frontline and middle managers in social and health-care services

Factors that foster sense of belonging among frontline managers and middle managers were *open interaction, effective conversation culture, support and encouragement, common values, a shared vision of the work and its objectives and the structure of leadership* (Figure 1).

Open interaction

Open interaction was described as an opportunity to express one's thoughts and opinions openly, even when they differ from others' views. It also contained balanced conversation and mutual listening.
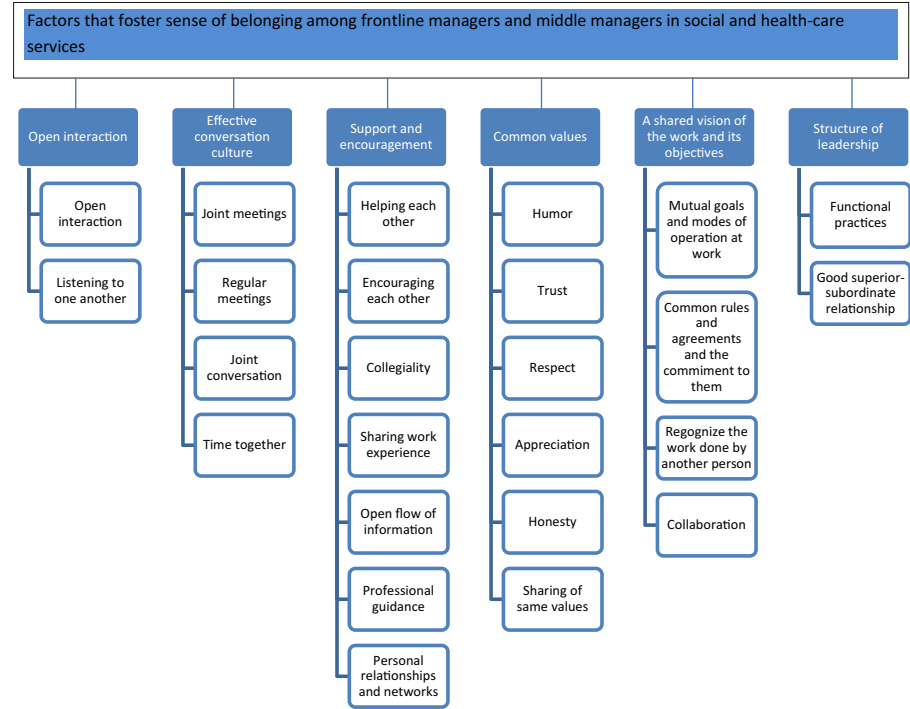

Figure 1.
Factors that foster sense of belonging among frontline managers and middle managers in social and health-care services
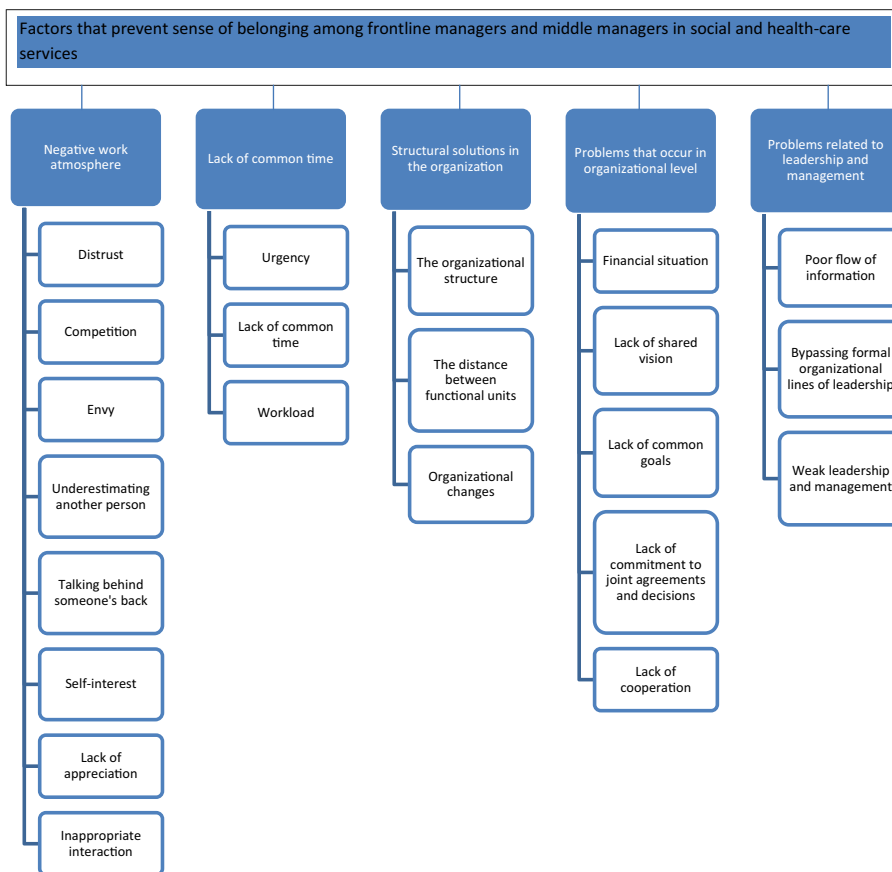
Figure 2.
Factors that prevent
sense of belonging
among frontline
managers and middle
managers in social
and health-care
services

Effective conversation culture
Effective conversation culture was seen as consisting of regular joint meetings and joint conversation, and being able to spend time together. Regular joint meetings included official meetings, appointments, team development days, etc. Joint conversation offered an opportunity to discuss work-related issues, even the problems, together. Through joint conversation, it was also possible to get support for one's own ideas. In addition, the possibility for open discussion outside the regular meetings was seen as important:

> Superiors should have time together also outside the meetings. (When we see each other in meetings, there is a lot we would like to discuss but with the meeting schedules and regular agendas, there is not time for this)

Support and encouragement
Support and encouragement was seen as including helping each other, encouraging each other, collegiality, sharing work experience, open flow of information, professional guidance and personal relationships and networks. Helping and encouraging each other included the

ability to ask for and give advice, mutual guidance in work-related matters and sharing know-how with colleagues. Personal relationships and networks included expressions such as long-term and good personal relations between leaders, good team spirit, good personal chemistry, good teamwork and polite and good behavior in meetings and in communication:

> [...] that you can ask when you encounter a challenging situation and, vice versa, you can help when your colleague is in the same situation.

Common values
Common values were described as humor, trust, respect, appreciation, honesty and sharing of same values. In addition to mutual appreciation, the respondents highlighted the appreciation of other person's know-how, education and work. Like appreciation, trust also appeared as trust of the other person's know-how. Sharing the same values was described as uniformity of work-related values and attitude toward work.

A shared vision of the work and its objectives
A shared vision of the work and its objectives was described as mutual goals and modes of operation at work, common rules and agreements and the commitment to them, recognition of the work done by another person and collaboration. A shared vision of the importance of work, as well as facing the same challenges and coping with them were seen as factors that foster mutual sense of belonging. Knowledge of the work done by another person or unit reduces errors in interpretation, and adds to mutual appreciation:

> [...] knowledge of the work done by another person increases appreciation.

> [...] knowledge of the work of others reduces errors in interpretation.

The structure of leadership
The structure of leadership was seen as consisting of functional practices, and good superior-subordinate relationship. Functional practices consisted of clear organization, clear division of work tasks, a reasonable sized management team and functional meeting practices and meeting schedule. A good superior–subordinate relationship included expressions such as a good superior, equal treatment from higher management level, fair management and appreciation, actions of person's own superior's, interest in their employees' know-how of person's own superior, appreciation received from person's own superior and them trusting that things get done.

Factors that prevent sense of belonging among frontline and middle managers in social and health-care services
The analysis yielded five categories of factors that prevent sense of belonging among frontline managers and middle managers. Those were *negative work atmosphere, lack of common time, structural solutions in the organization, problems that occur in organizational level and problems related to leadership and management* (Figure 2).

Negative work atmosphere
Negative work atmosphere was seen as consisting of distrust, competition, envy, underestimation of the other person (including their work and responsibilities), talking behind someone's back (e.g. criticism), self-interest, lack of appreciation (e.g. person's work

and know-how) and inappropriate interaction. Distrust showed itself as lack of trust towards a colleague. In addition, distrust was seen as causing communication problems in the organization, because it cannot be completely open for all people. In addition to competition between colleagues, competition was described as competition for power and economic resources. Competition also showed itself as competitive spirit, and competition in wrong things, for example between units. Self-interest was described with expressions such as "navel-gazing" and "to pull the rug out from under someone's feet." Negative work atmosphere appeared also as inappropriate interaction, such as discord, quarreling, searching for the culprit and interrupting when someone is talking.

Lack of common time
Lack of common time was seen to consist of sense of urgency and of workload, so that managers had no time to have collegial discussions and joint meetings. In addition to the lack of time with colleagues, the participants highlighted the lack of time with their own superiors:

> [...] recently the workload has been so high that you don't have time to meet withcolleagues often enough.

Structural solutions in the organization
Structural solutions in the organization included the organizational structure, the distance between functional units and the organizational changes. The hierarchy and scope of the organization, too large line-ups in meetings and an increasing number of colleagues (more than ten) were mentioned as factors that prevent sense of belonging in the organization. The scope of the organization had an effect on the fact that managers could not know all their colleagues. One of the respondents described the existing situation as follows:

> [...] social and health care services is an extensive organization, and one doesn't know most of one's manager colleagues.

Furthermore, constantly changing organization and changes in leadership were experienced as factors that prevent sense of belonging. Distance between units was seen as a physical distance from colleagues and superiors. The physical distance from other managers was experienced as being alone in one's own work as a leader and as lack of peer support in challenging situations:

> [...] physical distance from other managers – leading "alone", lack of peer support in challenging situations.

The problems that occur in the organizational level
The problems that occur in the organizational level were described as financial situation, lack of shared vision, lack of common goals, lack of commitment to joint agreements and decisions and lack of cooperation. Economic problems were described as weak financial situation, which led to comparing of the results and competing for resources between units. Lack of cooperation was described as lack of interaction and joint operations between units. Focusing on issues and interests of one's own staff or own unit was seen as leading to partial optimization leaving the interests of the entire organization in the background. In cases where organizations were merged into one, factors preventing sense of belonging were the old ways of working still visible in the work community and the dictating role of the larger party when building cooperation within the new organization:

[. . .] everyone focuses on their own issues and promotes, for example, the benefits of their own staff, will easily lead to partial optimizations.

Problems related to leadership and management
Problems related to leadership and management included poor flow of information, bypassing formal organizational lines of leadership and weak leadership and management. Poor flow of information showed itself as slowness of the flow of information, withholding of information and unequal allocation of information. Certain actions of participants' own superior were felt to weaken the sense of belonging among colleagues. In addition, weak leadership and management were described as inappropriate treatment of subordinates and as unfair management. Inappropriate treatment of subordinates was seen to consist of aggressive or hostile attitude and pointing out of errors. Unfair management was expressed as management based on friendship or favoritism, and occurred in the form of "divide and conquer" style of management, which could drive a wedge between management groups.

Discussion
According to the results, the factors that either foster or prevent sense of belonging among social and health-care managers can be summarized in the form of the quantity and quality of interaction between colleagues, support and encouragement, organizational structure and common practices, as well as leadership and management.

Interaction, based on openness, mutual trust, respect and appreciation, was seen as key in fostering sense of belonging among colleagues. In turn, distrust, competition, envy and lack of appreciation were mentioned to prevent sense of belonging among colleagues. Regular joint meetings making it possible to discuss work-related issues in managerial work were also considered as one factor fostering sense of belonging. Such discussion also allows sharing of work-related experiences, as well as mutual support and encouragement in managerial work-related problems. According to the results of this study, factors that prevent sense of belonging and form obstacles to interaction and conversation among managers were sense of urgency, lack of time and workload. Also in previous studies among teachers, mutual trust and respect have been found to be important in establishing and building relationships (Fox and Wilson, 2009), and the same is true for inter-professional teamwork in health care (Dieleman *et al.*, 2004). In addition, open communication has been identified as important for collaboration between team members (Dieleman *et al.*, 2004). Effective team communication, in turn, is achieved through regular team meetings (Heale *et al.*, 2014). Furthermore, Peterson *et al.* (2008) found that participating in a reflecting peer support group gave the participants a sense of belonging.

In this study, factors related to organizational structure, such as organizational hierarchy and scope, too large assemblies in meetings and an increase in the number of colleagues (more than 10) prevented the sense of belonging among managers in the organization. One reason that emerged from the responses may be that joint conversation becomes more difficult in large groups and there is no room to hear the views of all group members. This view is supported by Molyneux (2001) who found that within inter-professional health-care teams, a small number of team members was seen to make communication easier and to facilitate the development of positive working relationships within the team.

The physical distance between units was one of the factors that prevented sense of belonging among managers. The distance between units was experienced as physical distance from colleagues and one's own superiors. In previous studies, geographical or physical distance has been found to reduce cooperation within or between professional

groups (Gask, 2005; Mascia *et al.*, 2011; Clancy *et al.*, 2013). Xyrichis and Lowton (2008) found that the geographical proximity of team members is vital for successful team-work: according to them, team members who work in separate location or buildings can be less integrated with the team, which, in turn, may limit the team's functioning and effectiveness. In our study, the same phenomenon was experienced as the feeling of being alone as a leader, and as lack of peer support in challenging situations. However, even though face-to-face interaction has been found to be important to community-building in the workplace (White *et al.*, 2010), one solution, which should be noted when speaking about physical distance between units or colleagues is the current development of information and communication technology (ICT) and communication channels which have created new opportunities for interaction and cooperation in the organization. For example, Koivunen *et al.* (2014) found that electronic communication increased cooperation among nursing professional's: according to them, the use of electronic devices for communication among health-care professionals is a promising method, provided that certain obstacles (e.g. information security and lack of technical skills) are taken into account.

ICT can also be used to influence the flow of information, which was seen in our study as one factor that both fosters and prevents sense of belonging among social and health-care managers. Open flow of information was seen as one factor that fosters sense of belonging, whereas poor flow of information (e.g. slowness), withholding information and unequal allocation of information were factors that prevent sense of belonging among managers. Technology can be used to speed up the flow of information in the organization. However, it cannot affect people-dependent factors, such as withholding information and unequal allocation of information.

Constant organizational changes were considered as one factor preventing sense of belonging. One of the reasons may be that organizational changes can also bring changes to the manager community. In such situations, the group of managers has to rebuild their sense of belonging and networks again. One of the four elements based on the model of sense of community by McMillan and Chavis (1986) is a shared emotional connection: it is based on, in part, a shared history. According to McMillan and Chavis, it is not necessary for group members to have participated in the history to share it, but they must identify with it. And, as we think, identifying oneself with a new managerial group may take time in the new composition of the leadership community. Hence, in constant changes, the sense of community supports leadership and management.

What comes to common practices, such as shared vision of goals, agreements and models of operation at work, and commitment to these, in our study they were seen as factors that either foster (they are present) or prevent (they are absent) sense of belonging among colleagues. Instead, a tight financial situation leading to comparison of results and competition for resources between units was seen as an issue that prevents sense of belonging among managers. Lack of cooperation was described as the lack of interaction between units and the lack of joint operations between units. Focusing on issues and interests of own staff or own unit was seen as leading to partial optimization, putting the interests of the entire organization to the background. In situations where organizations were combined factors that prevent sense of belonging were old ways of working haunting the work community and the larger partner dictating how things should be done when building cooperation.

In addition to good interaction between leaders, good superior–subordinate relationship was felt to foster sense of belonging among managers. Leadership based on fairness, appreciation and equal treatment from higher management level was seen to foster sense of belonging among managers. Instead, leadership based on inappropriate and unfair treatment of subordinates was experienced to prevent sense of belonging among managers. Inappropriate

treatment of subordinates was described in terms such as aggressive or hostile attitude and pointing out of errors. Furthermore, unfair management style was seen as something based on friendship or favoritism and occurring in the form of "divide and conquer" management, which can drive a wedge between management groups. The results of this study support the work of Rouse and Al-Maqbali (2014), who analyzed nursing professionals' perceptions of the communication qualities that are essential for nurse managers to carry out their job effectively. They found out that nurse managers should be fair, should avoid discrimination and favoritism (i.e. they should not have favorites in their staff but, instead, everyone should be treated equally), should not only look for flaws or mistakes and should give feedback privately and in a positive and constructive tone. Ethical behavior in the workplace involves respecting colleagues at all levels of the organization, and professionals, especially those in health care, should not have to be reminded of this fact (Huston and Brox (2004). According to Huston and Brox (2004), "divide and conquer" may work on war battlefields, but these tactics only serve to destroy the work environment and remove any sense of trust for effective teamwork among employees (Huston and Brox, 2004).

Limitations of the study

The main limitation of this study was the data collection method. The data were collected by a questionnaire including two open-ended questions. The form of the questions was "what" (*What are the factors that foster/prevent sense of belonging among managerial community?*), lacking a follow-up question "how." In this form, the answers were partly too open for interpretation. In the future, the subject should be approached from the "how" perspective, to find out more in-depth information about the factors that foster or prevent sense of belonging among frontline managers and middle managers in social and health-care services in Finland. Alternatively, interviews could be used for data gathering to obtain deeper knowledge. Other limitations were the small number of respondents ($n = 135$) and the limited amount of information that the participants provided on these open-ended questions. In addition, there were one to two word expressions in the respondents' answers. According to Granheim and Lundman (2004), too narrow meaning units, for example only a single word, may result in fragmentation, and there is a risk of losing meaning of the text during the condensation and abstraction process. However, the researchers of this study have done their best to avoid this problem during the analysis process.

Implications for practice

This research illustrates the factors that foster or prevent sense of belonging among social and health-care managers. The results can be used to develop the sense of belonging among managers at all levels in the organization (horizontal and vertical). Ultimately, this research shows the importance of mutual interaction and communication throughout the organization. Therefore, time and place should be organized for joint discussions, where ideas and opinions can be exchanged between colleagues and where sense of belonging could be fostered. Sense of belonging can be seen as the quality factor for functional and goal oriented management.

Conclusion

Paying attention to the quantity and quality of interaction and to structural solutions in the organization, such as physical distance between units and the scope of organization, can affect the sense of belonging among frontline managers and middle managers. This study also showed the importance of superior−subordinate relationship at all levels of organization when discussing the mutual sense of belonging.

References

Bishop, M. (2013), "Work engagement of older registered nurses: the impact of a caring-based intervention", *Journal of Nursing Management*, Vol. 21 No. 7, pp. 941-949.

Burroughs, S.M. and Eby, L.T. (1998), "Psychological sense of community at work: a measurement system and explanatory framework", *Journal of Community Psychology*, Vol. 26 No. 6, pp. 509-532.

Clancy, A., Gressnes, T. and Svensson, T. (2013), "Public health nursing and interprofessional collaboration in Norwegian municipalities: a questionnaire study", *Scandinavian Journal of Caring Sciences*, Vol. 27 No. 3, pp. 659-668.

Dieleman, S.L., Farris, K.B., Feeny, D., Johnson, J.A., Tsuyuki, R.T. and Brilliant, S. (2004), "Primary health care teams: team members' perceptions of the collaborative process", *Journal of Interprofessional Care*, Vol. 18 No. 1, pp. 75-78.

Edwards, G. (2011), "Concepts of community: a framework for contextualizing distributed leadership", *International Journal of Management Reviews*, Vol. 13 No. 3, pp. 301-312.

Elo, S. and Kyngäs, H. (2007), "The qualitative content analysis process", *Journal of Advanced Nursing*, Vol. 62 No. 1, pp. 107-115.

Fox, A. and Wilson, E. (2009), "Support our networking and help us belong!: listening to beginning secondary school science teachers", *Teachers and Teaching: Theory and Practice*, Vol. 15 No. 6, pp. 701-718.

Gask, L. (2005), "Overt and covert barriers to the integration of primary and specialist mental health care", *Social Science & Medicine*, Vol. 61 No. 8, pp. 1785-1794.

Granheim, U.H. and Lundman, B. (2004), "Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness", *Nurse Education Today*, Vol. 24 No. 2, pp. 105-112.

Hagerty, B.M., Williams, R.A., Coyne, J.C. and Early, M.R. (1996), "Sense of belonging and indicators of social and psychological functioning", *Archives of Psychiatric Nursing*, Vol. 10 No. 4, pp. 235-244.

Hagerty, B.M.K., Lynch-Sauer, J., Patusky, K.L., Bouwsema, M. and Collier, P. (1992), "Sense of belonging: a vital mental health concept", *Archives of Psychiatric Nursing*, Vol. 6 No. 3, pp. 172-177.

Heale, R., Dickieson, P., Carter, L. and Wenghofer, E.F. (2014), "Nurse practitioners' perceptions of interprofessional team functioning with implications for nurse managers", *Journal of Nursing Management*, Vol. 22 No. 7, pp. 924-930.

Huston, J.L. and Brox, G.A. (2004), "Professional ethics at the bottom line", *The Health Care Manager*, Vol. 23 No. 3, pp. 267-272.

Koivunen, M., Niemi, A. and Hupli, M. (2014), "The use of electronic devices for communication with colleagues and other healthcare professionals – nursing professional' perspectives", *Journal of Advanced Nursing*, Vol. 71 No. 3, pp. 620-631.

Lampinen, M.-S., Viitanen, E. and Konu, A. (2013), "Systemaattinen kirjallisuuskatsaus yhteisöllisyydestä työelämässä", *Sosiaalilääketieteellinen Aikakauslehti*, Vol. 50 No. 1, pp. 71-86. [English summary: A systematic literature review of sense of community at work].

Lampinen, M.-S., Viitanen, E. and Konu, A. (2015), "Sense of community and job satisfaction in social and health care managers", *Leadership in Health Services (Bradford, England)*, Vol. 28 No. 3, pp. 228-244.

Lim, S. (2008), "Job satisfaction of information technology workers in academic libraries", *Library & Information Science Research*, Vol. 30 No. 2, pp. 115-121.

Mascia, D., Cicchetti, A., Fantini, M.P., Damiani, G. and Ricciardi, W. (2011), "Physicians' propensity to collaborate and their attitude towards EBM: a cross-sectional study", *BMC Health Services Research*, Vol. 11 No. 1, pp. 172.

McKenna, L. and Newton, J.M. (2008), "After the graduate year: a phenomenological exploration of how new nurses develop their knowledge and skill over the first 18 months following graduation", *Australian Journal of Advanced Nursing*, Vol. 25 No. 4, pp. 9-15.

McMillan, D.W. and Chavis, D.M. (1986), "Sense of community: a definition and theory", *Journal of Community Psychology*, Vol. 14 No. 1, pp. 6-23.

Molyneux, J. (2001), "Interprofessional teamworking: what makes teams work well?", *Journal of Interprofessional Care*, Vol. 15 No. 1, pp. 29-35.

Peterson, N.A., Speer, P.W. and McMillan, D.W. (2008), "Validation of brief sense of community scale: confirmation of the principal theory of sense of community", *Journal of Community Psychology*, Vol. 36 No. 1, pp. 61-73.

Rouse, R.A. and Al-Maqbali, M. (2014), "Identifying nurse managers' essential communication skills: an analysis of nurses' perceptions in Oman", *Journal of Nursing Management*, Vol. 22 No. 2, pp. 192-200.

Walker, L.O. and Avant, K.C. (1988), *Strategies for Theory Construction in Nursing*, 2nd ed., Appleton-Century-Crofts, Connecticut.

White, C., Vanc, A. and Stafford, G. (2010), "Internal communication, information satisfaction and sense of community: the effect of personal influence", *Journal of Public Relations Research*, Vol. 22 No. 1, pp. 65-84.

Winter-Collins, A. and McDaniel, A.M. (2000), "Sense of belonging and new graduate job satisfaction", *Journal for Nurses in Staff Development (JNSD)*, Vol. 16 No. 3, pp. 103-111.

Xyrichis, A. and Lowton, K. (2008), "What fosters or prevents interprofessional teamworking in primary and community care? A literature review", *International Journal of Nursing Studies*, Vol. 45 No. 1, pp. 140-153.

Further reading

Kramer, M. and Schmalenberg, C. (2008), "Confirmation of a healthy work environment", *Critical Care Nurse*, Vol. 28 No. 2, pp. 56-64.

The Finnish Advisory Board on Research Integrity (2012), "Ethical principles of research in the humanities and social and behavioural sciences", available at: www.tenk.fi/en/ethical-review-human-sciences/ethical-principles

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