



Nurses' job involvement and association with continuing current position—A descriptive comparative study

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Abstract

Aims and objectives: The aim of the study is to examine nurses' job involvement and intentions to continue in their current position.

Background: Globally, the supply of nurses fails to meet the labour markets' high demand. Compared to specialist health service, the community health service has the greatest challenge when it comes to nursing shortage. There is a lack of studies comparing nurses working in different parts of the healthcare system in research focusing on nurses' intentions to continue in their current position. Similarly, there has been relatively little research on nurses' job involvement, even less how it is associated with retaining the nurses, despite indications that job involvement may be the key to job-related motivated behaviour.

Design: A descriptive comparative study with a cross-sectional design.

Methods: The study comprises 297 nurses from the community health service and specialist health service, respectively. The relationships between nurses' intention to continue and participant characteristics were examined using binary logistic regression. Reporting followed the STROBE guidelines.

Results: Nurses in the community health service are older, have more children under the age of 18 and hold more permanent positions than nurses in the specialist health service. Job involvement is the only variable associated with nurses' intention to continue in their current position regardless of whether the nurse works in the community health service or specialist health service.

Conclusions: The results indicate that the community health service has the same possibilities as the specialist health service to retain nurses in their current jobs.

Relevance to clinical practice: The results indicate that nursing leaders/employers with a goal to retaining nurses are recommended to focus on improving the nurses' job involvement.

KEYWORDS

community health service, job involvement, motivation, nurses, turnover, turnover intention

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1 | INTRODUCTION

The nursing profession experiences a global nursing shortage, which is exacerbated by nurses leaving the profession or their current positions (Cowden & Cummings, 2012). It is projected a shortage of nearly 2.5 million nurses across the 23 OECD countries by 2030 (Scheffler & Arnold, 2019). However, according to Cowden and Cummings (2012) retaining nurses in their current position will reduce the implications of the nursing shortage. The average proportion of older adults in the OECD countries is expected to increase with 36% over the next decade, from 16% in 2013 to 22% in 2030. This will result in an increased need for nurses as older individuals generally have more health problems, and estimates suggest that increase by one percentage point in the previous year's population over 65 years is associated with an increase in the number of nurses per 1,000 inhabitants by 4.62% (Scheffler & Arnold, 2019). This may indicate that the nursing shortage will affect the community health services the hardest, since elderly care is the largest patient group in this sector. In addition to the increased number of older patients, there is indication of differences between the community health service and specialist health service which suggest that the community health service may experience more challenges related to retaining nurses. The community health services are perceived as burdensome, with challenges related to quality of care and limited nursing professional environment (Abrahamsen, 2015). The specialist health services (i.e., hospitals) appear to be the preferred employer, especially among newly licensed registered nurses (RN), and the community health service (i.e., nursing homes) tends to have higher turnover rates than hospitals (Kovner, Brewer, Fatehi, & Jun, 2014). Accordingly, compared to specialist health service, the community health service poses the greatest challenge when it comes to nursing shortage, and the sector should prepare and work on their retainment strategies. However, there is a lack of studies comparing nurses working in different parts of the healthcare system, particularly focusing on retaining nurses (Kovner et al., 2014; Nei, Snyder, & Litwiller, 2015).

2 | BACKGROUND

Turnover research distinguishes between nurses' cognitive behavioural intentions and turnover as an actual act (actual turnover, i.e. the nurse leaves her workplace; Nei et al., 2015). The behavioural intentions are usually split into two different concepts (i.e., intention to leave and intention to continue) representing different perspectives in turnover research (Cowden & Cummings, 2012). Actual turnover is often the result of a multi-step process, which includes the attitudes, decision and behaviour/ action components of the nurses (Cowden & Cummings, 2012; Lum, Kervin, Clark, Reid, & Sirola, 1998). The process is driven by the individual worker' cognitive assessment of their work environment and the workplace' ability to meet individual needs and motivational factors (Cowden & Cummings, 2012; Nei et al., 2015).

Job satisfaction and organisational commitment are the variables most strongly associated with nurses' intention to continue

What does this paper contribute to the wider global clinical community?

- Contemporary research lacks focus on nurses' job involvement across different health service sectors.
- Our results indicate that regardless of health service sector nursing leaders/employers with a goal to retaining their nurses, should focus on improving the nurses' job involvement.
- Investigating and identifying that personal and situational factors are associated with nurses' job involvement and comparing different groups of nurses, may facilitate development of retainment strategies and policies.

in their current position (Chan, Tam, Lung, Wong, & Chau, 2013; Cowden & Cummings, 2012; Ellenbecker & Cushman, 2012; Halter et al., 2017; Nei et al., 2015). Personal characteristics, job-related experiences and job characteristics are other personal and situational factors often indirectly associated with nurses' intentions to leave through their association with job satisfaction and organisational commitment (Liou, 2009; Nei et al., 2015). A variable assumed to be central in the turnover process is job involvement, which is theorised to have a mediating role between the personal, situational factors, job satisfaction and organisational commitment (Brown, 1996).

Job involvement is a type of work commitment more strongly associated with intrinsic rather than extrinsic need satisfaction (Brown, 1996). Kanungo (1979, 1982) defines it as a psychological identification with one's job, based on its potential to meet and satisfy an individual's salient needs and expectations. According to Brown (1996), the development of intention to continue or leave one's job is believed to be a motivational process, where job involvement plays a central role. There is a significantly lower likelihood ($\bar{r} = -.31$) that a job-involved person has the intention to quit his job than a person who is not a job-involved Brown (1996). How well an individual and work situation fit together and which consequences such compatibility has for the individual' behavioural intentions are assumed by Blau (1987) and Kristof-Brown, Zimmerman, and Johnson (2005) to be linked to job-related motivation such as individual differences in salient needs and need strength, predispositions and how they are motivated by different characteristics in their job. Nei et al. (2015) indicate that low compatibility between nurses' personal factors and the organisation in which they work is linked to an increased intention to quit their job.

Despite indications that job involvement may be the key to job-related motivated behaviour (Brown, 1996), little research has been done on nurses' job involvement, especially related to their intention to continue. A recent systematic review (Salessi &

Omar, 2019) exploring research on job involvement over the past 10 years, included 65 primary research studies; however, only eight studies included nurses and health workers as participants. Only one of these studies linked job involvement to nurses' intention to leave (Sulander et al., 2016), while three studies mentioned the importance of researching nurses' job involvement due to the concept of association with turnover in future work to meet the growing international nursing shortage (Katrinli, Atabay, Gunay, & Guneri, 2008, 2009; Koponen et al., 2010). According to a meta-analysis by Nei et al. (2015), eight out of 106 studies included job involvement as an independent factor when investigating nurses' turnover intentions. Of these eight studies, only three studies found an association between job involvement and nurses' intention to leave: Sjoberg and Sverke (2000), Cohen, (1998), Cohen and Golan (2007).

Sjoberg and Sverke (2000) used longitudinal data from 535 nurses in Swedish hospitals to investigate whether an interaction between job involvement and organisational commitment is mediated by intention to leave. Accordingly, low organisational commitment had a stronger negative association with intention to leave current position in nurses with low job involvement ($p < .001$) than in nurses with high job involvement ($p < .05$). Cohen (1998) investigated the relationship between job-related commitment and job-related outcomes in nurses at two hospitals ($N = 238$), and results suggested a significant three-way interaction effect, between job involvement, organisation commitment and professional commitment ($p < .05$) on the nurses' intention to leave, indicating that increased job involvement in nurses with high organisational commitment and low professional commitment might lead to stronger intentions to continue in their current position (Cohen, 1998). Cohen and Golan (2007) performed a similar study, but only included female nurses ($N = 119$) who work at institutions for long-term care, rather than hospitals. In contrast, among nurses they found that higher job involvement results in an increased intention to leave their job ($p < .05$).

Socio-demographic variables like age (Abrahamsen, 2015; Nei et al., 2015), sex (Estryn-Béhar et al., 2007; McGilton, Tourangeau, Kavcic, & Wodchis, 2013; Nei et al., 2015), having children (Currie & Carr Hill, 2012; Estryn-Béhar et al., 2007), marital status (Chan et al., 2013) and employment status (Andresen, Hansen, & Grov, 2017; Cowden & Cummings, 2012; Heinen et al., 2013; McGilton et al., 2013) are linked to the nurses' behavioural intentions. However, none of these variables are associated with job involvement (Brown, 1996).

The current available turnover and retention research on nurses have several gaps, particularly related to the nurses' behavioural intentions and job involvement across different healthcare sectors. Therefore, the aim of this study was to explore nurses' job involvement and intentions to continue in their current position. Specific objectives included the following: (a) to explore associations between job involvement and intention to continue in current position, and (b) to describe differences in these associations between the community and specialist health service.

3 | METHOD

3.1 | Study design

This is a descriptive comparative study using a cross-sectional design. The study followed the reporting guideline—Strengthening the Reporting of Observational Studies in Epidemiology (STROBE), for completed checklist see File S1.

3.2 | Sample and procedure

This study uses data from the StudData database, which is a collaborative project involving several Norwegian colleges and universities. The database is led by the Center for Professional Studies at OsloMet and funded by the Research Council of Norway. StudData follows individuals from the beginning of a professional education until they are well established in the labour market (Center for Professional Studies (SPS), 2005, 2011) and contains data obtained from four different panels. The surveys were conducted in the first and final years of education in addition 3 and 6 years after graduation. The current study is based on data collected from the third panel and the third wave (3 years after graduation). The respondents represent students from Bergen University College, Bodø University College, Oslo University College, University of Stavanger, Sør-Trøndelag University College and Ålesund University College. The data collection was carried out at the end of week 3 (21st and 22nd of January), 2010. Questionnaires and cover letters describing the purpose of the survey, information on privacy and voluntary participation were sent in the mail to persons who have participated since autumn 2004. An internet link to the survey was included in the cover letter, which gave the respondents the opportunity to answer the survey electronically. Attached was a form for reservation against further participation and retrieval of register data. In addition, the nurses received a letter from their union with an invitation to participate (SPS, 2011). In the week prior to the data collection, a newsletter that briefly presented results from previous phases of the StudData research was sent out to motivate participation (SPS, 2011).

3.3 | Eligibility criteria

Registered nurses (RN) who have nursing-related work and work in the public sector are included. Respondents who indicated not to work as nurse (RN) or did not work in the public sector were excluded. The public health sector in Norway is divided into two with the specialist and community health service. The public specialist health service includes hospitals, mental health services, specialised drug treatment and ambulance services. The public community health service includes institutional services, home nursing, general medical services, health station and school health services.

3.4 | Measures

Information about age, sex, marital status, children, income, place of employment and employment status was collected using a demographic questionnaire.

3.4.1 | Job involvement

Job involvement was assessed using the Job Involvement Questionnaire (JIQ; Kanungo, 1982). The JIQ contains 10 items related to the respondent's psychological identification with current job, each ranging from 1 (totally agree) to 6 (completely disagree). All items except "To me, my job is only a small part of my identity" and "Usually I feel detached from my job" were reversed, and total score ranged from 10–60 with scores in the upper range reflecting high job involvement. The reliability and validity of the JIQ is good with a Cronbach's alpha of 0.70 (Kanungo, 1982) to 0.88 in a previous study using StudData (Nesje, 2015). In the current sample, we obtained a Cronbach's alpha of 0.86.

3.4.2 | Intention to continue in current position

Intention to continue in current position was obtained using a single item form. Respondents were asked to indicate whether they had attempted to get another job/position the previous month by answering yes/no.

3.5 | Data analyses

Data were analysed using IBM SPSS (Statistical Package for the Social Sciences) Statistics 24 for Mac Os. For dichotomous categorical variables, Yates Correction (χ^2 Yates) was used while on the categorical variables of multiple categories was analysed by Pearson's Correlation (χ^2) to assess significance. Student's *t* test was used for the continuous variables (Pallant, 2013).

None of the items had a "missing value" of >10%, and in accordance with recommendations from Bennett (2001), no missing values were imputed. If information about workplace or intention to continue in current jobs had a missing value, the respondents were excluded.

3.5.1 | Backward logistic regression

A logistic regression analysis with a backward elimination procedure was carried out to assess the association between the nurses' intention to continue in the current position and work-related and socio-demographic variables. Variables were dropped step by step as a result of significance level ($p < .05$) in accordance with the recommendations from Sperandei (2014). To reduce the risk of statistical errors and increase the statistical strength of the analysis, sex and age were included in all steps of the regression model as control variables independent of significance level (Becker, 2005). An interaction term was constructed for job involvement and nurses in the community health service to investigate whether an increase in the nurses' job involvement is associated with increased

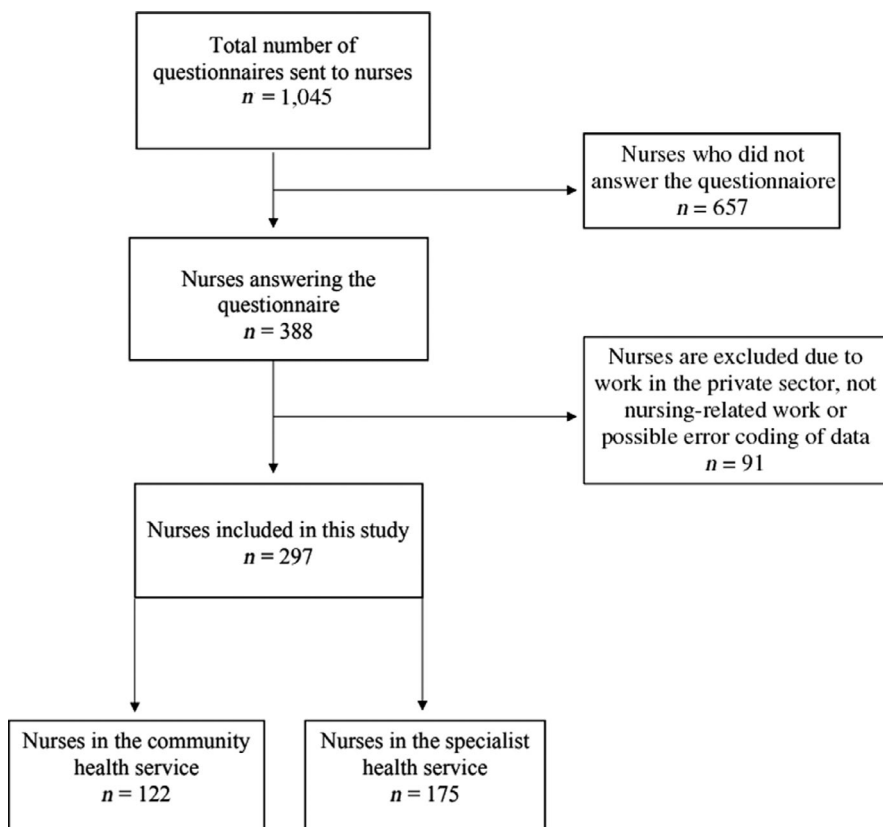


FIGURE 1 Flow chart for sample and group division

odds that the nurse intends to continue in the current position if the nurse is employed in the community health service but not when employed in the specialist service. The model's explanation of the nurses' intention to continue in their current position was examined by Cox–Snell R-squared and Nagelkerke R-squared. The Hosmer–Lemeshow goodness-of-fit test was used to check how well the final model matched the survey data.

3.6 | Ethics

The Study Data surveys were conducted in accordance with the Personal Data Act and with the legal and ethical guidelines regulating research developed by the Norwegian Social Science Data Services (NSD). All participants provided informed consent

to participate, and all data obtained in this study are anonymous in the sense that the researcher cannot identify the participants, and the data file did not contain sensitive information about the participants.

4 | RESULTS

Of the 1,045 nurses assessed for eligibility, 388 (39%) returned the questionnaires. This exclusion process resulted in 91 respondents being excluded and 297 respondents included. A total of 122 nurses were in the community health service and 175 nurses were in the specialist health service. The process is presented in flow chart (Figure 1).

The study sample ($N = 297$) consists of 122 (41%) nurses working in the community health service and 175 (59%) working in the

TABLE 1 Comparison of socio-demographic and job-related factors between nurses in community health services and specialised health services ($N = 297$)

	Total sample ($N = 297$)	Community health service ($n = 122$)	Specialised health service ($n = 175$)	χ^2 , χ^2 Yates or t	p -Value
Sex (n , %)					
Female	266 (89.9%)	108 (88.5%)	158 (90.8%)	0.197	.657
Male	30 (10.1%)	14 (11.5%)	16 (9.2%)		
Age (n , %)					
25–29 years	129 (43.6%)	40 (32.8%)	89 (51.1%)	10.341	.006
30–35 years	82 (27.7%)	38 (31.1%)	44 (25.3%)		
36–58 years	85 (28.7%)	44 (36.1%)	41 (23.6%)		
Job involvement (mean, SD)	32.27 (8.63)	33.18 (8.95)	31.61 (8.36)	1.499	.135
Min.	12	12	12		
Max.	55	53	55		
Intention to continue (n , %)					
Yes	243 (82.4%)	100 (82.6%)	143 (82.2%)	0.000	1.000
No	52 (17.6%)	21 (17.4%)	31 (17.8%)		
Employment (n , %)					
Permanent	218 (75.4%)	103 (88%)	115 (66.9%)	15.723	.000
Temporary	71 (24.6%)	14 (12%)	57 (33.1%)		
Employment (n , %)					
Full-time	173 (60.9%)	72 (62.1%)	101 (60.1%)	0.043	.836
Part-time	111 (39.1%)	44 (37.9%)	67 (39.9%)		
Gross Salary (n , %)					
<100,000–299,999 NOK	24 (8.6%)	9 (7.8%)	15 (9.2%)	0.294	.863
300,000–399,999 NOK	179 (64.4%)	76 (66.1%)	103 (63.2%)		
400,000–599,999 NOK	75 (27%)	30 (26.1%)	45 (27.6%)		
Children under 18 years (n , %)					
No children	173 (59.9%)	50 (42.4%)	123 (71.9%)	25.745	.000
1 child	59 (20.4%)	33 (28%)	26 (15.3%)		
2 or more children	57 (19.7%)	35 (29.7%)	22 (12.9%)		
Relationship status (n , %)					
Single	81 (27.6%)	29 (23.8%)	52 (30.2%)	1.187	.276
In a relationship	213 (72.4%)	93 (76.2%)	120 (69.8%)		

Note: The p -values come from Yates correction (χ^2 Yates) is used for sex, intention to continue, employment permanent, employment full-time and relationship status. Pearson's correlation (χ^2) is used for gross salary and age. Student's t test (t) is used for job involvement.

specialist health service: 266 (90%) women and 30 (10%) men, and most were between 25–29 years ($n = 129$, 44%). Seventy-five per cent ($n = 218$) had a permanent position, 61% ($n = 173$) worked full-time, and 39% ($n = 111$) worked part-time, and income ranged from 100,000 NOK to 599,999 NOK. The majority were living with a partner (72%, $n = 213$) and had no children under the age of 18 (60%, $n = 173$). The average score on the job involvement scale was 32.27 ($SD = 8.6$), and 82% ($n = 243$) intended to continue in their current position, while 18% ($n = 52$) had considered finding another position in the last month. In general, nurses working in the community health service were older ($p = .006$), had more children under 18 years ($p < .000$), and a higher proportion of permanent positions ($p = .000$) compared to nurses working in the specialised health service.

Respondents' socio-demographic characteristics and work-related factors are outlined in Table 1.

4.1 | Intention to continue in current positions

The nurses' intending to continue in their current position had a significantly higher mean sum score (32.8, $SD = 8.64$) on the job involvement scale than those intending to change jobs (29.6, $SD = 8.32$; $p = .018$; Table 2). For the total sample, one-unit increase on the job involvement scale was positively associated with a 5% increased OR of intending to continue in the current position

(OR = 1.05, 95% CI = 1.01–1.09, $p = .018$) controlled for age and sex in the logistic regression analyses (Table 3). The backward elimination demonstrated no significant associations between the variable "community health service" and "intention to continue in current position." Neither was the interaction term between working in the community health service and job involvement significantly associated with intention to continue in current position (Step 3, Table 3).

5 | DISCUSSION

The purpose of the present study was to examine associations between job involvement and intention to continue in current position, and differences in these associations between nurses working in the community or specialist health service. Results indicated no difference between nurses working in the two sectors when it comes to the association between their job involvement and their intention to continue in their current position. Accordingly, employers in each sector have an equal opportunity to retain nurses in their current positions despite differences related to socio-demographic and job-related factors such as age, familial obligations and permanent positions. Considering the present study's sample, it is conceivable these results may have been different if the sample had consisted of nurses with different degrees of professional tenure. However, this will be addressed when discussing the present study's limitations.

	Intention to continue ($n = 243$)	No intention to continue ($n = 52$)	χ^2, χ^2 Yates or t	p -Value
Female ($n\%$)	220 (90.9)	44 (84.6)	1.227	.268
Age ($n\%$)				
25–29 years	106 (43.8)	22 (42.3)	0.106	.948
30–35 years	67 (27.7)	14 (26.9)		
36–58 years	69 (28.5)	16 (30.8)		
Job involvement—sum score (mean, SD)	32.8 (8.64)	29.6 (8.32)	2.384	.018
Community health services ($n\%$)	100 (41.2)	21 (40.4)	0.000	1.000
Permanent ($n\%$)	185 (77.4)	33 (67.3)	1.723	.189
Full-time ($n\%$)	242 (60.3)	31 (64.6)	0.158	.691
Children under the age of 18 ($n\%$)				
No children	140 (59.3)	31 (60.8)	0.044	.978
1 child	49 (20.8)	10 (19.6)		
2 or more children	47 (19.9)	10 (19.6)		
Gross salary ($n\%$)				
<100,000–299,999 NOK	18 (7.9)	6 (12.5)	2.006	.367
300,000–399,999 NOK	151 (66.2)	27 (56.3)		
400,000–599,999 NOK	59 (25.9)	15 (31.3)		
In a relationship ($n\%$)	173 (71.5)	38 (76)	0.226	.635

TABLE 2 The distribution of the independent variables' frequencies or mean values on the dependent variable "Intention to continue in current position" ($N = 297$)

Note: Yates correction (χ^2 Yates) is used for female, permanent, full-time and relationship status. Pearson's correlation (χ^2) is used for gross salary and age. Student's t test (t) is used for job involvement.

TABLE 3 Backward logistic regression; Socio-demographic and job-related factors associated with intention to continue in current position among nurses in community health service and specialised health service

	Unadjusted model														
	Step 1					Step 2									
	B	SE	p	OR	95% CI	B	SE	p	OR	95% CI					
Sex (1)	0.60	0.45	.179	1.82	[0.76, 4.35]	0.67	0.57	.239	1.96	[0.64, 5.98]	0.90	0.50	.071	2.47	[0.92, 6.59]
Age—3 groups (ref.)	—	—	.948	—	—	—	—	.651	—	—	—	—	—	—	—
25–29 years (1)	0.11	0.36	.760	1.12	[0.55, 2.28]	-0.51	0.55	.355	0.60	[0.21, 1.76]	-0.40	0.46	.383	0.67	[0.27, 1.65]
30–35 years (2)	0.10	0.40	.797	1.11	[0.50, 2.45]	-0.30	0.53	.570	0.74	[0.26, 2.09]	-0.26	0.47	.584	0.78	[0.31, 1.93]
Job involvement	0.05	0.02	.019	1.05	[1.01, 1.07]	0.08	0.03	.018	1.08	[1.01, 1.15]	0.07	0.03	.025	1.07	[1.01, 1.14]
Permanent	0.51	0.34	.137	1.66	[0.85, 3.25]	0.64	0.45	.157	1.90	[0.78, 4.63]	0.57	0.40	.152	1.77	[0.81, 3.87]
Community health services	0.03	0.31	.919	1.03	[0.56, 1.90]	0.97	1.41	.491	2.63	[0.17, 41.33]	1.06	1.31	.416	2.89	[0.22, 37.41]
(Job involvement * Community health services)	—	—	—	—	—	-0.05	0.05	.261	0.95	[0.87, 1.04]	-0.05	0.04	.253	0.95	[0.88, 1.04]
Relationship status (1)	0.23	0.36	.517	1.26	[0.62, 2.56]	0.55	0.45	.222	1.74	[0.72, 4.23]	0.23	0.40	.566	1.26	[0.58, 2.75]
Full-time	-0.19	0.33	.576	0.83	[0.44, 1.59]	-0.25	0.42	.551	0.78	[0.34, 1.77]	—	—	—	—	—
Gross salary (ref.)	—	—	.372	—	—	—	—	.894	—	—	—	—	—	—	—
<100,000–299,999 NOK (1)	-0.27	0.55	.624	0.76	[0.26, 2.26]	0.08	0.83	.923	1.08	[0.21, 5.56]	—	—	—	—	—
300,000–399,999 NOK (2)	0.35	0.36	.324	1.42	[0.71, 2.86]	0.20	0.44	.644	1.22	[0.52, 2.87]	—	—	—	—	—
Children under the age of 18 (ref.)	—	—	.978	—	—	—	—	.738	—	—	—	—	—	—	—
1 child (1)	0.08	0.40	.838	1.09	[0.50, 2.38]	0.38	0.51	.450	1.47	[0.54, 3.97]	—	—	—	—	—
2 or more children (2)	0.04	0.40	.921	1.04	[0.47, 2.28]	0.24	0.56	.667	1.27	[0.42, 3.82]	—	—	—	—	—
Constant	—	—	—	—	—	-1.44	1.14	.205	0.24	—	-1.33	1.03	.197	0.26	—
	Step 3					Step 4					Step 5				
	B	SE	p	OR	95% CI	B	SE	p	OR	95% CI	B	SE	p	OR	95% CI
Sex (1)	0.83	0.50	.093	2.30	[0.87, 6.07]	0.84	0.50	.088	2.33	[0.88, 6.14]	-0.85	0.49	.083	0.43	[0.16, 1.12]
Age—3 groups (ref.)	—	—	.777	—	—	—	—	.890	—	—	—	—	.657	—	—
25–29 years (1)	-0.31	0.44	.482	0.73	[0.31, 1.74]	-0.20	0.42	.639	0.82	[0.35, 1.91]	-0.37	0.42	.384	0.69	[0.30, 1.58]
30–35 years (2)	-0.14	0.45	.756	0.87	[0.36, 2.11]	-0.08	0.45	.866	0.93	[0.38, 2.24]	-0.13	0.44	.776	0.88	[0.37, 2.09]
Job involvement	0.06	0.03	.026	1.07	[1.01, 1.13]	0.04	0.02	.031	1.04	[1.00, 1.09]	0.05	0.02	.018	1.05	[1.01, 1.09]
Permanent	0.55	0.38	.151	1.73	[0.82, 3.67]	0.46	0.37	.211	1.59	[0.77, 3.25]	—	—	—	—	—

(Continues)

TABLE 3 (Continued)

	Step 3				Step 4				Step 5						
	B	SE	p	OR	95% CI	B	SE	p	OR	95% CI	B	SE	p	OR	95% CI
Community health services	0.96	1.28	.453	2.61	[0.21, 31.97]										
(Job involvement * Community health services)	-0.04	0.04	.305	0.96	[0.89, 1.04]										
Relationship status (1)															
Full-time															
Gross salary (ref.)															
<100,000–299,999 NOK (1)															
300,000–399,999 NOK (2)															
Children under the age of 18 (ref.)															
1 child (1)															
2 or more children (2)															
Constant	-1.25	1.00	.209	0.29	—	-0.73	0.81	.367	0.48	—	1.23	0.91	.175	3.43	—

Note: CI = confidence interval for odds ratio (OR); Age (ref.) = 36–58 years, Children under the age of 18 (ref.) = no children, Gross salary (ref.) = 400,000–599,999 NOK, Sex (1) coded as 1 = female, 0 = male, Relationship status coded as 1 = single, 0 = in a relationship. (Job involvement * Community health service) = interaction term, Hosmer and Lemeshow test; $p = .288$.

Our findings demonstrated that factors often associated with extrinsic need satisfaction (e.g., the need for security and predictability), such as familial obligations (e.g., children under the age of 18) and permanent positions, are the only factors differentiating nurses in the community health service from nurses in the specialist health service. It is conceivable that the difference between the groups related to the children factor may be because the nurses who work in the specialist health service experience an imbalance between having children and their work (Yamaguchi, Inoue, Harada, & Oike, 2016), which in turn motivates the nurses to search for jobs where they experience an opportunity to balance their work and family life (Abrahamsen, 2019; Gautun, Øien, & Bratt, 2016; Yamaguchi et al., 2016). Since nurses highly value a permanent position and holding a temporary position may experience insecurity related to the job situation (Andresen et al., 2017), it is conceivable that nurses searching to balance their work and family life choose to work in the community health service due to the sectors significantly higher proportion of nurses in permanent positions.

Our findings indicate that extrinsically motivated factors may play a part in the nurses' desire to change jobs or which employer they will choose (Gagné & Deci, 2005), but not in the process which leads to intention to continue in their current position since the only significant factor in the present study associated with the nurses' intentions to continue in their current position is job involvement.

Research on turnover and nurses' behavioural intentions (Nei et al., 2015) indicates that job involvement plays an important positive role in nurses' intention to continue in their current position, which is in line with the findings of the present study. A nurse's job involvement may be perceived as a function of both psychological person- (e.g., job-related intrinsic motivation) and situation-dependent factors (e.g., positive job characteristics; Brown, 1996), and the interaction between these factors may determine the nurses' job involvement (Blau, 1987; Govender & Sanjana Brijball, 2010). Hence, it can be argued that the degree of which the individual nurses' intrinsically motivated salient needs match various positive psychological job characteristics in their current position (Hackman & Oldham, 1976; Latham & Ernst, 2006) and determine the odds of nurses continuing in their current positions. However, according to Riipinen (1997) if the employees' experience conformity between their salient needs and the current positions ability to satisfy those needs, it makes no difference if the salient needs are intrinsically or extrinsically motivated. Still, it is difficult to imagine nurses psychologically identifying with their job based on extrinsic rewards like salary or need for security, and in an extensive meta-analysis, Brown (1996) finds that job involvement has the strongest association with the intrinsic motivation. This indicates that employers who wish to retain their nurses should focus on enriching the workplace (Latham & Ernst, 2006) to satisfy intrinsic rather than extrinsic needs to increase the nurses' job involvement. Future research is needed to test this hypothesis.

The nonsignificant interaction term in the present study may indicate that the core values of the nursing profession and not aspects of the individual job serve as a catalyst for the nurses' job

involvement (Elloy, Everett, Flynn, & Clément, 1995). However, this perspective is contested by Nesje (2015) who found no significant association between nursing students motivated by the opportunity to make difference in people's life and their job involvement after they graduated. Another possible explanation is that the data used in the present study do not differentiate between the different aspects of the job involvement such as different salient needs or different job characteristics. In the current regression analysis, the community health service was associated with very wide nonsignificant confidence intervals, indicating that more knowledge and information is needed on how working in the community health service versus the specialist health service associates with the nurses' intention to continue in their current position. Still, it is reasonable to say that nurses in the community health service have different salient needs than nurses in the specialist health service and therefore are motivated by different job characteristics which may vary between the two sectors (Gautun et al., 2016). Findings from newly licensed American nurses (Kovner et al., 2014) indicate similar challenges in retention of nurses as studies on Norwegian nurses (Andresen et al., 2017; Heinen et al., 2013). Even though none of these studies differentiated between nurses in the specialist or community health service, they illustrate the need for new models to improve nursing workforce retention and based on present study it might be beneficial to focus on their nurses' job involvement.

5.1 | Limitations

The study's cross-sectional design affects the possibility to prove causal relationships; nevertheless, this was not the study purpose. However, this design makes it possible to test associations and differences between factors and groups (Downes, Brennan, Williams, & Dean, 2016), which was the purpose of the study. Even though a causal relationship cannot be proven in this study, there are strong indications of a causal relationship between job involvement and turnover intention in both theory and by previous research (Brown, 1996; Cohen, 2003).

Based on the study's specific population, the sample size ($N = 297$) is considered a strength; however, the response rate (39%) may be considered a limitation although the sample consists of participants from different educational institutions representing a wide geographic area. In studies with low response rates, one of the main concerns is nonresponse bias, which may cause a not representative sample, threaten the results external validity (Sedgwick, 2015) and possible bias due to over-/underrepresentation of groups. The sample's homogeneity in reference to professional tenure (3 years of experience) may have affected/influenced the findings on differences between the two groups transferability to the total nursing population. Studies with specific population, like the present study, is according to Sedgwick (2015) often representative of that population, which reduces the risk of selection bias. This indicates that the present study findings are transferable to newly educated nurses 3 years after graduation. Additionally,

both age and professional tenure have previously shown to be only weakly associated ($p = -0.08$) with nurses' turnover intention (Nei et al., 2015) and not associated with job involvement (Brown, 1996). Therefore, findings related to the job involvements association with the nurses' intention to continue in their current position are transferable. Future research should include a sample consisting of nurses with different professional tenure.

6 | CONCLUSION

The community health service is often linked to better working conditions for nurses and better opportunities to balance work and family life. In this study, the significant differences identified between the nurses in the community health service and the specialist health service may be explained by the nurses' choice of workplace based on their life situation and the workplace's potential to meet their extrinsic motivated needs. Only the nurses' job involvement was significantly associated with their intention to continue in their current position, which may be an indication that nurses' job involvement and intention to continue is driven by intrinsic motivation. Nurses in both sectors report equal degree of psychological identification with their job.

7 | RELEVANCE TO CLINICAL PRACTICE

The study' results may be interpreted as the community health service having a competitive advantage over the specialist health service when it comes to recruiting older nurses with more children. This is an employee group that is often associated with stable labour and a lower intention to leave the job, although this study does not show such a result.

Employers with a goal to retaining nurses are recommended to focus on increasing the nurses' job involvement, by mapping their workforce' salient needs, evaluate their own ability to satisfy those needs and enrich the workplace accordingly.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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