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Healthcare Professionals' Intention to Leave

Laiho, M., Tevameri, T., Vähätalo, M., Kallio, T. J. & Suomi, K.

Abstract

The objective of this study was to examine the experienced importance of workplace choice criteria, satisfaction with those criteria and their relationship with the intention to leave among health care professionals. The study is based on a large survey implemented in a private health care organization. According to the results, dissatisfaction with workplace choice criteria predicts the intention to leave among health care professionals. However, the experienced importance of workplace choice criteria does not affect health care professionals' intention to leave. In order to dissuade health care professionals from leaving, it is important to pay attention to organization-related practices that are under management control. For physicians, dissatisfaction with organizational factors mainly explains intention to leave. For nurses, dissatisfaction with work–life interface-related issues together with the organizational factors explain their intention to leave. Based on the findings, it is important to acknowledge that work-related factors attract health care professionals but are not enough to make them stay. Thus, it is suggested that employee entry and employee retention be managed separately.

Keywords Workplace choice, Meeting the criteria, Intention to leave, Health care professionals

Paper type Research paper

Introduction

There have been shortages of health care professionals in several countries for two decades (Chan & Morrison, 2000; Flinkman, 2014; Heikkilä, et. al. 2014; Maczuga, 2021; McLaughlin et al., 2010; Tei-Tominaga et al., 2018), and the COVID-19 pandemic has made this particularly obvious, especially among nurses (e.g., Tolksdorf et al., 2022). One outcome of the shortage is that health care professionals typically have many options for selecting where to work. Therefore, it is important for employers not only to acquire competent health care

professionals but also to keep them in the organization (e.g., Suomi et al., 2021) or in the branch (Roos et al., 2022). Employee retention is important particularly from a resource-based perspective as health care professionals' expertise is the most important asset for these organizations (see de Bruijn, 2011). In the best case, health care employees are committed to their workplace and thus do not have intentions to leave (Laine, 2005).

In order to acquire competent professionals, organizations must have knowledge about the factors that induce health care professionals to choose a workplace. Extant research literature has dealt with this topic in a few studies (Heikkilä et al., 2014; Mullei et al., 2010). In addition to attracting professionals, it is important to be able to retain them. In some studies, no clear difference is made between workplace choice and commitment to the organization or retention (Havens & Aiken, 1999; Laine et al., 2011; McClure et al., 2002; Upenieks, 2002). Moreover, retention in the organization alone does not indicate that employees would not have intentions to leave (Chan & Morrison, 2000; Kloutsiniotis & Mihail, 2017).

Typically, some kind of dissatisfaction precedes intention to leave (Albion et al., 2008; Labrague et al., 2020; Larrabee et al., 2003; Ma et al., 2009; Raddaha et al., 2012). Numerous studies have examined work dissatisfaction and intention to leave among health care professionals (Alsubhi et al., 2019; Chan & Morrison, 2000; Kato et al., 2010; Kloutsiniotis & Mihail, 2017; Labrague et al., 2020; Laine, 2005). However, little attention has been paid to the relationship between meeting workplace choice criteria and intention to leave. This topic is important in order to get research knowledge about the role and the relevance of workplace choice after the decision is made. This study fills this research gap by providing empirical evidence about the topic, as well as knowledge for managerial purposes. The purpose of the study is to examine the experienced importance of workplace choice criteria, satisfaction with the criteria and their relation to intention to leave among health care professionals. The moderation effect of the experienced importance of workplace choice criteria is also examined. In this study, the concept of meeting workplace choice criteria is used parallel to satisfaction with workplace choice criteria.

The study is based on a survey conducted in spring 2016 in a large private health care organization operating in Finland. The respondents represent several distinct groups of health care professionals with diverse demographic backgrounds. This is considered important as the extant literature suggests that different backgrounds and/or professional groups may have

different expectations of or needs regarding the workplace (Amstrong-Tassen & Stassen, 2013; Chan & Morrison, 2000; Heikkilä et al., 2014; Laine et al., 2011). Thus, the importance of workplace choice criteria in terms of the intention to leave may differ across employee groups. Therefore, this study, in addition to examining health care professionals as a whole group, compares nurse and physician groups.

Theory and hypothesis

Health care professionals' workplace choice and choice criteria

A few studies focus on the topic of workplace choice among health care professionals (Dotson, 2011; Heikkilä et al., 2014) or among other professionals (Kulkarni & Nithyanand, 2012). However, the concepts used to refer to workplace choice vary to some degree and overlap somewhat. For instance, attraction factors and magnet hospital may also refer to aspects of workplace choice (Havens & Aiken, 1999; Lee et al., 2016; Maczuga, 2021; McClure et al., 2002; Mullei et al., 2010; Renaud et al., 2016). Moreover, the concepts job choice and workplace choice are occasionally used as synonyms. Although the job choice perspective focuses on the job, this perspective includes the choice of organization (Kilduff, 1990; Kulkarni & Nithyanand, 2012). In this study, the concept workplace choice is used.

Distinct groups of health care professionals may have differing views about workplace choice. Heikkilä et al. (2014) studied workplace choice criteria (i.e., factors affecting workplace choice) among physicians. The most important criterion for choosing a workplace was professionally interesting content of the work. This is in line with findings that professionals typically possess strong intrinsic motivation and highly value their work, as well as the possibility of using their capabilities and expertise (de Bruijn, 2011). The location of the workplace, family or other personal reasons (Heikkilä et al., 2014), adequate remuneration (El Koussa et al., 2016; Maczuga, 2021), career development, infrastructure, staffing, professional work environment, workload and autonomy (El Koussa et al., 2016) were among the other most important choice criteria. Furthermore, gender, age, specialty area as well as employer sector (public or private), were related to workplace choice criteria (Heikkilä et al., 2014).

Location of the workplace is an important choice criterion for nurses. In the extant literature, this phenomenon is studied especially from the perspective of recruiting or choosing a

workplace in a rural area (Dotson et al., 2011; Mullei et al., 2010). For nurses, rural areas may be an interesting possibility, especially if they are seeking a change (Dotson et al., 2011). Beyond this, according to Roos et al. (2022), participatory development, resilient procedures, appreciation and optimization of work were the central attraction factors for licensed practical nurses.

The term magnet hospital refers to the attraction and retention of nurse professionals in hospitals (Havens & Aiken, 1999; McClure et al., 2002). Magnet hospitals typically invest in the following areas: a pleasant organizational culture and climate, an open and decentralized management culture, a sufficient level of staffing, collaboration, autonomy, proper facilities for patient care, opportunities for development and training and opportunities to reach one's professional potential and carry out high-quality patient care (Coile, 2001; Havens & Aiken, 1999; Kramer & Schmalenberg, 2002; McClure et al., 2002; Upenieks, 2002; Urden & Monarch, 2002). According to Coile (2001), salary is not among the most important means of attracting nurses to magnet hospitals. Further, according to Stone et al. (2007) high salaries do not reduce intention to leave among nurses. However, a contrary view has also been highlighted (Upenieks, 2002). Some studies suggest that salary is an important factor in dissatisfaction and can cause intention to leave even the nursing profession (Kankaanranta & Rissanen, 2008; see also Laine, 2005).

Health care professionals' intention to leave

Health care professionals' intention to leave and turnover in health care organizations are widely studied phenomena. Numerous studies focusing on this theme have been published since the turn of the new millennium (Albion et al., 2008; Alsubhi et al., 2019; Ang et al., 2013; Cao et al., 2020; Chan & Morrison, 2000; Dousin et al., 2020; Labrague et al., 2020; McLaughlin et al., 2010; Neves et al., 2022; Stone et al., 2007). The extant literature has approached the topic from the perspective of a specific professional group (McLaughlin et al., 2010), by focusing on health care workers in general (Albion et al., 2008) or by focusing on the gender viewpoint, particularly on women (Porter & Ayman, 2010).

Laine (2005) detected that nurses who were dissatisfied with work-related matters, such as rewardness of the work (e.g., meaningful work, opportunity to utilize one's abilities, development and influence opportunities), leadership style, work climate, work requirements

(e.g., time and other possibilities to carry out the needed and safe care for the patients) and career progress, were weakly committed both to their organization and partly to the nursing profession. Weak commitment, in turn, predicted intentions to leave and actual leaving (Laine, 2005). In addition, job satisfaction mediated the relationship between flexibility, choice in working hours, supportive supervision and intention to leave (Dousin et al., 2020). Dasgupta (2014) identified the key drivers causing turnover among nurses in a private health care organization. The drivers identified included heavy workload, inequality in salary, management style and conflict between work and family, among others. Management and organization culture are correlated with patient safety (Ocak et al., 2015), and perceived poor patient safety in turn creates an intention to leave (Sasso et al., 2019; Koch et al., 2020). In some studies, uncomfortable working hours, such as evening shifts, were observed to cause intention to leave among nurses (Ma et al., 2009). In addition, job insecurity can cause intention to leave the nursing profession (Laine et al., 2009). Further, Porter and Ayman (2010) noticed that work–family conflict was an important reason for intention to leave among women health care professionals. Walsh (2013) found a positive relationship between work–life interference and women doctors’ intention to leave. However, with flexible work arrangements (Porter & Ayman, 2010) and social support from co-workers (Walsh, 2013), intentions to leave can be reduced.

In the extant studies, the highlighted factors that affect the intention to leave are connected to organizational issues, such as low salary (Roth et al., 2022) or insufficient levels of staffing among nurses (Chan & Morrison, 2000; Neves et al., 2022). Furthermore, organizational climate (De Oliveira et al., 2017; Stone et al., 2007) and tightness of the labor market (Cao et al., 2021; Sasso et al 2019; Roth 2022) significantly affected nurses’ intention to leave. Kato et al. (2012) found similar results among physicians as Chan and Morrison (2000) had among nurses. Work dissatisfaction, restricted possibilities for career advancement, undervaluation and budget-based management style were the most important factors affecting physicians’ wish to exchange the hospital they work for (Kato et al., 2012). However, several external factors (Porter & Steers, 1973), such as the overall economic situation and the unemployment rate, may restrict employees’ intention to leave despite dissatisfaction (Kloutsiniotis & Mihail, 2017). Under these conditions, retention in the organization is, however, likely to be only temporary.

Meeting workplace choice criteria and intention to leave

It has been recently detected that employees' intention to stay is not the opposite of intention to leave; in other words, the same factors do not cause intention to stay and leave (George, 2015; Roth et al., 2022; Sasso, et al., 2019). Thus, it is important to study these phenomena separately. This is in line with the basic assumption of Herzberg's (1974) seminal study (also known as the motivation-hygiene theory) in which he suggested that job satisfaction and dissatisfaction are generated by different factors. Job satisfaction is related to the content of one's job. Factors such as recognition, interesting tasks and advancement are important for job satisfaction, for example. Job dissatisfaction, in turn, is related to factors that can be referred to as the context of one's job. Factors such as supervision, interpersonal relationships, salary and working conditions may produce job dissatisfaction among others (Herzberg, 1974). Kato et al. (2012) detected that inappropriate work hours increased the desire to change hospitals among physicians even though they were satisfied with the work itself. Following the reasoning of Herzberg's (1974) motivation-hygiene theory, and other studies dealing with the theme (Babić et al., 2014; Chernesky & Israel, 2009; Dasgupta, 2014; Kato et al., 2012), we propose that meeting some particular workplace choice criteria might be more critical than some others, when an employee is considering whether to leave the organization.

The relationship between meeting workplace choice criteria and intention to leave has not gained much attention in the extant literature. However, some studies on related topics have been conducted. For instance, Chernesky and Israel (2009) studied the relationship between employees' job expectations (what they expected to receive from organization), organizational commitment, job satisfaction and intention to leave in a child welfare agency. The scholars found that whatever the reasons for choosing one's job (mission or reward driven), if the employees' expectations were not met the employees were more likely to consider leaving the organization (Chernesky & Israel, 2009).

Porter and Steers' (1973) early literature review focused on factors that have been found to relate to employee turnover. They divided these factors into organization-wide (e.g., pay and promotion policy), immediate work environment (e.g., supervisory relations), job content (e.g., autonomy) and personal (e.g., age and family responsibilities) factors. Later, Ghapanchi and Aurum (2011) created a framework that proposes five groups of factors related to professional workers' turnover intention. They are individual (e.g., demographics), organizational (e.g.,

reward), job-related (e.g., job characteristics), psychological (e.g., job satisfaction) and environmental (e.g., work–family conflict) factors. George (2015), in turn, studied the retention of professional workers and found a distinction between retention factors that have an effect at the organizational (e.g., salary and career advancement) and job (autonomy, work–life balance) levels. In health care professions, nonstandard work schedules, such as shift work, are common thus emphasizing the risk for work–life pressures (Eby et al., 2005; Skinner et al., 2011; Walsh, 2013). Work–life conflict, in turn, has been found to be related to turnover intentions (Allen et al., 2000; Walsh, 2013). In a recent study, Tolksdorf et al. (2022) identified several factors that affected nurses' intention to leave during the COVID-19 pandemic. Based on their and previous studies, the factors can be divided into two categories: organizational (e.g., low job control) and individual (e.g., fear). (Tolksdorf et al., 2022).

Based on the literature review of health care professionals' workplace choice and choice criteria, the professionals' intention to leave and how these perspectives are related, the following hypotheses are formulated ^[1]:

- H1.* Dissatisfaction with organization-related workplace choice criteria is positively related to intention to leave.
- H2.* Dissatisfaction with job-related workplace choice criteria is positively related to intention to leave.
- H3.* Dissatisfaction with work–life interface-related workplace choice criteria is positively related to intention to leave.

Chernesky and Israel (2009) found that employees who choose their job in a mission-driven way are less likely to intend to leave in the case of unmet expectations compared to employees who choose their job based on the external incentive factors, such as rewards and benefits. This finding suggests that the reason for choosing a job may play a role later when employees consider leaving the current organization. Thus, by following Chernesky and Israel's (2009) reasoning and assuming some conceptual similarity between the reason for job acceptance and experienced importance of workplace choice criteria and meeting job expectations and satisfaction with workplace choice criteria, the following hypotheses are formulated:

- H4.* The experienced importance of organization-related workplace choice criteria moderates the relationship between dissatisfaction with organization-related

workplace choice criteria and intention to leave in that the effect is stronger for high importance.

- H5.* The experienced importance of job-related workplace choice criteria moderates the relationship between dissatisfaction with job-related workplace choice criteria and intention to leave in that the effect is stronger for high importance.
- H6.* The experienced importance of work–life interface-related workplace choice criteria moderates the relationship between dissatisfaction with work–life interface-related workplace choice criteria and intention to leave in that the effect is stronger for high importance.

Figure 1 illustrates the study’s proposed model and hypotheses.

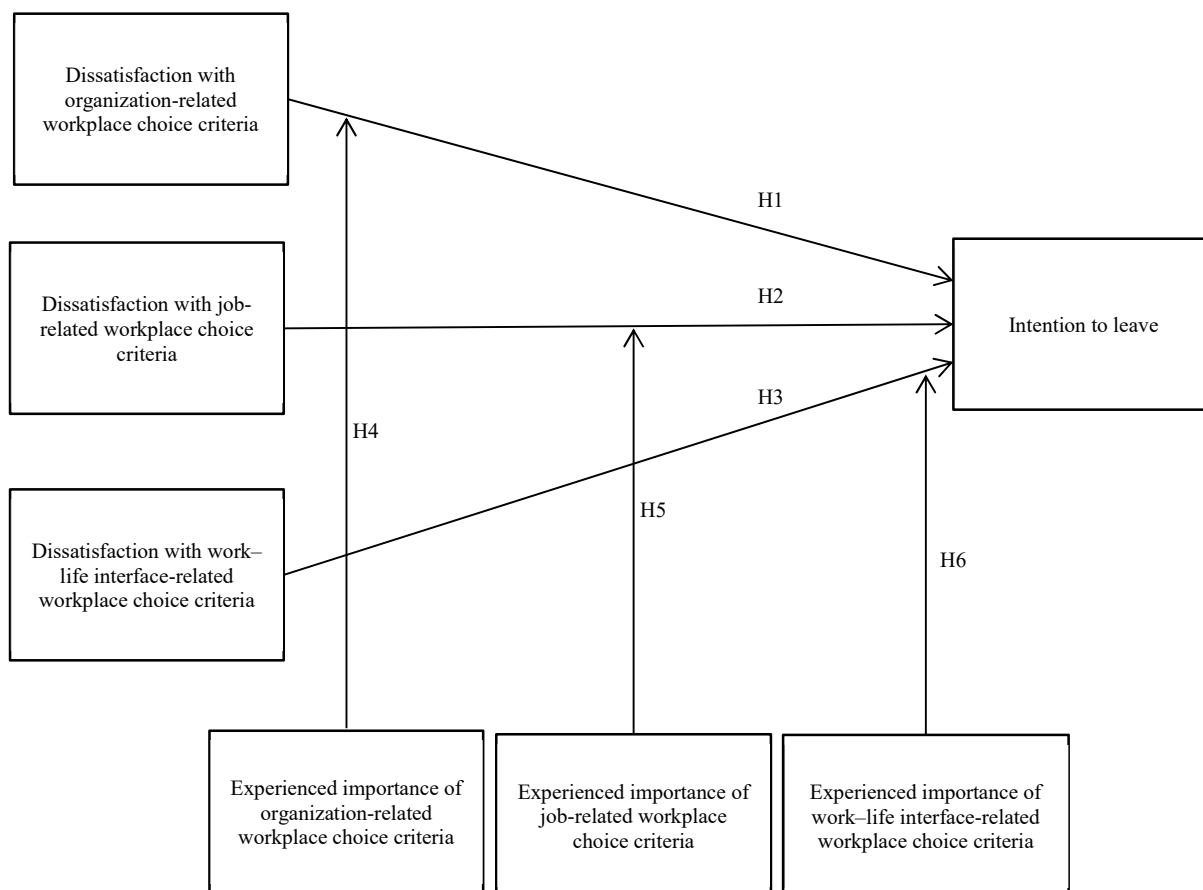


Figure 1 The study’s proposed model and hypotheses

Methodology

The data

The data were gathered from a large, private health care organization operating in Finland. The organization has several clinics around the country and has several thousands of employees, as well as independent contractors. The data were collected during spring 2016 by using a technology-assisted survey as part of a larger research project.

The questionnaire was developed in several phases. First, items were generated from a review of the relevant literature, and a tentative survey questionnaire was developed based on those items. After presenting the questionnaire to representatives of the healthcare organization in question, some modifications were made. The revised survey questionnaire was then pre-tested in the target organization and with university representatives. The survey was revised several times based on the discussions and pre-tests.

The final questionnaire contained 28 questions, including both structured and open-ended questions. The study's target group comprised the physicians and nurses working at the organization at the time of the survey. The physician group included general practitioners, specialists and specializing doctors and dentists, while the nurse group comprised nurses, physiotherapists, occupational health nurses, laboratory nurses and radiographers. Hereinafter, these groups are referred to as physicians and nurses, respectively. The respondents worked either as employees or as independent contractors in the organization.

In total, 772 respondents completed the survey. The response rate was 20.4 %, and compared to other similar studies (e.g., Boon et al., 2011), it can be considered sufficient. In the physicians group, the response rate was 12.3 %, and among nurses, the response rate was 42.1 %. This indicates that compared to nurses, physicians are underrepresented in the data. Of the respondents, 45.9 % were physicians, 54.1 % were nurses, 61.1 % were employees and 38.9 % independent contractors, 76.1 % were female, 70.2 % worked on a daily basis, the rest worked weekly or rarely and 10.1 % held a position of leadership. Respondents' average age was 49.3 years.

Table 1. Profile of the respondents

	Response categories	n	%
Gender	Male	181	23.9
	Female	577	76.1
Average age	49.3	772	
Occupation			

Contract	Nurses	407	54.1
	Doctors	345	45.9
Supervisory position	Employees	453	61.1
	Independent contractors	288	38.9
Work frequency	Yes	75	10.1
	No	670	89.9
Tenure (company)	Daily	529	70.2
	Weekly or rarely	225	29.8
Experience in health care	Less than 6 years	323	41.8
	At least 6 years	449	58.2
	Less than 11 years	166	21.5
	At least 11 years	606	78.5

Measures

Intention to leave was assessed using a single-item measure, ‘Have you considered quitting work at the xxx?’ Following previous studies (Tham, 2007; Walsh, 2013), the responses were given on a dichotomous scale ‘No’ or ‘Yes’.

Experienced importance of the workplace choice criteria was measured on 20 items constructed for the purposes of this study (see Table 2). These items are created and modified based on numerous previous studies and research literature dealing with health care or other professional fields.^[2] Due to the conceptual diversity in the field, a wide range of previous studies were consulted, including research dealing with, for instance, workplace choice, job choice, attraction, commitment, work (dis)satisfaction and intention to leave factors. Responses were given on a 5-point Likert scale ranging from very important (1) to not important (5). Before the analysis, the scales were reversed.

All of the provided workplace choice criteria were rated important, as all the mean values were without one exception (career prospects = 3,17) above 3.5. Respondents were also given the opportunity to indicate and rate other important workplace choice criteria outside the list provided. Forty-one respondents used this opportunity. Most of the criteria mentioned were related to appreciation at the workplace, equality and justice, peers and general atmosphere at the workplace. Company premises, instruments and software were also mentioned by several respondents. Overall, the measures used in the survey seemed to succeed well in covering the core aspects of workplace choice criteria.

Satisfaction with the choice criteria was measured with the same 20 items as the importance of the criteria (see Table 2). An example item is: I'm satisfied with the way that the training possibilities have been realized in [my organization]. The responses were given on a 5-point Likert scale ranging from strongly agree (1) to strongly disagree (5). Before the analysis, the scales were reversed.

Respondent's gender and age were included as control variables, as workplace choice has previously been found to differ according to these factors (Heikkilä et al., 2014). Type of contract (employee vs. independent contractor), position (physician vs. nurse), work frequency, tenure and experience in health care were also controlled.

Analysis

Analysis of the data was conducted using SPSS Statistics 24 software. Before the predictive model was tested, several analyses were conducted. Exploratory factor analyses (EFA) were carried out on the 20 items to establish the structure and number of dimensions relating to both 1) the experienced importance and 2) the satisfaction with the workplace choice criteria. Principal components method with varimax rotation were used. In the case of satisfaction model, one of the items that relates to location of the workplace was dropped from the analysis, because of the low communality value. Further, three of the items measuring the experienced importance of the workplace choice criteria (organization's reputation, organization's brand and organizational values) were dropped, because they formed an additional independent component. A forced three -dimensional solution yielded the most interpretable and consistent components. Three-factor solutions explained 52 % (satisfaction) and 50 % (importance) of the total variance. Satisfaction factors were labeled 1) organization ($\alpha = 0.833$), 2) work-life interface ($\alpha = 0.726$) and 3) job ($\alpha = 0.800$). The importance factors were labeled correspondingly to the satisfaction components: organization ($\alpha = 0.711$), work-life interface ($\alpha = 0.651$) and job ($\alpha = 0.804$). Despite the Cronbach's α value for work-life interface measure did not exceed the commonly accepted rule of 0,7 (Nunnally, 1967), the internal consistency of the aggregated measures can be considered satisfactory (Kloutsiniotis & Mihail, 2017).

Table 2. Factor matrixes for PCA with varimax rotation of three factor solution of satisfaction and importance items

	Satisfaction component			Importance component		
	Organization	Work-life interface	Job	Organization	Work-life interface	Job
Organization's reputation	.826	.057	.110	-	-	-
Organization's brand	.824	.032	.136	-	-	-
Organizational values	.735	.072	.172	-	-	-
Management culture	.705	.354	.144	0.604	0.028	0.402
Career prospects	.500	.244	.165	0.754	0.032	-
						0.090
Training possibilities	.496	.191	.171	0.816	0.051	0.059
Facilities, equipment and instruments	.427	.165	.162	0.078	0.317	0.567
Convenient work hours	.022	.732	.111	0.043	0.787	0.246
Reconciliation of work and private life	.047	.727	.091	0.246	0.741	0.034
Opportunity for independent and autonomous work	.235	.666	.241	0.028	0.212	0.614
Salary/income level	.402	.610	-	0.483	0.380	0.036
			.174			
Work content	.157	.576	.377	0.392	0.188	0.439
Job security	.383	.556	-	<i>0.454</i>	0.438	0.097
			.002			
Opportunity for high-quality patient work	.361	.453	.417	0.149	0.092	0.687
Peer support	.095	-.048	.844	<i>0.609</i>	0.069	0.375
Opportunity for peer consultancy and multi-professional collaboration	.229	.014	.692	<i>0.548</i>	0.041	0.438
Clientele	.070	.207	.602	-0.025	0.173	0.611
Pleasant work climate	.357	.208	.556	0.418	0.159	0.474
Opportunity for exploiting one's expertise in full	.202	.429	.502	0.280	-0.068	0.704
Location of workplace	-	-	-	-0.082	0.604	0.287

The predictive model of the study was tested using a logistic regression procedure (Hosmer & Lemeshow, 2000) with the experienced importance of the job choice criteria and satisfaction with the criteria as predictors and intention to leave as the dependent variable. As nurses' and physicians' views on the importance of the workplace choice criteria and satisfaction with the criteria were somewhat different, the models were fitted separately for the two professional groups. This was done in order to find out whether the predictors of intention to leave differ between nurses and physicians (Kloutsiniotis & Mihail, 2017).

Results

Descriptive results

The most important workplace choice criteria were related to the work itself ($M = 4.322$, $SD = 0.451$) and issues relating to the work and life interface ($M = 4.298$, $SD = 0.531$). Issues relating to organizational factors ($M = 3.903$, $SD = 0.671$) were rated as the least important workplace choice criteria. In terms of satisfaction with workplace choice criteria, issues related to the work itself received the highest scores ($M = 4.077$, $SD = 0.596$). Work-life interface related issues ($M = 3.924$, $SD = 0.738$) received high scores as well. The greatest dissatisfaction emerged in the case of organization related issues ($M = 3.325$, $SD = 0.766$) (see Table 3).

Of the respondents, 44.4 % had considered leaving the current organization. Nurses had higher intention to leave than physicians, as 51.9 % of the nurses had considered leaving, while the equivalent percentage of physicians was 35.9 %. The difference between the groups was statistically significant ($\chi^2=18,872$, $df=1$, $p<0.001$).

Table 3. Means, standard deviations and correlations among study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender (1=female, 2=male)			–												
2. Age	49.30	11.530	.216**												
3. Contract (1=employee, 2=independent contractor)			.469**	.294**	–										
4. Occupation (1=doctor, 2=nurse or physiotherapist)			-.434**	-.342**	-.621**	–									
5. Work frequency (1=daily, 2=weekly or rarely)			.198**	.222**	.467**	-.498**	–								
6. Tenure (1=less than 6 years, 2=at least 6 years)			.089*	.244**	.135**	-.062	-.009	–							
7. Experience in health care (1=less than 11 years, 2=at least 11 years)			.081*	.381**	.102**	-.159**	.036	.253**	–						
8. Organization importance	3.903	0.671	-.232**	-.283**	-.362**	.340**	-.301**	-.070	-.127**	–					
9. Job importance	4.322	0.451	-.157**	.016	-.037	.134**	-.176**	-.030	.031	.506**	–				
10. Work–life interface importance	4.298	0.531	-.225**	-.218**	-.079*	.126**	-.139**	-.019	-.058	.342**	.491**	–			
11. Organization satisfaction	3.325	0.766	.122**	.017	.209**	-.203**	.095*	-.034	-.012	-.037	.140**	.063	–1		
12. Job component satisfaction	4.077	0.596	-.042	-.001	.008	.042	-.090*	.073	.014	.130**	.374**	.162**	.568**	–	
13. Work–life interface satisfaction	3.924	0.738	.159**	.050	.373**	-.314**	.121**	.050	.053	-.141**	.172**	.155**	.532**	.527**	–
14. Turnover intention (0=no, 1=yes)			-.105**	-.082*	-.226**	.160**	-.096**	.051	-.013	.121**	-.031	-.034	-.489**	-.302**	-.368**

**=Correlation coefficient is significant at the 0.01 level.

*=Correlation coefficient is significant at the 0.05 level.

The correlation analysis performed with the aggregated measures revealed that the experienced importance of workplace choice criteria is only weakly related to intention to leave (see Table 3). The relation between workplace choice satisfaction and intention to leave, instead, was negative and statistically significant. The relation was strongest in the case of organization component ($r=-0.489$, $p<0.001$). Respondent's age was also negatively related to intention to leave ($r=-0.082$, $p<0.05$). Women reported more intention to leave than their male counterparts ($r=-0.105$, $p<0.01$). Turnover intention was higher among employees in contrast to independent contractors ($r=-0.226$, $p<0.001$). Nurses were more eager to change workplaces than physicians were ($r=0.160$, $p<0.001$). Further, those who worked at the organization on a daily basis experienced less turnover intentions than those who worked only weekly or rarely ($r=-0.096$, $p<0.001$).

Prediction of health care professionals' intention to leave

To test the predictive model of the study, a logistic regression procedure was conducted. The analysis revealed that dissatisfaction with organizational issues is the most significant ($p<0.001$) predictor of intention to leave for physicians ($p<0.001$) and nurses ($p<0.001$). Thus, H1 was supported. Dissatisfaction with job-related issues, instead, does not predict intention to leave. Thus, H2 was not supported. Dissatisfaction with work-life interface-related issues predicts intention to leave in the nurses group ($p<0.05$) but not in the physicians group. Thus, H3 was supported partially. In addition, the younger a nurse is the more likely she/he has considered leaving her/his current employer ($p<0.001$). The experienced importance of workplace choice criteria, instead, did not predict intention to leave. In the physicians' group the full model explained from 25,9 % (Cox and Snell R^2) to 35,8 % (Nagelkerke R^2) of the variance (see Table 4). In the nurses' group the full model explained from 33,4 % (Cox and Snell R^2) to 44,5 % (Nagelkerke R^2) of the variance (see Table 5). Compared to other recent studies (e.g. George 2015) the explanatory power of the models is high.

Table 4. Results from the hierarchical logistic regression analysis (physicians)

Variable	Model 1				Model 2				Model 3			
	β	Exp(β)	95 % lower	95 % upper	β	Exp(β)	95 % lower	95 % upper	β	Exp(β)	95 % lower	95 % upper
<i>Step 1: Controls</i>												
Gender	.205	1.227	.647	2.326	.134	1.144	.584	2.239	.169	1.184	.542	2.586
Age	.000	1.000	.967	1.034	.001	1.001	.965	1.038	-.002	.998	.957	1.041
Contract	-1.000**	.368	.185	.732	-.858*	.424	.206	.872	-.844	.430	.180	1.029
Work frequency	.409	1.505	.788	2.873	.398	1.489	.763	2.907	.266	1.305	.594	2.867
Tenure	.118	1.125	.572	2.212	.147	1.159	.585	2.294	.168	1.183	.549	2.551
Experience	.243	1.276	.450	3.618	.248	1.281	.451	3.638	.176	1.192	.351	4.052
<i>Step 2: Experienced importance of the workplace choice criteria</i>												
Organization					.323	1.381	.739	2.578	.360	1.433	.657	3.130
Work-life interface					-.294	.746	.374	1.488	-.121	.886	.380	2.065
Job					-.234	.791	.312	2.003	.604	1.829	.580	5.765
<i>Step 3: Satisfaction with the workplace choice criteria</i>												
Organization									-1.443***	.236	.116	.482
Work-life interface									-.255	.775	.335	1.792
Job									-.563	.570	.220	1.473
-2 log likelihood	236.754				234.829				187.126			
Model chi-square	9.030				10.955				58.659***			

Intention to stay was coded as 0. and intention to leave as 1. * $p < 0.05$ level. ** $p < 0.01$. *** $p < 0.001$.

Table 5. Results from the hierarchical logistic regression analysis (nurses)

Variable	Model 1				Model 2				Model 3			
	β	Exp(β)	95 % lower	95 % upper	β	Exp(β)	95 % lower	95 % upper	β	Exp(β)	95 % lower	95 % upper
<i>Step 1: Controls</i>												
Gender	.070	1.073	.288	3.998	-.321	.726	.187	2.816	-.261	.771	.157	3.793
Age	-.038**	.963	.936	.990	-.038*	.963	.935	.991	-.076***	.926	.892	.962
Contract	-1.717**	.180	.050	.641	-1.437*	.238	.066	.856	-.977	.376	.091	1.562
Work frequency	-.331	.718	.270	1.907	-.266	.766	.285	2.062	-.141	.868	.267	2.820
Tenure	.331	1.392	.824	2.354	.277	1.319	.768	2.265	.472	1.604	.832	3.091
Experience	.354	1.424	.751	2.703	.514	1.672	.855	3.270	.668	1.950	.884	4.301
<i>Step 2: Experienced importance of workplace choice criteria</i>												
Organization					.785**	2.192	1.237	3.883	.417	1.517	.782	2.944
Work-life interface					-.515	.598	.330	1.084	-.556	.574	.282	1.166
Job					-.547	.579	.271	1.237	0.307	1.360	.536	3.451
<i>Step 3: Satisfaction with workplace choice criteria</i>												
Organization									-1.433***	.239	.140	.406
Work-life interface									-.596*	.551	.332	.916
Job									-.187	.829	.419	1.641
-2 log likelihood	368.699				357.194				277.339			
Model chi-square	23.618**				35.124**				114.979***			

Intention to stay was coded as 0. and intention to leave as 1. *p<0.05 level. **p<0.01. ***p<0.001.

To test the moderation effect of the experienced importance of workplace choice criteria, moderator logistic regression was performed, similar to the procedures used by Vanhala and Stravrou (2013) and Allen et al. (2005). Because of multicollinearity among the predictors, the moderation models were estimated separately from the hierarchical models. To avoid multicollinearity, the experienced importance of workplace choice criteria was dropped from the interaction models (see Tables 6 and 7). Omitting one of the correlated variables has proven to be a suitable way to solve multicollinearity problems when the sample size is at least moderate (Midi et al., 2010), as in this study. The results revealed that the experienced importance of workplace choice criteria does not moderate the relationship between dissatisfaction and the intention to leave. Thus, H3, H4 and H5 were not supported.

Table 6. Results from the logistic regression analysis including interaction terms (physicians)

Variable	β	Exp(β)	95 % lower	95 % upper
Gender	.169	1.184	.543	2.582
Age	-.005	.995	.954	1.038
Contract	-.861	.423	.177	1.012
Work frequency	.280	1.323	.598	2.927
Tenure	.165	1.179	.545	2.550
Experience	.138	1.148	.338	3.899
Organization satisfaction	-1.682**	.186	.058	.595
Work-life interface satisfaction	-.024	.976	.241	3.948
Job satisfaction	-1.633	.195	.032	1.176
Org. importance \times satisfaction	.069	1.071	.859	1.337
Work-life interface importance \times satisfaction	-.058	.943	.761	1.169
Job importance \times satisfaction	.236	1.266	.940	1.704
-2 log likelihood	187.722			
Model chi-square	58.063***			

Intention to stay was coded as 0. and intention to leave as 1. * $p < 0.05$ level. ** $p < 0.01$. *** $p < 0.001$.

Table 7. Results from the logistic regression analysis including interaction terms (nurses)

Variable	β	Exp(β)	95 % lower	95 % upper
Gender	-.171	.843	.177	4.017
Age	-.074***	.928	.895	.963
Contract	-.983	.374	.091	1.541
Work frequency	-.141	.869	.267	2.823
Tenure	.450	1.569	.818	3.010
Experience	.636	1.889	.860	4.150
Organization satisfaction	-1.933***	.145	.054	.384
Work-life interface satisfaction	-.012	.988	.365	2.674
Job satisfaction	-.315	.730	.197	2.709
Org. importance*satisfaction	.118	1.126	.918	1.381
Work-life interface importance*satisfaction	-.134	.875	.721	1.060
Job importance*satisfaction	.044	1.045	.828	1.318
-2 log likelihood	278.718			
Model chi-square	113.599***			

Intention to stay was coded as 0. and intention to leave as 1. * $p < 0.05$ level. ** $p < 0.01$. *** $p < 0.001$.

Discussion and conclusion

The objective of this study was to examine the experienced importance of workplace choice criteria, satisfaction with those criteria and their relationship to the intention to leave among health care professionals. In the extant literature, health care professionals' work dissatisfaction has been linked to their intention to leave (Chan & Morrison, 2000; Kato et al., 2010; Kloutsiniotis & Mihail, 2017; Koch et al., 2020; Tolksdorf et al., 2022), among other factors; the current study adds a new perspective by showing that failing to meet expectations related to workplace choice criteria predicts health care professionals' intention to leave, with dissatisfaction with organization-related factors being particularly significant. This result is consistent with previous research findings (Chernesky & Israel, 2009; Dasgupta, 2014; Herzberg, 1974; Kato et al., 2012; Roth et al., 2022; Tolksdorf et al., 2022) in demonstrating that organizational factors play a role in job retention.

Issues related to the work itself and the work–life interface were the most important factors for attracting nurses and physicians. The research finding about the work itself as an important workplace choice criterion is in line with knowledge about professionals in general; professionals have a strong passion and intrinsic motivation for their work content (de Bruijn, 2011). The same is true for health and social care professionals (Heikkilä et al., 2014; Laine et al., 2011). However, work–life interface factors have only minor predictive value for nurses' intentions to leave and are of no value among physicians, while work and job content factors had no predictive value for either group.

Contrary to predictions, the perceived importance of workplace choice criteria had no moderating effect on the link between dissatisfaction and intention to leave. Consequently, the findings show that the factors that attract health care professionals to an organization differ from those that convince them leave in cases of dissatisfaction. In other words, satisfaction with workplace choice criteria does matter, but the factors that influence the intention to leave are different from those that most attract staff. This finding adds to earlier understanding of the turnover intentions of health care professionals (e.g., Kato et al., 2012; Roth et al., 2022; Tolksdorf et al., 2022) and provides the new theoretical insight that employee attraction should be managed separately from employee retention. Figure 2 illustrates the key finding of the study by presenting employee attraction and retention as separate areas of management.

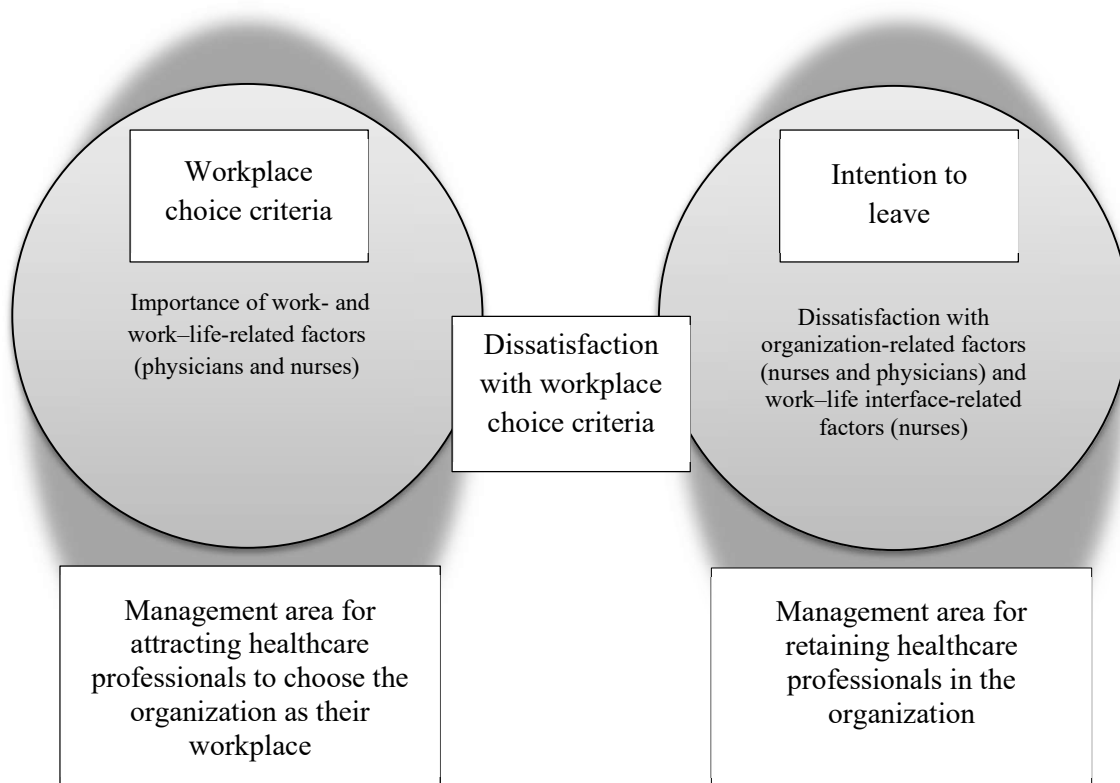


Figure 2 The study's key results and contribution

This study suggests that work-related factors attract health care professionals but are not enough to make them stay. Among physicians and nurses, dissatisfaction with organization-related factors tends to cause employees to consider leaving the organization. Thus, the study indicates that organization-related factors are of great importance to health care professionals because dissatisfaction with these factors causes intention to leave. For nurses, dissatisfaction with work-life interface-related factors also affected intention to leave. A similar conclusion was reached by Dasgupta (2014) and Allen et al. (2000).

Consequently, this study complements previous studies related to turnover intentions (Chernesky & Israel, 2009; Dasgupta, 2014; Kato et al., 2012, Koch et al., 2020; Labrague et al., 2020; Neves et al., 2022; Tolksdorf et al., 2022) and provides knowledge about the role and the relevance of workplace choice after the decision is made.

Practical implications

All types of healthcare organizations worldwide suffer from a shortage of professionals. Lack of personnel is likely to jeopardize patient safety and cause job burnout, which then stimulates intentions to leave (Labrague et al., 2020; Sasso et al., 2019). It is crucial to intervene in this negative cycle and pay attention to the factors that keep professionals from leaving. Moreover, employee commitment and motivation are central, underlying issues for growth management in private healthcare businesses (Simunaniemi et al., 2022).

As a practical suggestion from this study, employee entry and employee retention should be managed separately. In order to dissuade health care professionals from leaving, it is important to concentrate on the organization-related factors that, at least to some extent, are under management control. This can be done by applying organizational practices that consider individual career aspirations and provide professional development possibilities. From the managerial perspective, professionals' development and learning opportunities are crucial, because they are not only related to intention to leave but they also predict work engagement (Saari et al., 2017). These practices should be considered and analyzed regularly in the organization by examining how the factors are experienced among health care professionals. A typical healthcare company can utilize the results of this study to reduce the intentions of healthcare personnel to leave the company.

As highlighted earlier in this study, the extant research literature indicates that the factors that cause the intention to leave may differ from the factors that cause intent to stay (Dasgupta, 2014; George, 2015, Roth et al., 2022; Sasso et al., 2019). Consequently, the management area of employee retention requires additional knowledge about the factors that affect intention to stay among health care professionals.

Limitations and future research suggestions

A few potential limitations in this study should be taken into consideration. The data are cross-sectional and were gathered from the health care professionals who already worked in the organization. A longitudinal research setting would allow examination of pre-entry expectations and would therefore produce stronger evidence. However, at least two things suggest that collecting post-entry information about workplace choice criteria is not necessarily problematic for this research. First, we studied workplace choice criteria, which imply the

general appreciations regarding the workplace choice and are not tied to the specific process of workplace choice. Second, as the study revealed that a considerable number of the respondents intended to leave the current organization, there is reason to believe that the issues regarding workplace choice were on the respondents' minds at the time of the survey.

An additional limitation of the study is related to the low response rate among physicians. The main emphasis of this study is the total group of health care professionals. However, previous studies were mainly conducted by examining one professional group, namely, nurses or physicians. Thus, it is justifiable to study these professional groups separately. Consequently, the results concerning physicians should be treated with reservation. However, among the physicians who worked as employees the response rate was clearly higher (16.1 %) than among physician independent contractors (10.8 %) who might work at the target organization only rarely. Therefore, the questionnaire might not have reached all potential respondents, which have dropped the physicians' response rate.

This study relies on generic assumptions concerning professionals and their behavior in work (e.g., de Bruijn, 2011; George, 2015). However, it is suggested that cultural issues may also have an effect on the reasons that cause an intention to leave (Dousin et al., 2020). It has been proposed, for example, that issues related to the work–life interface have a different effect on the intention to leave depending on the institutional roles of work and family in the culture in question (Kodagoda, 2012; Kodagoda, 2013; Mihelič, 2014; Cao et al., 2021). Thus, it would be interesting to repeat this study in countries that have different cultural setting, such as in Eastern European countries.

In the future, the validity of the constructed measures should be tested further, for instance, in the case of public sector organizations. This would be important because it has been found that there are differences in health care professionals' needs when it comes to satisfaction, depending on whether they work in the public or private sector (Babić et al., 2014). This would probably bring ideas for how to develop the measures further. Moreover, the study was conducted based primarily on professional background. In future studies, the larger scale of different demographic factors should also be considered.

Endnotes:

- 1 In this study, organization-related workplace choice criteria refer to organizational aspects, such as reputation management, career prospects and salary/income level; job-related workplace choice criteria refer to job content, such as the opportunity to make full use of one's expertise in the workplace and to provide high-quality patient work; and work-life interface-related workplace choice criteria refer to the possibility of reconciling work and private life, such as convenient working hours.

2. Previous studies utilized in the construction and formation of questionnaire items include for instance the following (alphabetical order) studies: Albion et al., 2008; Alniacik et al., 2011; Amstrong-Stassen & Stassen, 2013; Babić et al., 2014; Chernesky & Israel, 2009; Coile, 2001; Cummings et al., 2010; Dasgupta, 2014; de Bruijn, 2011; Dotson et al., 2011; du Preez & Bendixen, 2015; George, 2015; Havens & Aiken, 1999; Heikkilä et al., 2014; Kankaanranta & Rissanen, 2008; Kato et al., 2012; Kramer & Schmalenberg, 2002, 2003; Kulkarni & Nithyanand, 2013; Laine, 2005; Laine et al., 2009; Laine et al., 2011; Ma et al., 2009; Porter & Ayman, 2010; Stone et al., 2007; Upenieks, 2002, 2003; Urden & Monarch, 2002; Vilma & Egle, 2007.

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