Community Dental Health (2017) **34,** 196–202
Received 23 November 2016; Accepted 5 April 2017

doi:10.1922/CDH_4095Tuononen07

Factors supporting dentist leaders´ retention in leadership

Tiina Tuononen[1], Johanna Lammintakanen[2] and Anna Liisa Suominen[3]

[1]Institute of Dentistry, University of Eastern Finland, Kuopio, Finland; [2]Department of Health and Social Management, University of Eastern Finland, Kuopio, Finland; [3]Institute of Dentistry, University of Eastern Finland and Department of Oral and Maxillofacial Surgery, Kuopio University Hospital, Kuopio, Finland

Objective*:** The aim was to study factors associated with staying in a dentist leadership position. ***Participants and methods*:** We used an electronic questionnaire to gather data from 156 current or former Finnish dentist leaders in 2014. Principal component analysis categorized statements regarding time usage and opportunities in managerial work into five main components. Associations between these main component scores and the tendency to stay as a leader were analyzed with logistic regression. ***Results: Out of the five main components, two were significantly associated with staying as a leader: `career intentions´, which represented intent to continue or to leave the leadership position; and `work time control opportunities´, which represented how leaders could control their own work time. Other factors that supported staying were leadership education, more work time available for leadership work, and lower age. The main component `work pressure´ decreased, although not significantly, the odds of continuing; it included lack of leadership work time, and pressure from superiors or subordinates. ***Conclusions:*** Leaders have important roles in health care, ensuring everyday operations as well as developing their organizations to meet future challenges. Knowledge of these supporting factors will enable dentist leaders and their organizations to improve working conditions in order to recruit and retain motivated and competent persons. In addition, well-designed education is important to inspire and encourage future leaders.

Keywords: dentist leader, retention, management, public dental health service, questionnaire, education

Introduction

Leadership has proved to be a relevant and attractive career choice for a dentist; at best, it can be very satisfying (Alestalo and Widström, 2011; Tuononen *et al.*, 2016a). In some cases, dentist leadership could lead to roles outside the dental profession. Skilled and motivated leaders with sufficient resources and opportunities will improve organisational performance and ensure quality of care and patient safety. Dentist leaders perform general leadership activities, for example, managing human resources, budgeting, organising and planning service processes. Many of them also have clinical tasks.

Dentist leaders, however, often have difficulties in balancing their work between clinical and leadership tasks. Some, even though they seem to have adequate time for leadership tasks, feel that they have excessive administrative routine duties; they lack time, for example, for human resource management and development work (Tuononen *et al*., 2016a; Bevins, 2013). They perceive their work as demanding and challenging because of continuous restructuring in health care organisations (Morison and McMullan, 2013; Tuononen *et al.,* 2016a). At worst, these factors could result in turnover.

Turnover is a process which can vary in duration and have multiple antecedent stages based on various reasons (Tham, 2007). For dentist leaders, the antecedent stage for a turnover intention could involve loneliness in the current leadership position, lack of support and insufficient compensation combined with an excessive number of duties (Tuononen *et al*., 2016a), inadequate time for leadership tasks (Bolin and Shulman, 2005; Tuononen *et al*., 2016a), and inadequate training for leadership (Morison and McMullan, 2013). Additionally, demand from the private sector could have an effect on the turnover of dentists working in the public sector (Roslan, 2014). Kaur (2013) described other antecedents such as the quality of work life, stress, and organizational justice. These antecedents could lead to the intention to leave (thinking of quitting, searching for something else), which can, in some cases, end in real turnover (Mobley *et al*., 1978). Tham (2007) stated that the turnover process may lack linearity; a person can oscillate between intentions to stay or leave and dither. In addition, a shortage of dentists in some countries (for example, in Finland) in recent decades has increased dentists´ options to choose how, where and when to work. Some evidence exists of turnover or unwillingness to take a leader´s post among health care leaders (Boucher, 2005; Spehar *et al*, 2012, Styhre *et al.*, 2014), but less so among dentist leaders (Alestalo and Widström, 2013; Tuononen *et al.*, 2016a; Tuononen *et al.*, 2016b).

To attract and recruit younger dentist generations to leadership positions, it is essential to familiarize younger dentists with leadership work and motivate them to seek those positions (Victoroff *et al*., 2008; 2009; Kalendrian *et al*., 2010; Skoulas and Kalendrian, 2012; Morison and McMullan, 2013). It is similarly significant to keep leaders in those positions; a loss of even one competent leader could challenge an organization. Factors which impact on seeking, staying in, and leaving a leadership position all merit investigation. This study examines factors associated with staying in a dentist leadership position.

Correspondence to: Tiina Tuononen, University of Eastern Finland, Institute of Dentistry, PO Box 1627 FI-70211 KUOPIO, FINLAND
Email: tiina.tuononen@uef.fi

Methods

Finland has about 4500 working-age dentists, split nearly equally between the public and private sectors (Finnish Dental Association, 2015). About 20% of them reported in 2014 that they had dentist subordinates (Labour market survey, 2015). In April 2014, we sent an electronic questionnaire to Finnish dentist leaders (n=309) working in the highest positions in their organizations. In smaller organizations, these were dentist leaders with other dentists and dental staff as their subordinates; in larger organizations, these were chief dentists with other dentist leaders, dentists and dental staff as their subordinates. The questionnaire was especially formulated for this study and target group to explore the circumstances of their management. To obtain more thorough information of factors associated with dentist leaders´ work, we based this questionnaire on previous literature on health care leadership and the results of earlier dentist leader studies (Alestalo and Widström, 2013; Tuononen *et al.*, 2016a). Our questionnaire was pretested on two dentist leaders and modified based on their comments.

Our participants were from the public dental services (PDS), the clinics of hospital districts, the Finnish student health service, or from private clinics and companies offering outsourced oral health care services. We obtained the contact information of all the dentists in the highest leader posts in the PDS from the Finnish Dental Association registers for 2007 and 2012 (n=266) to identify and contact dentist leaders who had left their positions since 2007. Email address lists were updated from the homepages of the PDS units and also with the help of the Finnish Dental Association. We included all PDS dentist leaders (n=249, 93%) with a current email address. Using information from individual institutes and units, we contacted dentist leaders in other organizations (n=60). The distribution of the dentist leaders in our study was similar to that in Finland. Most dentist leader posts are in the PDS. We sent email reminders three times during April and May 2014. Ethical favorable permission was not required, but participants provided informed consent by voluntarily answering the questionnaire; the data analyzed remained anonymous.

Of 171 respondents (response rate: 55%), we excluded those who had retired (15: 9%); 156 participants remained, of which 80% worked in the PDS (n=124). Based on their response to an item at the outset of the questionnaire, we categorized participants as either Leaders (78%) or Leavers; the latter had quit a leadership position but still worked as dentists.

The first section of the questionnaire investigated background information such as gender, age, experience as dentist and dentist leader, the ratio between clinical and leadership work time, population in their catchment area, numbers of dental sub-units and dentist subordinates in their organizations, leadership education, and the reason for assuming a leadership post (Table 1). Next we used 14 statements formulated to describe the everyday work of dentist leaders (Tables 2 and 3) and examining aspects of work time management and opportunities for managerial work. Statements had Likert-type answer options: never=1, seldom=2, often=3 or always=4, with participants choosing the best match to their current or the latest leadership position. Initially, we calculated the mean scores of these 14 statements from all our participants, and then separately for the Leaders and the Leavers in order to compare these groups (p-values, t-test) (Table 2). Next, we calculated the odds ratios (ORs) for the likelihood for staying. Based on these ORs, we categorized these statements as either supporting retention or influencing turnover (Table 2). We then employed principal component analysis and the varimax method to categorize these statements into five main components (Table 3). Prior to the final regression analysis, we calculated Pearson correlations between all potential confounders contributing to staying (Table 1) with significant correlations. We used leadership education, leadership work time, and the reason for assuming a leadership post in addition to age and gender, as confounders. The final multivariate logistic regression analyses investigated the association among the main components (Table 3) and the likelihood of staying as a leader (Table 4). We also ran regression models as sensitivity analyses, separately for each of the main component scores with the same confounders. These results were similar compared to our models including all the main components simultaneously; we had an exception of one main component in the full model (Model 4)—`work pressure´: OR 0.64; CI 0.41-0.98 (data not shown).

Results

Table 1 describes the background characteristics of participants in the Leader and the Leaver groups. Leaders had significantly more time for leadership work more frequently and their organizations, which had more dentists, served larger populations. In addition, more Leaders had leadership education and had begun their leadership work of their own accord. (Table 1).

The highest ORs to stay were among those who perceived that they had adequate time for leadership tasks and those who intended to stay in their position (Table 2). Differences in the score between Leaders and Leavers were significant in six of the eight statements which supported retention; all mean scores were higher among Leaders (Table 2). The only factor which significantly influenced turnover was the intent to leave the position (Table 2). While 53% of Leavers intended to leave their leadership work (options often or always), only 19% of the Leaders had this intention.

Principal component analysis grouped the questionnaire statements into five main components: `work time control possibilities´, `management development opportunities´, `work pressure´, `career intentions´, and `overwork´ (Table 3).

Higher levels of the main component score `career intentions´ associated significantly with retention (staying). The association with `work time control´ was significant when adjusted for age and gender (Model 1) or for age, gender, and leadership education (Model 3). Other significant items in Model 3 were leadership education and lower age; in Model 4, they were the higher proportion of time available for leadership work and lower age. `Work pressure´ seemed to decrease the odds of retention, even though this result was non-significant.

Table 1. Background characteristics of 156 current leaders and Leavers. The p-values refer to Pearson Chi square-test between Leaders and Leavers.

		ALL n= 156	
		Leaders	Leavers
		%	
		78	22
Gender	women	59	50
		p=0.35	
Age (years)	mean years (SD)	53.6 (7.3)	56.2 (5.9)
Missing n=1		%	
	<45	12	0
	45–54	35	36
	>54	53	64
		p=0.12	
Working experience (years)	mean years (SD)	26.9 (8.1)	29.4 (6.9)
Missing n=1		%	
	<21	19	18
	21–30	45	38
	>30	36	44
		p=0.71	
Leadership experience (years)	mean years (SD)	13.3 (8.5)	11.6 (8.6)
		%	
	<11	47	56
	11–20	34	29
	>20	19	15
		p=0.68	
Percentage of clinical worktime out of total worktime	mean % (SD)	42.3 (32.6)	67.9 (25.8)*
Missing n=1		%	
	0-25	37	12
	26–50	20	9
	51–75	24	32
	76–100	19	47
		p=0.00	
Percentage of leadership worktime out of total worktime	mean % (SD)	51.9 (32.3)	27.2 (23.6)*
Missing n=1		%	
	0-25	31	70
	26–50	27	18
	51–75	15	3
	76–100	27	9
		p=0.00	
Population in the catchment area	<20th inhabitants	41	71*
Missing n=8	20-50th	32	17
	>50th	26	12
		p=0.01	
Number of dental sub-units in organization	1	36	26
	2-4	28	47
	5 or more	36	27
		p=0.11	
Number of dentist subordinates	5 or less	29	50*
	6-15	31	35
	>15	40	15
		p=0.01	
Leadership education	Special Competence in dental leadership (SC)	41	35
		p=0.55	
	Specialized dentist (SD)	36	15*
		p=0.02	
	SC or SD or LLE[1]	76	56*
		p=0.02	
Start of leadership career	Requested	43	33*
	Drifted or demanded[2]	24	48
	Of one´s own accord	33	18
		p=0.02	

[1] Other form of substantial leadership education or administration competence (25 or more credits).
[2] Drifted by change or for the demand of the superiors

Table 2. Responses to statements regarding leadership work among Leaders and Leavers.

	Leaders	Leavers	Support for retention
	mean (SD)		OR (95 % CI)
Statements supporting retention			
I have/have had good possibilities to determine for myself how much time I can devote/would have devoted to leadership tasks	3.0 (0.8)	2.6 (0.9)	**2.0 (1.3-3.3)**
I intend/had intended to continue working in my present /previous position until the end of my working life	3.0 (0.7)	2.4 (0.9)	2.5 (1.5-4.1)
I have / had sufficient opportunities to improve my skills through training and courses	2.8 (0.6)	2.6 (0.6)	1.9 (1.0-3.6)
I am / was able to find a good balance between my clinical duties and leadership tasks	2.8 (0.8)	2.5 (0.9)	**1.6 (1.0-2.5)**
I have / had adequate time to devote to leadership tasks	2.7 (0.7)	2.2 (0.8)	**2.6 (1.4-4.9)**
I have / had sufficient opportunities to improve my leadership expertise	2.7 (0.6)	2.4 (0.7)	2.1 (1.1-3.9)
I have / had sufficient time to devote to developing how things are /were done in my work unit	2.4 (0.6)	2.3 (0.6)	1.4 (0.7-2.7)
In my organization it is / was possible to do my work out of the office by telecommuting	2.0 (0.9)	1.4 (0.8)	**2.4 (1.3-3.3)**
Statements influencing turnover			
I need /needed to take unfinished work to be done when I get / got home	2.7 (0.8)	2.8 (0.7)	0.7 (0.5-1.2)
I am experiencing / experienced pressure from the employees with respect to my leadership tasks	2.4 (0.6)	2.7 (0.7)	0.6 (0.3-1.0)
I need /needed to do work in my free time although this is/was not assessed as part of my working time	2.4 (0.8)	2.5 (0.8)	0.9 (0.6-1.4)
I intend / had intended to leave my present /previous position	2.0 (0.7)	2.5 (0.8)	**0.5 (0.2-0.7)**
I am experiencing / experienced pressure from the upper echelons of the business with respect to my leadership tasks	2.1 (0.6)	2.3 (0.8)	0.7 (0.4-1.2)
I need /needed to do work in my free time on some occasions but this I assess/assessed as part of my working time	1.7 (0.8)	1.8 (0.8)	0.9 (0.5-1.4)

Discussion

Career intentions and good work time control were the two main issues related to staying in a leadership position. Work pressure seemed to affect the decision to leave a leadership position.

In earlier research the intention to stay in or leave a position predicted the actual decision to remain or leave (Mobley *et al*., 1978; Tham, 2007). Our finding was similar. However, even among Leavers who had left their leadership work, almost had intended to continue the rest of their career in that leadership position. Only a little more than a half of the Leavers and every fifth Leader had often or always intended to leave their leadership position. We could ask what made the Leavers leave and what retained those Leaders who had intended to leave. This aspect is worth studying in the future. Therefore, it is important to highlight those factors that could support current leaders in their everyday work to stay in their positions. Likewise, we need to clarify those factors that could activate the turnover process.

Factors significantly supporting staying were opportunities to determine how much time to devote to leadership work, opportunities to balance clinical and leadership duties, as well as adequate time for leadership tasks. Earlier studies (Bolin and Shulman, 2005; Tuononen *et al*., 2016a) have similarly showed that the balance between clinical and leadership work is important. Furthermore, an association exists between turnover intentions and the lack of time available for leadership duties. In Bolin and Shulman's (2005) study, almost three quarters of dentists with administrative duties had either inadequate, or a total lack of, administrative time in their schedules. The work of dentist leaders in a smaller or medium-size organization is generally divided into clinical and leadership work, although clinical work usually occupies most of their time.

Full-time dentist leaders work in larger organizations. Full-time leadership appeared rather uncommon in these Finnish leaders, but its proportion seemed to have increased during the past decade, probably because of municipality mergers. According to Alestalo and Widström (2013), between 2003 and 2011, full-time leaders increased from 10% to 17%. In our study, 12% of participants were full-time leaders, and about 20% used 90% or more of their work time for leadership.

Lower age and leadership education seemed to support staying. Leavers´ mean age was higher and they had leadership education less often than Leaders. Some Leavers were close to retirement; perhaps, they wanted, or were forced, to change their work place or position in their remaining working years. Alestalo and Widström

Table 3. Principal component analysis of the statements of work time management, time use possibilities, work pressure, and future career intents.

MANAGEMENT FACTORS		Component				
		1	2	3	4	5
WORK TIME CONTROL OPPORTUNITIES	In my organization it is / was possible to do my work out of the office by telecommuting	**0.720**	0.042	0.096	-0.019	0.291
	I am / was able to find a good balance between my clinical duties and leadership tasks	**0.654**	0.061	-0.030	0.151	-0.419
	I have/have had good possibilities to determine for myself how much time I can devote/would have devoted to leadership tasks	**0.652**	0.241	-0.107	0.177	-0.066
	I have / had adequate time to devote to leadership tasks	**0.622**	0.351	-0.178	0.221	-0.291
DEVELOPMENT OPPORTUNITIES FOR MANAGEMENT	I have / had sufficient opportunities to improve my leadership expertise	0.100	**0.904**	-0.004	0.061	0.046
	I have / had sufficient opportunities to improve my skills through training and courses	0.148	**0.834**	-0.132	0.064	-0.043
	I have / had sufficient time to devote to developing how things are /were done in my work unit	0.478	**0.546**	-0.055	-0.016	-0.089
WORK PRESSURE	I need /needed to do work in my free time although this is/was not assessed as part of my working time	0.160	0.018	**0.778**	0.088	0.141
	I am experiencing / experienced pressure from the employees with respect to my leadership tasks	-0.241	-0.034	**0.681**	-0.188	-0.153
	I am experiencing / experienced pressure from the upper echelons of the business with respect to my leadership tasks	-0.373	-0.134	**0.667**	0.125	-0.126
	I need /needed to take unfinished work to be done when I get / got home	0.245	-0.196	**0.667**	-0.178	0.422
CAREER INTENTIONS	I intend/had intended to continue working in my present /previous position until the end of my working life	0.027	0.073	0.071	**0.905**	-0.048
	I intend / had intended to leave my present/previous position	0.221	0.039	-0.122	**0.851**	-0.010
OVERWORK	I need /needed to do work in my free time on some occasions but this I assess/assessed as part of my working time	-0.089	-0.003	0.002	-0.003	**0.808**
Cumulative variance explained (%) (Initial Eigenvalues)		26.5	40.1	51.2	59.9	67.6

Table 4. Logistic regression models predicting staying as a leader.

MANAGEMENT FACTORS	OR (95 % CI)			
	Model 1	Model 2	Model 3	Model 4
WORK TIME CONTROL OPPORTUNITIES	**2.1 (1.3-3.5)**	1.7 (0.9-3.0)	**2.2 (1.3-3.7)**	1.6 (0.8-2.9)
DEVELOPMENT OPPORTUNITIES FOR MANAGEMENT	1.4 (0.9-2.3)	1.1 (0.7-1.9)	1.2 (0.7-2.0)	1.0 (0.6-1.8)
WORK PRESSURE	0.9 (06-1.3)	0.7 (0.4-1.1)	0.9 (0.5-1.3)	0.7 (0.4-1.1)
CAREER INTENTIONS	2.7 (1.7-4.3)	2.9 (1.7-4.6)	2.7 (1.7-4.4)	2.8 (1.7-4.7)
OVERWORK	1.0 (0.6-1.5)	0.9 (0.6-1.5)	1.0 (0.6-1.5)	1.0 (0.6-1.6)
Hosmer and Lemeshow Test	p=0.54	p=0.35	p=0.51	p=0.35

Model 1: Adjusted for age and gender
Model 2: Model 1 and adjusted for proportion of leadership time out of total time
Model 3: Model 1 and adjusted for leadership education
Model 4: Model 2 and adjusted for leadership education and the reasons for starting leadership position

(2013) found that the average age of dentist leaders in Finland had significantly increased during previous years. Half their participants in 2003 and nearly three quarters in 2011 were aged 50 or older. A similar tendency existed in our study; 80% of the participants were aged 50 or more, with a mean age of 54.2. Dentist leaders are ageing; new leader generations are necessary.

The importance of leadership education during dentist graduation studies in raising younger dentists´ interest in leadership work was highlighted in studies among dentist students and postdoctoral dentist students (Victoroff *et al*., 2008; 2009; Kalenderian *et al*., 2010; Skoulas and Kalenderian, 2012) as well as in the dentist leader study of Morison and McMullan (2013). Willingness to be a leader could evolve gradually during life and work experience; this factor is important even at lower levels in supporting leader retention (Tuononen *et al*., 2016b). Therefore, it would be beneficial to familiarize younger dentists with leadership work in the early stages of their careers. Similarly, the opportunity to improve one´s leadership expertise during a leadership career supports staying in a leadership position. Participants in Morison and McMullan's (2013) study valued leadership training for dentists in leadership positions.

Our participants were from both the public and private sectors and from different organizations. Most were working in the PDS, reflecting the distribution of dentist leaders in Finland; only a minority work outside the PDS. Therefore, these results can be generalized to dentist leaders in Finland and other Scandinavian countries, with their similar health care systems. A limitation of the study is the cross-sectional design, which allows no causal inferences. In addition, quantitative, often questionnaire-based, studies such as ours can take only limited issues into account; residual confounding is always a problem. However, the statement pattern we used seemed to function well, and principal component analysis yielded five clear main components well connected to the work of dentist leaders. Future research with qualitative or mixed methods would be useful in order to describe dentist leaders' subjective experiences of being a leader or leadership work. The statement pattern was used for the first time. It included parts of earlier questionnaires but was specially modified to this target group to describe the circumstances of the management work of health care leaders. The questionnaire was pretested on two dentist leaders and improved with their comments.

One target of governments in many ageing societies has been to prolong working careers. Work as a dentist leader is not physically as hard as the work of a practising dentist. Organizations would benefit from being able to retain their highly educated and experienced leaders. Dentist leadership work has not yet proved to be attractive to younger dentists. In the future, it is important to study the profession and careers of dentist leaders by including qualitative methods. It would also be interesting to replicate this study among other health care leaders.

Conclusion

Leaders have important roles in health care: ensuring everyday operations, as well as developing their organizations to meet future challenges. Therefore, knowledge of the supporting factors is crucial in enabling dentist leaders and their organizations to improve their working conditions, in order to recruit and retain motivated and competent persons in these crucial positions. In addition, well-designed education is crucial to inspire and encourage future leaders.

Acknowledgements:

The authors wish to acknowledge the study participants, the Finnish Dental Association and the Finnish Dental Society. A research grant (019114) from the Finnish Dental Society in 2015 supported this research (TT). We thank Gerald Netto of the University of Eastern Finland for his language revision of this text.

References:

Alestalo, P. and Widström, E. (2011). Lead Public Health Service Dentists in Finland: Leaders or Dentists? *Oral Health and Dental Management* **10**, 55-63.

Alestalo, P. and Widström, E. (2013). Lead dentists in the public dental service in Finland during a major reform. *Oral Health and Dental Management* **12**, 166-173.

Bevins F. (2013). Making time management the organization's priority. *McKinsey Quarterly,* January 2013. HYPERLINK "http://www.mckinsey.com/business-functions/organization/our-insights/making-time-management-the-organizations-priority"

Bolin, K. A. and Shulman, J. D. (2005). Nationwide survey of work environment perceptions and dentists' salaries in community health centers. *Journal of the American Dental Association* **136**, 214-220.

Boucher, C.J. (2005). To be or not to be . . . a manager: the career choices of health professionals. Australian Health Review: *A Publication of the Australian Hospital Association* **29**, 218-225.

Finnish Dental Association (2015). http://www.hammaslaakariliitto.fi/fi/liiton-toiminta/tutkimukset-ja-tilastot/hammaslaakarien-lukumaaraennuste

Kalenderian, E., Skoulas, A., Timothe, P. and Friedland, B. (2010). Integrating leadership into a practice management curriculum for dental students. *Journal of Dental Education* **74**, 464-471.

Kaur, B., Mohindru, Pankaj. (2013) Antecedents of Turnover Intentions: A Literature Review. *Global Journal of Management and Business* **3**, 1219-1230

Labour market survey 2015 by the Finnish Dental Association (2015). http://www.hammaslaakariliitto.fi/sites/default/files/mediafiles/liiton_toiminta/tmt2015_nettiin.pdf

Mobley, W. H., Horner, S. O. and Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology* **63**, 408-414

Morison, S. and McMullan, C. (2013). Preparing for the future: Challenges and opportunities for management and leadership skills. *British Dental Journal* **214**, E2

Roslan, J., Noor Hazilah, A., Nor Filzatun, B. and Azahadi, M. (2014). Turnover intention among public sector health. workforce: Is job satisfaction the issue? *The International Medical Journal Malaysia* **13**, 51-56.

Skoulas, A. and Kalenderian, E. (2012). Leadership training for postdoctoral dental students. *Journal of Dental Education* **76**, 1156-1166.

Spehar, I. (2012), Clinicians' experiences of becoming a clinical manager: a qualitative study. *BMC Health Services Research* **12**, 421-421.

Styhre, A., Roth, A., Roth, J. (2016). Who will lead the physicians unwilling to lead? Institutional logics and double-bind situations in health care leadership. *Leadership & Organization Development Journal* **37**, 325-340.

Tham, P. (2006) Why Are They Leaving? Factors Affecting Intention to Leave among Social Workers in Child Welfare. *British Journal of Social Work* **37,** 1225-1246.

Tuononen, T., Suominen, A. L. and Lammintakanen, J. (2016a). Factors associated with staying or leaving a dentist leader's position - a qualitative study. *BMC Oral Health,* **16**, 50-016-0206-z. doi:10.1186/s12903-016-0206-z

Tuononen, T., Lammintakanen, J. and Suominen, A. L. (2016b). Career anchors of dentist leaders. *Acta Odontologica Scandinavica* **74**, 487-493.

Victoroff, K. Z., Schneider, K. and Perry, C. (2008). Leadership development for dental students: What do students think? *Journal of Dental Education* **72**, 982-988.

Victoroff, K. Z., Schneider, K. and Perry, C. (2009). Tomorrow's leaders, starting today: A pilot leadership development program for dental students. *Journal of Dental Education* **73**, 311-318.