



Taking action to improve health for all

Assessment of the Relationships between R.I.G.H.T. Leader Behavior, Organizational Silence, Work Engagement, and Extra Role Behaviors in Hospitals

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This study is based on the doctoral dissertation of the first author at Ankara University, Department of Health Management.



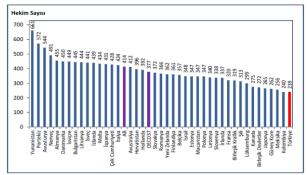
TUBITAK financial support was provided for conference participation



What kind of country did the data for this study come from? Let's Think on it

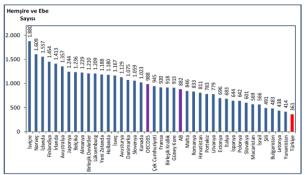


International Comparison of Total Number of Physicians per 100,000 People, 2022



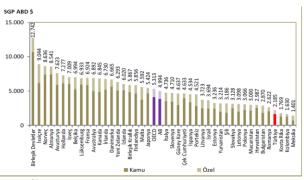
Kaynak: Sağlık Hizmetleri Genel Müdürlüğü, OECD Health Data 2024, EUROSTAT Veri Tabanı Not: Türkiye verisi 2023 yılına aittir. Ülke verileri 2022 yılına veya en yakın yıla aittir.

International Comparison of Number of Nurses and Midwives per 100,000 People, 2022



Kaynak: Sağlık Hizmetleri Genel Müdürlüğü, OECD Health Data 2024, EUROSTAT Veri Tabanı Not: Türkiye verisi 2023 yılına aittir. Ülke verileri 2022 yılına veya en yakın yıla aittir.

International Comparison of Current Health Expenditure per Capita, SGP US\$, 2022



Kaynak: TÜİK, OECD Health Data 2024 Not: Türkiye verisi 2023 yılına aittir. Ülke verileri 2022 yılına veya en yakın yıla aittir.



Country success comparison of 169 countries (calculated 2025 by 8 and 15 criteria) (Kaklauskas et al. 2022)

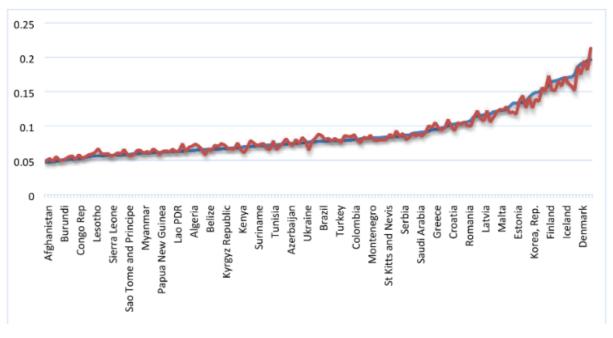


Fig. 3. Country success comparison of 169 countries (calculated by 8 and 15 criteria).

Besides, Turkey's covid case fatality rate remained below 0.6%. This is better than many developed European countries.

Worldometer, 2024

0.9% İnfant Mortality Rate 77 Life Expentancy WB, 2025

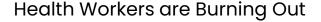


Why Extra Role Behavior in Healthcare Workers is Worth Investigating?

- Being a labor-intensive sector and simultaneous production and consumption requires workers to do more than expected
- It requires service delivery that requires cooperation and solidarity
- Staff numbers are far below the OECD average, forcing them to do more than expected.
- Given its mission, vocational and on-the-job training is important as it contributes to a culture of cooperation and solidarity.
- It can facilitate orientation in areas with high staff turnover.
- Individual initiative by people with expertise can trigger innovations and improvements.



Why is it Important for Hospital Organizations to be Psychologically Healthy?



Health Workers Quit Their Jobs

Health Workers Are Subjected to Hierarchical Mobbing

Health Workers Live in an Environment with Physical and Mental Challenges

Communication or Role Related Aspects Negatively Affect Collaboration

Recognition and Career Development Opportunities Stand Out in Increasing Motivation

(Willis-Shattuck et al., 2008; Keyko, 2016; Garth et al., 2018; Bordignon and Monteiro, 2019; Liu et al., 2019; Bayın Donar and Yeşilaydın, 2022; Poon et al., 2022 ; Zarei et al., 2024)



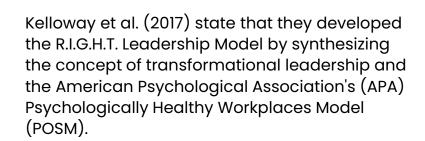


One of the basic requirements of social organizations, including health institutions, that want to survive is the leadership process (Kalkman, 1953).





R.I.G.H.T. Leadership





Recognition (Farkında Olma)



Involvement (Katılım)



Growth & Development (İlerleme ve Gelişme)



Health and Safety (Sağlık ve Güvenlik)



Team Work (Takım Çalışması)



Systematic reviews suggest that the relationship between leadership that promotes psychologically healthy workplaces and extra role behavior is worth examining (Yao et al., 2021).

However, it is unclear how this interaction will take place. Due to the nature of the concepts, leadership and extra role behavior are closely related to some other common concepts in theory and practice.

This study aims to shed light on this relationship and increase the limited evidence by controlling the role of concepts such as organizational silence and work engagement, which are considered to be very important for hospitals and are at the intersection of these concepts in theory.







Type

The research is a correlational and cross-sectional descriptive study. It is also a methodological research with a partial scale adaptation.

Population

Hospital	Popu	lation	Sample				
Hospital	Physician	Nurse	Physician	Nurse			
Education Research Hospital	333	752	77	172			
Private Hospital	50	69	17	41			
TOTAL	383	821	94	213			
Adaptation Study (University Hospital)	724	705	84	92			

Data Collection Tools

Measurements in the research were made in 7-point Likert type.

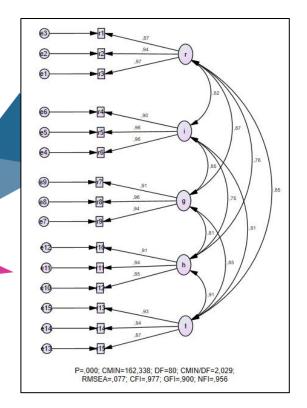
R.I.G.H.T Leadership Scale (Biricik Gulseren et al., 2021). Organizational Silence Scale (van Dyne et al., 2003) Work Engagement Scale (Schaufeli et al., 2006) Extra Role Behavior Scale (Spector et al., 2010)

Data Analysis

SPSS 25.0, Process Macro 4.1 and AMOS 25 programs were used for data analysis. Descriptive statistics, scale averages and normal distribution evaluations were made. The construct validity of the R.I.G.H.T. Leadership Scale was tested with confirmatory factor analysis. In mediation analysis, Baron and Kenny's (1986) method and Bootstrap method were applied at 95% confidence level.

EFA and CFA Results of R.I.G.H.T. Leadership Scale





Kaiser-Meyer-Olkin Measu	ire of Sampl	ling Adequac	v		0,948						
				Appx. Chi-Square							
Bartlett's Test of Sphericity	7		df								
1 ,			Sig.		0						
Factor Load Range			-1-2		0,633 - 0,849						
Total Variance Explained				%	90,6						
•				•	1,094 -						
Covariance Matrix Based I	Eigenvalues				38,348						
		Factor Load	ings of Items		•						
Items	1	2	3	4	5						
Recognition 2			0,781								
Recognition 1			0,739								
Recognition 3			0,730								
Involvement 1		0,816									
Involvement 2		0,802									
Involvement 3		0,738									
Growth and Development 3				0,729							
Growth and Development 2				0,718							
Growth and Development 1				0,608							
Health and Safety 2	0,849										
Health and Safety 3	0,812										
Health and Safety 1	0,688										
Team Work 3					0,694						
Team Work 1					0,648						
Team Work 2					0,633						

Method: Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

+ Measurement Invariance - Configural, Metric, Scalar, Strict

Corelations and Measurements



Variables	Mean	ss.	1	1.1	1.2.	1.3	1.4	1.5	2	2.1	2.2	2.3	3	3.1	3.2
1. R.I.G.H.T. Leadership	4.77	1.42	1												
1.1. Recognition	4.73	1.63	,884	1											
1.2. Involvement	4.44	1.69	,878	,731	1										
1.3.Growth &Development	4.78	1.60	,931	,810	,780	1									
1.4. Health & Safety	4.98	1.47	,841	,632	,638	,729	1								
1.5. Teamwork	4.91	1.59	,915	,745	,736	,822	,773	1							
2. Organizational Silence	3,19	1.06	-,12*	ad	-,185	- ,11*	ad	ad	1						
2.1 Acquiescent Silence	2.86	1.32	-,14 [*]	-,12*	-,221	-,13*	ad	ad	,730	1					
2.2. Defensive Silence	2.56	1.18	- ,153	-,12*	-,235	-,13*	ad	-0,102	,808,	,622	1				
2.3. Prosocial Silence	4.45	1.70	ad	ad	ad	ad	ad	ad	,693	,120*	,270	1			
3. Work Engagement	4.78	1.46	,322	,334	,287	,303	,243	,259	ad	- ,149	ad	,153	1		
3.1. Vigor	4.49	1.56	,309	,325	,298	,292	,213	,238	ad	- ,151	ad		,910	1	
3.2. Dedication	5.06	1.54	,297	,299	,250	,280	,253	,241	ad	<mark>-,159</mark>	ad	,143*	,945	,791	1
3.3. Absorption	4.78	1.62	,291	,309	,251	,274	,213	,244	ad	ad	ad	,173	,934	,750	,848
4. Extra Role Behavior	5.20	1.20	,198	,189	,226	,155	,147*	,160	ad	- ,177	-,13*	,139*	<mark>,490</mark>	,418	,460

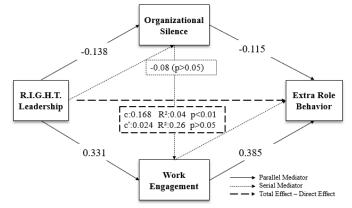


Sample ANOVA Test

Variabl	les	N	RIG L		Recog		Involv nt		Grov and Develo	d opm	Heal and Safe	d	Team k	wor	Or Siler	_	Accept Defen Siler	sive	WI	E	Vigo	or	Dedic	ation	Absor	ption	Ext Ro Beha	le
			χ¯	s	χ¯	S	χ¯	S	χ¯	S	χ¯	S	χ¯	S	x	S	χ¯	S	χ¯	S	χ¯	S	χ¯	S	χ¯	S	χ¯	S
Satisfa	Satisfaction with Working in the Organization																											
Satisfie	ed	10 8	5,48	1,1	5,59	1,1	5,13	1,5	5,56	1,2	5,49	1,3	5,63	1,3	3,26	1,2	2,61	1,3	5,56	1,2	5,39	1,4	5,76	1,3	5,51	1,3	5,44	1,2
Partiall	ly	15 8	4,54	1,4	4,51	1,6	4,26	1,6	4,53	1,6	4,76	1,5	4,61	1,6	3,18	1,0	2,55	1,2	4,63	1,3	4,25	1,3	4,94	1,4	4,67	1,5	5,15	1,2
Not Satisfie	ed	41	3,82	1,4	3,31	1,7	3,35	1,8	3,70	1,7	4,52	1,6	4,21	1,6	3,11	1,0	2,54	1,0	3,33	1,5	3,05	1,6	3,69	1,7	3,24	1,6	4,81	1,2
ANOV.	A Tes	t(p)	0,0	01	0,00)1	0,00)1	0,00	1	0,00	1	0,00)1	0,68	35	0,90)1	0,00)1	0,00	1	0,0	01	0,00)1	0,0	12
Post Ho	oc	Ü	1,2	,3	1,2,	3	1,2,	3	1,2,	3	1,2,	3	1,2,	3					1,2,	3	1,2,	3	1,2	2,3	1,2,	3	1,2	2,3

Parallel and Serial Mediation Analysis Findings





-		_												
Predictors	•	os		•	WE		•	ERB		ERB				
Predictors	b	LLCI	ULCI	ь	LLCI	ULCI	ь	LLCI	ULCI	ь	LLCI	ULCI		
R.I.G.H.T. Leadership (RL)	-0,138*	-0,23	-0,04	,331*	0,22	0,44	0.168*	0.07	0.24	0.024#	06	0.11		
Organizational Silence (ÖS)				-0.08#	<u>-0,21</u>	<u>0,05</u>				-0.115*	-0.216	-0.01		
Work Engagement (WE)	•	•							•	0.385*	0.30	0.47		
		$R^2 = 0.03$			R2=0,10			R ² =0,04			$R^2=0,26$			
RL - ERB		Unstan	. E (b)	Boot	LLCI		BootULCI	[Stand. E (β)		SOBEL 3			
Direct Effect		0,0	0,024#		,06		0,11			30*				
OS Indirect Effect		0,01	15*	0,	00		0,03		0,0	18*	-2,043 (0,040)			
WE Indirect Effect	0,12	27*	0,	07		0,18		0,1	50*	3,267 (0,001)				
OS-WE Serial Indirect Effect (0.00	04#	<u>-0</u>	.00	•	0.01		0,005#		0,861 (0,	,388)^			
Total Effect	0,10	58*	0,	07		0,26		0,19	98*					
C1	-0.1	11*	-0	.17	•	-0.05		13	31*					





The study concluded that leadership behaviors play a significant role in healthcare professionals' extra-role behaviors. However, based on the findings, this influence is indirect and mediated by other concepts, similar to the evidence in the literature.

In this context, it is crucial for physician and nurse leaders to be aware of their employees' abilities and talents, to utilize their abilities, knowledge, and skills when making decisions, and to support their development and advancement.





This is essential for enhancing employees' job engagement. Because this situation can also encourage them to go beyond their job descriptions and exert effort towards their colleagues, patients, and the organization.

Therefore, it is recommended that managers be aware of the R.I.G.H.T. leadership concepts and exhibit behaviors accordingly, and that various policies and educational programs be implemented to support this.



THANK YOU



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A Subspecialty in Medical Administration: A National Case Study in Physician Leadership Training

Yoel Angel, MD, MBA







No conflict of interests



The Research Team



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Background



Israeli Healthcare Landscape (2023)

Figure 1.7. Life expectancy and health expenditure

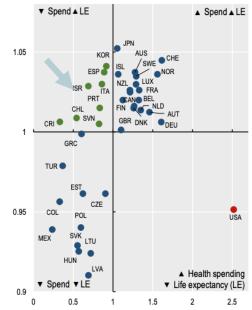
Palulation: ~10 Million

Universal Health

Hybrid Healthcare System

33,000 physicians (3.57 / 1000 persons)

Health expenditure: 7.2% of GDP



Source: OECD Health at a Glance 2023



Healthcare Leadership

e Israeli healthcare system, many senior positions are held by pician-administrators

Israel is the only country with a recognized **subspecialty** in Medical Administration, which since 2013 is required to fill senior roles

Many other OECD countries offer training programs – but they are voluntary, of varying duration, and intended for a diverse audience



Objective of the Medical Administration Subspecialty

to fulfill managerial roles in the healthcare system.

These span across multiple dimensions such as interpersonal leadership, data analysis, decision making and more"



The Medical Administration Subspecialty

- srseen by the Scientific Council of the Israel Medical Association
- Requires a base specialty and an advanced degree (MPH / MHA / MBA)
- **Decentralized** any approved healthcare institution with >2 specialists may train residents
- **2 year training** in a management position, including 6-month rotation in another (category of) institution
- Includes written and oral board exams covering Health Economics, epidemiology, state laws and regulations and more





980s 990-1991 1992

1999

2013

2015

First management training for physicians offered by Haifa University

Subspecialty in Medical Administration recognized by the MoH

"Founders of the field" declared

First board examinations conducted

Examinations and curriculum revised

Ministry of Health mandates Medical Administration Subspecialty to apply for Director or Deputy Director of hospitals / HMOs

"Inbar" program for healthcare leadership launched



Study Objectives

describe the development of the subspeciality in Medical administration in Israel.

describe the characteristics of the specialists in Medical Administration in Israel.



Methods

More database was queried to identify all specialists in Medical

Administration

pata on base specialties, time of certification, residence were analyzed

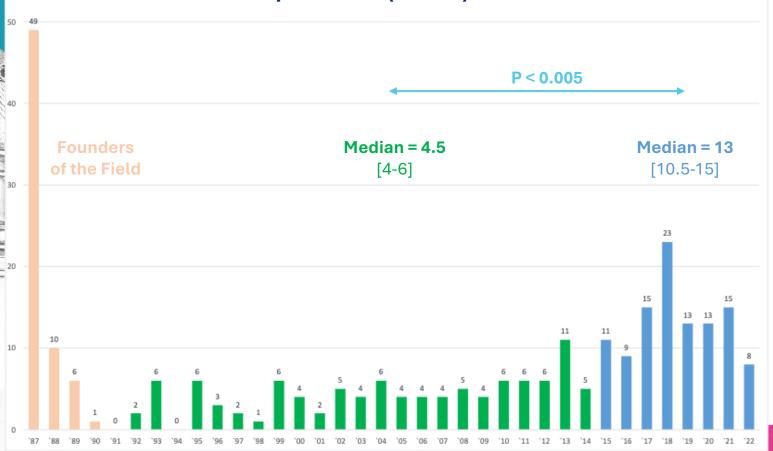




Results

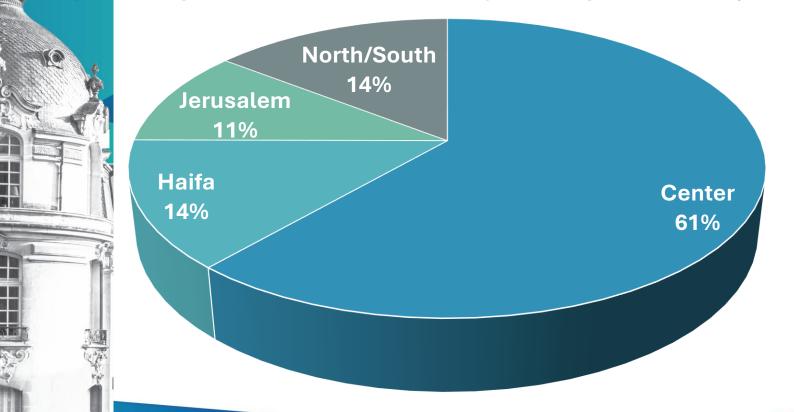








Only 14% of specialists reside outside major metropolitan areas (N=277)





Conclusions

It works! A subspecialty in Medical Administration is a feasible and effective mechanism for large-scale leadership training at a national level

Equity gap: under-representation of specialists coming from peripheral areas and some base specialties



Limitations

Despiptive data only, without a control group

mited data available on public MoH website

Data excludes deceased specialists



Areas for future research

Do ganizations lead by specialists in Medical Administration outperform those run by others?

Why do physicians pursue this specialty and how does it affect their career



THANK YOU



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