TO PUBLISHED ONLINE ONLY

Table 1. Descriptive statistics and correlation matrix

	Variables	Mean	S.D.	Correlations													
				1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1	Knowledge sharing	0.00	0.97	1													
2	Public official	0.67	0.46	0.10***	1												
3	*Sexenio*	0.85	0.35	0.02	0.44***	1											
4	Gender	0.62	0.48	–0.22	0.12***	0.01	1										
5	Dedication	0.95	0.20	–0.00	0.30***	0.31***	0.05	1									
6	Age	30.31	9.54	0.12***	0.63***	0.29***	0.15***	0.10***	1								
7	Arts-Humanities	0.12	0.32	–0.09**	0.06	–0.01	–0.02	0.03	0.09**	1							
8	Sciences	0.41	0.49	0.13***	0.10***	0.07	0.04	0.06	0.08**	–0.31***	1						
9	Social-Legal Science	0.22	0.41	–0.08**	–0.05	–0.02	–0.13***	–0.03	–0.13***	–0.20***	–0.45***	1					
10	Health Science	0.06	0.23	0.06	–0.06	0.01	–0.04	–0.12***	0.061	–0.09**	–0.21***	–0.13	1				
11	Architecture-Engineering	0.16	0.37	–0.05	–0.06	–0.04	0.16***	0.00	–0.09**	–0.016***	–0.37***	–0.24***	–0.11***	1			
12	Extrinsic motivation	0.00	1	–0.02	0.00	0.03	–0.05	0.04	–0.10***	–0.03	–0.07	0.09**	0.02	0.014	1		
13	Intrinsic motivation	0.00	1	0.14***	0.05	0.11***	0.02	0.05	0.01	0.05	0.04	–0.03	–0.00	–0.063	0.000	1	
14	Knowledge-oriented leadership	0.00	0.97	0.70***	0.020	0.03	–0.06	–0.07	–0.01	–0.01	–0.00	0.04	0.03	–0.063	0.04	0.17***	1

*** $p < 0.010$; ** $p < 0.05$

Table 2. The effect of motivation and leadership on knowledge sharing

	Model I		Model II	
	β	*t*	β	*t*
(Constant)		–0.159		–1.546
Public official	0.136*	1.819	0.065	1.258
Sexenio	–0.084	–1.288	–0.084*	–1.857
Gender	–0.076	–1.353	–0.040	–1.043
Dedication	–0.070	–1.174	0.000	–0.003
Age	0.031	0.444	0.040	0.823
Arts-Humanities	0.036	0.579	0.061	1.436
Sciences	0.183***	2.651	0.195***	4.118
Health Science	0.129**	2.205	0.097***	2.416
Architecture-Engineering	0.051	0.762	0.070	1.526
Extrinsic motivation			–0.063*	–1.615
Intrinsic motivation			0.023	0.584
Knowledge-oriented leadership			0.714***	18.518
R^2	0.064		0.568	
R^2 *Adjusted*	0.036		0.551	

F	2.335**	33.463***

***p < 0.01; ** p < 0.05; * p < 0.1

Table 3. Robustness analysis: the effect of motivation and leadership on scientific knowledge sharing by scientific areas

	Arts-Humanities		Sciences		Social-Legal Science		Architecture-Engineering	
	Beta	*t*	Beta	*t*	Beta	*t*	Beta	*t*
(Constant)		–0.379		1.183		–1.976		0.832
Public official	0.184	1.080	0.065	0.674	–0.013	0.144	0.095	0.831
Sexenio	–0.182	–1.215	–0.051	–0.602	–0.149	–1.607	0.045	0.449
Gender	0.168	1.062	–0.044	–0.687	–0.018	–0.247	–0.111	–1.212
Dedication	0.058	0.360	–0.070	–0.955	0.095	1.237	–0.135	–1.383
Age	–0.094	–0.484	–0.023	–0.260	0.102	1.131	0.003	0.025
Extrinsic motivation	0.038	0.235	0.068	1.044	–0.114	–1.442	–0.179*	–1.887
Intrinsic motivation	–0.017	–0.120	0.101	1.560	0.020	0.259	–0.024	–0.260
Knowledge-oriented leadership	0.795***	5.736	0.678***	10.362	0.770***	10.496	0.685***	7.181
R^2	0.646		0.512		0.623		0.609	
R^2 *Adjusted*	0.517		0.482		0.582		0.548	
F	5.02***		16.56***		15.076***		10.105***	

***p < 0.01; ** p < 0.05; * p < 0.1

Health Science is not analysed because of small simple size.

APPENDIX I

Table A1. Confirmatory factor analysis for knowledge sharing

Items	Com.	Factor load	Cronbach'salpha
My research team members always share their knowledge and experience with the rest	0.88	0.939	0.957
My research team members always give their knowledge to others	0.86	0.931	
My research team members always look for synergies in order to facilitate others' work	0.74	0.863	
My research team members always share with each other their research results (new articles, projects, etc.)	0.74	0.860	
Eigenvalue		43.424	
Total % explained variance		80.881	
Kaiser–Meyer–Olkin		0.863	
Bartlett's test of sphericity		2555.261***	

Table A2. Exploratory factor analysis for motivation

Items	Com.	Factor load 1	Factor load 2	Cronbach's alpha
I research for research merits	0.70	**0.836**	0.031	0.733
I research for financial rewards	0.57	**0.752**	–0.085	
I research for promotion	0.60	**0.749**	0.199	
I research for my own prestige	0.52	**0.615**	0.383	
I research for my own personal satisfaction	0.73	0.093	**0.851**	0.645
Research is part of my activity	0.66	0.053	**0.834**	
Eigenvalue		2.473	1.357	
Total % explained variance			81.350	
Kaiser–Meyer–Olkin			0.683	
Bartlett's test of sphericity			895.77***	

Table A3. Confirmatory factor analysis for knowledge-oriented leadership

Items	Com.	Factor load	Cronbach's alpha
The leader of the research team promotes learning from the experience, tolerating mistakes up to a certain point	0.79	0.928	0.945
The leader of the research team is accustomed to assuming the role of knowledge leader, which is mainly characterized by openness, tolerance to mistakes and mediation for the achievement of team objectives	0.86	0.890	
The leader of the research team fosters an environment for the responsible behaviour of the research team members	0.79	0.889	
The leader of the research team rewards members who share and apply their knowledge	0.66	0.881	
The leader of the research team promotes the acquisition of external knowledge	0.78	0.810	
Eigenvalue		4.10	
Total % explained variance		77.537	
Kaiser–Meyer–Olkin		0.899	
Bartlett's test of sphericity		1919.176***	