## **Online Supplement for**

Fürst, S., Volk, S. C., Schäfer, M. S., Vogler, D., & Sörensen, I. (2022). Assessing changes in the public communication of higher education institutions: A survey of leaders of Swiss universities and colleges. *Studies in Communication Sciences (SComS)*, 22(3), 515–534. https://doi.org/10.24434/j.scoms.2022.03.3489

Table 5: Sample description of surveyed leaders (n = 196) in Swiss HEI, differentiated by type of HEI

HEI type Ge		ıder		ge	Working years	at rectorate	Prior experience in HEI		
	Female	Male	M	SD	M	SD	No	M	
Universities of applied sciences (UAS)	27.1 %	72.1 %	54.9	6.1	2010	5.2	39.1 %	60.9 %	
Colleges of education (CE)	36.4 %	63.3 %	51.6	5.9	2013	3.9	47.1 %	52.9 %	
Research universities (RU)	22.6 %	77.4 %	57.6	4.8	2013	4.4	31.3 %	68.8 %	

Notes: M = arithmetic mean; SD = standard deviation; UAS = Universities of applied sciences (n = 130 leaders); CE = Colleges of education (n = 34 leaders), RU = Research universities (n = 32 leaders).

Table 6: Differences in perceived changes in HEI communication across types of HEIs

Dimension	Item	All	Universities of applied sciences (UAS)	Colleges of education (CE)	Research universities (RU)	
		M	M (SD)	M (SD)	M (SD)	
Intensification	The department has received more personnel and financial resources	4.2 (1.4)	4.1 (1.5)	4.2 (1.4)	4.5 (1.2)	
Intensification	The department produces more output	4.0 (1.3)	4.0 (1.3)	4.1 (1.2)	3.9 (1.2)	
Diversification	The department uses more communication channels	5.1 (1.0)	5.0 (1.1)	5.1 (.7)	5.4 (.8)	
Diversification	The number of target groups important to the HEI has increased	4.1 (1.4)	4.1 (1.5)	4.0 (1.2)	4.2 (1.4)	
Professionalization	More employees of the department have had vocational training in the field of communication	4.1 (1.3)	3.9 (1.4)	4.5 (1.1)	4.3 (1.1)	
Professionalization	The department has an increasing influence on how HEI members communicate publicly	3.7 (1.3)	3.7 (1.3)	3.8 (1.4)	3.7 (1.4)	
Increasing strategic alignment	The department is increasingly guided by communication strategies and plans	4.2 (1.3)	4.1 (1.3)	4.6 (1.0)	4.0 (1.2)	
Increasing strategic alignment	The department has more influence on strategic decisions of the HEI	2.7 (1.4)	2.6 (1.4)	2.9 (1.3)	2.7 (1.5)	

Notes: M = arithmetic mean; SD = standard deviation; UAS = Universities of applied sciences (n = 130); CE = Colleges of education (n = 34), RU = Research universities (n = 32). Measurements on a seven-point scale ranging from 0 = "not at all" to 6 = "very much". Kruskal-Wallis nonparametric test revealed no significant differences.

Table 7: Pearson correlations between items of the "perceived changes in HEI communication" index

Dimension	Item	I1	<b>I2</b>	D1	D2	P1	P2	S1	S2
Intensification	The department has received more personnel and financial resources (I1)	1	.30***	.28***	.14	.32***	.17*	.24***	.23***
Intensification	The department produces more output (I2)	.30***	1	.44***	.28***	.26***	.29***	.40***	.31***
Diversification	The department uses more communication channels (D1)	.28***	.44***	1	.32***	.28***	.37***	.48***	.13
Diversification	The number of target groups important to the HEI has increased (D2)	.14	.28***	.32***	1	.38***	.42***	.51***	.21**
Professionalization	More employees of the department have had vocational training in the field of communication (P1)	.32***	.26***	.28***	.38***	1	.32***	.42***	.22**
Professionalization	The department has an increasing influence on how HEI members communicate publicly (P2)	.17*	.29***	.37***	.42***	.32***	1	.50***	.44***
Increasing strategic alignment	The department is increasingly guided by communication strategies and plans (S1)	.24***	.40***	.48***	.51***	.42***	.50***	1	.41***
Increasing strategic alignment	The department has more influence on strategic decisions of the HEI (S2)	.23***	.31***	.13	.21***	.22***	.44***	.41***	1

Notes:  $*p \le .05$ ,  $**p \le .01$ ,  $***p \le .001$ . These eight items form an index of "perceived changes in HEI communication" with a satisfactory Cronbach's alpha value (= .79) and also a satisfactory Spearman-Brown coefficient (= .75).

Table 8: Perceived changes in HEI communication departments: Comparison of assessments by HEI leaders and HEI communicators

		<b>HEI leaders</b>			HEI	HEI communicators		
Dimension	Item	N	M	SD	N	M	SD	
Intensification	The department has received more personnel and financial resources	194	4.2	1.4	135	3.5	1.7	
Intensification	The department produces more output	195	4.0	1.3	135	4.7	1.3	
Diversification	The department uses more communication channels	195	5.1	1.0	134	5.6	0.7	
Diversification	The number of target groups important to the HEI has increased	193	4.1	1.4	134	4.0	1.5	
Professionalization	More employees of the department have had vocational training in the field of communication	190	4.1	1.3	136	3.8	1.7	
Professionalization	The department has an increasing influence on how HEI members communicate publicly	193	3.7	1.3	136	3.9	1.4	
Increasing strategic alignment	The department is increasingly guided by communication strategies and plans	194	4.2	1.3	136	4.4	1.2	
Increasing strategic alignment	The department has more influence on strategic decisions of the HEI	194	2.7	1.4	135	3.5	1.5	

Notes: Department is used here as a designation for the central communication office. Respondents answered on a seven-point scale ranging from 0 = "not at all" to 6 = "very much". The analysis includes all leaders who worked in the rectorate / executive board of their HEI since at least 2017 (see Section 4.2) and all communicators in central communication departments who worked there since since at least 2017. The survey of the latter was conducted online between September 1 and December 1, 2020 (whole-population survey of all HEIs in Switzerland). By searching publicly available information of the 42 HEIs in Switzerland, we compiled a list of all communicators working in the central communication departments of Swiss higher education institutions, such as communication, media, and marketing offices. Of the 552 contacts identified, 297 were from research universities (RU), 186 from universities of applied sciences (UAS), and 69 from colleges of education (CE). 60 people in our contact list could not be reached or did not work in central communication offices. Of the 492 individuals successfully contacted, 203 participated in our survey, yielding a response rate of 41 percent. The number of respondents from different HEI types varies considerably (RU = 106; UAS = 55; CE = 24; 18 respondents did not reveal the HEI type), reflecting the mentioned differences in size between these HEI's communication departments.

Reading example: 194 HEI leaders answered the question about whether it was true that the central communication department of their organization has received more personnel and financial resources over the past five to ten years. This resulted in an arithmetic mean value of 4.2, with a standard deviation of 1.4. Communicators at central communication offices, comprising 135 respondents, agreed somewhat less with this statement, with an arithmetic mean value of 3.5 and a standard deviation of 1.7.