UNIVERSITY OF TWENTE.

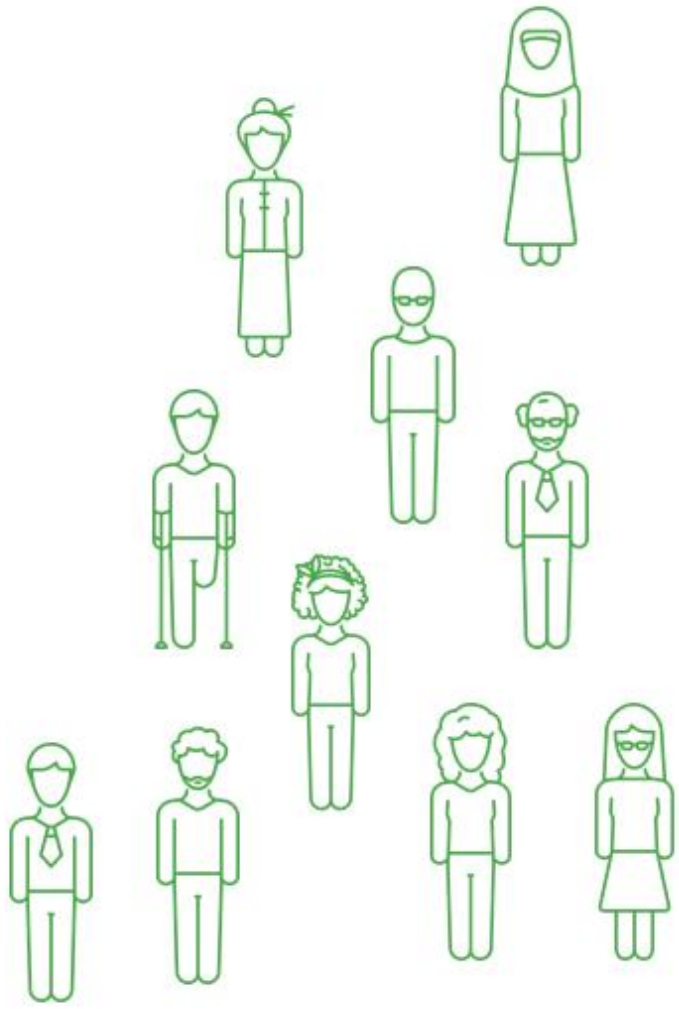
STILL ENGAGED AT A DISTANCE

Results of the 2021 well-being study among UT employees

Wave 2 (July-August 2021)

16-09-2021

Dr. ir. Jan de Leede



CONTENT

MANAGEMENT SUMMARY 3
1 AIMS AND BACKGROUND OF THE STUDY 5
1.1 Aims of the study 5
1.2 Research design: three waves 6
1.3 Research model 7
2 FINDINGS ON SATISFACTION, WORK ENGAGEMENT AND STRAIN 9
2.1 Satisfaction with UT, engagement and strain 9
2.2 Organisational stimuli, job demands and job resources 10
2.3 Perceived workload and excessive work hours 14
3 FINDINGS ON HOME WORKING 19
3.1 Perceived general effects of the enforced homeworking 19
3.2 Preferences for hybrid working: diversity across individuals 21
4 FINDINGS ON HEALTH AND WELL-BEING 23
4.1 Perceived health effects 23
4.2 Perceived effects on home-work interference 25
5 FINDINGS ON INAPPROPRIATE BEHAVIORS 26
6 OPEN REMARKS 27
7 CONCLUSIONS 28
8 RECOMMENDATIONS 29

APPENDIX 1: QUESTIONNAIRE 30
APPENDIX 2: ANSWERS & COMPARISONS 30
2.1 Engagement (vigor and dedication) and strain 30
2.2 Job demands 31
2.3 Job resources 34
2.4 Organisational stimuli 37
APPENDIX 3: CATEGORIZATION OF OPEN QUESTIONS 40

MANAGEMENT SUMMARY

During Summer 2021 – the second year of the pandemic – the University of Twente (UT) is measuring the well-being of its employees. Still, the advice is to work from home and most of the common work of employees is done from home, although some activities are allowed on campus. What does it mean for the well-being of the employees, to work primarily from home for such a long time. Do we see a drop in engagement, or in commitment to the organisation? What does it mean for the perception of workload and excessive work hours? How do we think about the quality of work?

For exploring employee experiences and needs under these circumstances, a bilingual online survey was distributed to one-third of the employees (employed at 1 April, 2021). Unlike previous years, we are not surveying all of our staff at the same time. As the current circumstances are unique and we cannot yet predict how things will be in three months, we have decided to divide staff into three representative groups and hold the survey in three waves (Spring, Summer and late Autumn). This report is about the results of Wave 2: the questionnaire was online available for completion from 2 July until 16 August 2021. The survey was exactly the same like Wave 1 and largely based on the well-being survey of 2019 and a selection of questions of the Well-being under Covid-19 survey held in 2020.

In total 1399 emails with links to the questionnaires were distributed. The response was almost satisfying: in total 416 responses were counted with valid answers, which is a net response rate of 30%.

Most important findings

1. Wave 2 reveals by and large the same message as Wave 1.
2. In general, UT employees still are both engaged and strained. They have much energy and dedication to their job, however, at the same time they feel strained by the amount of demands and role overload.
3. Most respondents are satisfied with the UT, on average they grade the UT with a 7.5, which is similar to 2020 (7.6) and still somewhat higher than 2019 (7.2).
4. The organisational stimuli, like job crafting and HRM satisfaction, are on a similar level compared with 2019. The same applies for the job demands and job resources. Of course, we cannot compare the results in a strict sense of a repeated measurement, because we have two different samples. Still, the averages of both groups are similar for every antecedent.
5. The high strain is reflected in the perceived workload. 43% of the respondents in wave 2 perceive a (way) too high workload. In 2020 it was 38% and in 2019 it was 44%. Especially scientific staff (teachers, assistant, associate and full professors) are mostly perceiving a high workload, with managers in the second place, while support staff is experiencing the least workload.

6. 42% work fully from home (in 2020 72% and in April 2021 52%), while 50% work partly from home and on campus (was 24%); these numbers reflect the different situation of Summer 2021 compared to Summer 2020.
7. Since last year, the UT employees in general learned to cope with homework and working fully online. At least the perceived teaching quality has been further improved, also in comparison with wave1. In addition, work-life balance has been improved a little. Still, big minorities are struggling with work-life balance (32%).
8. The preferences for working from home are more diverse than ever. One-third want to work not more than 2 days from home. However, the preference for three or four days at home is higher compared to wave 1. Hardly any control variable is important here: age only to a limited extent (most of the younger employees (under 30s) want to work from home a maximum of one-two days), organisational unit (only one significant difference between two faculties), and no statistical significant differences are found for gender, job title, organisational tenure and home situation. Apparently, individual differences are relevant in these preferences.

Recommendations

Based on the findings of the first wave, it is possible to derive a few preliminary recommendations, however, these recommendations will be elaborated after wave 3.

1. Since hybrid working will be the norm for most employee groups, the UT should accommodate the diverse preferences of the employees. Do not develop a standard norm for e.g. two days at home, be flexible about it and adapt the norm within each organisational unit to personal circumstances. A 'one fits all' approach towards the working time spend at home and on campus is inadvisable.
2. Scientific staff (Teachers/lecturers, Assistant, Associate and Full professors) experiences the highest workload. Next to scientific staff, the managers perceive a too high workload. Reducing the amount of work is an unquestionable precondition for well-being. Especially reducing meetings and administrative work that academic professionals have to do is a key to achieve this. In developing new policies, adapting existing policies, the focus should not only be on the students or managerial issues, the primary focus should be on staff and its well-being. This is a UT-wide challenge.
3. Continue with the well-being initiatives. It has been observed and appreciated by the employees. Pay attention to specific groups: the managers, young employees, new employees, employees with unsecure contracts.
4. Pay attention to the role of the direct supervisor. Despite the fact that certain attention or target groups could be identified, never forget that also within groups (large) differences between apparently equal group members concerning desires and needs do exist. For finding individual differences and adequate solutions that both affect employee well-being and productivity, the role of direct supervisors is crucial. Direct communications between supervisors and individual staff members is inevitable for continuing a fit between organisational policies and practices and employees.

1 AIMS AND BACKGROUND OF THE STUDY

1.1 Aims of the study

Scientific research, education and valorisation are performed by people. Therefore, Executive Board (CvB) of the University of Twente (UT) and the indirect participation bodies (university council and OPUT) ascribe great importance to safeguarding employee well-being at UT. The EB therefore commissioned on-going studies into employee well-being and its antecedents. Moreover, regulations on working conditions (in Dutch: ARBO) pose the requirement to monitor the psychological strain of employees as part of the Risico-inventarisatie & Evaluatie (RIE). In line with this requirement, this well-being study assesses the risks of work pressure (strain) and its antecedents.

Taken together the aims of the survey are therefore

1. To measure the trends in employee well-being, defined as employees' perceptions of work engagement and work pressure (strain).
2. To measure relevant antecedents – i.e. human resource management (HRM), job crafting, job demands and job resources – of employee well-being.
3. To measure the current employee experiences and preferences about working from home and working on campus, due to the Covid-19 measures; this includes measuring the trends in well-being.
4. To measure employees' perceptions of aggression and violence at work.
5. The fulfilment of the aforementioned aims can contribute to an improvement of the UT's HRM policies and practices as well as support priority setting.

On the basis of the research results, recommendations for policy and management will be formulated on how to safeguard employee well-being at the UT. With the results of this survey, we hope to contribute to the plans – required by the CAO – of the university to reduce work pressure, taken into account the complicated situation of hybrid working.

To achieve these five aims, the survey is based on the conceptual model developed for the Well-being survey of 2019[1]. We followed the Job-Demands-Resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti et al, 2001; Schaufeli, Bakker & Salanova, 2006) and enriched this model by adding insights from recent job crafting studies (Tims et al, 2012) and scholarly work into human resource management (HRM). The conceptual model served as the basis for the development of an employee survey used to measure employee well-being and its antecedents at the UT. To this survey, we added additional questions to measure employees' experiences of specific UT facilities as well as perceived aggression and violence at work. In addition, selected

[1] De Leede, Meijerink & Torka (2019). Work engagement and work pressure: still in balance? A well-being study among UT employees. Report ref nr CvB UIT – 3998, 23-04-2019.

questions of the Well-being under Covid-19 survey[2] were used to enable insights in the developments within well-being.

Based on the research results, recommendations for policy and management will be formulated for safeguarding employee well-being at the UT during COVID-19. With the results of this survey, we aim to contribute to both management and employees of the UT community.

1.2 Research design: three waves

This survey was distributed in Dutch and English. See Appendix 1 for the questionnaire. Unlike previous years, the questionnaire was not sent to all of our staff at the same time. During the presentations of the Well-being under Covid-19 among faculties and service departments, the most often heard remark was to repeat such a measurement more frequently. As the current circumstances are unique, the decision was made to have three waves of the 2021 survey: in Spring, Summer and late Autumn 2021. Accordingly, staff was divided into three representative groups. One-third of the employees with a UT employment contract at 1 April 2021 were included in the sample of Wave 1. The PhD candidates without a labour contract with the UT (e.g. scholarships) are included in the 2nd and 3rd Wave. The service departments with <100 employees were allocated to one of the three waves, in order to minimise the possibilities for non-anonymity due to small groups.

Table 1. Division of employees in three waves (in yellow the units fully assigned to one wave)

	Total population			total group in wave
	Total	WP	OBP	
BMS	531	419	112	
EEMCS	642	496	146	
ET	522	403	119	
ITC	254	176	78	
TNW	827	563	264	
CES	170		170	
CFM	169		169	
FIN	48		48	2
GA	60		60	1
HR	49		49	1
LISA	165		165	
MC	85		85	3
SBD	31	2	29	1
SP	40		40	3
UCT	16	9	7	1
Pre-U	13	4	9	2
FPC	19	14	5	2
Totaal	**3641**	**2086**	**1555**	

[2] De Leede, De Jager & Torka (2020). Working at home alone? A Well-being study among UT employees under Covid-19. 30-09-2020.

In total 1399 emails with links to the questionnaires were distributed. The survey was open from July 2nd until August 16th, 2021. Two reminders were sent out.
The response was lower compared to Wave 1, though still enough to get a representative sample: in total 416 responses were counted with valid answers, which is a net response rate of 30%. This is lower compared to the 38% of wave 1 and definitely lower compared to the 47% response rate of the well-being UT 2019 survey and the 54% of the 2020 survey.

Table 2. Representativeness

	In wave 2	University of Twente	Response group wave 2
Organisational unit			
Faculty of Behavioural, Management and Social Sciences (BMS)	1/3	14.4%	15.7%
Faculty of Engineering Technology (ET)	1/3	14.4%	11.7%
Faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS/EWI)	1/3	17.2%	15.5%
Faculty of Science and Technology (TNW)	1/3	22.5%	19.2%
Faculty of Geo-Information Science and Earth Observation (ITC)	1/3	7.4%	8.7%
General Affairs (GA)	none	2.2%	Not included
Campus & Facility Management (CFM)	1/3	4.9%	4.0%
Centre for Educational Support (CES)	1/3	4.8%	7.7%
Finance (FIN)	complete	1.4%	2.9%
Human Resources (HR)	none	1.5%	Not included
Library, ICT services & Archive (LISA)	1/3	4.4%	6.2%
Marketing & Communication (MC)	complete	2.3%	5.5%
Strategic Business Development (SBD)	none	0.9%	Not included
Strategy & Policy (SP)	complete	1.1%	2.7%
Not answered			3.6%
Job category			
Scientific staff		57.2%	50%
Support and management staff		42.8%	50%
Gender			
Female		42.2%	49.0%
Male		57.7%	50.4%
Other			0.6%

Analysis for representativeness shows that employees for the faculties ET and TNW and males have a slight under-representation. Due to the inclusion of some service departments completely in this wave, these departments are slightly overrepresented. This was a deliberate choice for reasons of anonymity of the respondents of smaller departments.

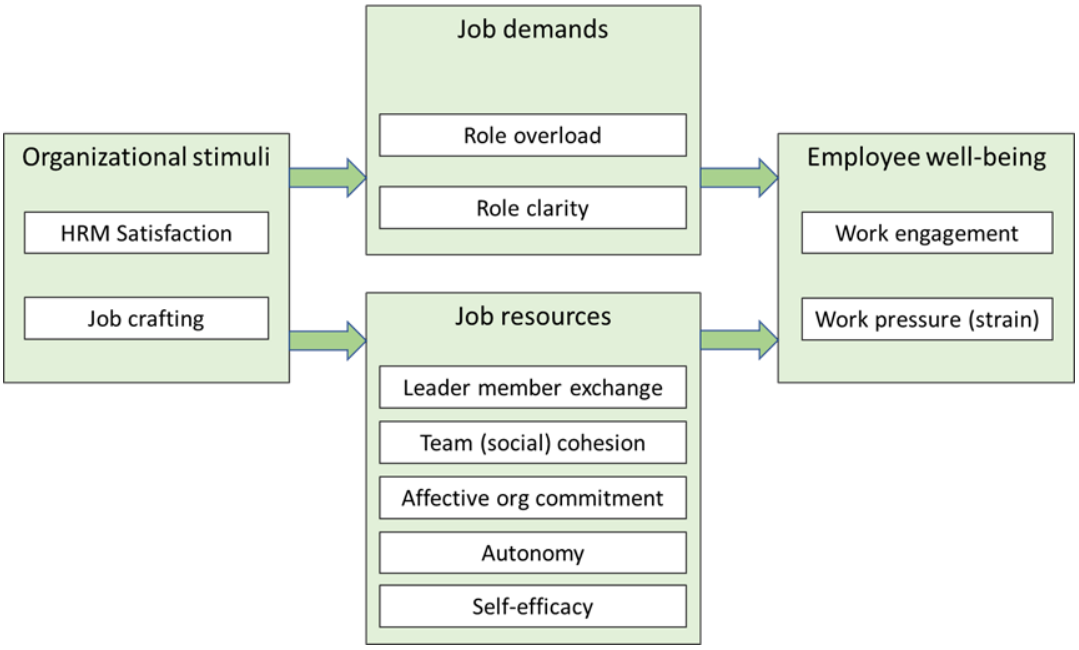
1.3 Research model

This 2021 Well-being study re-uses the conceptual model of the well-being study of 2019. Two major reasons are: (1) the possibility to compare the results of 2021 and 2019 and (2) the conceptual model of 2019 is well grounded in the academic literature on well-being ate work.

The conceptual model explains employee well-being and its antecedents (see Figure 1). The core of the conceptual model is based on the Job-Demands-Resources (JD-R) model[3]. The JD-R model predicts that employee well-being is a function of job demands (i.e. job characteristics that drain energy, such as role overload and poor role clarity (also called: role ambiguity)) versus job resources (i.e. job characteristics which enable employees to realize their goals and which are energising). We included job resources that relate to the job (autonomy and self-efficacy), the supervisor (leader-member exchange (LMX)), the team (team cohesion) and the organisation (commitment).

To examine how organisational policies/practices impact job demands and job resources, and how employees themselves can safeguard their well-being, we decided to include employee satisfaction with HRM activities such as development opportunities, appraisal and feedback (as relevant organisational policies/practices that may impact well-being) as well as employee reports of job crafting (i.e. employee-initiated changes to job demands/resources for sustaining well-being). Since HRM activities and job crafting are unlikely to have a direct relationship with employee well-being, we hypothesize that job demands and job resources mediate between employee satisfaction with HRM/job crafting and employee well-being. Employee well-being is conceptualized as both work engagement and strain to tap into both the desirable dimensions (i.e. work engagement) as well as its undesirable dimensions (i.e. work pressure/strain).

Figure 1.1 Conceptual model



[3] Bakker, A.B. and Demerouti, E. (2007), "The job demands-resources model: state of the art", Journal of Managerial Psychology, Vol. 22, pp. 309-28.

2 FINDINGS ON SATISFACTION, WORK ENGAGEMENT AND STRAIN

2.1 Satisfaction with UT, engagement and strain

On average, the respondents assess the UT with 7.5 (scale 1-10), which is the same like wave 1 and almost similar to 2020 and still somewhat higher compared with 2019.

Figure 2.1 Satisfaction with UT

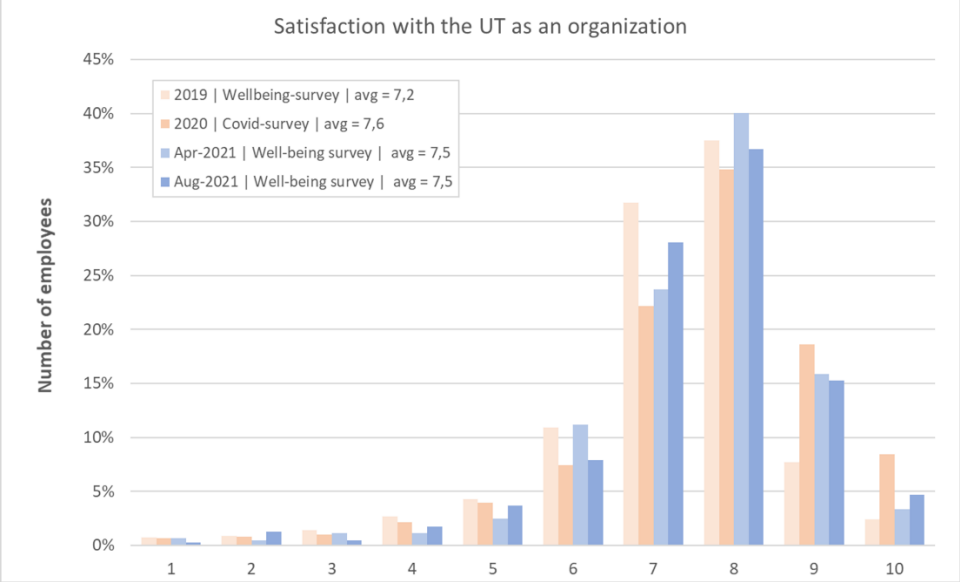


Table 2.1: General satisfaction with UT, engagement and strain per organisational unit

Organisational unit	General satisfaction[1]		Engagement[2]		Strain[3]	
	Mean	*SD*	*Mean*	SD	*Mean*	*SD*
BMS	7.17	*1.52*	5.38	*1.05*	3.42	*0.87*
ET	7.26	*2.05*	5.06	*1.19*	3.35	*1.11*
EEMCS/EWI	7.55	*1.58*	5.29	*1.11*	3.37	*0.94*
TNW	7.42	*1.36*	5.35	*1.03*	3.37	*1.00*
ITC	7.74	*1.15*	5.59	*0.95*	3.32	*0.93*
CFM	7.38	*1.75*	5.57	*1.02*	3.23	*1.18*
CES	7.71	*1.07*	5.45	*1.00*	2.80	*0.76*
FIN	7.50	*0.90*	5.75	*1.09*	2.61	*1.01*
LISA	7.48	*1.23*	5.55	*1.15*	3.51	*0.69*
M&C	8.14	*0.64*	5.49	*0.78*	2.86	*0.83*
SP	8.09	*1.22*	6.09	*0.66*	3.12	*1.05*
UT wave2	**7.49**	***1.45***	**5.40**	***1.05***	**3.26**	***.96***
UT wave1	**7.52**	***1.39***	**5.18**	***.95***	**3.39**	***.91***

[1] Scale = 1 to 10
[2] Scale = 1 to 7
[3] Scale = 1 to 5
SD = standard deviation

Table 2.1 shows the means and standard deviations of general satisfaction, engagement and strain across organisational units. Anova/Bonferroni analysis was used to investigate whether the differences between organisational units are significant. No significant difference was found ($p < .05$).

Table 2.2: General satisfaction with UT, engagement and strain per function

Function	**General satisfaction[1]**		**Engagement[2]**		**Strain[3]**	
	Mean	*SD*	Mean	*SD*	Mean	*SD*
PhD Candidate / Student	7.51	*1.54*	5.30	*1.06*	3.48	*0.91*
Researcher / Postdoc	7.94	*1.06*	5.25	*1.10*	3.50	*1.15*
Teacher / lecturer	7.56	*2.06*	5.41	*0.97*	3.15	*0.81*
Assistant Professor	6.94	*1.92*	5.38	*1.17*	3.84	*0.76*
Associate Professor	6.69	*1.25*	5.10	*0.92*	3.49	*0.86*
Full professor	7.77	*0.93*	5.60	*0.89*	3.26	*0.96*
Manager (service dept)	8.20	*1.08*	5.92	*0.85*	3.18	*0.85*
Manager (faculties)	8.14	*0.38*	5.79	*0.50*	2.76	*1.07*
Support staff	7.65	*1.16*	5.47	*0.95*	2.99	*0.94*
I prefer not to answer this question	6.84	*1.77*	5.10	*1.49*	3.33	*1.02*
UT wave2	**7.49**	***1.45***	**5.40**	***1.05***	**3.26**	***.96***
UT wave1	**7.52**	***1.39***	**5.18**	***.95***	**3.39**	***.91***

[1] Scale = 1 to 10
[2] Scale = 1 to 7
[3] Scale = 1 to 5
SD = standard deviation

Table 2.2 shows the means and standard deviations of general satisfaction, engagement and strain across functions. It turns out that Assistant professors are among the least satisfied and the most strained. Anova/Bonferroni analysis showed that only a few differences between groups are significant ($p < .05$). For Strain, the support staff are significantly less strained compared with PhD Students and Assistant Professors. This confirms the findings of wave1. No significant differences were found for Engagement or General satisfaction.

2.2 Organisational stimuli, job demands and job resources

Table 2.3 shows the means and standard deviations of the two organisational stimuli: job crafting (increasing structural and social job resources and increasing challenging demands) and HRM satisfaction across organizational units. Anova/Bonferroni analysis showed that a few differences between groups are significant ($p < .05$), such as CFM showing less social job resources compared to ET, TNW, LISA, M&C and SP. The other organisational stimuli do not show significant differences between organisational units.

Table 2.3: Organisational stimuli: Job crafting and HRM satisfaction per organisational unit

Organisational unit	Increasing structural job resources[1]		Increasing social job resources[1]		Increasing challenging job demands[1]		HRM satisfaction[2]	
	Mean	*SD*	*Mean*	SD	*Mean*	*SD*	*Mean*	*SD*
BMS	5.22	*1.09*	3.50	*0.96*	4.13	*1.24*	3.72	*1.01*
ET	5.37	*0.99*	3.59	*0.95*	4.04	*1.31*	4.07	*0.86*
EEMCS/EW	5.48	*0.85*	3.30	*0.85*	3.90	*1.26*	3.91	*0.73*
TNW	5.39	*0.83*	3.64	*0.97*	4.29	*1.09*	3.98	*0.73*
ITC	5.11	*1.06*	3.21	*0.87*	4.37	*1.30*	3.84	*0.67*
CFM	4.69	*1.06*	2.67	*0.89*	4.75	*1.20*	3.46	*0.88*
CES	5.27	*0.82*	3.53	*0.79*	4.24	*1.32*	4.22	*0.59*
FIN	5.08	*1.12*	3.60	*1.49*	3.58	*1.59*	3.97	*0.94*
LISA	5.27	*1.07*	3.96	*0.99*	4.68	*1.17*	3.79	*0.65*
M&C	5.24	*0.84*	3.72	*0.60*	4.61	*1.01*	4.26	*0.61*
SP	5.75	*0.83*	4.14	*0.76*	4.55	*1.17*	4.18	*0.57*
UT wave2	**5.29**	***.96***	**3.51**	***.95***	**4.23**	***1.24***	**3.93**	***.79***
UT wave1	**5.33**	***.81***	**3.57**	***.96***	**4.23**	***1.15***	**3.61**	***.68***

[1] Scale = 1 to 7
[2] Scale = 1 to 5

Table 2.4 shows the outcomes of the means for role overload and role ambiguity per organisational unit. The differences per unit are small and non-significant.

Table 2.4: Job demands: Role overload and Role ambiguity per organisational unit

Organisational unit	Role overload		Role ambiguity	
	Mean	*SD*	*Mean*	*SD*
BMS	1.81	*0.28*	3.86	*0.67*
ET	1.77	*0.33*	4.00	*0.82*
EEMCS/EW	1.77	*0.30*	3.90	*0.78*
TNW	1.80	*0.25*	3.90	*0.72*
ITC	1.83	*0.27*	4.05	*0.68*
CFM	1.91	*0.27*	4.15	*0.78*
CES	1.89	*0.21*	3.99	*0.74*
FIN	2.00	*0.00*	4.19	*0.48*
LISA	1.90	*0.25*	3.91	*0.66*
M&C	1.98	*0.11*	3.92	*0.66*
SP	1.95	*0.15*	4.30	*0.55*
UT wave2	**1.83**	***.27***	**3.96**	***.72***
UT wave1	**1,84**	***,26***	**3.79**	***.72***

Table 2.5 shows the means per unit for the job resources, only a few significant differences between organisational units here. The differences in means in social cohesion between CFM on the one hand and ITC and FIN on the other are significant ($p < .05$): apparently, the social cohesion is perceived somewhat lower in CFM.

Table 2.5: Job resources: Leadership (LMX), team cohesion, autonomy, self-efficacy and commitment per organisational unit

Organisational unit	LMX		Team cohesion		Autonomy		Self-efficacy		Commitment	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
BMS	3.63	0.78	3.76	0.68	3.97	0.69	3.97	0.63	3.35	0.77
ET	3.80	0.99	3.99	0.80	4.09	0.83	3.83	0.78	3.32	0.92
EEMCS/EW	3.64	0.74	3.94	0.53	4.09	0.71	3.87	0.76	3.30	0.81
TNW	3.82	0.80	3.98	0.68	4.25	0.65	3.94	0.70	3.35	0.81
ITC	3.69	0.85	4.10	0.69	3.99	0.76	4.05	0.69	3.26	0.75
CFM	3.71	0.83	3.46	0.82	3.98	0.76	4.35	0.63	3.44	0.78
CES	3.95	0.77	3.94	0.45	4.33	0.60	4.10	0.63	3.55	0.52
FIN	3.56	0.76	4.31	0.44	3.72	1.13	4.08	0.53	3.81	0.88
LISA	3.77	0.90	4.09	0.53	3.89	0.83	4.29	0.60	3.73	0.78
M&C	3.87	0.65	4.08	0.34	4.12	0.45	3.97	0.48	3.82	0.47
SP	4.11	0.62	4.24	0.58	4.30	0.50	4.33	0.47	4.02	0.68
UT wave2	**3.75**	***.81***	**3.96**	***.65***	**4.09**	***.72***	**4.00**	***.68***	**3.43**	***.79***
UT wave1	**3.79**	***.69***	**3.98**	***.61***	**4.12**	***.67***	**3.99**	***.69***	**2.84**	***.69***

Table 2.6 shows the results of the job crafting and HRM satisfaction per function. For increasing structural job resources no significant differences were found. Like wave1, an interesting significant difference is in increasing social job resources between PhD Students and teachers, assistant and full professors and support staff: they show all less social job resources compared with PhD students. Apparently, PhD students are asking more advice and coaching from their supervisors and colleagues, compared with the other scientific staff. For challenging job demands, significant ($p<.05$) differences were found between PhD students showing less challenging job demands compared with assistant and full professors, managers (service departments) and support staff. Also between teachers and managers (service departments) a significant difference was found. Apparently, PhD students and Teachers perceive the least possibilities to craft their job via increasing challenging job demands.

Table 2.6: Organisational stimuli: Job crafting and HRM satisfaction per function

Function	Increasing structural job resources		Increasing social job resources		Increasing challenging job demands		HRM satisfaction	
	Mean	*SD*	*Mean*	SD	*Mean*	*SD*	*Mean*	*SD*
PhD Candidate / Student	5.60	*0.72*	3.97	*0.78*	3.54	*1.29*	4.04	*0.84*
Researcher / Postdoc	5.64	*0.89*	3.47	*1.17*	4.42	*1.42*	3.89	*0.78*
Teacher / Lecturer	5.08	*0.95*	2.97	*0.98*	3.50	*0.89*	3.87	*1.00*
Assistant Professor	5.27	*1.25*	3.26	*1.04*	4.50	*1.16*	3.63	*0.85*
Associate Professor	5.21	*0.80*	3.17	*0.70*	4.31	*1.39*	3.56	*0.79*
Full professor	5.17	*0.85*	2.85	*0.73*	4.73	*0.75*	4.21	*0.65*
Manager (service dept)	5.57	*0.75*	3.88	*0.69*	5.03	*0.74*	4.12	*0.49*
Manager (faculties)	5.32	*0.83*	3.89	*0.88*	5.00	*0.87*	4.11	*0.36*
Support staff	5.19	*0.94*	3.47	*0.89*	4.30	*1.17*	4.03	*0.71*
I prefer not to answer this question	5.04	*1.15*	3.51	*1.18*	4.68	*1.21*	3.54	*0.93*
UT wave2	**5.30**	***.96***	**3.52**	***.95***	**4.23**	***1.24***	**3.93**	***.79***
UT wave1	**5.33**	***.81***	**3.57**	***.96***	**4.23**	***1.15***	**3.61**	***.68***

In Table 2.7 the job demands are presented per function, and Table 2.8 shows the results for de job resources per function. Role overload is perceived significantly (p<.05) higher by support staff compared to PhD students, researchers and assistant professors. Also managers (service departments) perceive a significant (p<.05) higher role overload compared to assistant professors. In the job resources we found two significant (p<.05) differences. PhD students perceive a lower self-efficacy compared to assistant and associate professors, managers (service departments) and support staff. Commitment was perceived the highest among managers (service departments) and this was a significant difference with PhD students, researchers and assistant professors.

Table 2.7: Job demands: Role overload and Role ambiguity per function

Function	**Role overload**		**Role ambiguity**	
	Mean	*SD*	*Mean*	*SD*
PhD Candidate / Student	1.78	*0.27*	3.92	*0.60*
Researcher / Postdoc	1.69	*0.30*	3.91	*1.00*
Teacher / Lecturer	1.91	*0.20*	3.96	*0.42*
Assistant Professor	1.65	*0.31*	3.91	*0.83*
Associate Professor	1.81	*0.25*	3.95	*0.45*
Full professor	1.73	*0.33*	4.10	*0.53*
Manager (service dept)	1.90	*0.28*	4.11	*0.71*
Manager (faculties)	1.86	*0.24*	4.14	*0.38*
Support staff	1.92	*0.19*	4.03	*0.69*
I prefer not to answer this question	1.81	*0.31*	3.58	*0.98*
UT wave2	**1.83**	***.27***	**3.96**	***.71***
UT wave1	**1,84**	***,26***	**4.00**	***.72***

Table 2.8: Job resources: Leadership (LMX), team cohesion, autonomy, self-efficacy and commitment per function

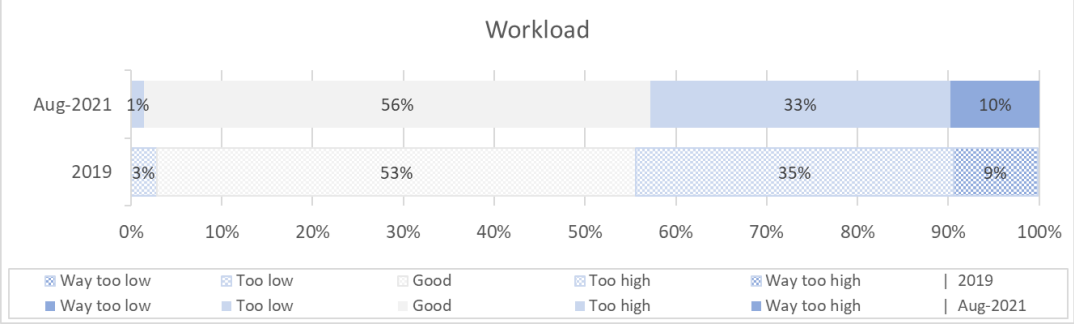
Function	**LMX**		**Team cohesion**		**Autonomy**		**Self-efficacy**		**Commit ment**	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
PhD Candidate / Student	3.79	*0.70*	3.89	*0.65*	4.11	*0.62*	3.54	*0.67*	3.29	*0.72*
Researcher / Postdoc	3.63	*0.92*	3.57	*0.62*	4.24	*0.63*	3.87	*0.72*	2.93	*0.97*
Teacher / Lecturer	3.67	*0.57*	3.67	*0.79*	3.83	*0.71*	4.13	*0.59*	3.28	*0.90*
Assistant Professor	3.57	*0.95*	3.94	*0.74*	3.96	*0.76*	3.99	*0.74*	3.32	*0.79*
Associate Professor	3.68	*0.83*	3.87	*0.74*	4.13	*0.63*	4.26	*0.61*	3.38	*0.75*
Full professor	3.41	*0.72*	4.13	*0.62*	4.33	*0.76*	4.05	*0.61*	3.58	*0.79*
Manager (service dept)	4.23	*0.61*	4.24	*0.48*	4.53	*0.55*	4.31	*0.65*	4.08	*0.63*
Manager (faculties)	3.98	*0.62*	4.19	*0.42*	4.14	*0.69*	4.29	*0.59*	3.93	*0.51*
Support staff	3.86	*0.75*	4.01	*0.60*	4.12	*0.73*	4.11	*0.62*	3.54	*0.72*
I prefer not to answer this question	3.39	*1.10*	4.01	*0.60*	3.80	*0.91*	4.27	*0.57*	3.31	*0.96*
UT wave2	**3.75**	***.81***	**3.96**	***.64***	**4.09**	***.72***	**4.00**	***.68***	**3.43**	***.79***
UT wave1	**3.79**	***.69***	**3.98**	***.61***	**4.12**	***.67***	**3.99**	***.69***	**2.84**	***.69***

2.3 Perceived workload and excessive work hours

This section presents the data on perceived workload, overtime hours and on which activities the respondents spend their time.

Figure 2.2 on perceived workload shows a rather similar result on the perception of workload compared with the Well-being study of 2019. With 45% of the respondents that experience a (way) too high workload it is even 1% higher compared with 2019.

Figure 2.2 Perceived workload 2019-2021



Looking at the trend, the observation is that perceived workload is back again on the level of 2019. In 2020 it was lower, and in 2015 also, as we can see in Figure 2.3. Again, we have to mention here that the samples in all five surveys are different, so it is 'dangerous' to draw conclusions. Nevertheless, the sample of wave 2 perceive on average as much workload as the average of the sample of 2019, implying that almost half of the employees perceive a (way) too high workload. Figure 2.4 shows the results per organisational unit, with BMS as the unit with the highest perceived workload.

Figure 2.3 Perceived workload 2015-2021

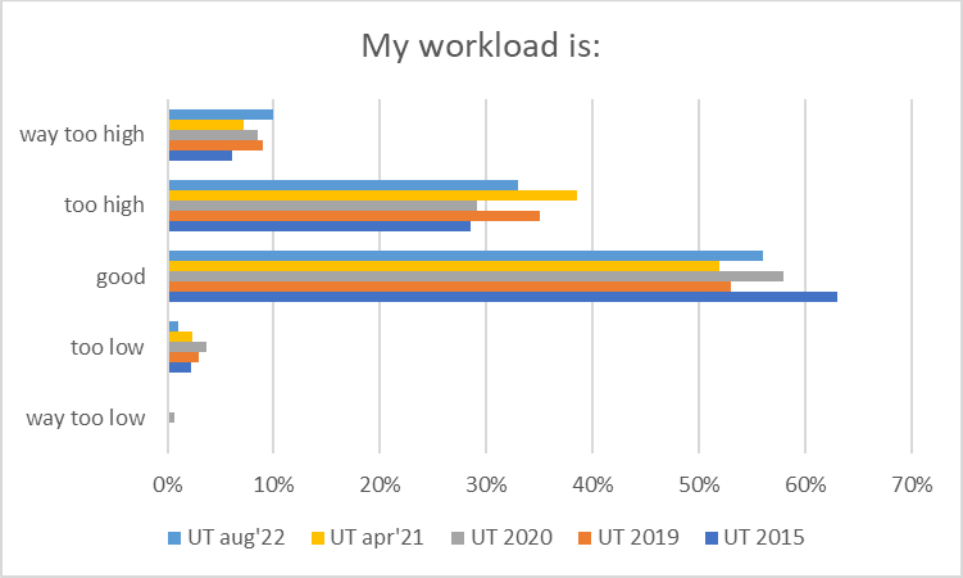
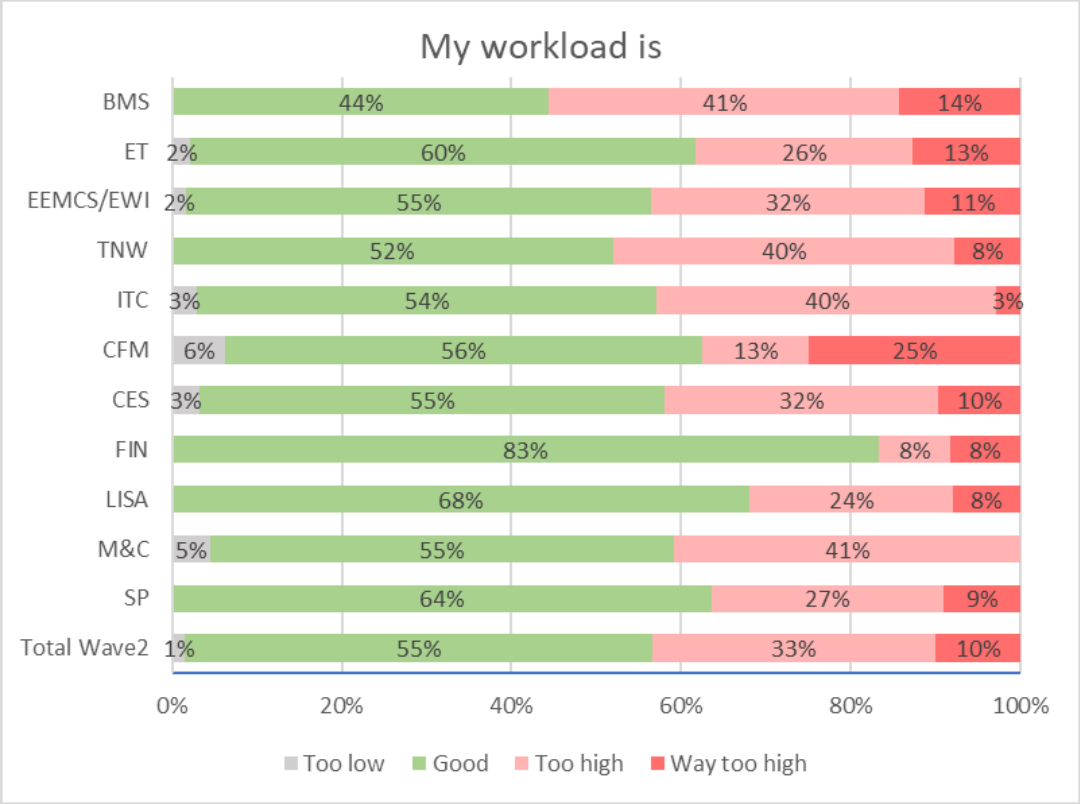


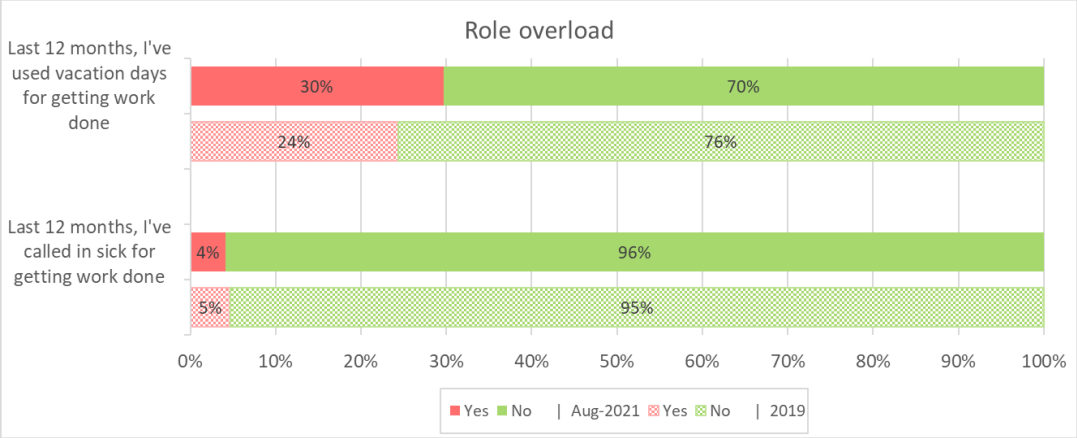
Figure 2.4 Perceived workload 2021 by organisational unit



It is possible to zoom in the workload by three ways: role overload, overtime and time spent on activities.

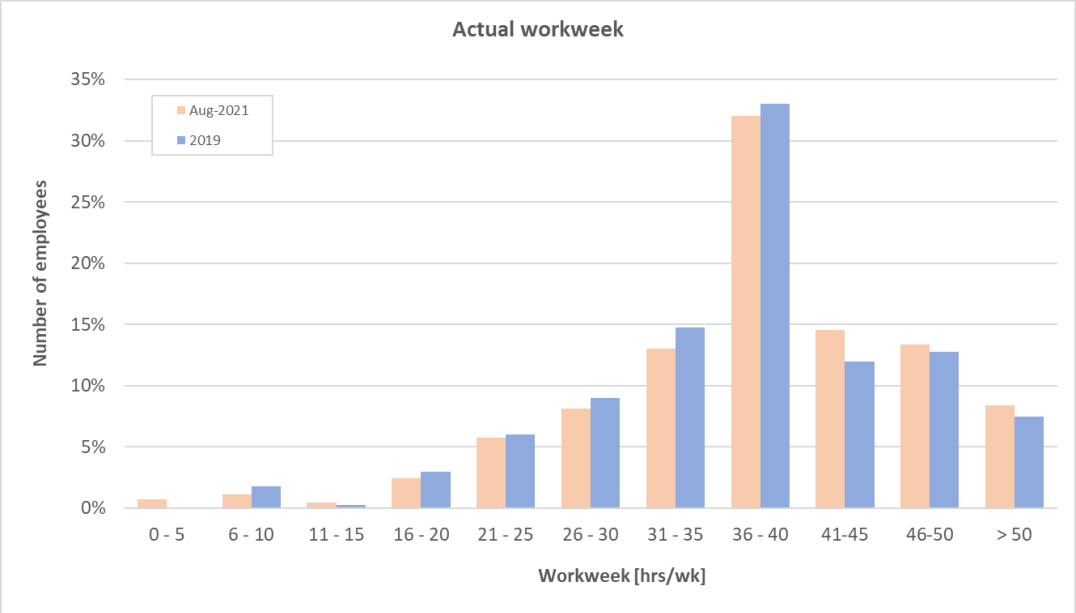
Figure 2.5 shows that 30% of the respondents indicating they are using vacation days for getting their work done. That is even 6% higher compared to the 2019 survey. Calling sick for getting work done however has decreased from 5% to 4%.

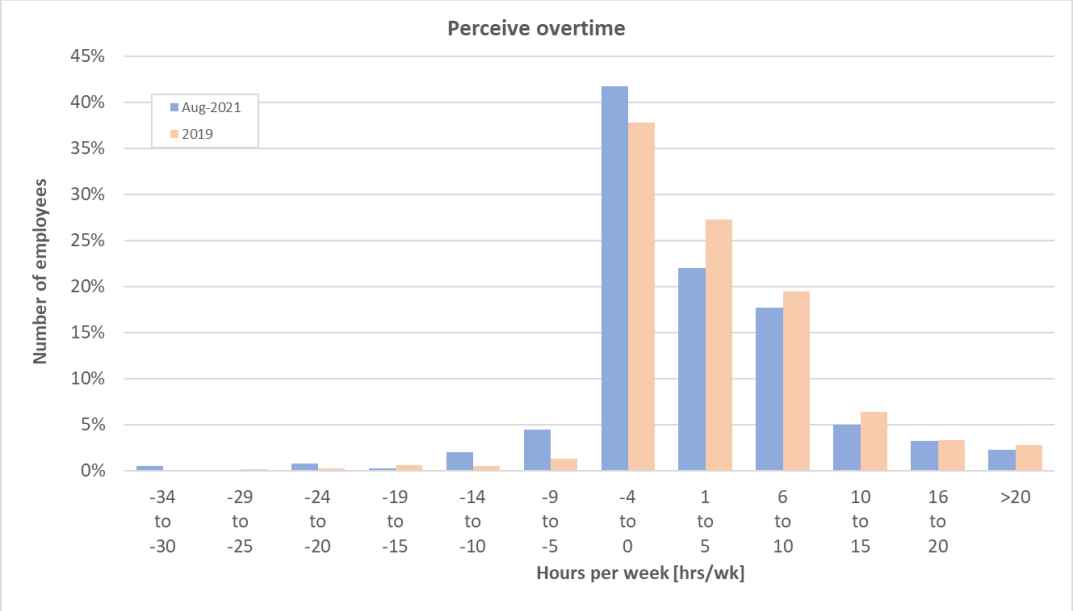
Figure 2.5 Role overload (2019-2021)



The actual hours worked compared to the contractual hours per week is represented in Figure 2.6. We can observe that 32% of the respondents work longer than 40 hours a week. Some of them are really making long hours: 10% are making more than 10 hours overtime per week.

Figure 2.6 Actual workweek and overtime in hours per week

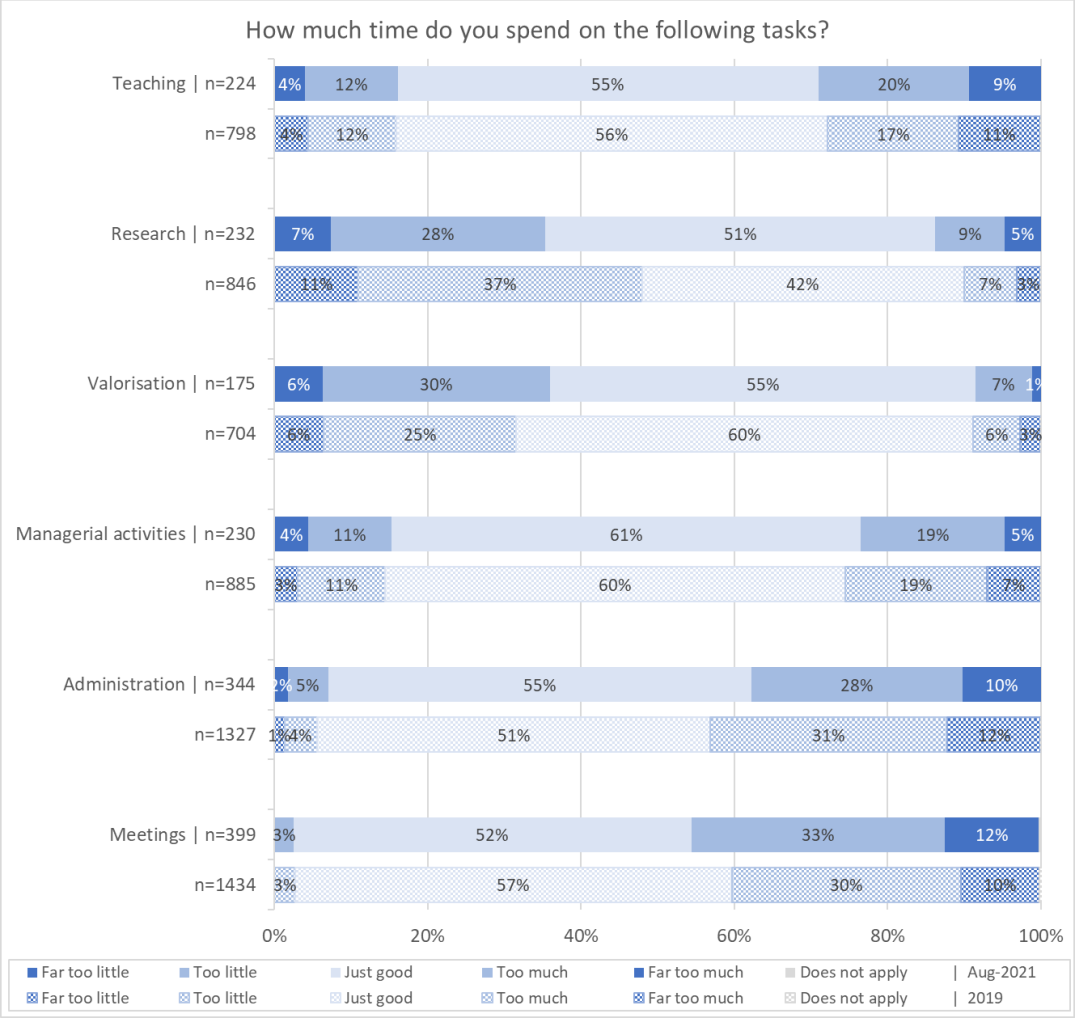




On what type of activities do the respondents spend their time and how satisfied are they with this? Figure 2.7 presents the results, from which we may conclude that the respondents spend too much time in their opinion on meetings (45%) and administration (38%). From the core processes, teaching takes too much time according to almost one third of the respondents.

It is particularly interesting that the number of people complaining about the time spent on meetings has increased from 40% to 45% (wave1: 51%); during Covid-times apparently we have been witnessed more meetings than before.

Figure 2.7 Time spent on activities


How much time do you spend on the following tasks?
Teaching | n=224
4%
12%
55%
20%
9%
n=798
4%
12%
56%
17%
11%
Research | n=232
7%
28%
51%
9%
5%
n=846
11%
37%
42%
7%
3%
Valorisation | n=175
6%
30%
55%
7%
1%
n=704
6%
25%
60%
6%
3%
Managerial activities | n=230
4%
11%
61%
19%
5%
n=885
3%
11%
60%
19%
7%
Administration | n=344
2%
5%
55%
28%
10%
n=1327
1%
4%
51%
31%
12%
Meetings | n=399
3%
52%
33%
12%
n=1434
3%
57%
30%
10%
0%
20%
40%
60%
80%
100%
Far too little
Too little
Just good
Too much
Far too much
Does not apply
| Aug-2021
Far too little
Too little
Just good
Too much
Far too much
Does not apply
| 2019

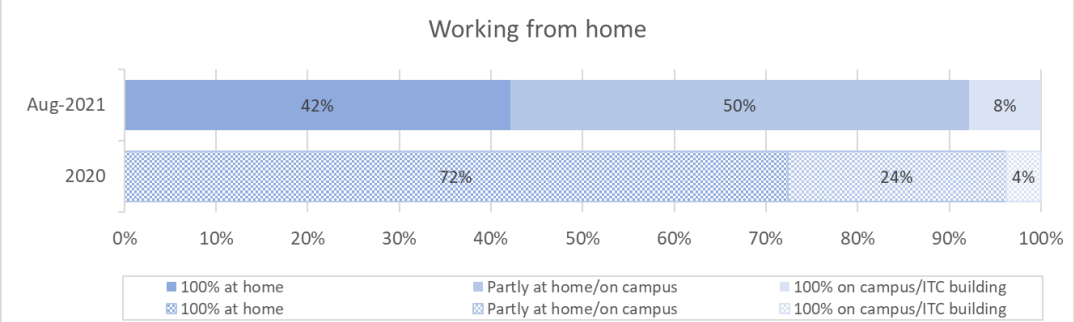
3 FINDINGS ON HOME WORKING

This chapter reports on the main findings of the survey related to work experiences due to enforced homeworking.

3.1 Perceived general effects of the enforced homeworking

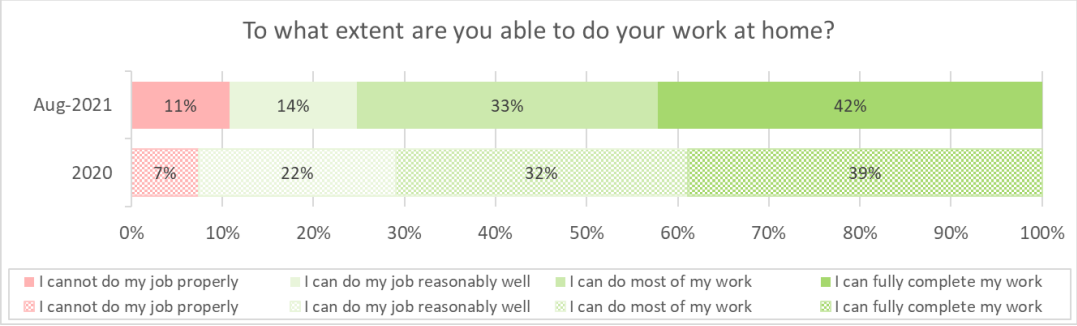
Figure 3.1 shows that 42% of the employees work from home full-time (compared to 72% in 2020 and 50% in wave1) and 50% work partly from home and partly on campus or in the ITC building, and a minority works on campus full-time (8%). This seems to be a good reflection of the time (June-August 2021) at the data collection.

Figure 3.1 Working situation



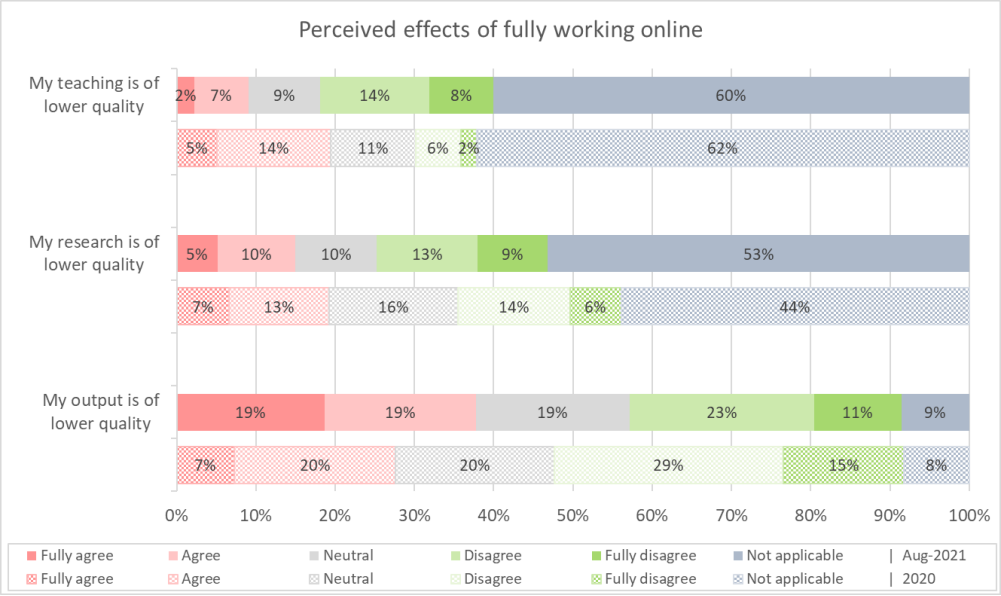
77% of all respondents report that they can still fully complete their work (42%) or most of their work (33%), slightly more than last year. However, a minority of 11% cannot do their job properly which might represent a larger group compare to 2020, see Figure 3.2.

Figure 3.2 Effect of homework on performance of work in general



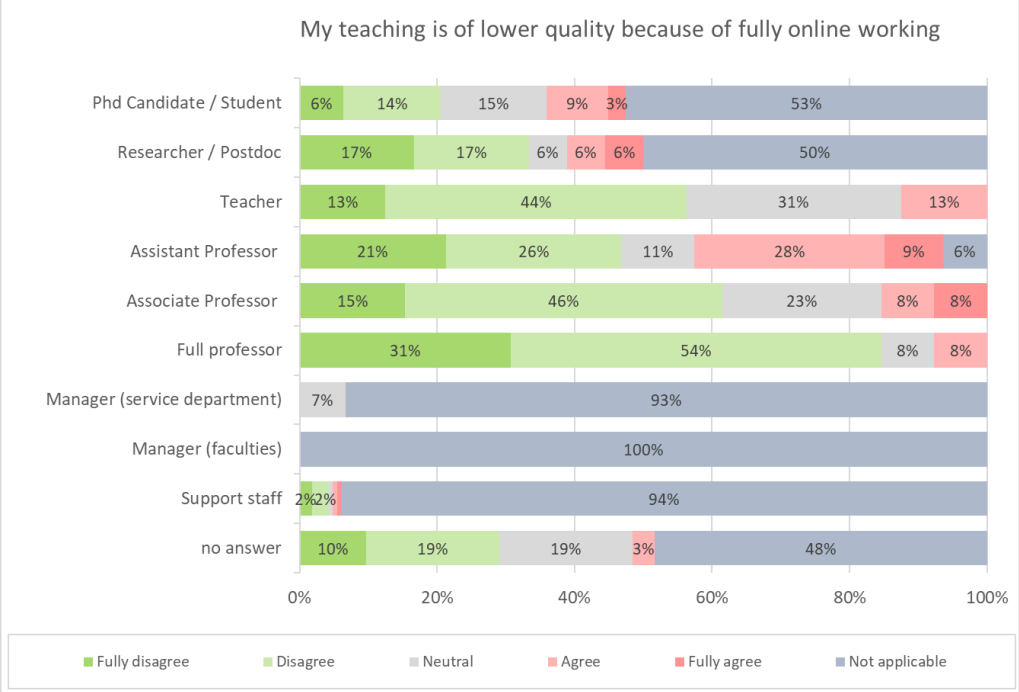
Three questions were asked to explore possible links between fully online working and work quality related to output, research and teaching. In general, for all three work quality topics, a minority reports a decreased perceived quality (Output 38%, Research 15% and Teaching 9%). Moreover, the data show an improvement compared to the 2020 survey and wave1: more people report an increase in the quality of working online, see Figure 3.3.

Figure 3.3 Perceived effects of fully working online on quality of teaching, research, output



Further analysis of the percentages presented in Figure 3.3 for the relevant groups reveal the same trend. In 2020, about 60% of the respondents who teach (Teachers/Lecturers, Assistant, Associate and Full professors) perceive a lower teaching quality because of fully online working, now it is decreased to 8-37%, also better compared to wave1. These data reflect the enormous effort that academic and support staff put in teaching online.

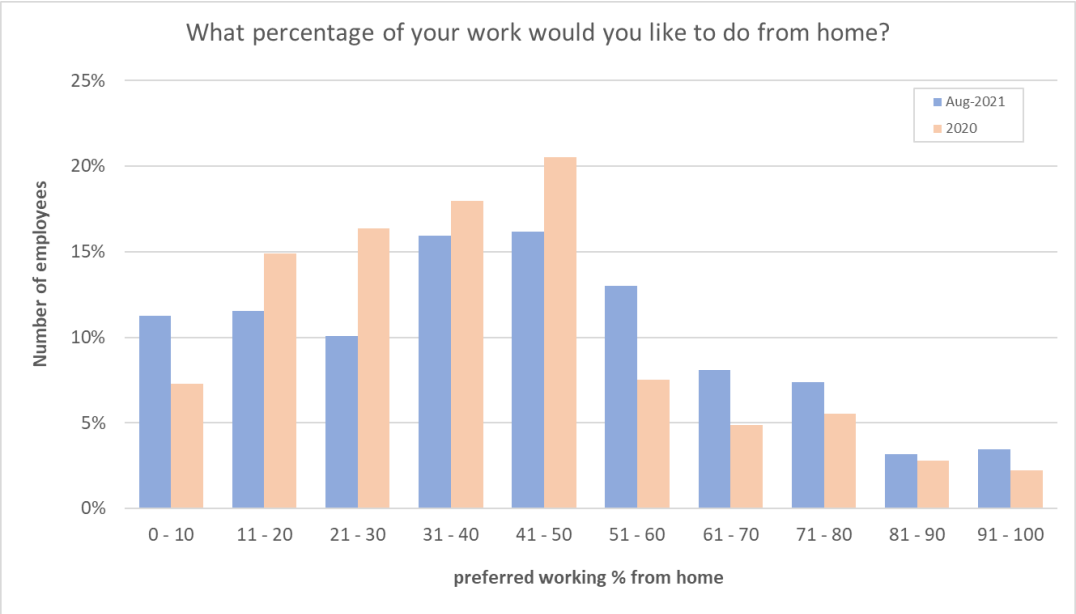
Figure 3.4 Perceived teaching quality for different positions



3.2 Preferences for hybrid working: diversity across individuals

The preferences for working in a hybrid way, both home and at campus/ITC building were included in the survey. In general the percentages for working home followed the same pattern like 2020, however, the preferences are more dispersed: 45% want to work from home 2-3 days a week, while 33% want to work from home 0-2 days a week and another 22% want to work from home 3-5 days a week. We must keep in mind again that both samples might be different, however, the group that wants to do their work most of their worktime from home is increasing and now almost one-third of the total population.

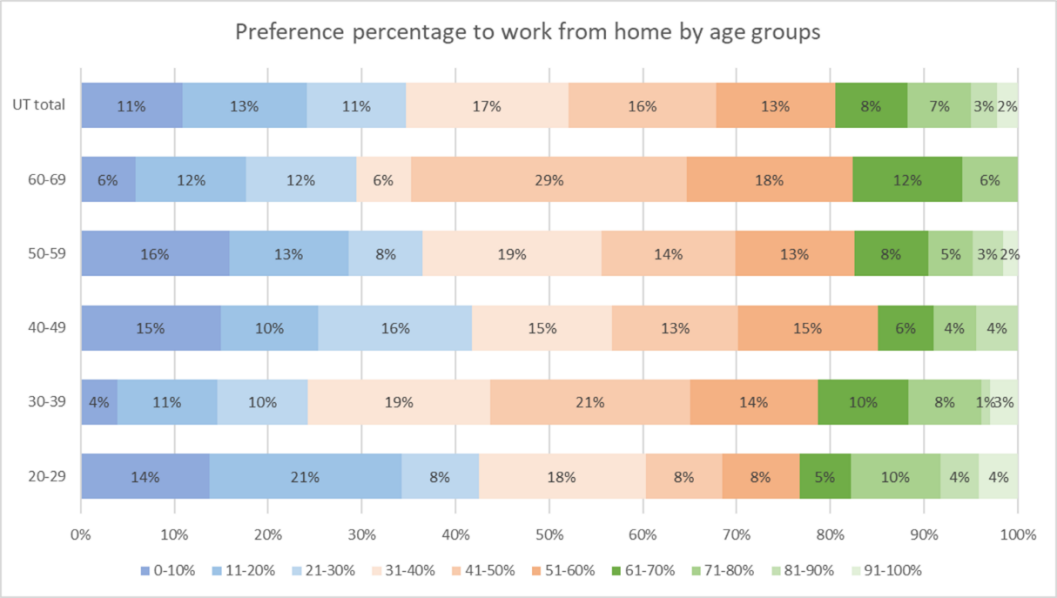
Figure 3.5 Preference home working (in % of worktime)



Secondly, many young employees want to work from home less compared to their older colleagues. As can be seen from Figure 3.6 the employees under 30 years old want to work from home around 1-2 days (at least 60% want to work from home max 2 days or 40% of their working time). For the other age groups, that percentage is around 50%. Still, also part of the young employees want to work from home more days.

In short, we may observe here a lot of individual preferences, partly explained by age, and not by gender, organisational tenure, situation at home (i.e. taking care of children or not), position (academic or support staff) or organisational unit (only respondents from BMS indicate that they want to work from home more compared to TNW).

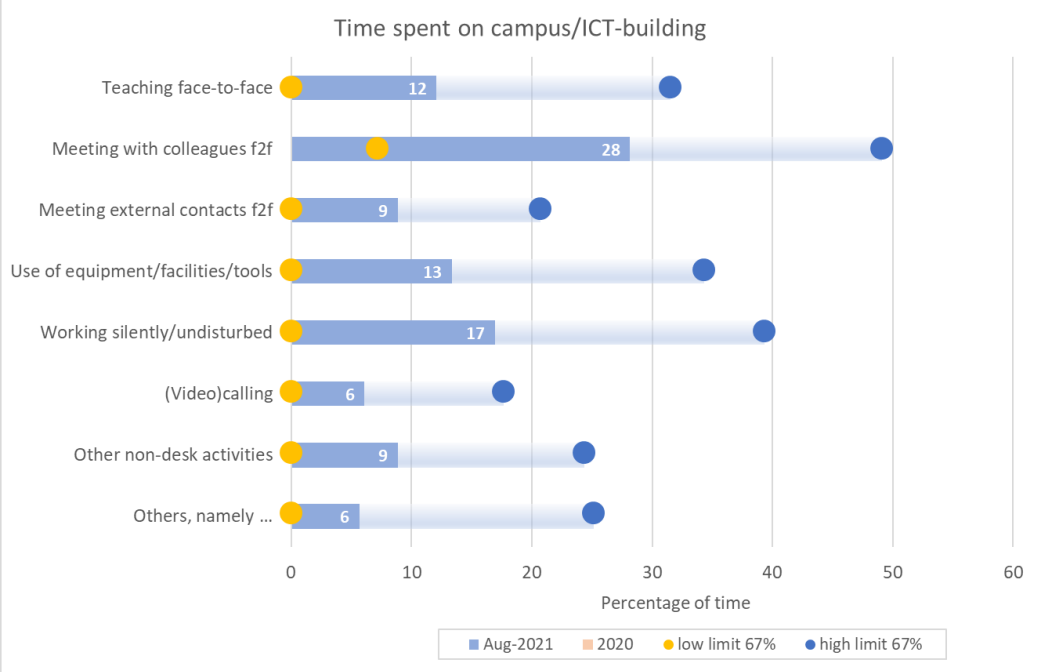
Figure 3.6 Homework preferences by age groups



Looking at the type of activities the respondents want to do at the return to the campus, we see the following top-4 (see Figure 3.7):

1. Meeting with colleagues
2. Working undisturbed
3. Use of equipment/facilities/tools
4. Teaching face-to-face.

Figure 3.7 Time spent on activities at the return on campus

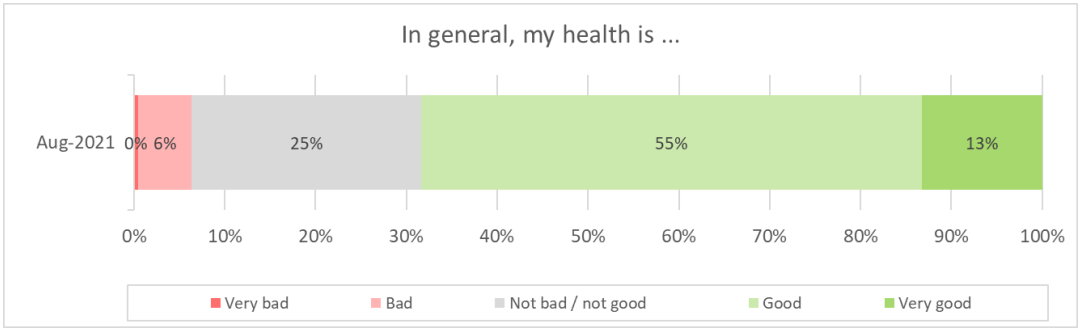


4 FINDINGS ON HEALTH AND WELL-BEING

4.1 Perceived health effects

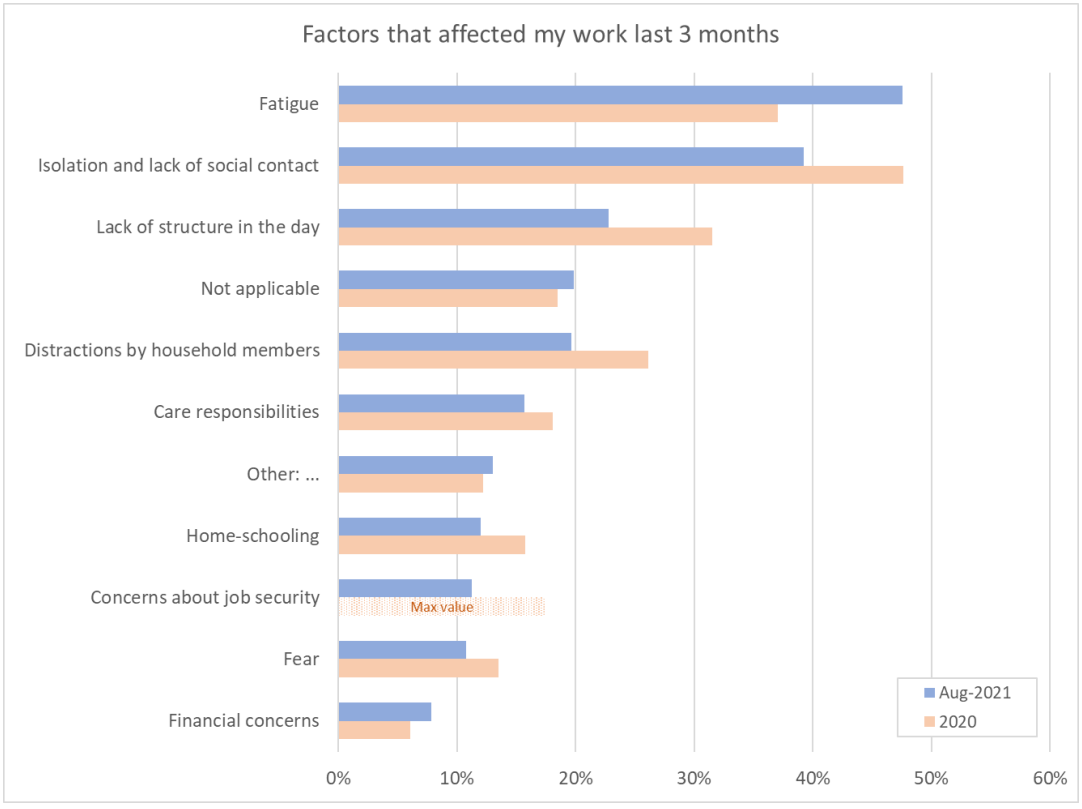
A majority of respondents reports a good or very good health (62%), while 8% report a (very) bad health, see Figure 4.1.

Figure 4.1 Perceived health



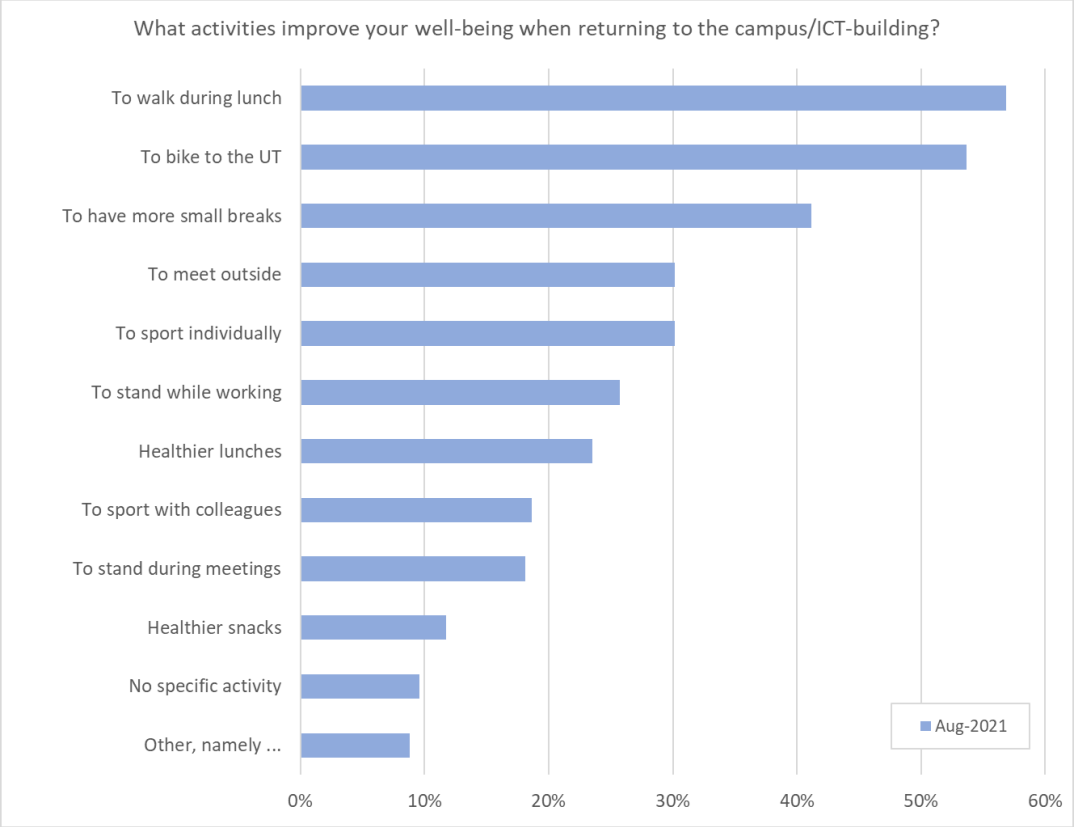
Top-4 of factors that are affecting work did not change since last year: (1) Fatigue, (2) Isolation, (3) Lack of structure in the day and (4) Distractions by household members. Compared to 2020, even more respondents (48%) say fatigue is the number 1 factor (wave 1 53%).

Figure 4.2 Factors affecting work



Most respondents indicate to do more exercising (walking, biking) and better planning of breaks and meeting outside, see Figure 4.3.

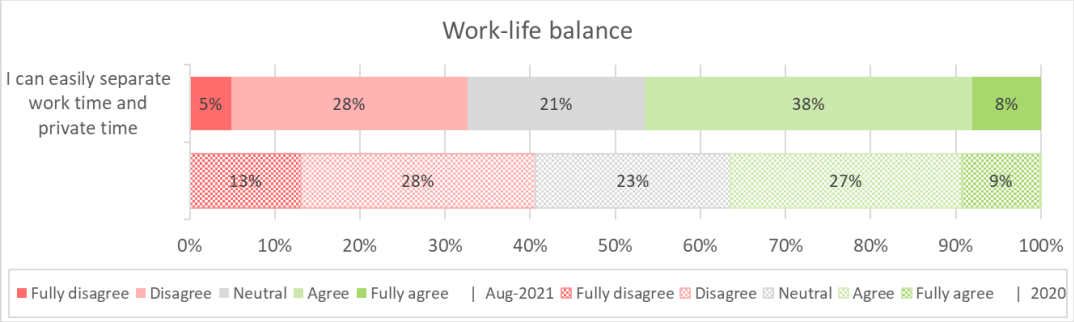
Figure 4.3 Activities to improve well-being when back-on-campus



4.2 Perceived effects on home-work interference

Figure 4.4 presents the perceived home-work interference. In 2020, in spite of the corona crisis, 36% agreed that they can separate work time and private time, while now this percentage increased to 46% (in wave1 43%). In line with this, a smaller group is struggling with work-life balance, however, this groups is still 32%; they report a negative interaction between the work and home domains. In other words, one of each three UT employees is not satisfied about work-life balance.

Figure 4.4 Perceived home-work interference



5 FINDINGS ON INAPPROPRIATE BEHAVIORS

To be added in the final report after full data collection of Wave 1, 2 and 3.

6 OPEN REMARKS

Some selected remarks will be presented here, the analysis will be done after Wave 3.

If so, please explain shortly why a difference between expected and actual hours exist:

"Too much workload"

"Due to the number of online meetings, I had to work after work hours and during weekends/holidays."

" I want to do multiple tasks well such as, teaching and research. In addition, I have to take some task chances where I can build up my network and research for my future career."

"Because academia works that way, especially if you want progress."

"Als je thuiswerkt en je hebt jouw "bureau" aan de keukentafel, dan ben ik sneller geneigd om weer achter de computer te kruipen."

"Versnippering en online activiteiten kosten meer tijd"

Open question

"Working from home as a PhD student is bad for your motivation, interaction with other PhD students, and overall career development. We should not encourage working from home for PhD students."

"I hope that the UT will consider keeping the good aspects of the corona crisis, such as a more flexible balance between working at home & on campus, and a more environmentally friendly policy with respect to air travel, data storage, and energy on campus. Generally, the UT is doing very well."

"During the pandemic the perceived workload is way higher than before. I think this is because many things take longer time to arrange or resolve with only MS Teams and Email communication mode."

"1 Voor een goede mentale gezondheid, kan de UT kan zich beter richten op een reductie en verdeling van de daadwerkelijke werklast (m.n. onderwijs) dan allerlei welzijnsworkshops. Een reductie van werklast moet dan niet gepaard gaan met allerlei aanvraag- en sollicitatieprocedures, die alleen nog maar meer werklast met zich meebrengen.
2 Voor het verbeteren van het percentage vrouwen, kan m.i. beter worden gekeken hoe zorgtaken en een (zware) academische carriére kunnen worden gecombineerd, dan het huidige voorkeursbeleid bij sollicitaties. Hierdoor verdwijnt ook de dubbele achterstelling (discriminatie?) van mannen met zorgtaken."

"Online hoorcolleges is me goed bevallen, maar werkcolleges en projectbegeleiding moet face-to-face. Dagelijkse fietstocht heen-en-weer werk is belangrijk (schiet er nu bij in tijdens corona). Kletsen in de wandelgang is van belang, ook al heb je even niks te melden. Dat zorgt voor binding en saamhorigheid."

7 CONCLUSIONS

9. Wave 2 reveals by and large the same message as Wave 1. In general, UT employees still are both engaged and strained. They have much energy and dedication to their job, however, at the same time they feel strained by the amount of demands and role overload.
10. Most respondents are satisfied with the UT, on average they grade the UT with a 7.5, which is similar to 2020 (7.6) and still somewhat higher than 2019 (7.2).
11. The organisational stimuli, like job crafting and HRM satisfaction, are on a similar level compared with 2019. The same applies for the job demands and job resources. Of course, we cannot compare the results in a strict sense of a repeated measurement, because we have two different samples. Still, the averages of both groups are similar for every antecedent.
12. The high strain is reflected in the perceived workload. 43% of the respondents in wave 2 perceive a (way) too high workload. In 2020 it was 38% and in 2019 it was 44%. Especially scientific staff (teachers, assistant, associate and full professors) are mostly perceiving a high workload, with managers in the second place, while support staff is experiencing the least workload.
13. 42% work fully from home (in 2020 72% and in April 2021 52%), while 50% work partly from home and on campus (was 24%); these numbers reflect the different situation of Summer 2021 compared to Summer 2020.
14. Since last year, the UT employees in general learned to cope with homework and working fully online. At least the perceived teaching quality has been further improved, also in comparison with wave1. In addition, work-life balance has been improved a little. Still, big minorities are struggling with work-life balance (32%).
15. The preferences for working from home are more diverse than ever. One-third want to work not more than 2 days from home. However, the preference for three or four days at home is higher compared to wave 1. Hardly any control variable is important here: age only to a limited extent (most of the younger employees (under 30s) want to work from home a maximum of one-two days), organisational unit (only one significant difference between two faculties), and no statistical significant differences are found for gender, job title, organisational tenure and home situation. Apparently, individual differences are relevant in these preferences.

8 RECOMMENDATIONS

5. Since hybrid working will be the norm for most employee groups, the UT should accommodate the diverse preferences of the employees. Do not develop a standard norm for e.g. two days at home, be flexible about it and adapt the norm within each organisational unit to personal circumstances. A 'one fits all' approach towards the working time spend at home and on campus is inadvisable.

6. Scientific staff (Teachers/lecturers, Assistant, Associate and Full professors) experiences the highest workload. Next to scientific staff, the managers perceive a too high workload. Reducing the amount of work is an unquestionable precondition for well-being. Especially reducing meetings and administrative work that academic professionals have to do is a key to achieve this. In developing new policies, adapting existing policies, the focus should not only be on the students or managerial issues, the primary focus should be on staff and its well-being. This is a UT-wide challenge.

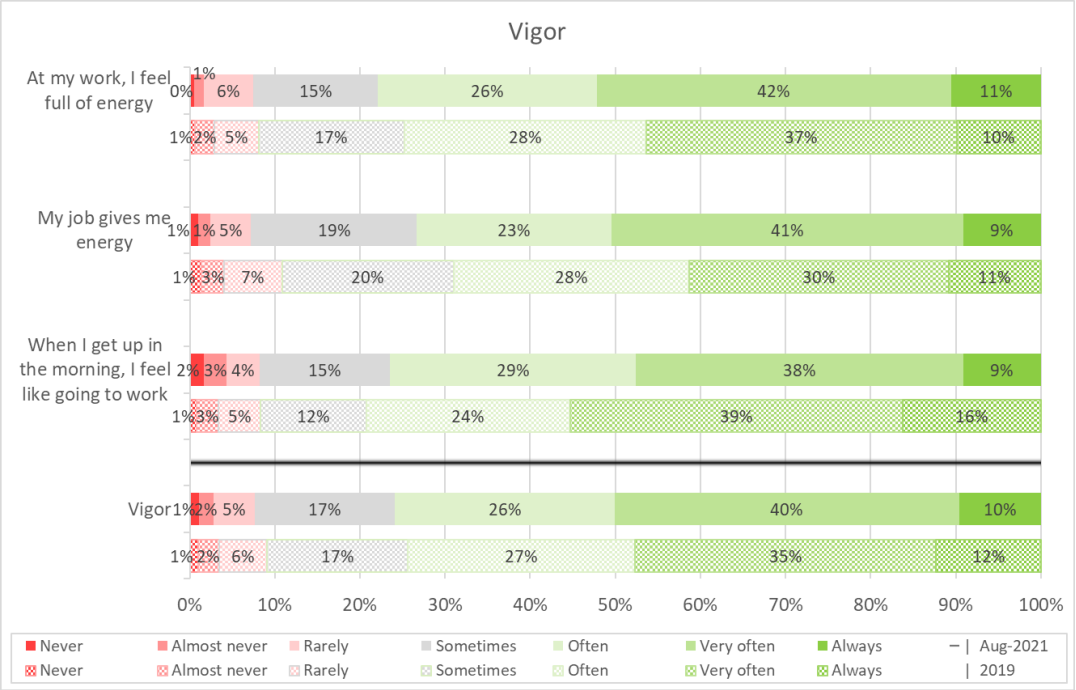
7. Continue with the well-being initiatives. It has been observed and appreciated by the employees. Pay attention to specific groups: the managers, young employees, new employees, employees with unsecure contracts.

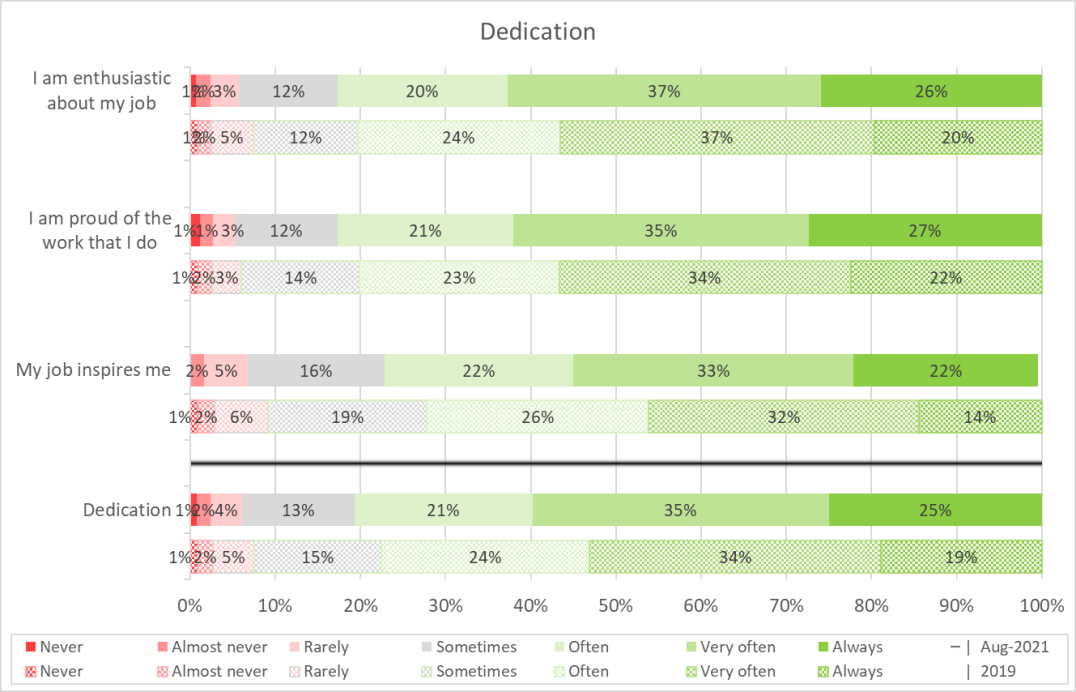
8. Pay attention to the role of the direct supervisor. Despite the fact that certain attention or target groups could be identified, never forget that also within groups (large) differences between apparently equal group members concerning desires and needs do exist. For finding individual differences and adequate solutions that both affect employee well-being and productivity, the role of direct supervisors is crucial. Direct communications between supervisors and individual staff members is inevitable for continuing a fit between organisational policies and practices and employees.

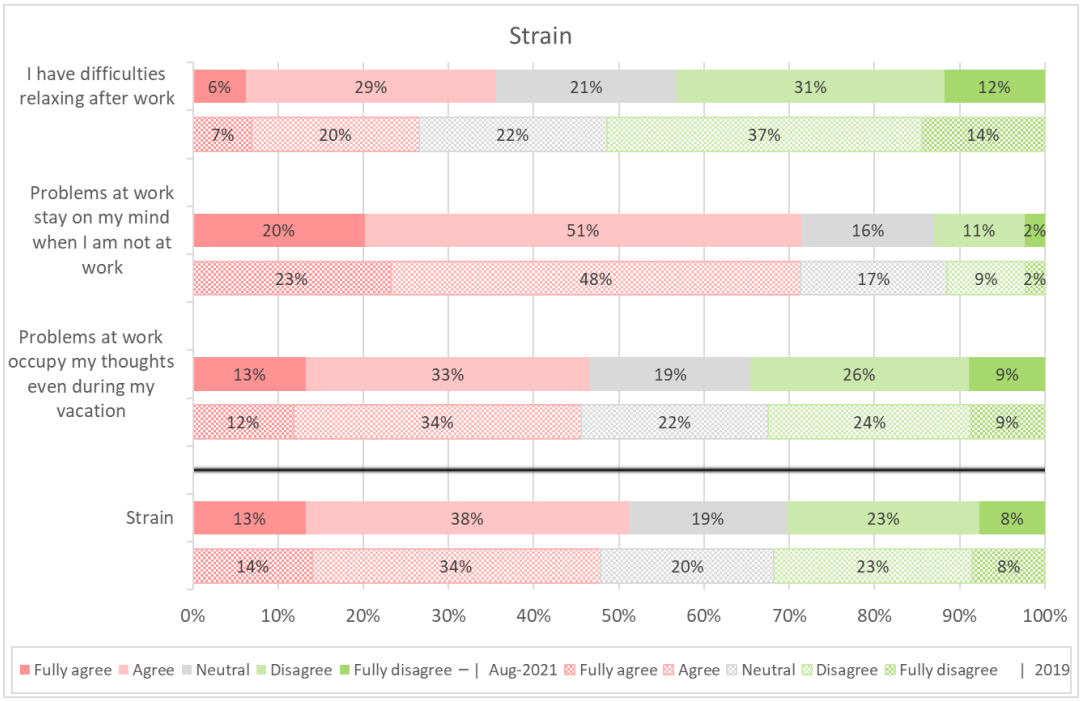
APPENDIX 1: QUESTIONNAIRE

APPENDIX 2: ANSWERS & COMPARISONS

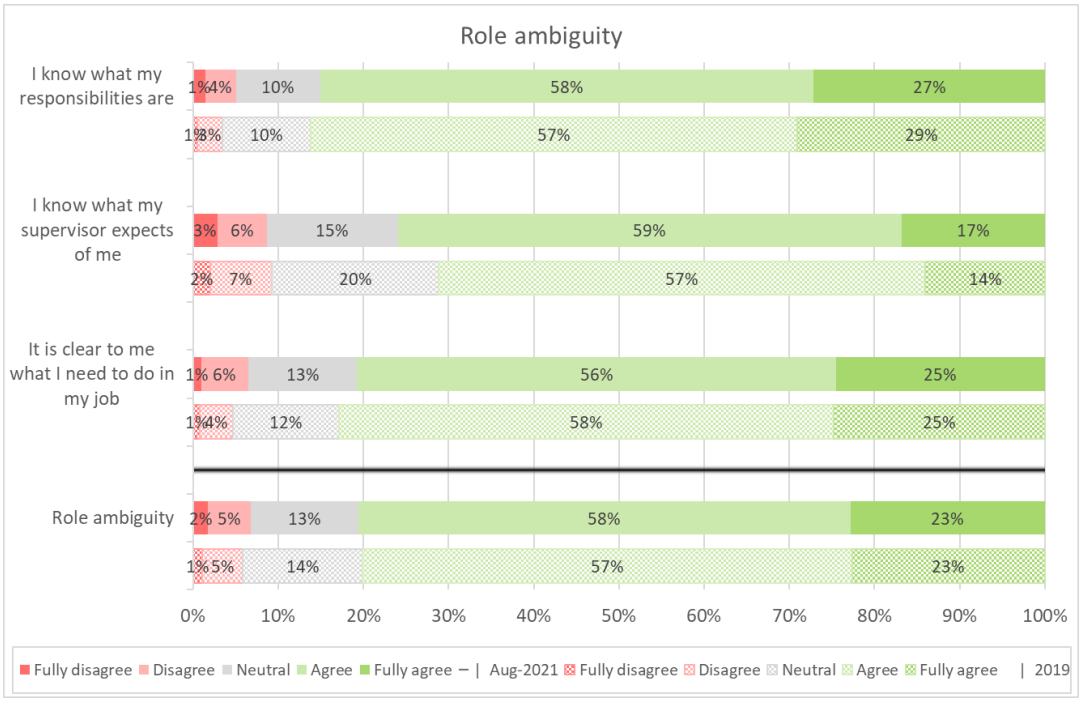
2.1 Engagement (vigor and dedication) and strain

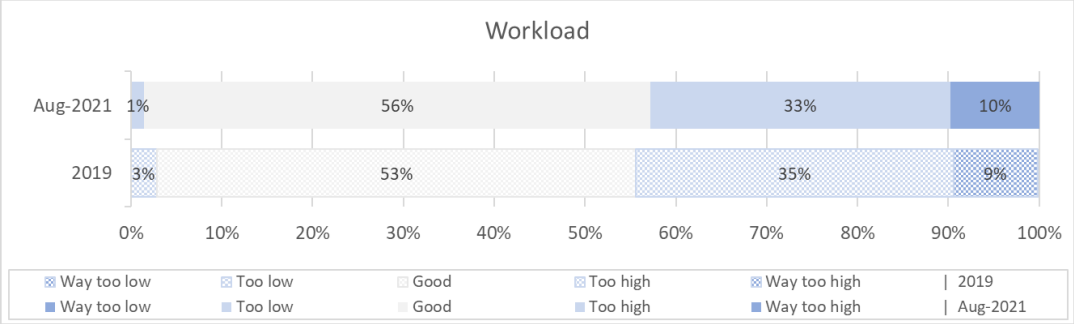


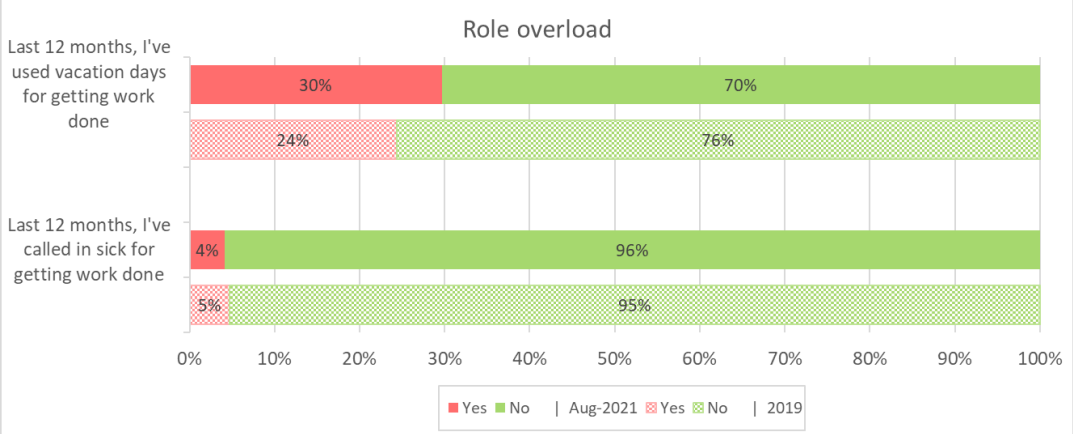


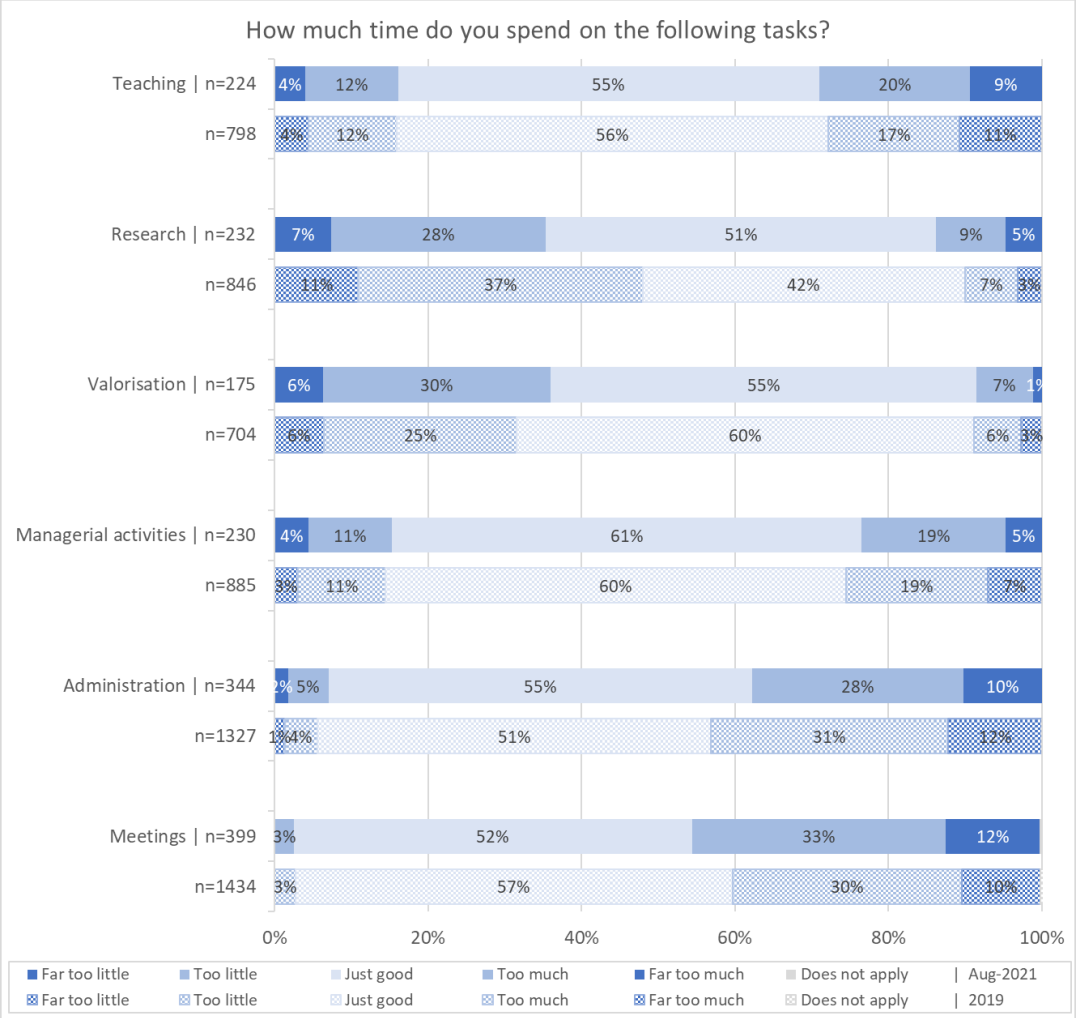


2.2 Job demands

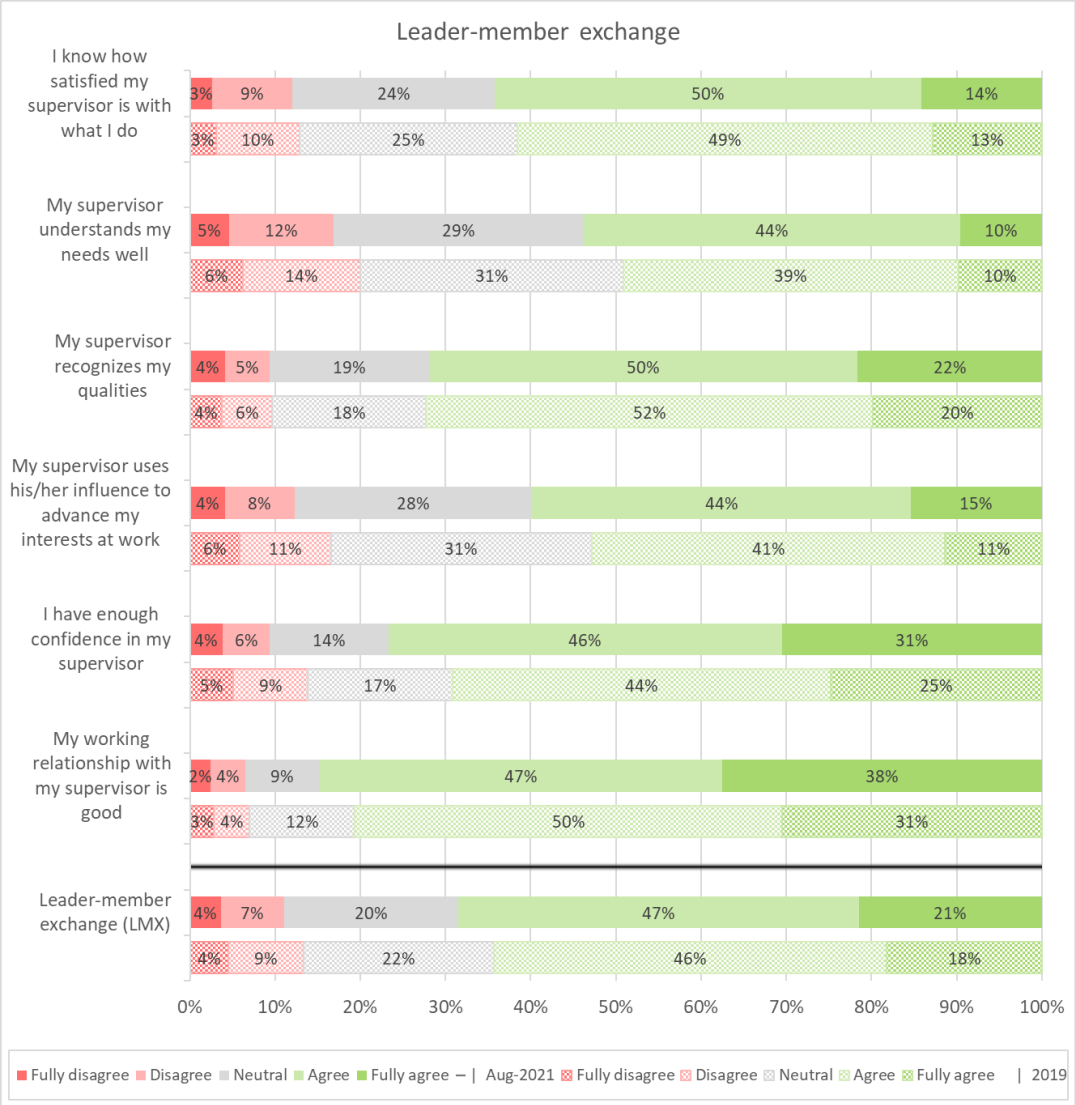


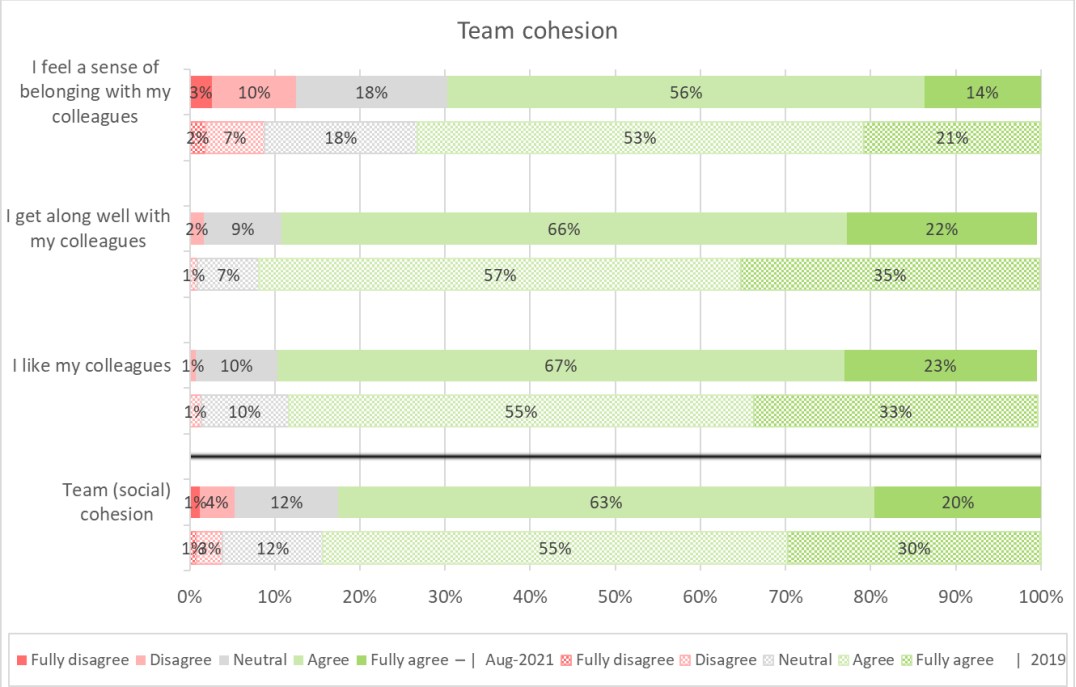

Workload
Aug-2021
2019
1%
56%
33%
10%
3%
53%
35%
9%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Way too low
Too low
Good
Too high
Way too high
2019
Aug-2021

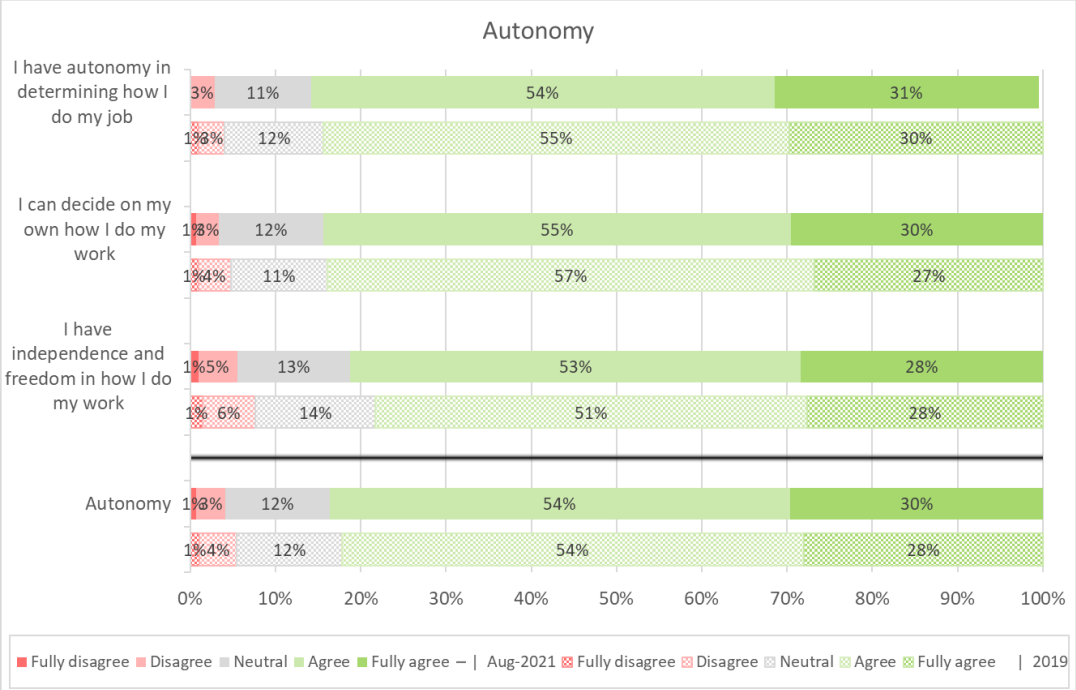

Role overload
Last 12 months, I've used vacation days for getting work done
Last 12 months, I've called in sick for getting work done
30%
70%
24%
76%
4%
96%
5%
95%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Yes
No
Aug-2021
Yes
No
2019

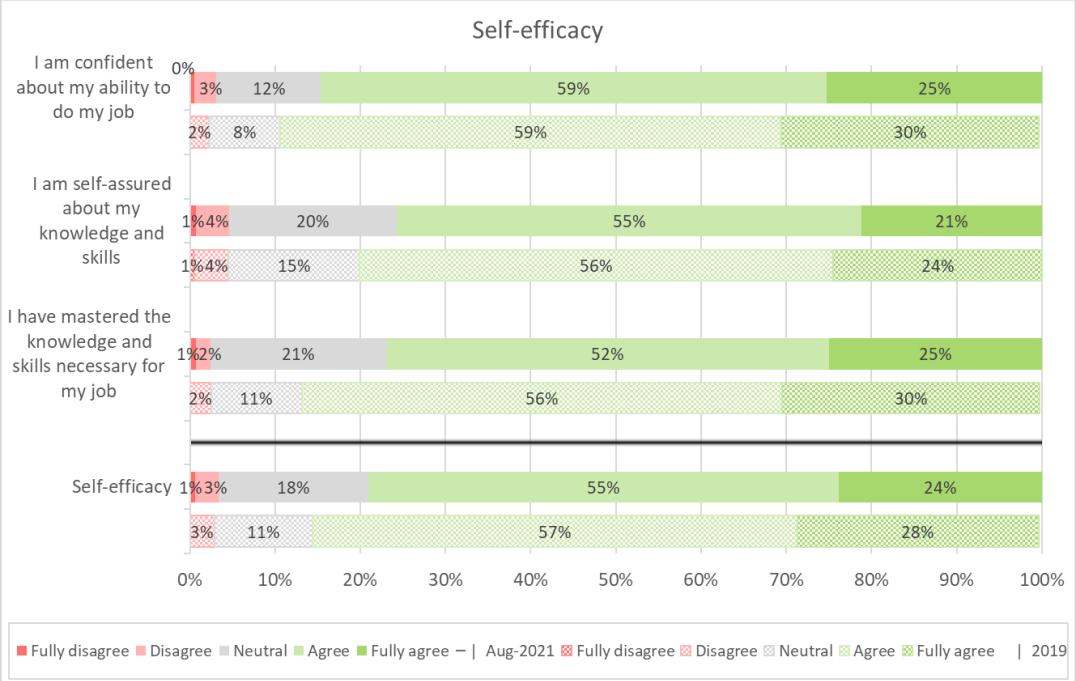

How much time do you spend on the following tasks?
Teaching | n=224
4%
12%
55%
20%
9%
n=798
4%
12%
56%
17%
11%
Research | n=232
7%
28%
51%
9%
5%
n=846
11%
37%
42%
7%
3%
Valorisation | n=175
6%
30%
55%
7%
1%
n=704
6%
25%
60%
6%
3%
Managerial activities | n=230
4%
11%
61%
19%
5%
n=885
3%
11%
60%
19%
7%
Administration | n=344
2%
5%
55%
28%
10%
n=1327
1%
4%
51%
31%
12%
Meetings | n=399
3%
52%
33%
12%
n=1434
3%
57%
30%
10%
0%
20%
40%
60%
80%
100%
Far too little
Too little
Just good
Too much
Far too much
Does not apply
Aug-2021
Far too little
Too little
Just good
Too much
Far too much
Does not apply
2019

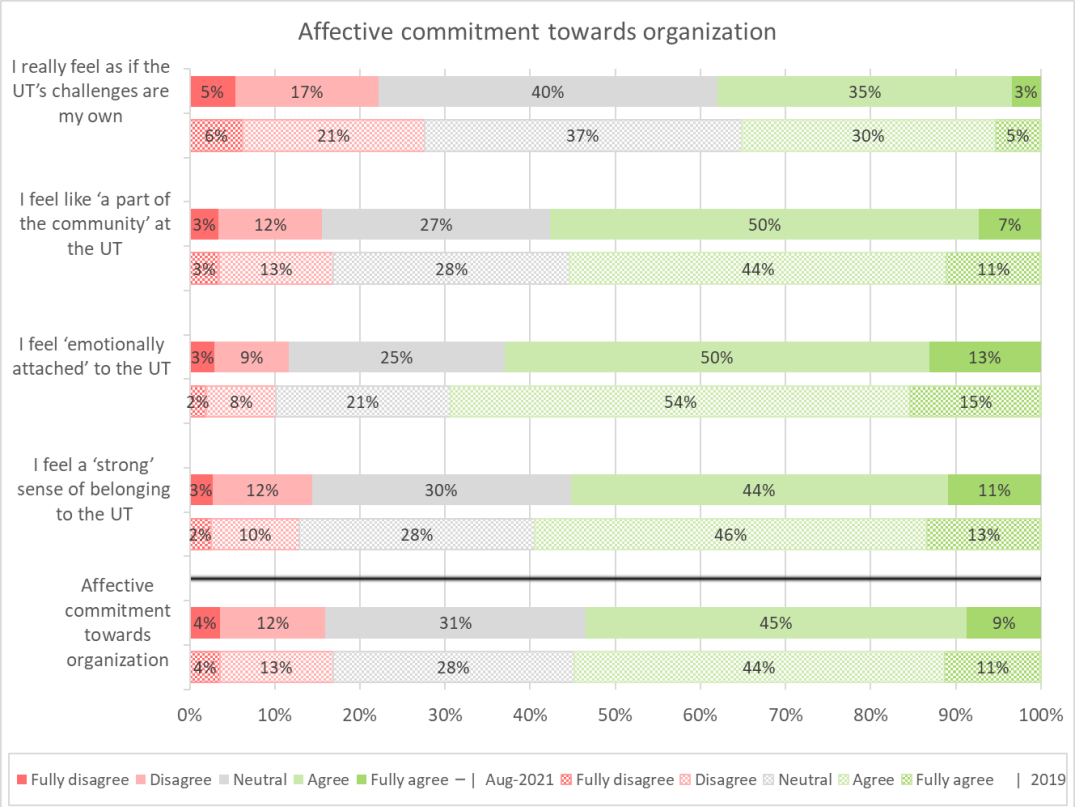
2.3 Job resources



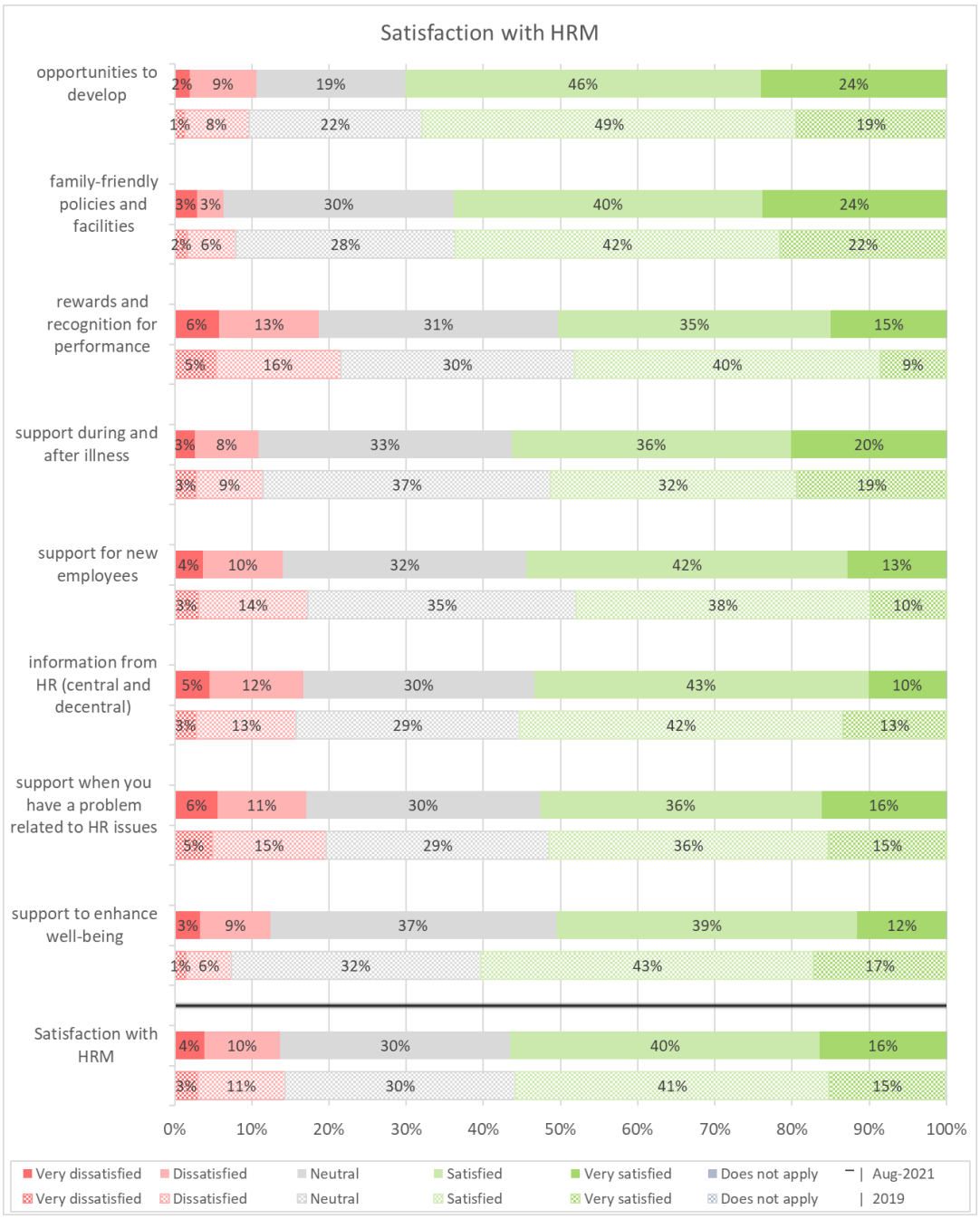

Team cohesion
I feel a sense of belonging with my colleagues
3% 10% 18% 56% 14%
2% 7% 18% 53% 21%
I get along well with my colleagues
2% 9% 66% 22%
1% 7% 57% 35%
I like my colleagues
1% 10% 67% 23%
1% 10% 55% 33%
Team (social) cohesion
1% 4% 12% 63% 20%
1% 3% 12% 55% 30%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Fully disagree Disagree Neutral Agree Fully agree | Aug-2021 Fully disagree Disagree Neutral Agree Fully agree | 2019

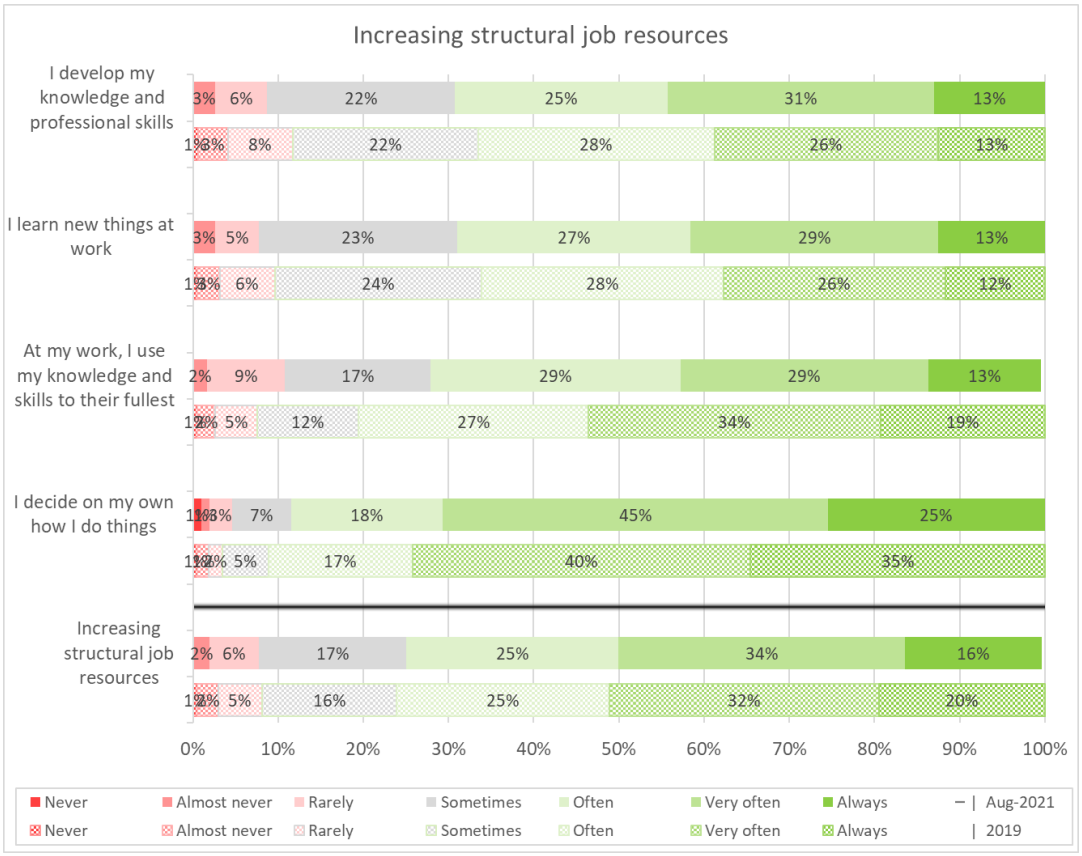

Autonomy
I have autonomy in determining how I do my job
3% 11% 54% 31%
1% 3% 12% 55% 30%
I can decide on my own how I do my work
1% 3% 12% 55% 30%
1% 4% 11% 57% 27%
I have independence and freedom in how I do my work
1% 5% 13% 53% 28%
1% 6% 14% 51% 28%
Autonomy
1% 3% 12% 54% 30%
1% 4% 12% 54% 28%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Fully disagree Disagree Neutral Agree Fully agree | Aug-2021 Fully disagree Disagree Neutral Agree Fully agree | 2019

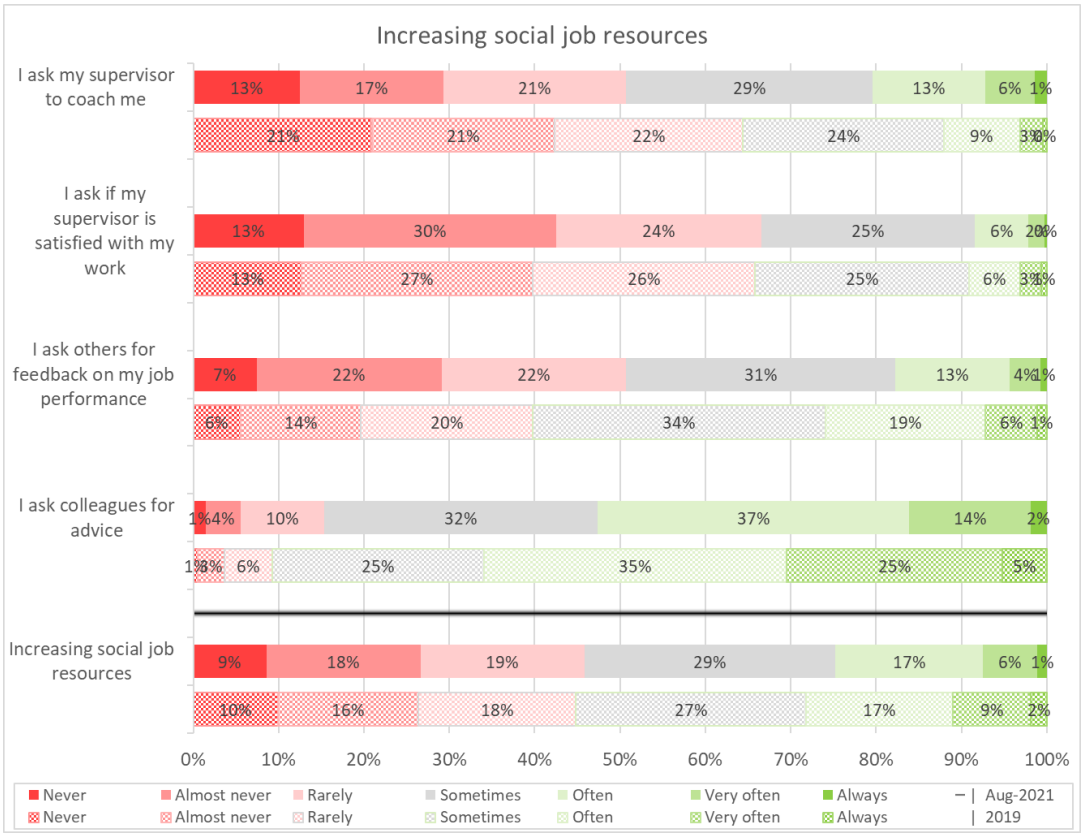

Self-efficacy
I am confident about my ability to do my job
0% 3% 12% 59% 25%
2% 8% 59% 30%
I am self-assured about my knowledge and skills
1% 4% 20% 55% 21%
1% 4% 15% 56% 24%
I have mastered the knowledge and skills necessary for my job
1% 2% 21% 52% 25%
2% 11% 56% 30%
Self-efficacy
1% 3% 18% 55% 24%
3% 11% 57% 28%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Fully disagree Disagree Neutral Agree Fully agree | Aug-2021 Fully disagree Disagree Neutral Agree Fully agree | 2019

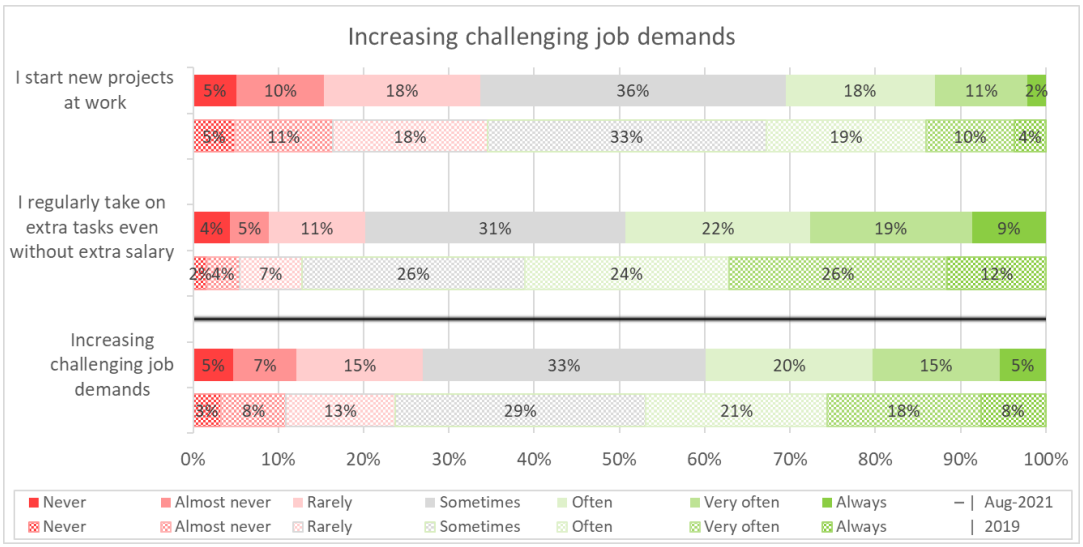

Affective commitment towards organization
I really feel as if the UT's challenges are my own
5% 17% 40% 35% 3%
6% 21% 37% 30% 5%
I feel like 'a part of the community' at the UT
3% 12% 27% 50% 7%
3% 13% 28% 44% 11%
I feel 'emotionally attached' to the UT
3% 9% 25% 50% 13%
2% 8% 21% 54% 15%
I feel a 'strong' sense of belonging to the UT
3% 12% 30% 44% 11%
2% 10% 28% 46% 13%
Affective commitment towards organization
4% 12% 31% 45% 9%
4% 13% 28% 44% 11%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Fully disagree Disagree Neutral Agree Fully agree | Aug-2021 Fully disagree Disagree Neutral Agree Fully agree | 2019

2.4 Organisational stimuli




Increasing structural job resources
I develop my knowledge and professional skills
3% 6% 22% 25% 31% 13%
1% 3% 8% 22% 28% 26% 13%
I learn new things at work
3% 5% 23% 27% 29% 13%
1% 3% 6% 24% 28% 26% 12%
At my work, I use my knowledge and skills to their fullest
2% 9% 17% 29% 29% 13%
1% 2% 5% 12% 27% 34% 19%
I decide on my own how I do things
1% 3% 7% 18% 45% 25%
1% 2% 5% 17% 40% 35%
Increasing structural job resources
2% 6% 17% 25% 34% 16%
1% 2% 5% 16% 25% 32% 20%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Never Almost never Rarely Sometimes Often Very often Always Aug-2021
Never Almost never Rarely Sometimes Often Very often Always 2019


Increasing social job resources
I ask my supervisor to coach me
13% 17% 21% 29% 13% 6% 1%
21% 21% 22% 24% 9% 3% 0%
I ask if my supervisor is satisfied with my work
13% 30% 24% 25% 6% 2% 0%
13% 27% 26% 25% 6% 3% 1%
I ask others for feedback on my job performance
7% 22% 22% 31% 13% 4% 1%
6% 14% 20% 34% 19% 6% 1%
I ask colleagues for advice
1% 4% 10% 32% 37% 14% 2%
1% 3% 6% 25% 35% 25% 5%
Increasing social job resources
9% 18% 19% 29% 17% 6% 1%
10% 16% 18% 27% 17% 9% 2%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Never Almost never Rarely Sometimes Often Very often Always Aug-2021
Never Almost never Rarely Sometimes Often Very often Always 2019


Increasing challenging job demands
I start new projects at work
5% 10% 18% 36% 18% 11% 2%
5% 11% 18% 33% 19% 10% 4%
I regularly take on extra tasks even without extra salary
4% 5% 11% 31% 22% 19% 9%
2% 4% 7% 26% 24% 26% 12%
Increasing challenging job demands
5% 7% 15% 33% 20% 15% 5%
3% 8% 13% 29% 21% 18% 8%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Never Almost never Rarely Sometimes Often Very often Always Aug-2021
Never Almost never Rarely Sometimes Often Very often Always 2019

APPENDIX 3: CATEGORIZATION OF OPEN QUESTIONS

To be added after Wave 3