UNIVERSITY OF TWENTE.

WELL-BEING IN THE SECOND COVID-19 YEAR

Results of the 2021 well-being study among UT employees

Wave 1, 2 and 3

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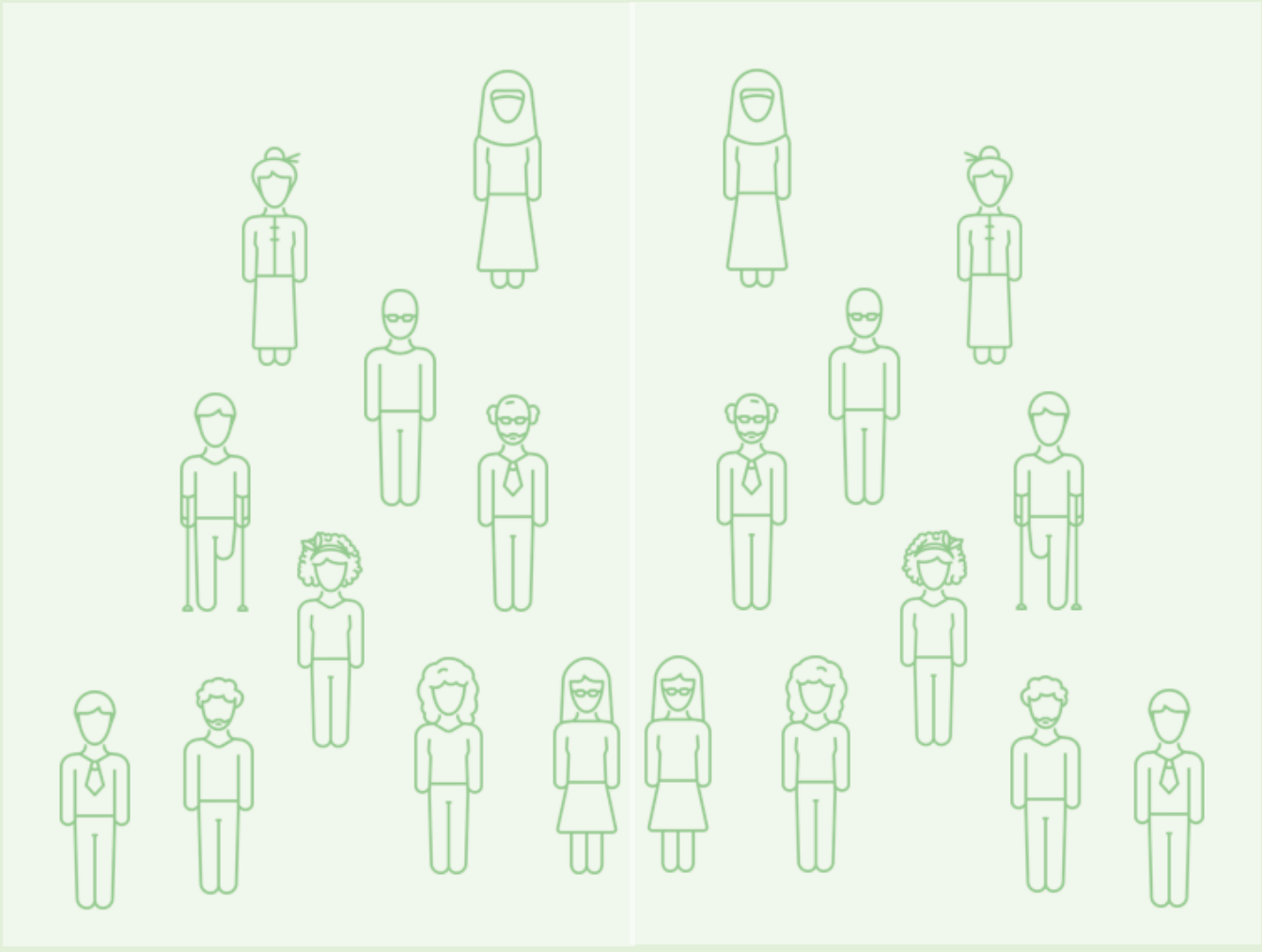


CONTENT

MANAGEMENT SUMMARY

During Spring, Summer and Autumn 2021 – the second year of the pandemic – the University of Twente (UT) measured the well-being of its employees. Most of the year, the advice was to work from home and most of the common work of employees is done from home, although some activities are allowed on campus. Only from September-November were most of the activities possible 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? Do we see differences between the three waves?

For exploring employee experiences and needs under these circumstances, a bilingual online survey was distributed in every wave to one-third of the employees (employed at 1 April, 2021). As the current circumstances are unique and we cannot yet predict how things will be in three months, we 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 the three Waves together and is a follow-up of the former reports on Wave 1 and Wave 2.

For Wave 3 the questionnaire was online available for completion from 4th November until 5th December. The survey of Wave 3 is exactly the same as Wave 1 and 2 and largely based on the well-being survey of 2019 with a selection of questions of the Well-being under Covid-19 survey held in 2020. For Wave 3, 1568 emails with links to the questionnaire were distributed. The response was satisfying: in total 521 responses were counted with valid answers, which is a net response rate of 33%.

Most important findings

1. Wave 3 in general shows slightly more positive outcomes compared to Wave 1 and 2.
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 7.7, which is a bit higher than Wave 1 and 2 (7.5) and similar to 2020 (7.6) and also somewhat higher than 2019 (7.2).
4. Of the organisational stimuli, such as job crafting and HRM satisfaction, the social job resources have been increased, the HRM Satisfaction a bit decreased. In general, they are on a similar level compared with 2019. The same applies for the job demands and job resources. Two job resources show statistically significant differences: team cohesion and commitment have been improved across the three waves. Of course, we cannot compare the results in a strict sense of a repeated measurement, because we have different samples. Still, the averages of both groups are similar for half of the antecedents and the others a bit more positive.

5. The high strain is reflected in the perceived workload. 37% of the respondents in wave 3 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. Only 11% work fully from home. This is a sharp difference with the other waves: in 2020 72% and in April 2021 52% and in July 2021 42%), while 76% work partly from home and on campus (was 24% in Wave 1 and 50% in Wave 2). These numbers reflect the different situation of November 2021, compared to Summer and Spring 2021 and Summer 2020.
7. The difference in working on campus are also reflected in the perceived quality of online teaching. In wave 2, the perceived teaching quality has been improved in comparison with wave1. Now, in wave 3, especially the teaching staff is less satisfied. Probably the renewed experience of offline teaching reminded them on the benefits of it compared with fully online teaching. More or less the same applies for research quality.
8. Work-life balance has been improved a little. Still, one out three employees are struggling with work-life balance (33%).
9. The preferences for working from home are more diverse than ever. Given their preferences for working from home 5% of the employees can be classified as 'no homeworkers', 23% as 'light homeworkers' (for 1 day a week), 40% as 'moderate home workers' (2-3 days a week) and 32% as 'heavy homeworkers' (>3 days a week). Especially the group of heavy homeworkers has been increased. 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) and organisational unit (only a few significant difference between faculties). The preferences are not explained by gender, country of birth, situation at home (i.e. taking care of children or not), contractual status (permanent, temporary) and position (academic or support staff. Apparently, individual differences are relevant in these preferences.
10. Inappropriate behaviours are experienced, witnessed and shared by a small minority of the respondents, however, it is still present.

Recommendations

1. 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. Also for many of the academic staff the balance between research and teaching is skewed. 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.
    a. In the survey, role overload was assessed through taking vacation or sick days to get work done. Conducting follow up assessment such as focus groups about why

people are taking leave to complete their work could help identify new strategies for managing workload and role overload.

   b. Communicating clear expectations about workloads and output (e.g., publications) may help some individuals reduce their workload, but professional expectations from outside the UT are likely to reinforce high workload expectations. Providing additional support for administrative tasks and teaching should be considered. This may also be an appropriate time to re-evaluate the work being done by employees in all job categories at the UT to see if some work tasks can be eliminated or streamlined. Alternatively, guidance on how to prioritize work activities rather than trying to accomplish everything could be useful.
   c. Another option is to shift the timing of certain work activities, e.g. no early Monday morning meetings or discuss the need to respond to emails outside of work hours.

2. Since hybrid working will be the norm for most employee groups, the UT should accommodate the diverse preferences of the employees. A 'one fits all' approach towards the working time spend at home and on campus is inadvisable. UT should consider providing some guidance for managers on how to have this conversation with workgroups and employees. Pay attention to specific groups (e.g. employees with young children) and investigate the possibilities to contract co-working resources in other places and communities where employees live.
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 and employees who speak English as their primary language. Many of the open-ended comments in the survey addressed resources for fitness and sports and the importance of making those available as well as the need for more social interaction like informal connection events.
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. Managers could also be provided with guidance on how to create more favourable leader-member exchange relationships with the employees in their workgroup.
5. Do more with job crafting, especially increasing social job resources. Provide guidance to both employees and supervisors about options for job crafting and what that would mean to them.
6. Develop a culture of trust, safety and transparency where inappropriate behaviours are not tolerated, discussed openly and without consequences for victims.

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 is 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 and dynamic, 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.

In total 1586 emails with links to the questionnaires were distributed in Wave 3. The survey was open from November 4th until December 5th, 2021. Two reminders were sent out.
The response was satisfying, it is enough to get a representative sample: in total 521 responses were counted with valid answers, which is a net response rate of 33%. 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; however, it is somewhat higher than the 30% of Wave 2.

Table 1.1 Representativeness of Wave 3 and the 3 Waves together

	Wave 3	UT	Response wave 3	Response wave 1,2,3
Organisational unit				
Faculty of Behavioural, Management and Social Sciences (BMS)	1/3	14.4%	18.2%	16.6%
Faculty of Engineering Technology (ET)	1/3	14.4%	15.0%	13.4%
Faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS/EWI)	1/3	17.2%	17.3%	16.5%
Faculty of Science and Technology (TNW)	1/3	22.5%	18.0%	17.6%

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

Faculty of Geo-Information Science and Earth Observation (ITC)	1/3	7.4%	8.1%	9.2%
General Affairs (GA)	none	2.2%	none	2.2%
Campus & Facility Management (CFM)	1/3	4.9%	3.1%	3.4%
Centre for Educational Support (CES)	1/3	4.8%	6.8%	7.6%
Finance (FIN)	none	1.4%	none	0.9%
Human Resources (HR)	none	1.5%	none	1.7%
Library, ICT services & Archive (LISA)	1/3	4.4%	4.4%	5.1%
Marketing & Communication (MC)	all	2.3%	4.0%	3.1%
Strategic Business Development (SBD)	none	0.9%	3.8%	1.3%
Strategy & Policy (SP)	all	1.1%	1.6%	1.4%
Not answered			5.7%	4.8%
Job category				
Scientific staff		57.2%	57.3%	51.9%
Support and management staff		42.8%	42.7%	48.1%
Gender				
Female		42.2%	52.6%	46.4%
Male		57.7%	46.9%	44.2%
Other			0.2%	0.4%

Analysis for representativeness for Wave 3 shows (see fourth column of Table 1.1):
-somewhat more from BMS and CES and SBD,
-somewhat less from TNW,
-substantially more female.
Analysis for representativeness for all three Waves shows (see most right column of Table 1.1):
-somewhat more from BMS and ITC and CES,
-somewhat less from TNW,
-somewhat more from support staff and less scientific staff,
-somewhat more female and less male.
All in all, the three waves together show a satisfying degree of representativeness.

In this report we will present the results of different waves and compare the outcomes with 2019 or 2020. We must keep in mind that this research does not have a repeated-measures design in which all groups in every survey consist of exactly the same respondents. In our research, we compare the outcomes of the mean of each group, not of the individuals within the group. Each group has different group members, so we cannot derive causal relationships. The outcomes could be caused by the composition of the respondent group of each survey. Nevertheless, because of the representativeness of the surveys, the outcomes might indicate enough to compare the results between the surveys.

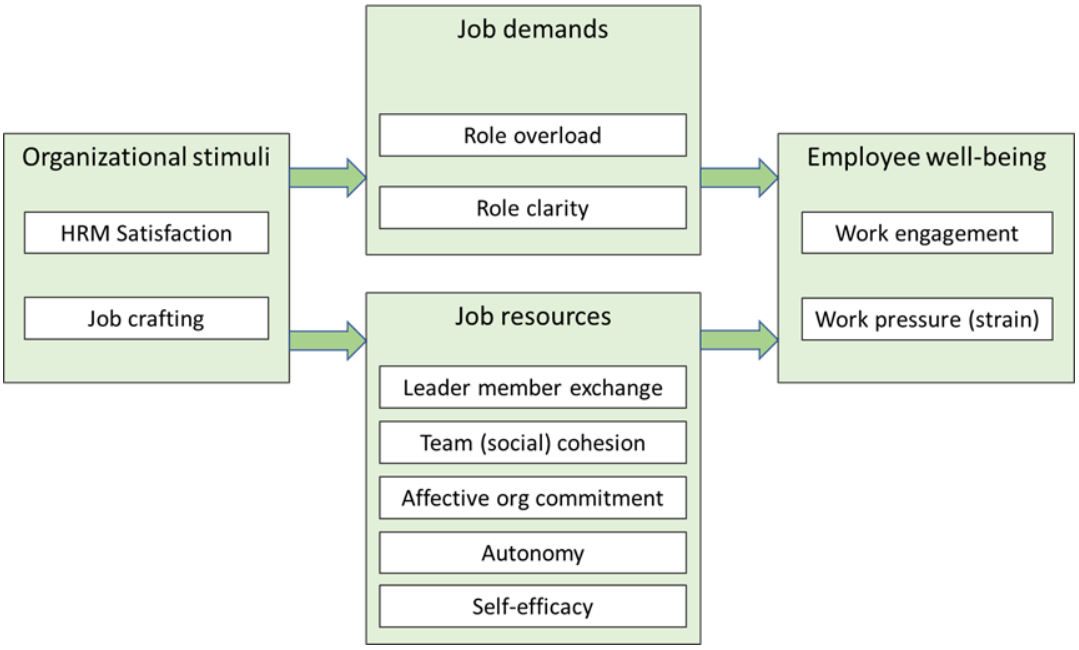
1.3 Research model

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 7.7 (scale 1-10), which is a bit higher compared to wave 1 and 2 and almost similar to 2020 and also higher compared with 2019. Again, we repeat to be careful with the comparison of the five surveys, because of the different composition of the five respondent groups. Still, due to the rather high degree of representativeness, it is possible to interpret these as a trend.

Figure 2.1 Satisfaction with UT

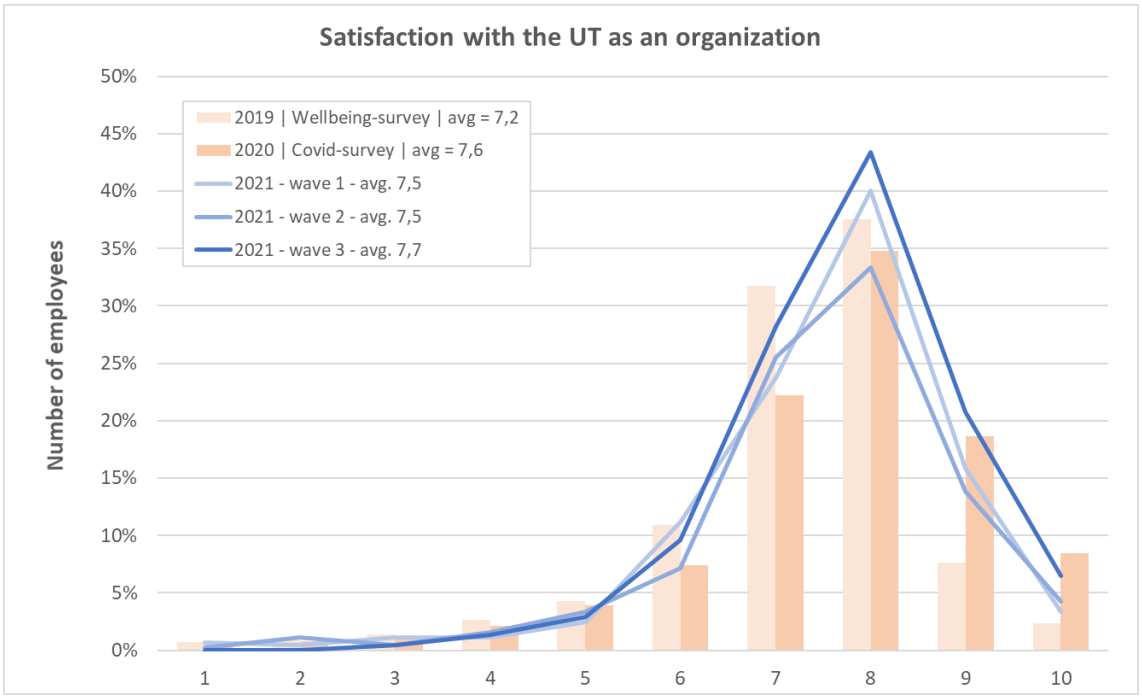


Table 2.1: General satisfaction with UT, engagement and strain per organisational unit

Organisational unit	General satisfaction[1]		Engagement[2]		Strain[3]	
	Mean	*SD*	*Mean*	SD	*Mean*	*SD*
BMS	7.42	*1.25*	5.34	*.99*	3.47	*.92*
ET	7.65	*1.28*	5.40	*1.01*	3.21	*.93*
EEMCS/EWI	7.88	*1.47*	5.50	*1.00*	3.21	*.95*
TNW	7.64	*1.16*	5.59	*.95*	3.26	*.81*
ITC	7.88	*1.37*	5.35	*1.20*	3.21	*1.11*
CFM	7.38	*1.31*	5.56	*1.33*	2.90	*1.08*
CES	7.79	*.91*	5.39	*.83*	2.93	*.98*
LISA	8.05	*.90*	5.73	*.96*	2.68	*.77*
M&C	8.30	*.80*	5.59	*.74*	3.38	*.86*
SP	8.63	*.92*	6.13	*.84*	3.42	*.87*
UT wave3	**7.73**	***1.26***	**5.48**	***1.00***	**3.23**	***.94***
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 ($p < .05$), other than BMS was significantly higher in strain compared to LISA.

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	7.79	*1.33*	5.51	*.98*	3.28	*.93*
Researcher / Postdoc	7.91	*1.31*	5.46	*.86*	3.37	*.76*
Teacher / lecturer	7.44	*1.54*	5.46	*1.08*	3.20	*.92*
Assistant Professor	7.43	*1.68*	5.33	*1.23*	3.54	*.91*
Associate Professor	7.10	*1.48*	5.46	*1.00*	3.95	*.78*
Full professor	7.73	*.79*	6.03	*.52*	3.48	*.64*
Manager (service dept)	8.22	*1.20*	5.78	*.81*	3.56	*.97*
Manager (faculties)	7.33	*1.00*	5.56	*.84*	4.07	*.62*
Support staff	7.95	*.92*	5.54	*.92*	2.86	*.89*
I prefer not to answer this question	6.89	*1.05*	4.96	*1.22*	3.58	*.98*
UT wave3	**7.72**	***1.25***	**5.48**	***1.00***	**3.23**	***.94***
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 and Associate professors are among the least satisfied and the most strained. Also managers (of faculties) have the same pattern. 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 and Associate Professors. This confirms the findings of wave1 and 2. No significant differences were found for Engagement or General satisfaction.

Average levels of strain are slightly above the scale midpoint in all three waves. Nearly one-third of respondents reported experiencing high levels of strain (4.0-5.0 on the 5-point scale): Wave 1: 35.6%, Wave 2: 32%, Wave 3: 27.3%.

Predictors of strain

- Wave 1: Job type (academic positions more likely to experience high strain), LMX (workers with high LMX less likely to experience high strain).
- Wave 2: Job type (academic positions more likely to experience high strain), LMX (workers with high LMX less likely to experience high strain). Self-efficacy was also negatively related to strain (workers with high self-efficacy were less likely to experience high strain).
- Wave 3: Wave 1: Job type (academic positions more likely to experience high strain), LMX (workers with high LMX less likely to experience high strain)

We also tested for the effects of age, having children at home, team cohesion, and autonomy on strain and found these variables did not significantly affect strain.

Unexpectedly, the choice of language for the survey (English, Dutch) was related to many of the survey responses, including strain. Even after accounting for job type (respondents in PhD student, post-doctoral, and professor positions were much more likely to respond to the survey in English), survey language was a significant predictor of strain with respondents using Dutch less likely to experience strain (in wave 1 and 2).

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 only one difference is significant ($p < .05$): BMS shows lower HRM satisfaction compared to EEMCS. 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	.90	3.66	.80	4.28	1.16	3.32	.79
ET	5.56	.86	3.85	1.12	4.03	1.25	3.66	.69
EEMCS/EWI	5.47	.91	3.81	.98	4.33	1.12	3.88	.70
TNW	5.49	.82	3.76	1.10	4.27	1.11	3.60	.68
ITC	5.15	1.13	3.46	1.17	4.06	1.01	3.60	.84
CFM	5.09	1.33	4.23	1.23	4.94	1.25	3.50	.94
CES	5.09	.70	3.77	.83	3.99	1.17	3.70	.59
LISA	5.45	1.01	3.95	.90	4.34	1.05	3.74	.70
MC	5.36	.74	3.90	.94	4.48	1.03	3.79	.54
SP	5.41	.86	3.53	.82	4.13	.35	4.00	.53
UT wave3	**5.37**	***.91***	**3.77**	***1.01***	**4.24**	***1.14***	**3.63**	***.74***
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	1.80	*.30*	3.80	*.75*
ET	1.81	*.31*	4.03	*.56*
EEMCS/EWI	1.85	*.23*	4.01	*.64*
TNW	1.81	*.29*	3.99	*.68*
ITC	1.71	*.32*	3.89	*.79*
CFM	1.97	*.13*	3.69	*.93*
CES	1.91	*.23*	3.95	*.65*
LISA	1.89	*.26*	4.29	*.54*
MC	1.90	*.26*	3.75	*.98*
SP	1.94	*.18*	4.29	*.45*
UT wave3	**1.83**	***.28***	**3.95**	***.70***
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 difference in means in Leader-Member Exchange between BMS and TNW is significant, implying a lower perceived LMX at BMS. No differences were found between the organisational units in team cohesion, autonomy and self-efficacy. Only in commitment we found a significant ($p < .05$) difference: M&C is higher in commitment compared to the five faculties.

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	3.52	*.84*	4.11	*.59*	4.02	*.73*	3.96	*.60*	3.33	*.80*
ET	3.88	*.65*	4.02	*.67*	4.26	*.53*	3.88	*.69*	3.35	*.75*
EEMCS/EWI	3.85	*.76*	4.11	*.70*	4.17	*.71*	3.88	*.82*	3.57	*.76*
TNW	3.92	*.67*	4.17	*.65*	4.17	*.69*	3.95	*.67*	3.50	*.79*
ITC	3.71	*.76*	4.15	*.78*	4.09	*.86*	3.90	*.79*	3.29	*.86*
CFM	3.65	*.90*	4.15	*.52*	3.71	*.87*	4.04	*.63*	3.52	*.65*
CES	3.87	*.50*	3.97	*.50*	3.83	*.67*	4.04	*.44*	3.65	*.56*
LISA	3.97	*.72*	4.20	*.59*	3.97	*.79*	4.29	*.50*	3.83	*.56*
MC	3.93	*.76*	4.25	*.48*	4.20	*.66*	4.23	*.56*	4.23	*.54*
SP	4.21	*.74*	4.17	*.89*	4.17	*.40*	4.42	*.46*	4.16	*.42*
UT wave3	**3.80**	***.74***	**4.11**	***.64***	**4.10**	***.71***	**3.97**	***.68***	**3.50**	***.77***
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 and wave2, an interesting significant difference is in increasing structural and social job resources between PhD Students and assistant professors and support staff: they show all less structural and social job resources compared with PhD students. Apparently, PhD students are developing more new knowledge and skills, and learning more new things compared to the other job types. Also, they 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 associate professors. Apparently, PhD students perceive less possibilities to craft their job via increasing challenging job demands.
Assistant professors show the lowest HRM satisfaction (which is a significant difference with others, Anova/Bonferroni, $p<.05$).

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	5.72	*.79*	4.12	*.96*	3.94	*1.19*	3.83	*.70*
Researcher / Postdoc	5.50	*.73*	3.98	*.89*	3.94	*1.12*	3.74	*.77*
Teacher / Lecturer	5.50	*1.03*	3.46	*.93*	4.31	*1.34*	3.52	*.77*
Assistant Professor	5.16	*1.18*	3.59	*1.13*	4.44	*1.16*	3.21	*.79*
Associate Professor	5.30	*.98*	3.36	*.73*	4.88	*.90*	3.44	*.91*
Full professor	5.61	*.64*	3.18	*.59*	4.91	*.83*	3.86	*.57*
Manager (service dept)	5.75	*.71*	4.06	*1.19*	4.89	*.86*	3.64	*.44*
Manager (faculties)	5.42	*.61*	3.89	*.98*	4.94	*.77*	3.44	*.70*
Support staff	5.22	*.80*	3.67	*.95*	4.23	*1.02*	3.74	*.64*
I prefer not to answer this question	4.86	*1.26*	3.51	*1.34*	4.41	*1.44*	3.00	*.68*
UT wave3	**5.37**	***.91***	**3.77**	***1.01***	**4.24**	***1.14***	**3.63**	***.74***
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) lower by support staff compared to PhD students, assistant and associate professors.
In the job resources (see Table 2.8) we found two significant (p<.05) differences. PhD students (like in Wave 2) perceive a lower self-efficacy compared to assistant professors, managers (service departments) and support staff. The difference in commitment between PhD students and support is significant, with support staff showing on average more commitment to the organisation.

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

Function	Role overload		Role ambiguity	
	Mean	*SD*	*Mean*	*SD*
PhD Candidate / Student	1.79	*.30*	3.94	*.57*
Researcher / Postdoc	1.80	*.29*	3.96	*.69*
Teacher / Lecturer	1.81	*.30*	4.11	*.62*
Assistant Professor	1.71	*.32*	3.88	*.77*
Associate Professor	1.65	*.33*	3.70	*.12*
Full professor	1.82	*.34*	4.18	*.66*
Manager (service dept)	1.67	*.35*	4.22	*.47*
Manager (faculties)	1.94	*.17*	3.85	*.75*
Support staff	1.94	*.18*	4.02	*.70*
I prefer not to answer this question	1.72	*.32*	3.62	*.68*
UT wave2	**1.83**	***.28***	**3.95**	***.70***
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		Commitment	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
PhD Candidate / Student	3.84	*.65*	4.00	*.70*	4.18	*.53*	3.63	*.74*	3.29	*.81*
Researcher / Postdoc	4.05	*.66*	4.20	*.66*	4.19	*.80*	3.98	*.65*	3.41	*.80*
Teacher / Lecturer	3.81	*.36*	3.89	*.56*	3.94	*.94*	4.11	*.58*	3.60	*.76*
Assistant Professor	3.63	*.95*	4.01	*.78*	3.92	*.86*	4.14	*.70*	3.32	*.83*
Associate Professor	3.50	*.79*	4.15	*.50*	4.18	*.56*	4.02	*.81*	3.41	*.89*
Full professor	3.64	*.88*	4.27	*.47*	4.42	*.50*	4.21	*.40*	3.91	*.57*
Manager (service dept)	4.06	*.52*	4.00	*.73*	4.33	*.44*	4.41	*.46*	4.14	*.55*
Manager (faculties)	3.74	*.75*	4.26	*.52*	4.26	*.68*	4.00	*.83*	3.92	*.57*
Support staff	3.89	*.69*	4.21	*.57*	4.11	*.70*	4.09	*.58*	3.68	*.67*
I prefer not to answer this question	3.27	*.93*	4.07	*.59*	3.79	*.87*	3.86	*.65*	3.27	*.74*
UT wave3	**3.80**	***.74***	**4.11**	***.64***	**4.11**	***.71***	**3.97**	***.68***	**3.50**	***.77***
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 Differences and trends across waves

Differences across waves at the group level were found with approximately half of the key constructs. Where they exist, we see a generally positive trend. For example, the average score on vigor and dedication is higher at Wave 3 than at Wave 1. The average score on strain is lower (although the difference is very small here) at Wave 3. The significant differences (based on an ANOVA) are noted below.

Table 2.9 Significant differences across waves

	Wave 1	Wave 2	Wave 3
Vigour	5.10	5.24	5.31
Dedication	5.28	5.56	5.64
Increasing social resources	3.59	3.52	3.78
Strain	3.38	3.26	3.23
Team cohesion	3.98	3.95	4.11
Commitment	2.85	3.43	3.50
HRM Satisfaction	3.61	3.93	3.63
Satisfaction with UT as an organisation	7.52	7.49	7.71

The only (statistically significant) decrease in Wave 3 is shown by HRM Satisfaction.

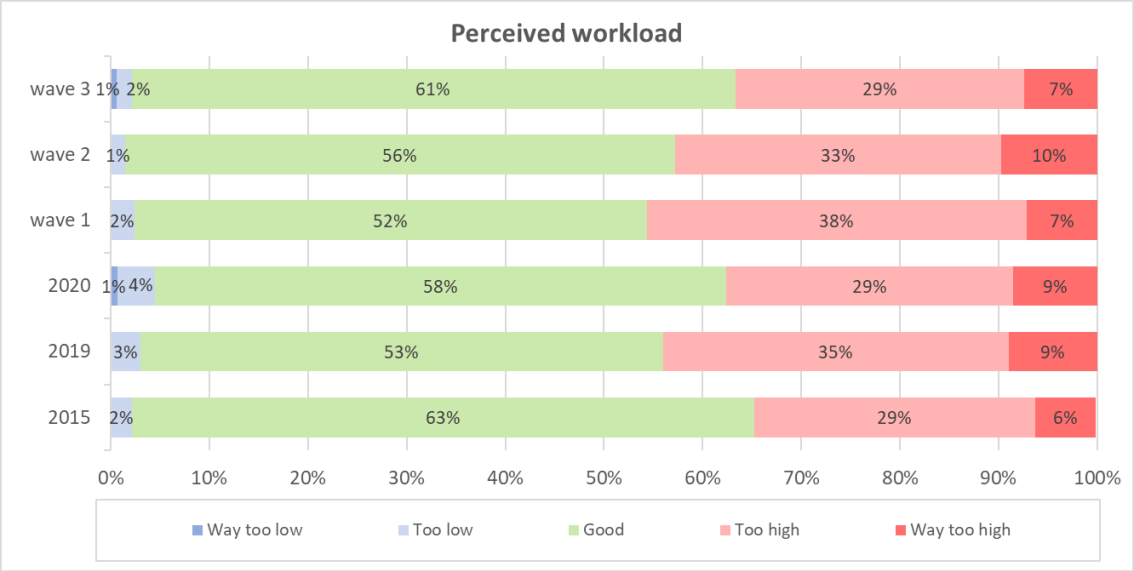
2.4 Perceived workload and excessive work hours

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

Slightly less perceived workload

Figure 2.2 on perceived workload shows for Wave 3 a rather similar result on the perception of workload compared with the Well-being study of 2015. With almost 37% of the respondents that experience a (way) too high workload it is 8-9% lower compared with 2019 and Wave 1.

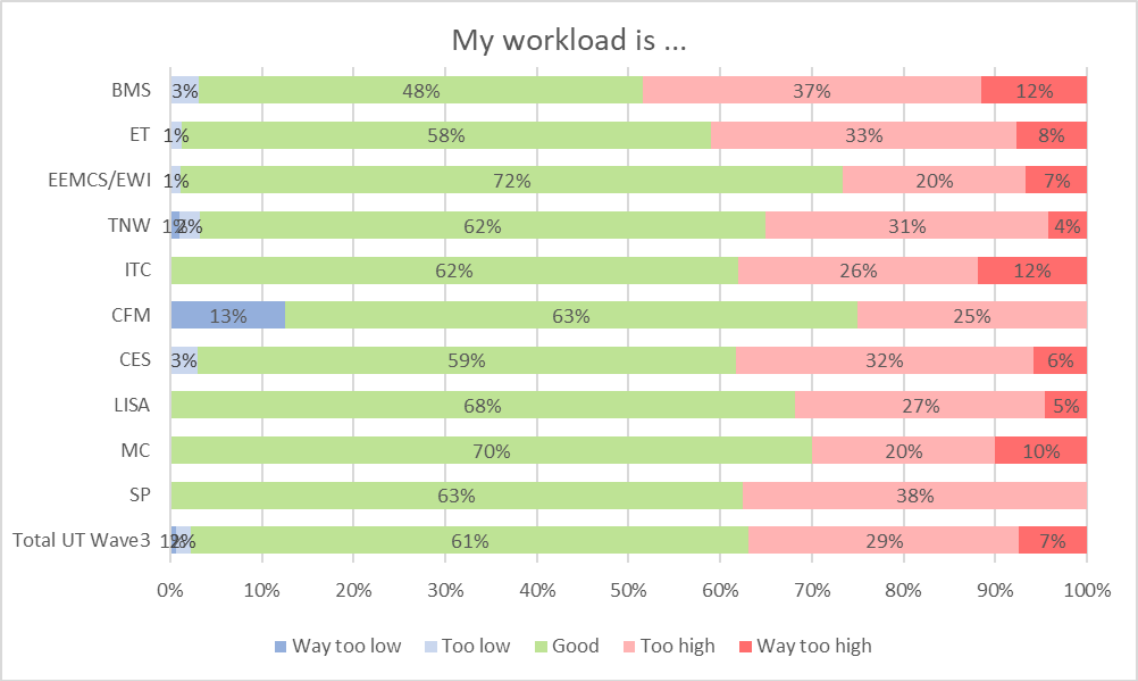
Figure 2.2 Perceived workload 2015-2021



During Wave 1 and 2, the perceived workload was higher, maybe an association with the lockdowns is visible here. Again, we have to mention here that the samples in all six surveys are different, so it is 'dangerous' to draw conclusions. Nevertheless, it is a better result.

Figure 2.3 shows the results per organisational unit, with BMS as the unit with the highest perceived workload (49%); also in Wave 1 and 2 BMS had the highest perceived workload.

Figure 2.3 Perceived workload Wave 3 by organisational unit



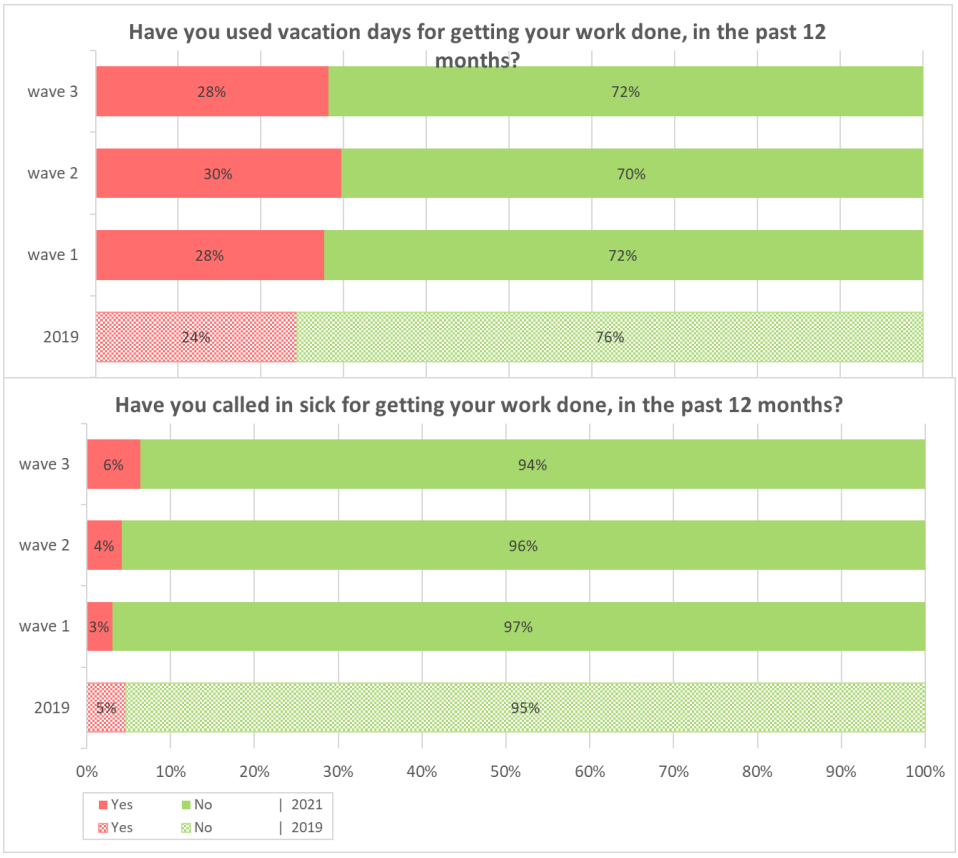
Predictors of workload

- Wave 1: Workload was positively associated with age, type of job, and self-efficacy. People who were older, in professor positions, and with higher self-efficacy were more likely to report having a high workload. Survey language was negatively associated with workload, such that people who completed the survey in Dutch were less likely to report a high workload.
- Wave 2: Workload was positively associated with type of job, such that people who were academic positions reported a significantly higher workload. The effect for age on workload was positive but marginal (p = .054).
- Wave 3: Workload was positively associated with age, type of job, and having children at home. People who were older, in professor positions, and had children at home were more likely to report having a high workload.

We also tested for the effects of role ambiguity, LMX, team cohesion, and autonomy on workload and found these variables did not significantly affect workload. It is possible to zoom in the workload by three ways: role overload, overtime and time spent on activities.

Figure 2.4 shows that 28% of the respondents indicating they are using vacation days for getting their work done. That is somewhat higher compared to the 2019 survey. Calling sick for getting work done also increased a little bit from 5% to 6%.

Figure 2.4 Role overload: use of vacation days (2019-2021) and use of sick leave



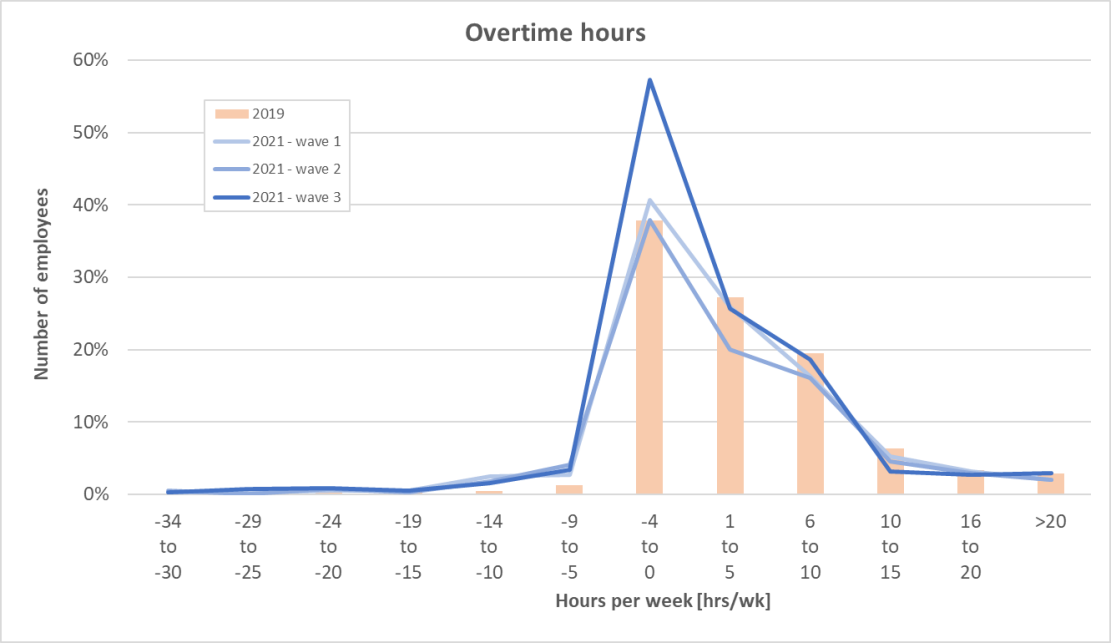
Apparently, using vacation days and even calling in sick are persistent ways of UT respondents to deal with workload. We performed multiple regression to see which predictors might explain the use of vacation days (Wave 1: 27.5%, Wave 2: 29.3%, Wave 3: 27.8%).

Predictors of Using Vacation Days to Get Work Done

- Wave 1: Job type is related to this use of vacation days, such that academic staff are more likely to use this technique for dealing with high workload. Having children at home is positively related to using vacation days for completing work. Survey language is a negative predictor, suggesting that people who responded to the survey in English are more likely to engage in this behavior.
- Wave 2: Job type is related to this use of vacation days, such that academic staff are more likely to use this technique for dealing with high workload. Survey language is a negative predictor, suggesting that people who responded to the survey in English are more likely to engage in this behavior. In this wave LMX was also negatively related to using vacation days, meaning that employees with a high LMX were less likely to report using vacation days for work.
- Wave 3: Job type is related to this use of vacation days, such that academic staff are more likely to use this technique for dealing with high workload. Survey language is a negative predictor, suggesting that people who responded to the survey in English are more likely to engage in this behavior.

We can observe that almost half of the respondents work longer than their contractual hours. Some of them are really making long hours: almost 10% are making more than 10 hours overtime per week. For Wave 3, the excessive hours has been decreased compared to the former surveys, in line with the somewhat lower perception of workload.

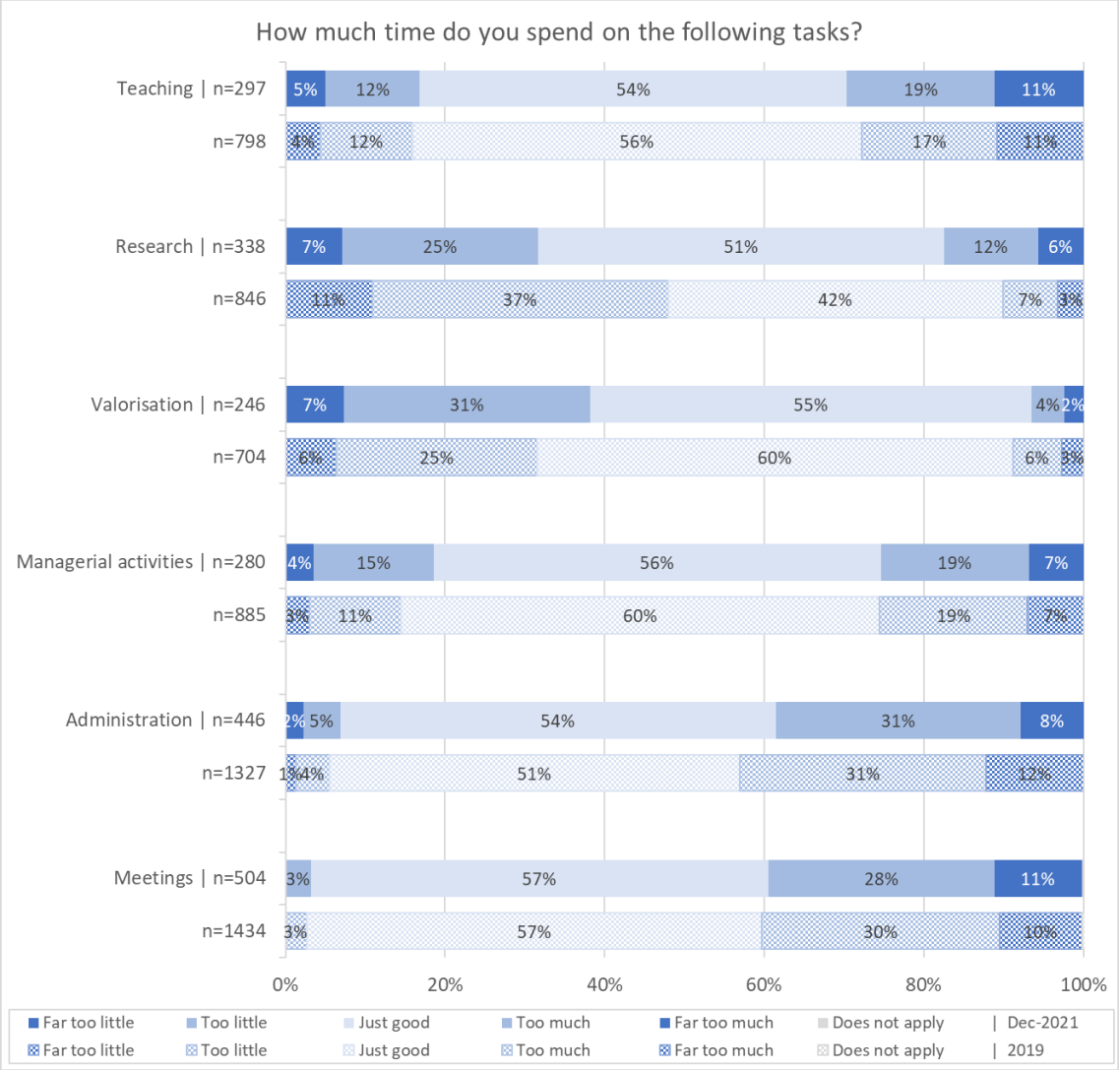
Figure 2.5 Perceived overtime in hours per week (2019-2021)



On what type of activities do the respondents spend their time and how satisfied are they with this? Figure 2.6 presents the results, from which we may conclude that the respondents spend too much time in their opinion on meetings (39%) and administration (39%). From the core processes, teaching takes too much time according to almost one third of the respondents.

Across the waves, similar results were shown except for one type of activity: meetings. It is interesting that the number of people complaining about the time spent on meetings has increased during Wave 1 (51%) and Wave 2 (45%), and now is back on the level of 2019 (39-40%). During the lockdowns with high numbers of people working at home, more respondents are complaining about their time spent on meetings.

Figure 2.6 Time spent on activities



2.5 Model: test of antecedents

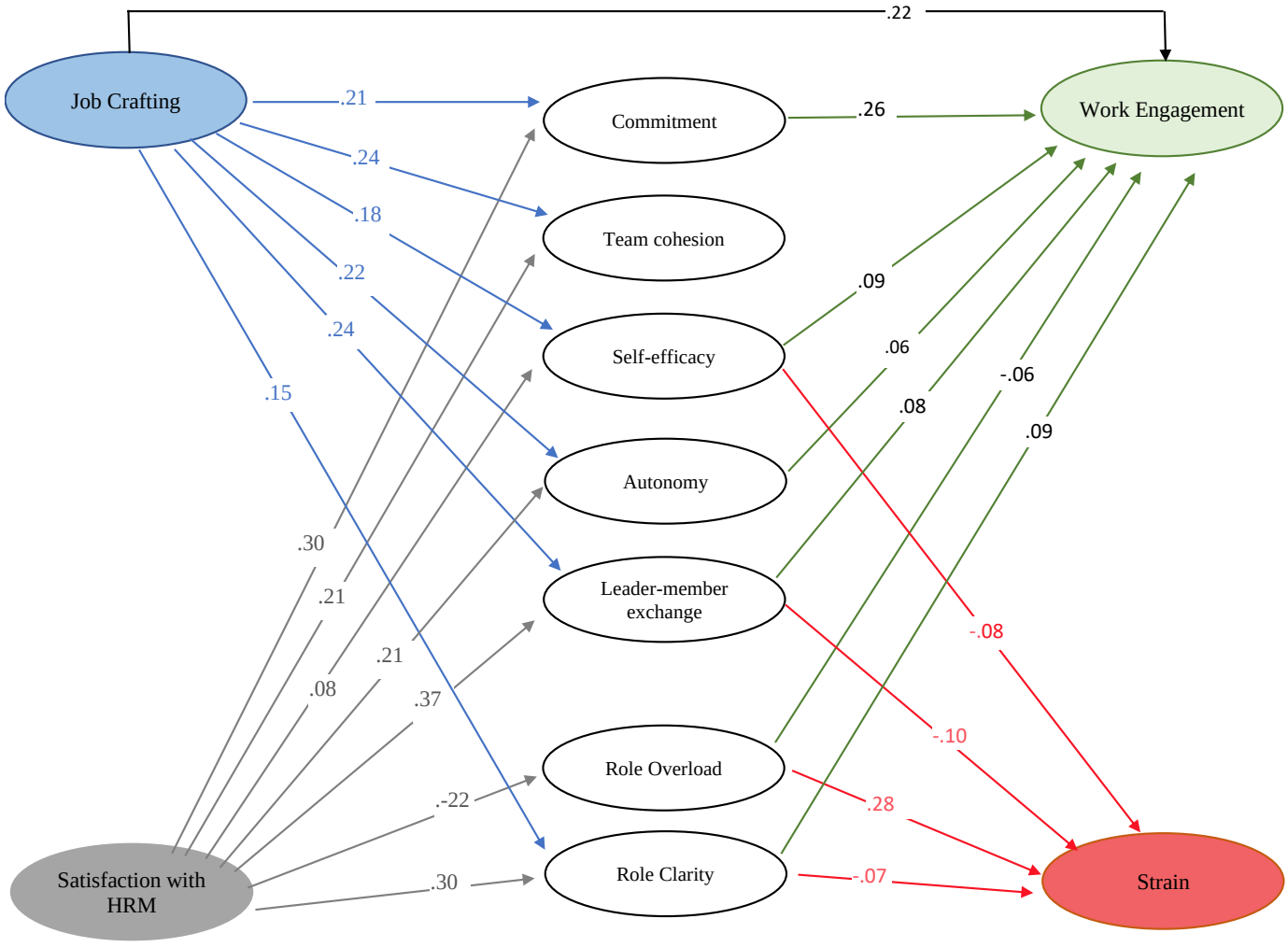
To examine the relationships between well-being and its antecedents (including: HRM satisfaction, job crafting, autonomy, self-efficacy, leader-member exchange, commitment and team cohesion), we tested the conceptual model as outlined in Chapter 2. For an overview of the average score of each antecedent (across organizational units) we refer to Appendix 3.

To examine these relationships, we first assessed – through structural equation modelling in MPlus – how well the conceptual model fitted the survey data. We tested the accepted model from the 2019 survey report that was based on the hypothesized model. This procedure resulted in a model that had a close to acceptable model fit ($\chi2(8) = 99.96$; $p = .00$; CFI = .97; RMSEA = .09; SRMR = .03) and which was used to examine the relationship between employee well-being and its antecedents. For the sake of brevity, here we only discuss the relationships

between organizational stimuli (i.e. Satisfaction with HRM and job crafting) and well-being (work engagement) as mediated by job demands and job resources.

Figure 2.7 provides an overview of the relationships among the key variables of interest. For the sake of clarity, we only include the relationships which were found to be significant ($p < .05$) and exclude the significant correlations among the job resources/job demands. The full overview of the observed relationships can be found in Appendix 5.

Figure 2.7 Strength of the significant relationships in conceptual model



Note: Model calculated using data from all three waves of data collected in 2021 (n=1406). Standardized estimates (p<.05) are shown in the diagram. Correlations among the mediators are not shown.

First, as can be seen in Figure 2.8, work engagement is most strongly and positively influenced by commitment (β = .26, p < .001). This implies that employees who experience a strong bond with the UT are more likely to experience high-level work engagement than those who do not experience this bond. Strain, on the other hand, is most strongly influenced by role overload (β = .28, p < .001). This shows that those who experience their workload to be too high such that they need to take vacation days and sick days to complete their work are more likely to experience cognitive irritation (e.g. worry about problems at work). On the other hand, self-efficacy (β = -.08, p < .05) and leader-member exchange (β = -.10, p < .01) are negatively related to strain. This implies that employees' cognitive irritation decreases when the confidence in their abilities and the relationship with their supervisor/manager improve.

Second, in most cases, job crafting and satisfaction with HRM are indirectly related to work engagement and strain through the mediating role of job demands and job resources as suggested by the Job Demands Resources Model. An exception is the direct and positive relationship between job crafting and work engagement (β = .22, p < .001). This shows that employees can improve their dedication and vigor at work through proactively increasing structural job resources (e.g. knowledge and skills), increasing social job resources (e.g. feedback) and increasing challenging job demands (e.g. taking on additional responsibilities they find intellectually stimulating).

Third, satisfaction with HRM is indirectly and positively related to work engagement (total indirect effects = .18, p < .001) through its positive effects on all of the job demands and job resources. This implies that satisfaction with HRM relates positively with work engagement because it provides employees a feeling they strongly belong to a team and to the UT, while reducing their workload perceptions. Satisfaction with HRM is indirectly related to strain (total indirect effects = -.15) primarily through leader-member exchange (indirect effect = -.04, p < .01) and role overload (indirect effect = -.06, p<.001).

Fourth, the positive, indirect relationship between job crafting and work engagement can be best explained by the finding that job crafting relates positively to commitment (β = .21, p < .001). This shows that job crafting helps to improve work engagement when it provides employees a feeling of belongingness to their team and the UT. Finally, job crafting and strain are indirectly and negatively related (total indirect effect = -.07, p < .001) as job crafting is positively related to self-efficacy (β = .18, p < .001) and leader-member exchange (β = .24, p < .001).

Summary – job crafting and satisfaction with HRM had favourable relationships with nearly all of the job resources and job demands. Explanation of work engagement and strain was more limited. Many of the estimates, while significant, were quite small (the large number of respondents across the three waves led to small effect sizes to become significant).

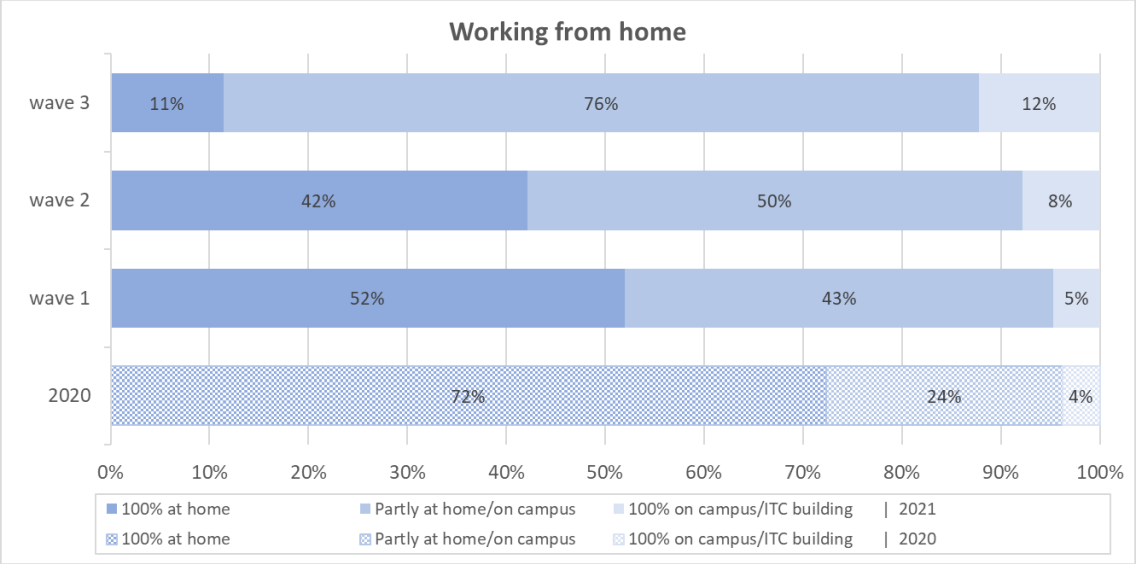
3 FINDINGS ON WORKING AT HOME

This chapter describes the main findings related to work due to enforced homeworking.

3.1 Perceived general effects of the enforced homeworking

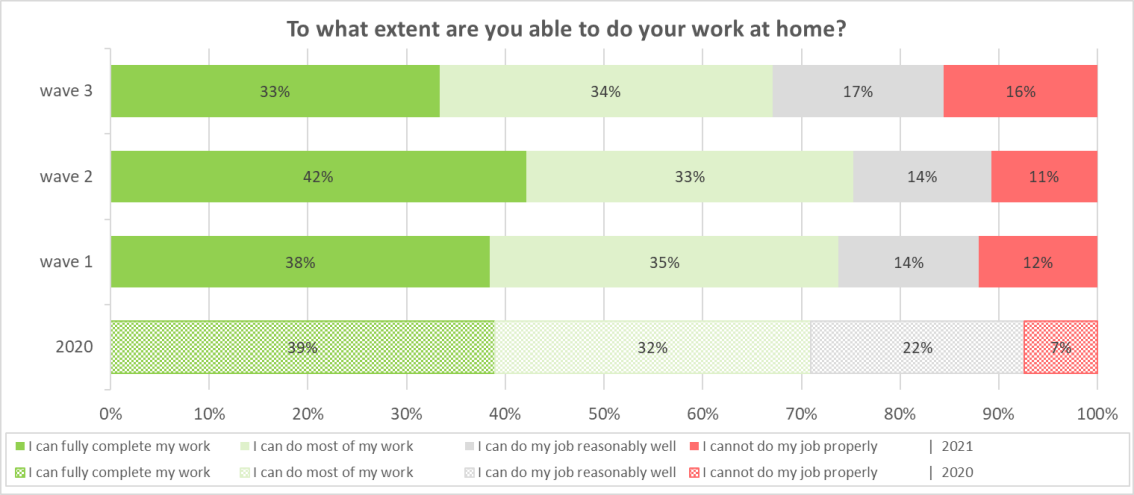
Figure 3.1 shows that 11% of the employees work from home full-time (compared to 42% in Wave 2 and 52% in Wave 1 and 72% in 2020) and 76% work partly from home and partly on campus or in the ITC building, and a minority works on campus full-time (12%). This seems to be a good reflection of the timing of the three waves (November 2021, July-August 2021 and April 2021) at the data collection. With 76% working partly at home and on campus, the hybrid working situation have become a reality for most of UT employees.

Figure 3.1 Working situation



Two out of three respondents report that they can still fully complete their work (33%) or most of their work (34%), slightly less than last year or earlier in 2021. However, a minority of 16% cannot do their job properly which might represent a larger group compare to 2020 and early 2021, see Figure 3.2. This increasing group that is not satisfied with working at home is also partly reflected in the questions on the quality of teaching and research, see Figures 3.3 and 3.4.

Figure 3.2 Effect of working at home on performance of work in general



Two questions were asked to explore possible links between fully online working and quality of teaching and research. In general, for both quality topics, a minority reports a decreased perceived quality (Research 20% and Teaching 20%). This is a remarkable percentage, because it is on the same level as 2020, while Wave 1 and 2 showed a gradual improvement, see Figure 3.3 and 3.4. Maybe, this finding of Wave 3 reflects the situation of quartile 1 in which it was possible to teach on campus again, an experience by teachers reminding them of the contrast of being fully online with the students.

Figure 3.3 Perceived effects of fully working online on quality of teaching

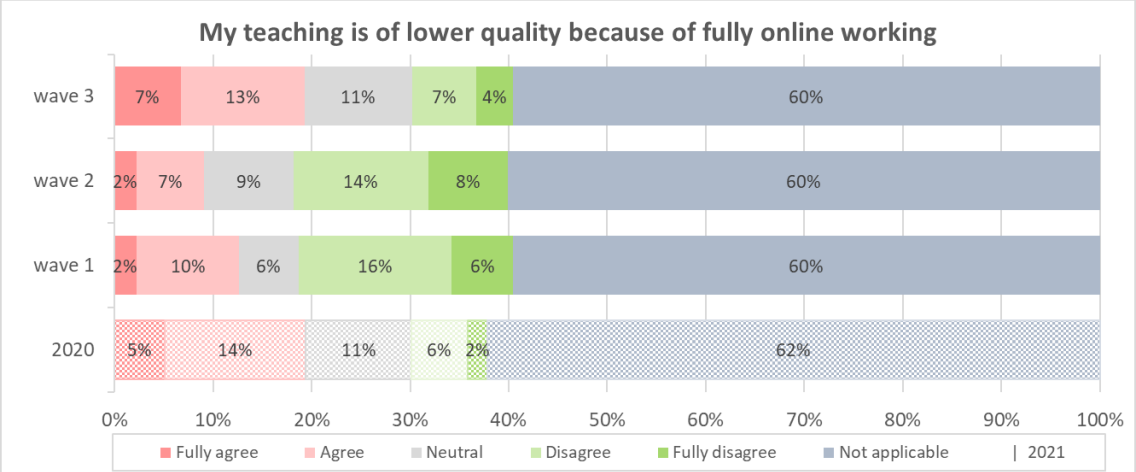
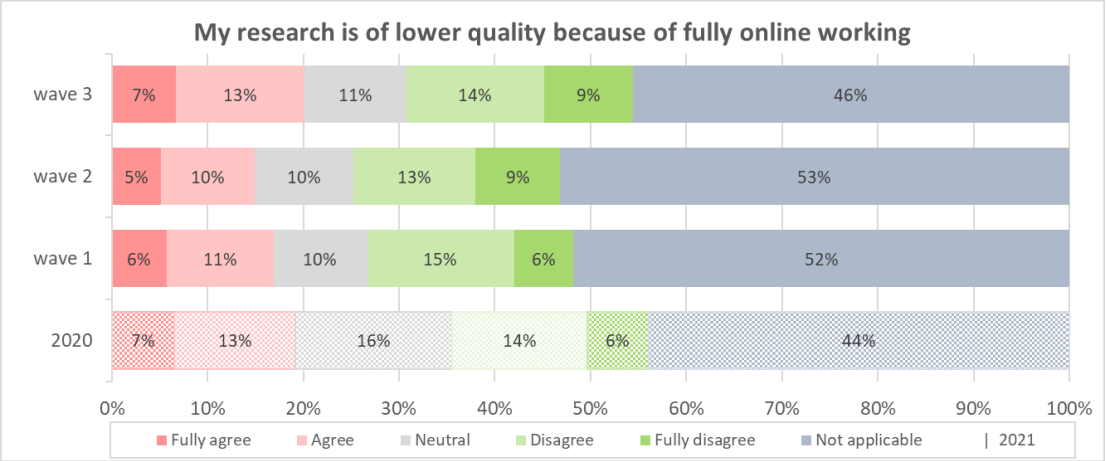
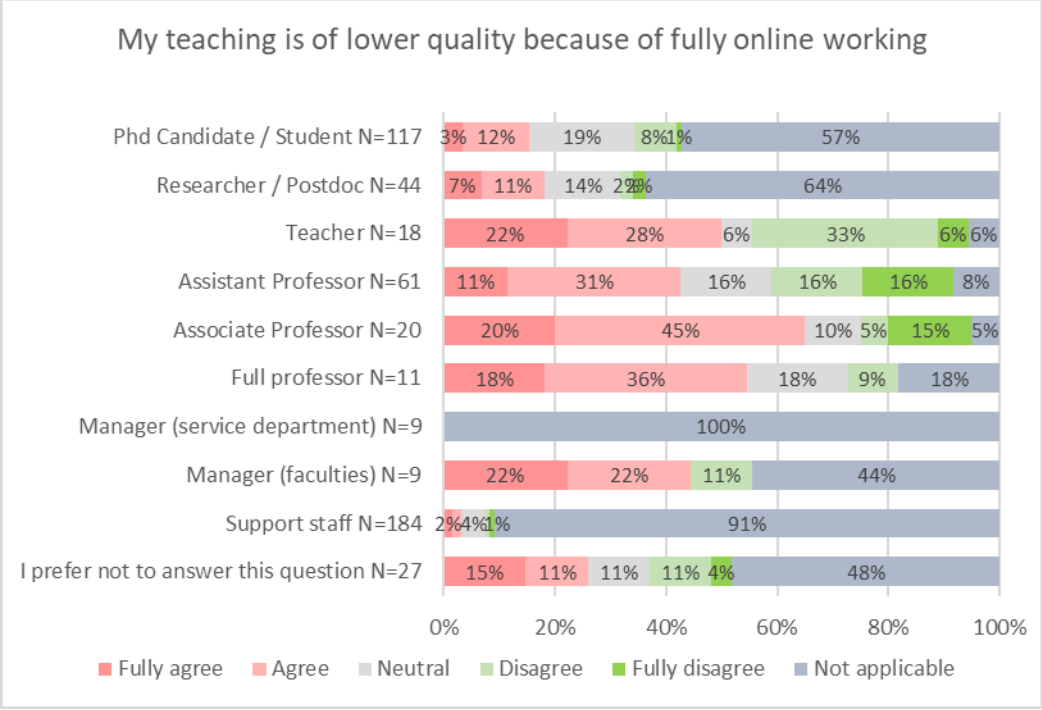


Figure 3.4 Perceived effects of fully working online on quality of research



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) perceived a lower teaching quality because of fully online working, while in Wave 1 and 2 it shrank to 8-37%. These data seemed to reflect the enormous effort that academic and support staff put in teaching online. However, in Wave 3 the percentage that perceived lower teaching quality is almost back on the level of 2020. Again, the renewed experience with teaching on-campus might have been a reminder of the perceived shortcomings of fully online teaching.

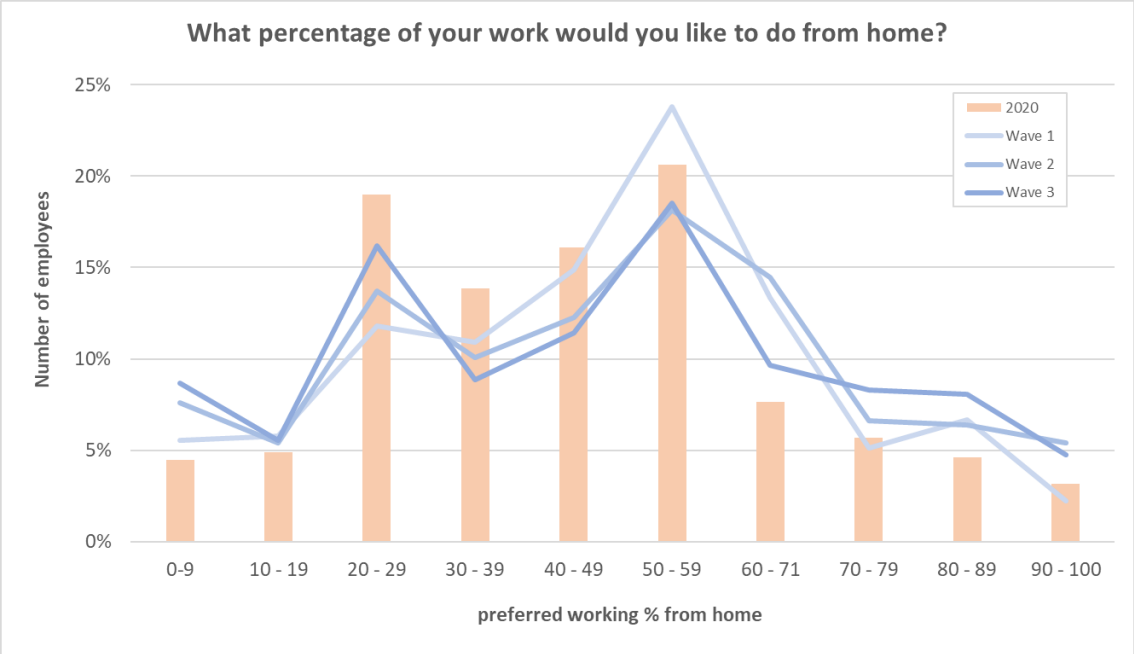
Figure 3.5 Perceived teaching quality for different positions (only Wave 3)



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, see Figure 3.5 and 3.6.

Figure 3.5 Preference home working (in % of worktime)

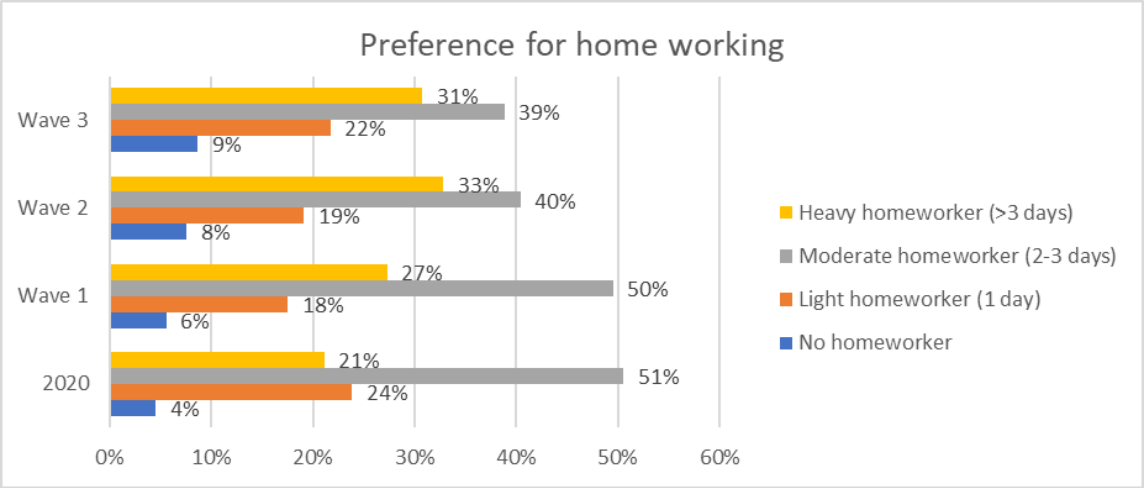


The same numbers are presented grouped into four categories of homeworkers:

1. No homeworkers (0-9%, occasionally)
2. Light homeworkers (10-29%, 1 day a week)
3. Moderate homeworkers (30-59%, 2-3 days a week)
4. Heavy homeworkers (60-100%, >3 days a week)

Compared to 2020 and Wave 1, we observe in Wave 2 and 3 a more dispersed outcome: 40% want to work from home 2-3 days a week, while 33% want to work from home more than 3 days a week and another 20% want to work from home only 1 day a week, while 9% are 'no homeworkers'. We must keep in mind again that all four samples might be different, however, the group that wants to work most of their worktime from home is increasing and now almost one-third of the total population.

Figure 3.6 Preferences for working at home divided in categories (in % of worktime)

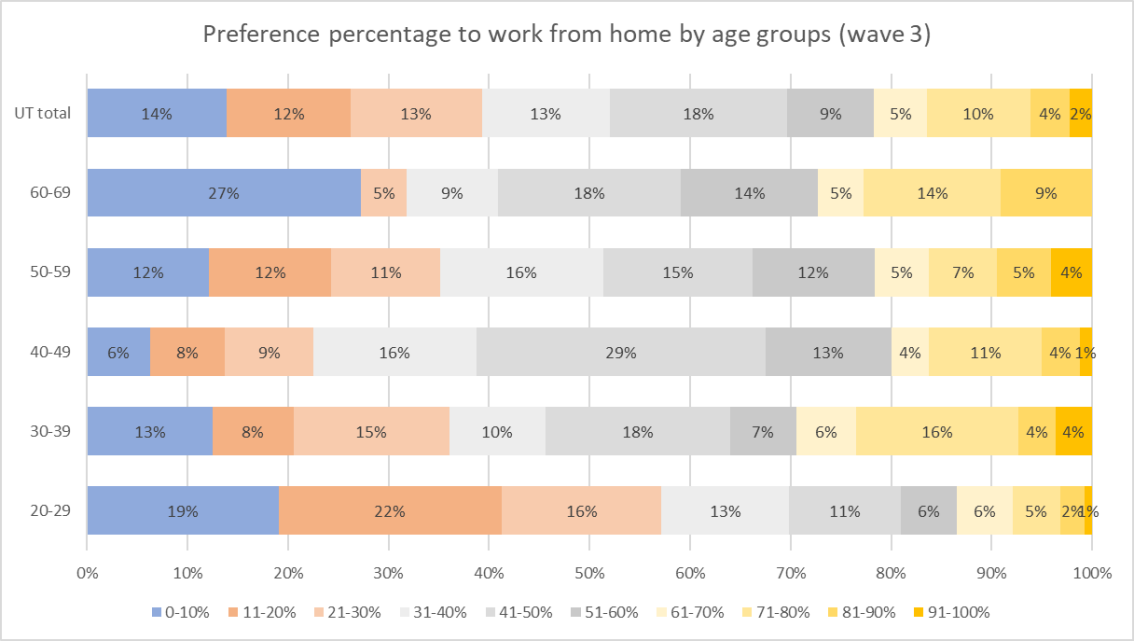


Secondly, many young employees want to work from home less compared to their older colleagues. As can be seen from Figure 3.7 the employees under 30 years old want to work from home less compared to other age groups (this is a significant difference based on Anova/Bonferroni ($p < .05$)): almost 60% of these young respondents can be categorised as no or light homeworkers. For the other age groups, that percentage is 23-36%. 50%. Still, also part of the young employees want to work from home more days. The growth in 'heavy homeworkers' is mostly stemming from the respondents in their 30s.

When examining predictors of preferences for working from home using a multivariate regression, gender and country of origin were the only significant predictors. Respondents who identified as men tended to prefer less working from home (ß= .077, $p<.05$). Regarding country of origin, people from the Netherlands also tended to report less preference for working from home (ß= .115, $p < .01$). None of the other demographic variables had a significant impact.

In short, we may observe here a lot of individual preferences (people just like it to work from home or not), partly explained by age, gender (women prefer to work more at home), family status (singles prefer to work less at home), country of origin and organisational tenure (those who work less than 1 year at UT want to work less often from home compared to the group who works at UT 1-5 years). It is also partly explained by organisational unit (respondents from BMS and ITC indicate that they want to work from home more compared to TNW and CFM (Anova/Bonferroni, $p <.05$)). The differences are not explained by situation at home (i.e. taking care of children or not), contractual status (permanent, temporary) and position (academic or support staff).

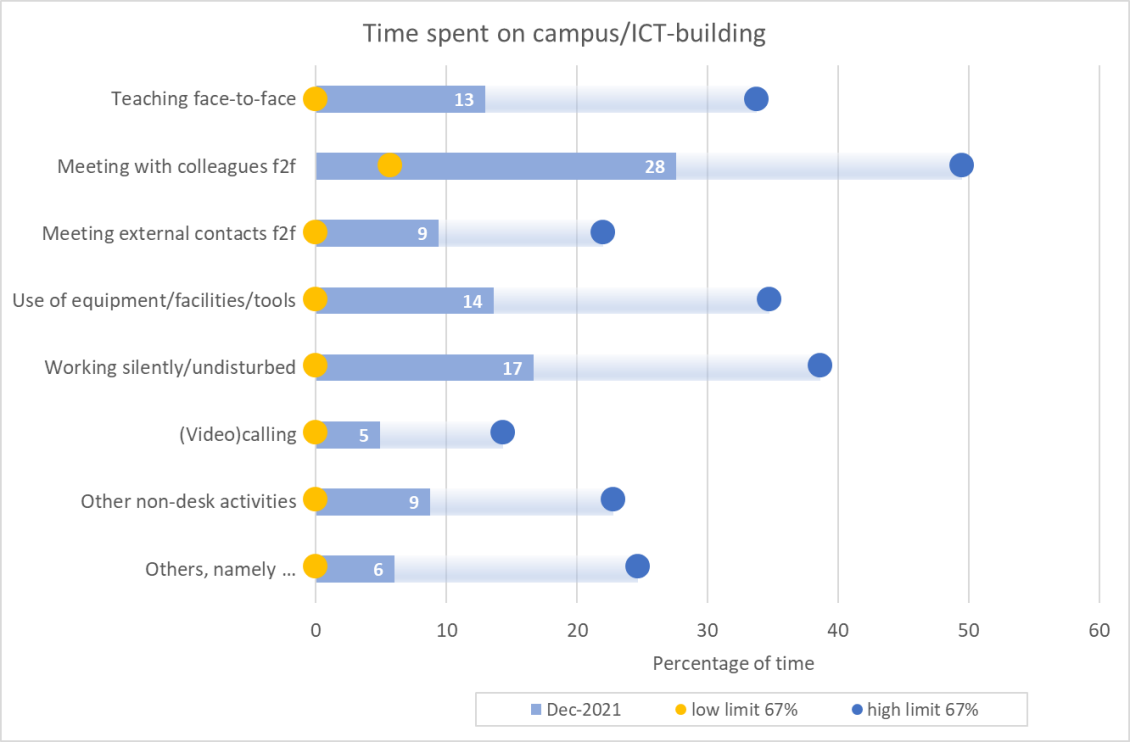
Figure 3.7 Homework preferences by age groups



Looking at the type of activities the respondents want to do at the return to the campus, we see the same top-4 as in earlier waves (see Figure 3.8):

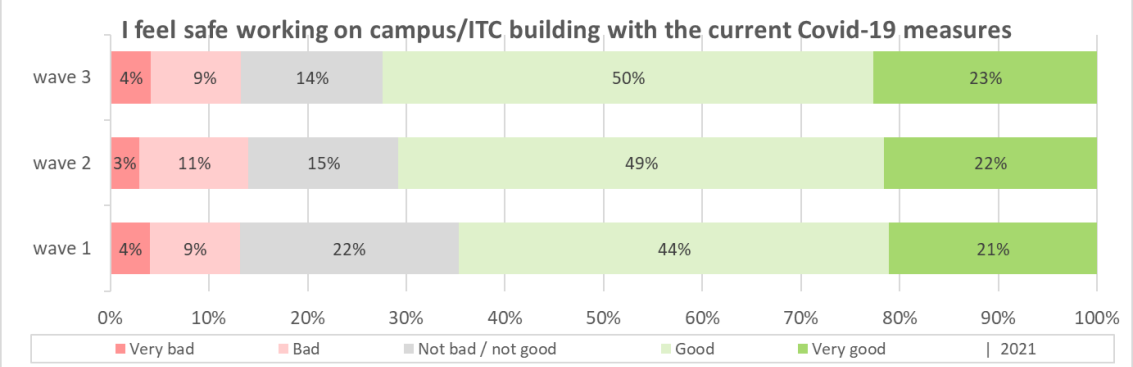
1. Meeting with colleagues
2. Working undisturbed
3. Use of equipment/facilities/tools
4. Teaching face-to-face.

Figure 3.8 Time spent on activities at the return on campus



Finally, most respondents (now almost 75%) feel safe about working on campus. A stable minority of around 13% feels uncomfortable with the current corona measures, see Figure 3.9.

Figure 3.9 Perceived safety of working on campus

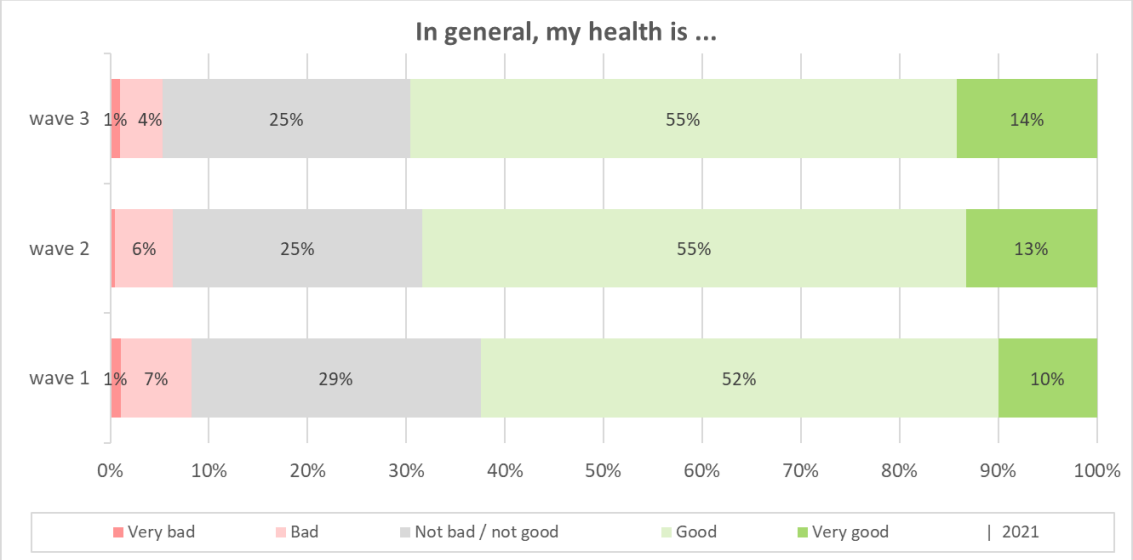


4 FINDINGS ON HEALTH AND WELL-BEING

4.1 Perceived health effects

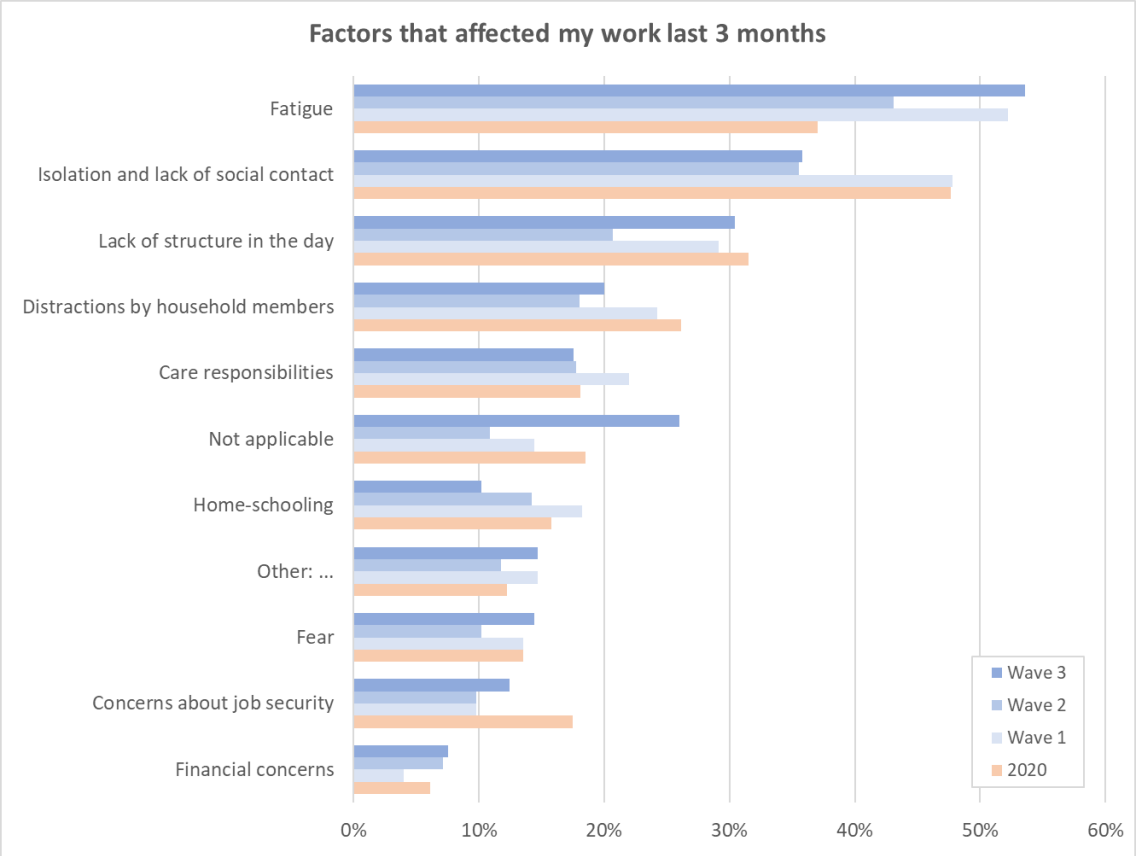
A majority of respondents reports a good or very good health (62%), while 8% report a (very) bad health, see Figure 4.1.

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, in 2021 the most often mentioned factor is fatigue. In Wave 3 more than 50% indicate fatigue is the number 1 factor (like wave 1). In 2020 during the first lockdown, it was social isolation and lack of social contact.

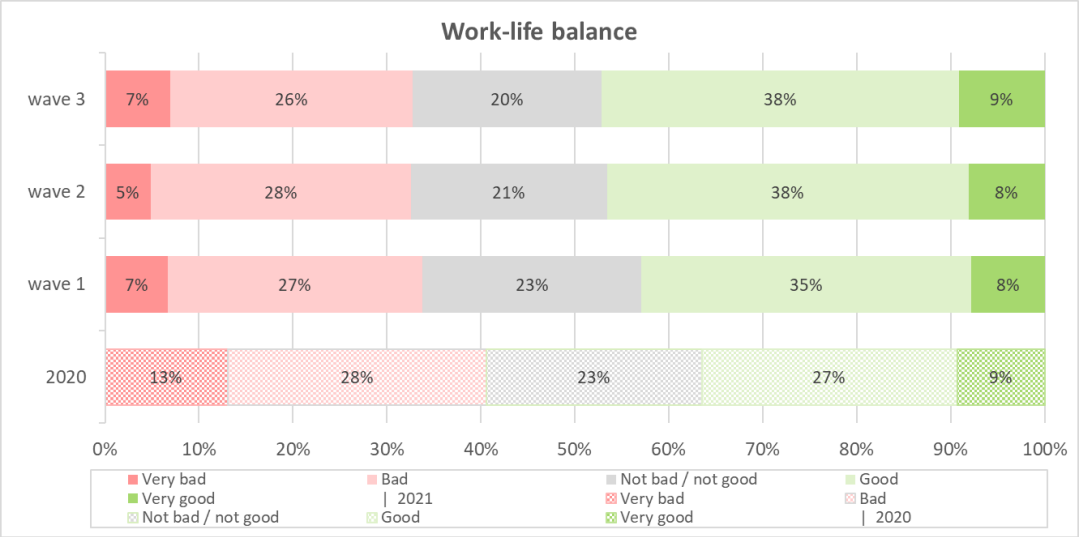
Figure 4.2 Factors affecting work



4.2 Perceived effects on home-work interference

Figure 4.3 presents the perceived home-work interference. In 2020, in spite of the first lockdown due to corona, 36% agreed that they can separate work time and private time, while now this percentage increased to 47%. In line with this, a smaller group is struggling with work-life balance, however, this group across the three waves is still around 33%; 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.

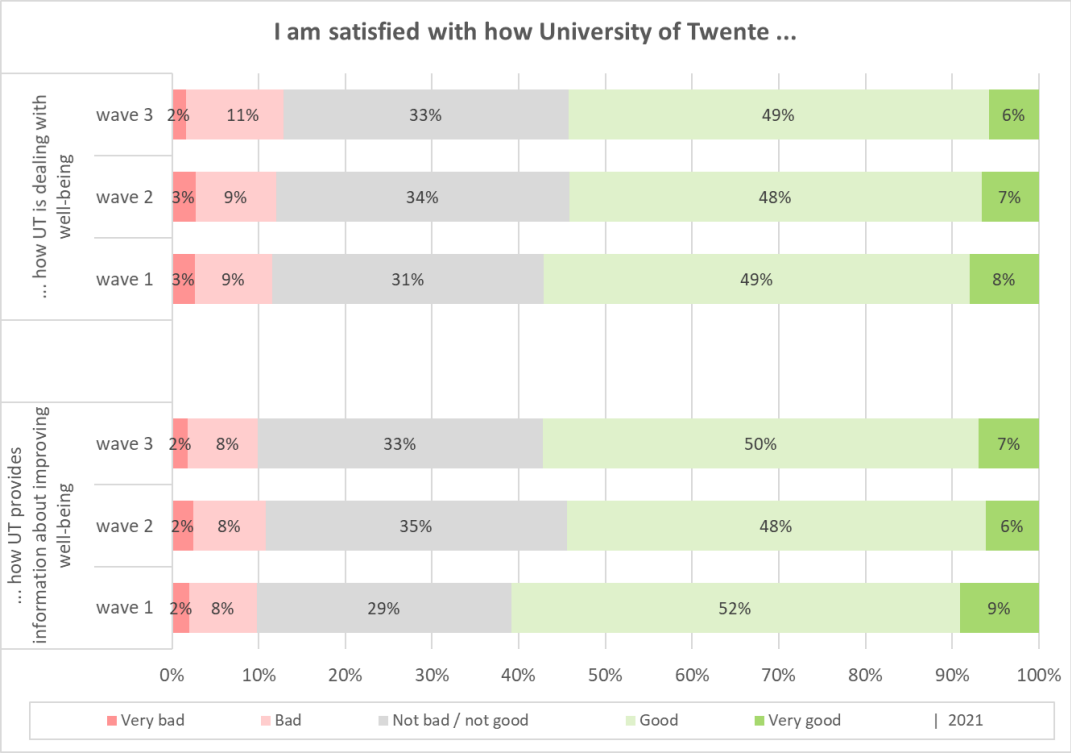
Figure 4.3 Perceived home-work interference



4.3 Satisfaction with UT policies on well-being

Figure 4.4 shows that the majority of UT employees are positive about how UT is dealing with well-being and how information about improving well-being is provided. Simultaneously, about one-third is neutral here and a minority of around 10% is negative.

Figure 4.4 Satisfaction with policies and information about well-being



5 FINDINGS ON INAPPROPRIATE BEHAVIORS

The survey included three extra questions on employee experiences of aggressive behaviors at work. These questions were included to satisfy the obligation of the *Risico- Inventarisatie & -Evaluatie* of the *ARBO*-law. As shown in Table 5.1 and Figure 5.1, although 80% of the respondents did not experience any type of aggressive behaviors during the last two years, 16% (20% minus 4% who preferred not to answer) reported to have experienced a type of aggression at work during the last two years. This is in line with results on aggressive behavior in (higher) education[4]. The most frequently reported type of aggression (by 6,4% of the respondents) is intimidation at work, such as shouting and threats. Personal experience of discrimination has been increased compared to 2021. Nine respondents indicated to have been subject to sexual harassment and six respondents indicated to have been subject to physical violence during the last two years.

Two remarks are important on the interpretation of these results. First, it is important to note that respondents could have been ticked more than one category, so it could be that some respondents experienced more than one of the aggressive behaviors. Second, we do not report on comparisons between gender, age, tenure, country of birth, job functions and organizational unit because of the low numbers. Low numbers of observations can easily lead toward Type-1 mistakes, indicating that the hypothesis that there is a significant difference would have been rejected unjustified. Due to low numbers, the null hypothesis could be rejected falsely, inferring the existence of something that is in fact not real (e.g. we might suppose a difference between group, which is not true but just a coincidence).

Table 5.1: During the last two years, have you experienced or witnessed one or more of the following aggressive behaviors against yourself or others at the UT? (absolute numbers)

	Personal experience		**Witnessing**	
	2019	**2021**	**2019**	**2021**
No	1155	1119	1077	1071
Bullying	53	47	89	76
Discrimination	48	59	75	82
Intimidation (shouting, threats, etc.)	115	90	144	106
Sexual harassment	9	10	19	25
Physical violence	6	1	9	7
Yes, but none of the aforementioned forms of aggression	59	54	72	54
I prefer not to answer this question	61	55	58	49

[4] TNO (2016). Agressie op het werk 2014; Ontwikkelingen, risico's, impact en behoefte aan maatregelen, TNO: Leiden.

Figure 5.1: During the last two years, have you experienced one or more of the following inappropriate behaviors against yourself at the UT?

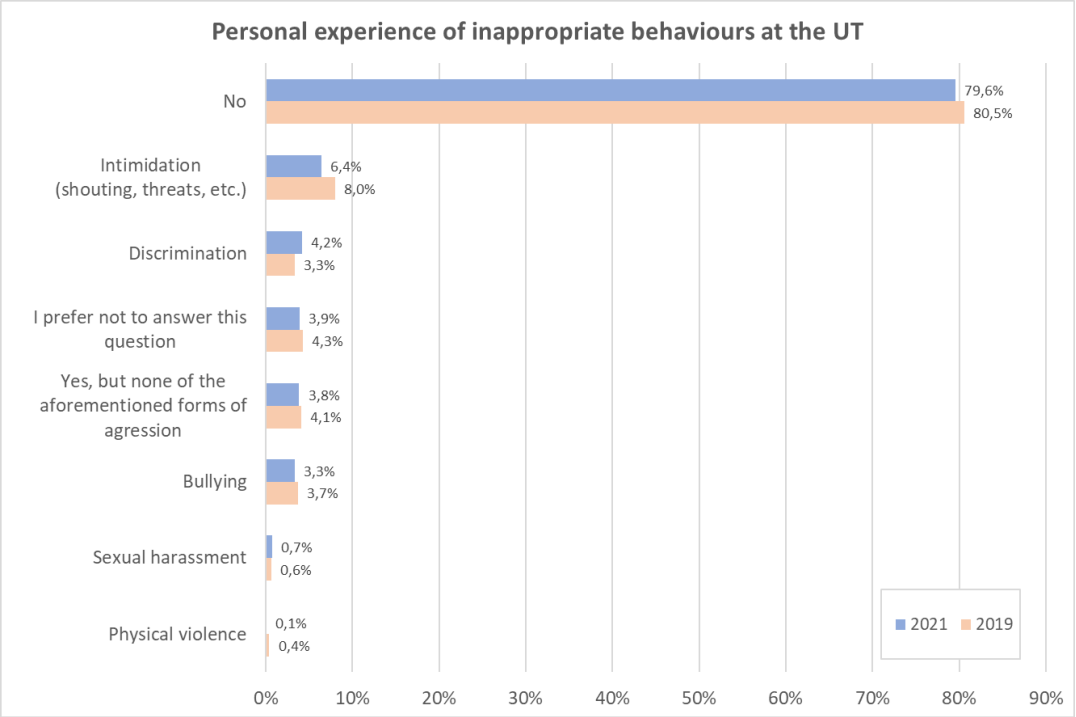


Figure 5.2 presents the findings on those who have been a witness of aggression at work. As shown, 20% (24% minus 4% who preferred not to answer) reported to have been a witness of a type of inappropriate behaviors at work during the last two years. Again, intimidation at work is more frequently reported (by 7.5% of the respondents). Again, this finding is similar with outcomes from national surveys that report intimidation to be the largest proportion of aggressive behaviors (TNO, 2016).

In comparison with 2019, we may conclude that the numbers are similar. Although a decrease can be seen in the numbers of intimidation and bullying (both in experience and in witnessing), we see also a small increase in the numbers of discrimination. The numbers of sexual harassment and physical violence remain low, although every incident is too much here. All in all, we see a slight improvement, however the inappropriate behaviors are still there.

Figure 5.2: During the last two years, have you witnessed one or more of the following inappropriate behaviors against others at the UT?

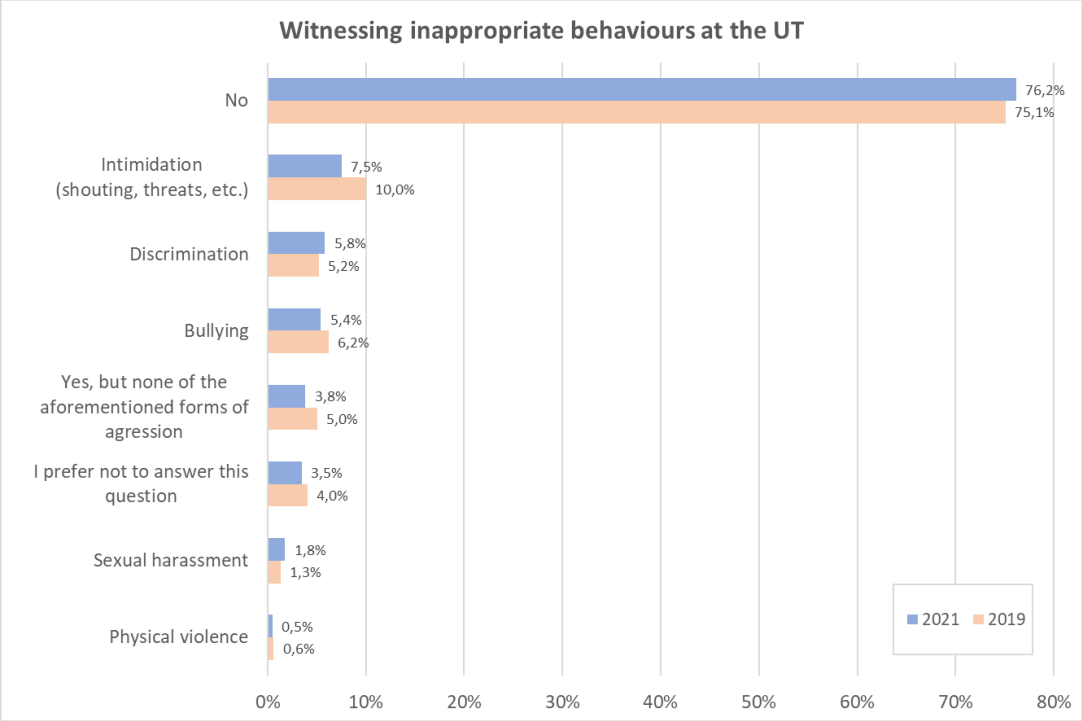
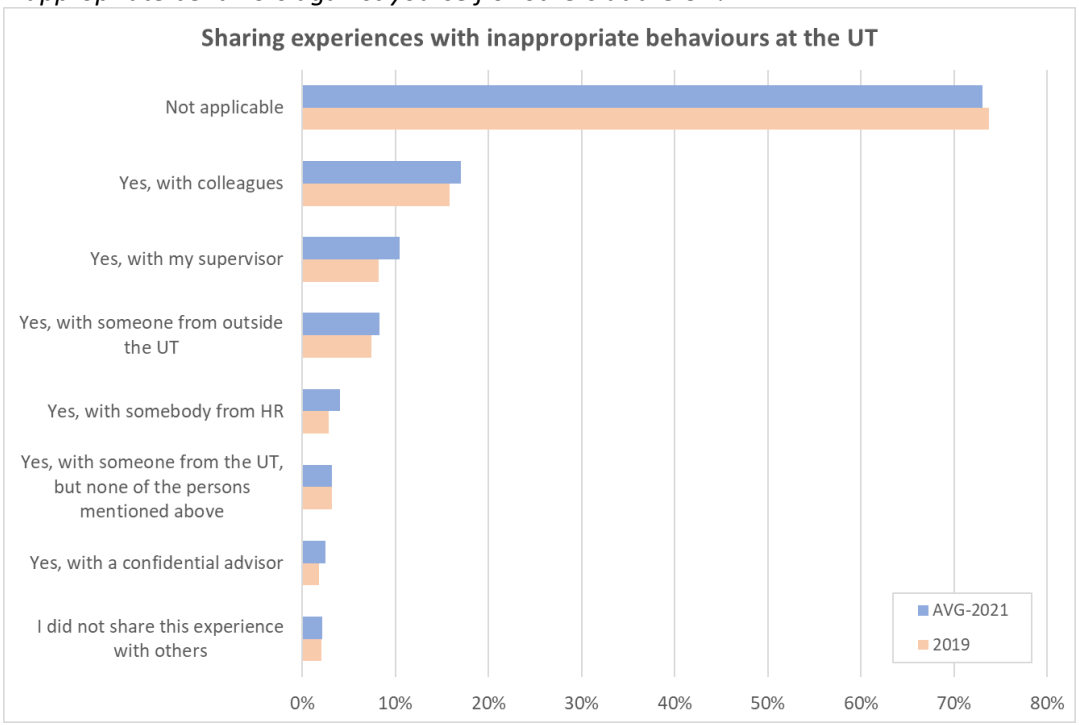


Figure 5.3: During the last two years, have you shared one or more of the following inappropriate behaviors against yourself or others at the UT?



6 OPEN REMARKS

5.1 Tops & tips

Tops from open question: Is there anything you already do to improve your well-being at the University of Twente (TOP)?

"Connect with colleagues"

"Finding peers, support groups, talking and exchanging"

"Take small breaks often. Make time in the afternoon/evening to exercise at the Gym or (around) the campus"

"Try to organize more meetings in person with students and colleagues as possible to improve social contact and meeting efficiency"

"I am learning not to work on the weekends, however, that does not make me happy because others work on the weekend, and also quality reduces"

"I exercise pretty much every day, bike to work, and take small breaks (max. 5 minutes)"

Tips from open question: Is there anything you would like to change at the current situation to improve your well-being at the University of Twente (TIP)?

"Onboarding is nonexistent in UT/my department. Also, I arrived during the lockdown and by now I'm considered already an older hire, even though I have only 2 months since we were allowed in the office and meeting people. Pay more attention to expats. And have everything in English as well. Maybe have also expats in the onboarding processes as locals may not understand what we are missing."

"Housing crisis is real and this give a really distracting thoughts. If this can be solved it will be way better."

"Well-being initiatives should be clearly encouraged and enforced by management, otherwise they are seen as not a priority and are skipped. Also, there should be more affordable healthy food options for low calorie, vegetarian, and vegan people. Recurring free coffee breaks are very good too, they encourage movement, socialization, and professional networking. There should also be mental health off days (or half days) that are encouraged to be taken, without stigma."

"More time for research, more help for teaching, more financial support for caring"

"I would like to ask UT facilities to please put hand soap dispensers in all the kitchens of Techmed so that employees can wash their hands before eating/drinking."

"The Head of Department is putting pressure on us, is impolite, and does not show any understanding that the job description of an Assistant Professor includes research rather than only teaching."

"I feel that the extra work of teachers and researchers during Corona time has not been rewarded and recongnized properly. And very often, regulations and approaches to teaching are changed, making the high work done to organize online teaching totally useless. That is unfair."

"Assistance or availing of negotiable zero-hour (not paid) contracts for foreign employees for a few months when they finish their contract at UT until they find the next job. It would be very helpful for Visa/residence permits during the COVID crisis. Some employees are finding it very hard to get their new job at this difficult time due to the pandemic, especially international PhD's or postdocs. Please consider this, and many will be thankful to the UT which is already doing a good job."

"Everyone is overloaded. We need more time to reflect and think. But everyone barely has time to do that. More social events or funding for these activities on the group level are necessary after Covid. We need to reconnect. More talks about preventing burn out are also needed. It's too late to help persons once they are in that stage. One has to train people to recognize symptoms."

"Clear Capacity and Workload Planning, Giving fair research time allocation to all academic staff"

"I joined the UT in August 2021, as a new member of the teaching staff I feel overwhelmed with the amount of workload. One specific issue is the transition between the first and second quartile without any breaks in between. I'm still struggling to finalize the grades and exams of the first quartile modules while preparing for the second. I feel that I'm drowning in a circle of overwork load, I almost work every Sunday!"

"Fewer surveys"

5.2 Reasons for gaps between expected and actual hours

Respondents were able to argue why a difference between expected and actual hours exist:

"Too much stuff to do"

"Because I am overloaded and working more hours is the only way I find so far to cope with all responsibilities to grow in my career"

"To be competitive in my work I need to publish, do academic service, submit proposals, participate in competitions for awards, connect with society, give talks , teach, supervise, review, manage, and do admin."

"Due to conducting experimental science, most of the times we need to spend longer to conclude our studies."

"An academic works more hours e.g. researching, reviews, project acquisitions, etc."

"This is my last year of PhD period. I have some article to write while my provision is not enough to run fast. So I need more time a week to pursue my target."

"Online teaching and a big inflow of students"

"Working at home is unstructured and inefficient"

"I want to work more than 40 hours per week."

"I am just learning not working"

"I work less hours, due to low workload"

5.3 Open question

Below a selection of typical answers on the last open question: We would like to give you the opportunity to explain your answers or to bring forward matters that are not included in this questionnaire.

"Regarding application to another position outside UT and development options: we were shown numbers for personnel planning in a department meeting, and for my next career step, these numbers did not look very promising. Rather demotivating a bit. Just a tiny increase in full-time employees for this next career level (Associate Prof) in the next five years, and a lot of people at the same position (Assistant Prof) as myself, who are longer at UT already. Otherwise I would not look for other opportunities, I am happy here."

"I think the university has to be more restrict with the corona rules, less people working together, in restaurants and common areas, do bubbles working groups, same days same people working together and do rotations, in order to avoid the contact with many people."

"Please start with 360 degree performance reviews"

"As Ph.D. candidate you spend a lot of time writing papers. With Covid-19 we spend most of the time doing so at home. This can be quite isolating and does not give me much energy. It explains why I'm not feeling well often and have low energy levels regarding my job."

"The stress is double for external PhDs. We should satisfy our company and alongside that keep the planning and deliverables of UT. It takes lots of energy. Also, there isn't a coherence between UT and external company/research groups with common Ph.D. students."

"The UT is doing great to bring diversity and equality, while also making sure we express what is needed. Thanks."

"Work pressure is high, however, this year better than the years before, I hope this will continue. Home schooling and taking care for others provide extra pressure, though UT wants to think with me in these difficult situations. Nevertheless, I think it is very difficult to solve, because it is impossible for others to do my teaching and other jobs, only more capacity would help here."

7 CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. Wave 3 in general shows slightly more positive outcomes compared to Wave 1 and 2.

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 7.7, which is a bit higher than Wave 1 and 2 (7.5) and similar to 2020 (7.6) and also somewhat higher than 2019 (7.2).

4. Of the organisational stimuli, such as job crafting and HRM satisfaction, the social job resources have been increased, the HRM Satisfaction a bit decreased. In general, they are on a similar level compared with 2019. The same applies for the job demands and job resources. Two job resources show statistically significant differences: team cohesion and commitment have been improved across the three waves. Of course, we cannot compare the results in a strict sense of a repeated measurement, because we have different samples. Still, the averages of both groups are similar for half of the antecedents and the others a bit more positive.

5. The high strain is reflected in the perceived workload. 37% of the respondents in wave 3 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. Only 11% work fully from home. This is a sharp difference with the other waves: in 2020 72% and in April 2021 52% and in July 2021 42%), while 76% work partly from home and on campus (was 24% in Wave 1 and 50% in Wave 2). These numbers reflect the different situation of November 2021, compared to Summer and Spring 2021 and Summer 2020.

7. The difference in working on campus are also reflected in the perceived quality of online teaching. In wave 2, the perceived teaching quality has been improved in comparison with wave1. Now, in wave 3, especially the teaching staff is less satisfied. Probably the renewed experience of offline teaching reminded them on the benefits of it compared with fully online teaching. More or less the same applies for research quality.

8. Work-life balance has been improved a little. Still, one out three employees are struggling with work-life balance (33%).

9. The preferences for working from home are more diverse than ever. Given their preferences for working from home 5% of the employees can be classified as 'no homeworkers', 23% as 'light homeworkers' (for 1 day a week), 40% as 'moderate home workers' (2-3 days a week) and 32% as 'heavy homeworkers' (>3 days a week). Especially the group of heavy homeworkers has been increased. 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) and organisational unit (only a few significant difference between faculties). The preferences are not explained by gender, country of birth, situation at home (i.e. taking care of children or not), contractual status (permanent, temporary) and position (academic or support staff. Apparently, individual differences are relevant in these preferences.

RECOMMENDATIONS

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. That said, the UT should consider providing some guidance for managers on how to have this conversation with workgroups and employees. Some workgroups may want to establish core workdays or work hours on which all group members are physically present in the office. Workgroups may determine that certain meetings will be conducted face-to-face or may decide to conduct only hybrid meetings. Managers should also be prepared to assess the effectiveness of hybrid work arrangements on a regular basis and have conversations about adapting such arrangements as needed. The CIPD offers guidelines on how managers can facilitate hybrid work arrangements.

   Employees with young children at home may be interested in hybrid working, with some time away from the office to focus on individual work projects, but home may not be the right place for them. Another option to consider is contracting for co-working resources in other places in the community, or other communities where employees live. This could help provide a balance between having the necessary resources (e.g., good internet access and a quiet working space) and not having to commute all the way into the office or having time away from the office to focus. As noted by Microsoft[5], employees who had more time to focus for at least two hours at a time reported better work-life balance.

[5] Klinghoffer, D. (2021). Hybrid tanked work-life balance. Here is how Microsoft is trying to Fix it. *Harvard Business Review*.

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. Also for many of the academic staff the balance between research and teaching is skewed. 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.
    a. In the survey, role overload was assessed through taking vacation or sick days to get work done. Conducting follow up assessment such as focus groups about why people are taking leave to complete their work could help identify new strategies for managing workload and role overload.
    b. As noted in the open-ended comments, academia has become characterized in many ways by expanding workloads and a blend of personal and work life rather than separation. Communicating clear expectations about workloads and output (e.g., publications) may help some individuals reduce their workload, but professional expectations from outside the UT are likely to reinforce high workload expectations. Providing additional support for administrative tasks and teaching should be considered. This may also be an appropriate time to re-evaluate the work being done by employees in all job categories at the UT to see if some work tasks can be eliminated or streamlined. Is there work from an historical perspective that might not need to be done in the future? Alternatively, guidance on how to prioritize work activities rather than trying to accomplish everything could be useful.
    c. Another option is to shift the timing of certain work activities, e.g. no early Monday morning meetings. In their analysis of work-life balance and hybrid working, Microsoft[6] found that when workers had Monday morning meetings they often used Sunday evenings to prepare for those meetings. Eliminating Monday morning meetings resulted in better work-life balance and may also reduce perceptions of workload. Other organizations have taken steps to discourage employees from responding to emails outside of work hours. As noted by one respondent: *"I never respond to e-mails outside of working hours. I think a university wide rule (or guideline) about this would do more for staff wellbeing than any workshop*." However, some employees likely pursue a more blended model of work-life balance and rely on evenings and weekends to respond to e-mail, especially if they work with international research teams. Regardless, one option could be to discourage internal e-mails outside of working hours.

[6] Klinghoffer, D. (2021). Hybrid tanked work-life balance. Here is how Microsoft is trying to Fix it. *Harvard Business Review*.

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 and employees who speak English as their primary language. Many of the open-ended comments in the survey addressed resources for fitness and sports and the importance of making those available as well as the need for more social interaction like informal connection events.

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. Managers could also be provided with guidance on how to create more favourable leader-member exchange relationships with the employees in their workgroup. Leaders should be trained on the framework of LMX and then on communication styles more consistent with such relationships. High LMX relationships are easier to form when employees are new to the workgroup, but lower quality relationships can be improved with training on feedback and approaches to assigning tasks[7].

5. Do more with job crafting, esp. social job resources. Provide guidance to both employees and supervisors about options for job crafting and what that would mean to them. Organizational interventions have been found to show a positive effect on job crafting behaviours, engagement, and in some cases, performance[8].Other interventions[9] may include a workshop, weekly crafting assignments, and a reflection assignment as helping improve employee well-being. Providing a similar type of intervention is likely to improve work engagement directly and through a positive effect on commitment.

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[7] See for example: Graen, G. B., Hui, C., & Taylor, E. A. (2006). Experience-based learning about LMX leadership and fairness in project teams: A dyadic directional approach. *Academy of Management Learning & Education*, *5*(4), 448-460.

Mayfield, J., & Mayfield, M. (1998). Increasing worker outcomes by improving leader follower relations. *Journal of Leadership Studies*, *5*(1), 72-81.

[8] Oprea, B. T., Barzin, L., Vîrgă, D., Iliescu, D., & Rusu, A. (2019). Effectiveness of job crafting interventions: A meta-analysis and utility analysis. *European Journal of Work and Organizational Psychology*, *28*(6), 723-741.

[9] Demerouti, E., Peeters, M. C., & van den Heuvel, M. (2019). Job crafting interventions: do they work and why?. In *Positive psychological intervention design and protocols for multi-cultural contexts* (pp. 103-125). Springer, Cham.

APPENDIX 1: QUESTIONNAIRE

Part I

How often does the following occur?
(tick only one answer)

	Never	Almost never / a few times a year or less	Rarely / Once a month or less	Sometimes / a few times a month	Often / once a week	Very often / a few times a week	Always / every day
1. At my work, I feel full of energy	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
2. My job gives me energy	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
3. When I get up in the morning, I feel like going to work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
4. I am enthusiastic about my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
5. I am proud of the work that I do	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
6. My job inspires me	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
7. I develop my knowledge and professional skills	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
8. I learn new things at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
9. At my work, I use my knowledge and skills to their fullest	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
10. I decide on my own how I do things	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
11. I ask my supervisor to coach me	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
12. I ask if my supervisor is satisfied with my work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
13. I ask others for feedback on my job performance	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
14. I ask colleagues for advice	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
15. I start new projects at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
16. I regularly take on extra tasks even though I do not receive extra salary for them	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

To what extent do you agree with the following statements?
(tick only one answer)

	Fully disagree	Disagree	Neither agree or disagree	Agree	Fully agree
17. I have difficulties relaxing after work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
18. Problems at work stay on my mind when I am not at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
19. Problems at work occupy my thoughts even during my vacation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
20. I know what my responsibilities are	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
21. I know what my supervisor expects of me	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
22. It is clear to me what I need to do in my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
23. I know how satisfied my supervisor is with what I do	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
24. My supervisor understands my needs well	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
25. My supervisor recognizes my qualities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
26. The probability that my supervisor uses his/her influence to advance my interests at work is high	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
27. I have enough confidence in my supervisor.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
28. My working relationship with my supervisor is good	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
29. I feel a sense of belonging with my colleagues	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
30. I get along well with my colleagues	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
31. I like my colleagues	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
32. I have autonomy in determining how I do my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
33. I can decide on my own how I do my work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
34. I have considerable opportunity for independence and freedom in how I do my work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
35. I am confident about my ability to do my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
36. I am self-assured about my knowledge and skills necessary for doing my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
37. I have mastered the knowledge and skills necessary for my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

PART III

The following questions relate to what the University of Twente offers you.
How satisfied are you with ...

	Very dissatisfied	Dissatisfied	Neither agree or disagree	Satisfied	Very satisfied	Does not apply
38. opportunities to develop	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
39. family-friendly policies and facilities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
40. rewards and recognition for performance	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
41. support during and after illness	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
42. support for new employees	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
43. information from HR Central and HR at your faculty/service (about pay, benefits, leave, training opportunities, etc.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
44. support when you have a problem related to HR issues (pay, benefits, contracts, etc.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
45. support to enhance well-being	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

PART IV

	Fully disagree	Disagree	Neither agree or disagree	Agree	Fully agree
46. I really feel as if the UT's challenges are my own.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
47. I feel like 'a part of the community' at the UT	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
48. I feel 'emotionally attached' to the UT	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
49. I feel a 'strong' sense of belonging to the UT	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

50. How much time do you spend on the following tasks?	Far too little	Too little	Just good	Too much	Far too much	Does not apply
- Teaching	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
- Research	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
- Valorisation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
- Managerial activities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
- Administration	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
- Meetings	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

	Way too low	Too low	Good	Too high	Way too high
51. My workload is ….	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

52. Have you used vacation days for getting your work done, in the past 12 months?
No ☐ 1
Yes ☐ 2

53. Have you called in sick for getting your work done, in the past 12 months?
No ☐ 1
Yes ☐ 2

54. Have you applied for another job at the UT in the last 12 months?
No ☐ 1
Yes ☐ 2

55. Have you applied for another job outside the UT in the last 12 months?
No ☐ 1
Yes ☐ 2

PART V

The following questions are about your wellbeing under Covid-19.

56. What percentage of your normal work hours do work at home?
    - 100% at home
    - Partly at home, namely … % (rest of the time on campus or in the ITC building)
    - 100% on campus or in the ITC building

57. To what extent are you able to do your work at home?
    - I can still fully complete my work
    - I can do most of my work
    - I can do my job reasonably well
    - I cannot do my job properly

58. My teaching is of lower quality because of fully online working.	Fully agree	Agree	Neutral	Disag ree	Fully disagree	Not applica
59. My research is of lower quality because of fully online working.						
60. My output is of lower quality because of fully online working.						

61. At home, I have the following support I need to do my job (more than one answer may be given).
    a. Access to the network and software
    b. Availability of devices
    c. Availability of information and data
    d. Availability of supervisors
    e. Availability of colleagues
    f. Otherwise, namely...

62. What percentage of your work would you like to do from home?
    a. Input field...slider 1-100

63. What percentage of your time do you want to spend on the following activities on campus/in ITC building?
    a. Teaching face-to-face …%
    b. Meeting with colleagues face-to-face …%
    c. Meeting external contacts face-to-face …%
    d. Use of equipment/facilities/tools …%
    e. Working silently/undisturbed …%
    f. (Video)calling …%
    g. Other non-desk activities …%
    h. Others, namely …. …%

64. At the return to campus / ITC building, which of the following activities do you want to start or continue to improve your wellbeing? (more than one answer can be given)
    a. No specific activity
    b. To walk during lunch
    c. Healthier lunches
    d. Healthier snacks
    e. To stand during meetings
    f. To meet outside
    g. To stand while working
    h. To sport with colleagues
    i. To sport individually
    j. To bike to the UT
    k. To have more small breaks (<5 minutes)
    l. Other, namely….

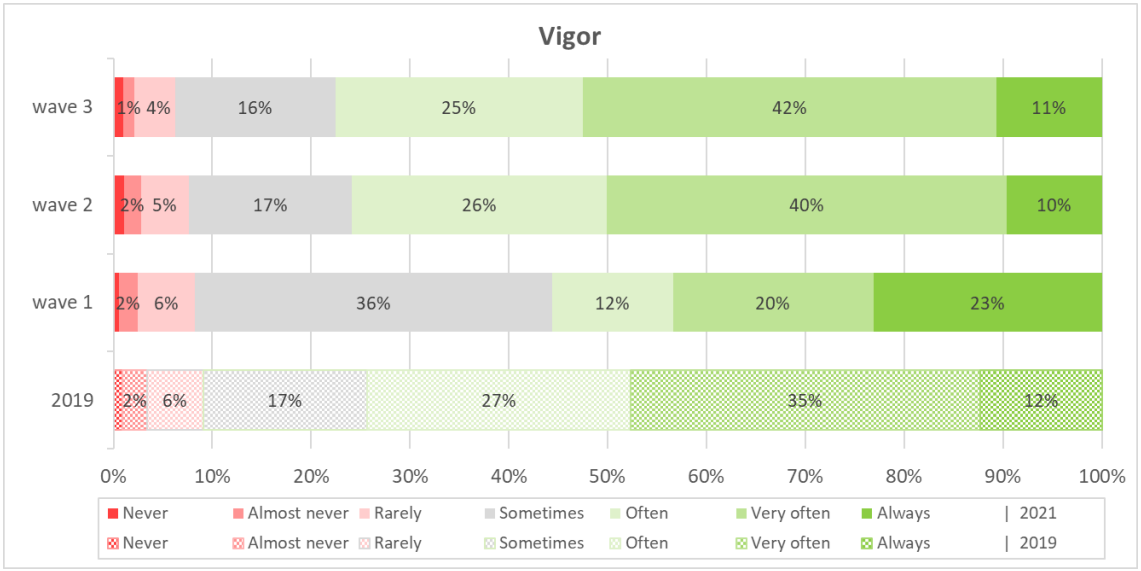
65. In general, my health is
    a. Very bad
    b. Bad
    c. Not bad / not good
    d. Good
    e. Very good

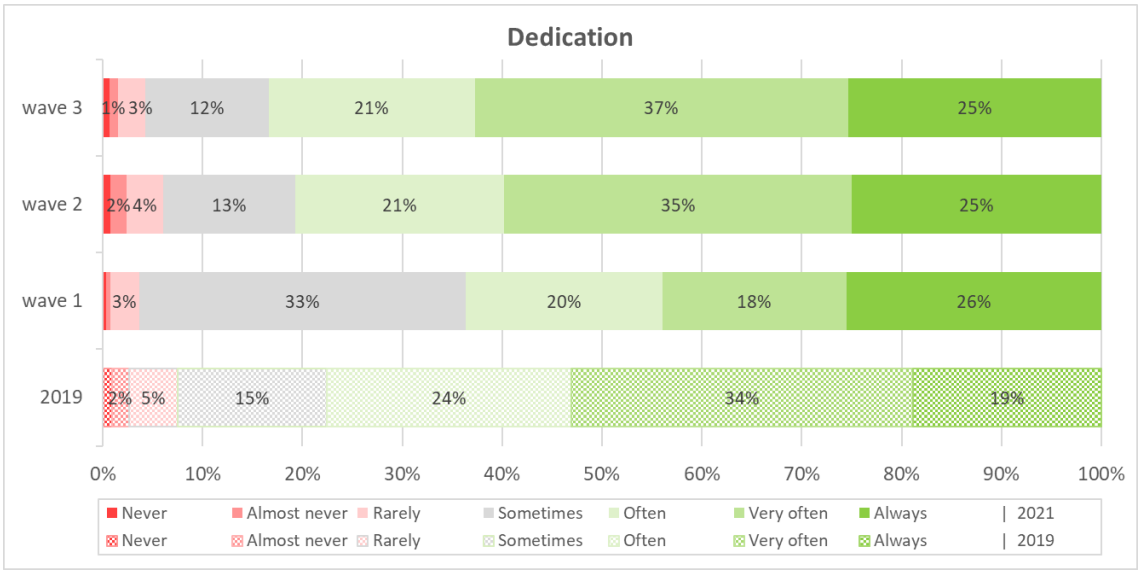
66. The last 3 months, which of the following factors have affected your work (more than one answer may be given)?
    a. Fear
    b. Isolation and lack of social contact
    c. Lack of structure in the day
    d. Care responsibilities
    e. Home-schooling
    f. Distractions by household members
    g. Fatigue
    h. Financial concerns
    i. Other: ... input field
    j. Not applicable

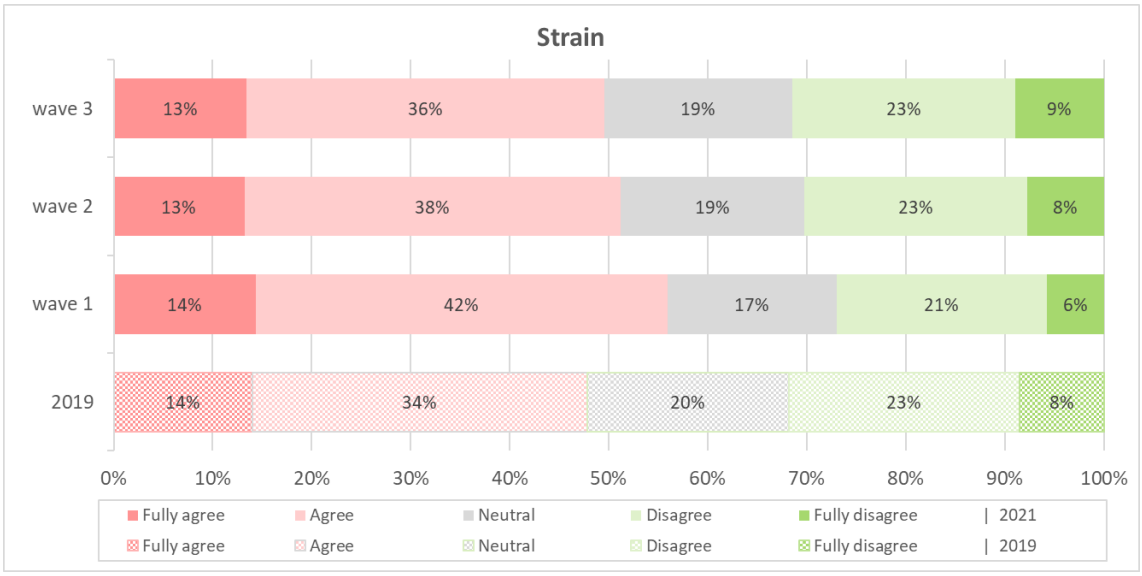
67. I can easily separate work time and private time	Fully agree	Agree	Neutral	Disagree	Fully disagree
68. I am satisfied with how University of Twente is dealing with wellbeing.					
69. I am satisfied with how University of Twente provides information about improving wellbeing.					
70. I feel safe working on campus/ITC building with the current Covid-19 measures.					

APPENDIX 2: ANSWERS & COMPARISONS

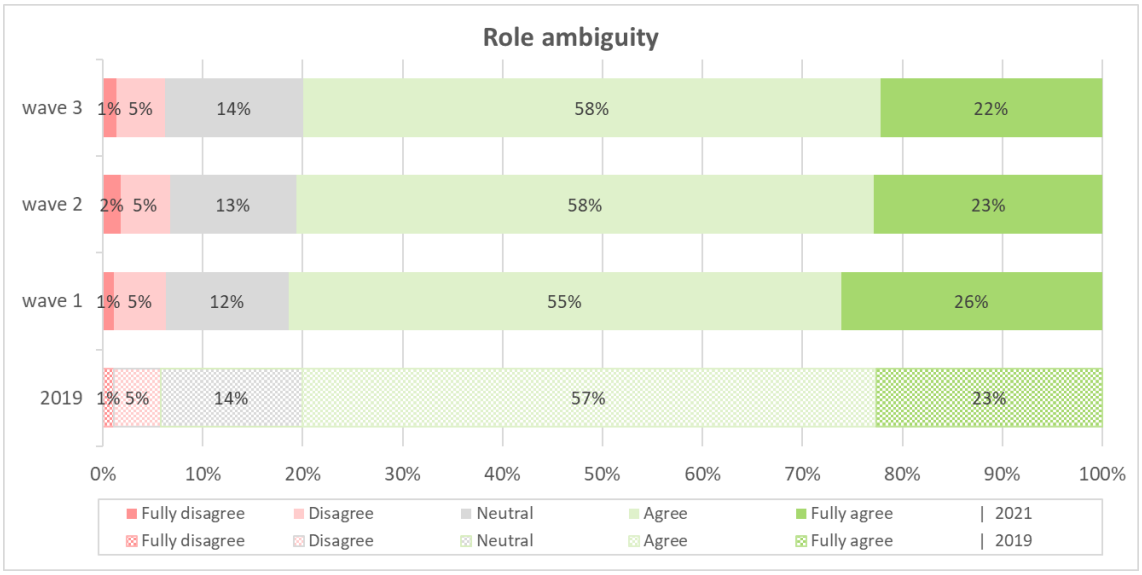
2.1 Engagement (vigor and dedication) and strain

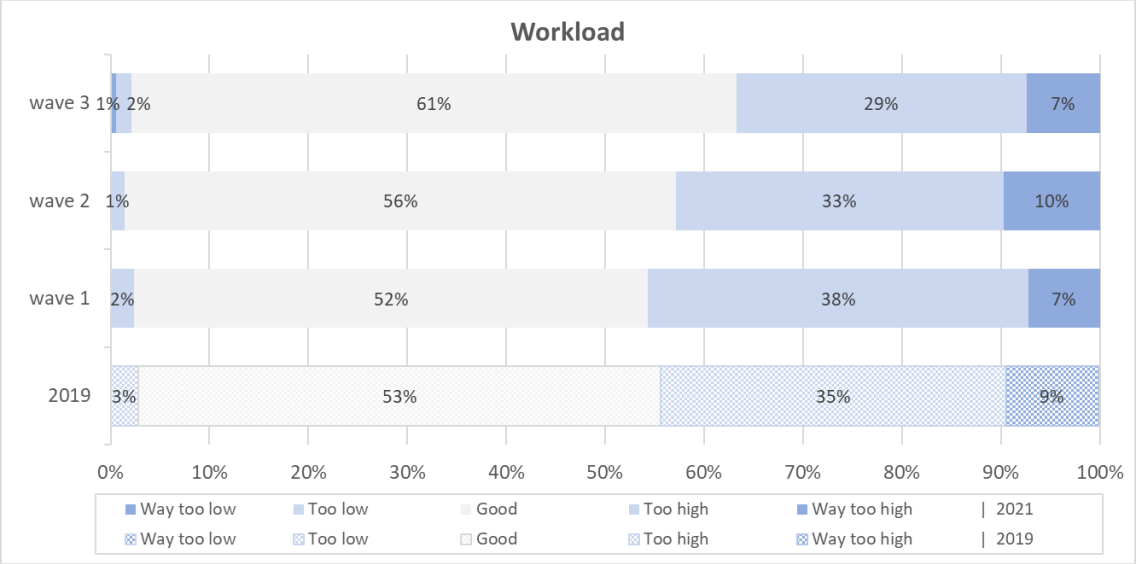


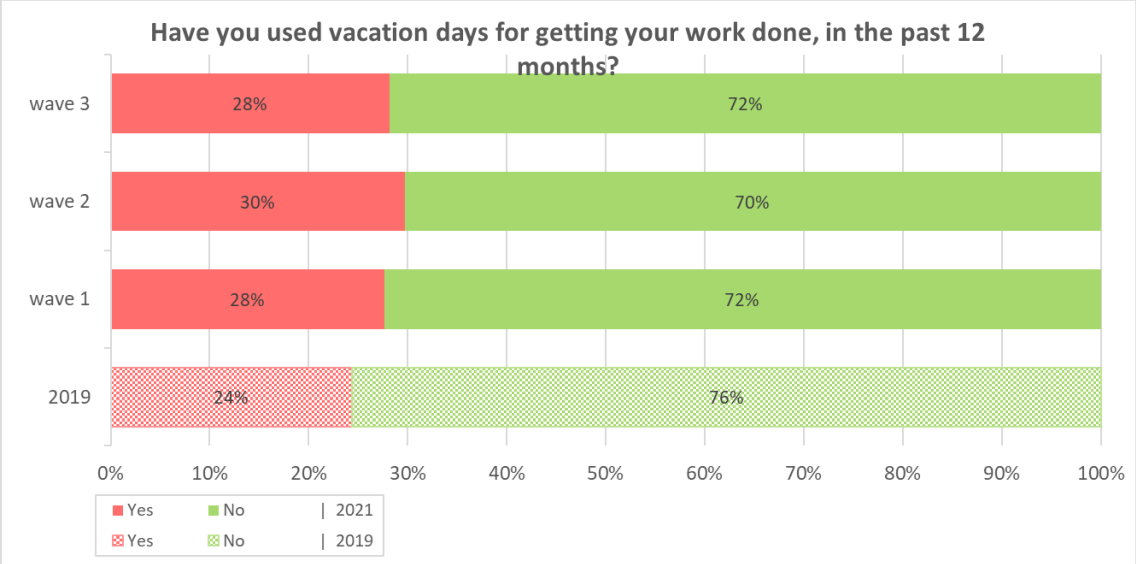


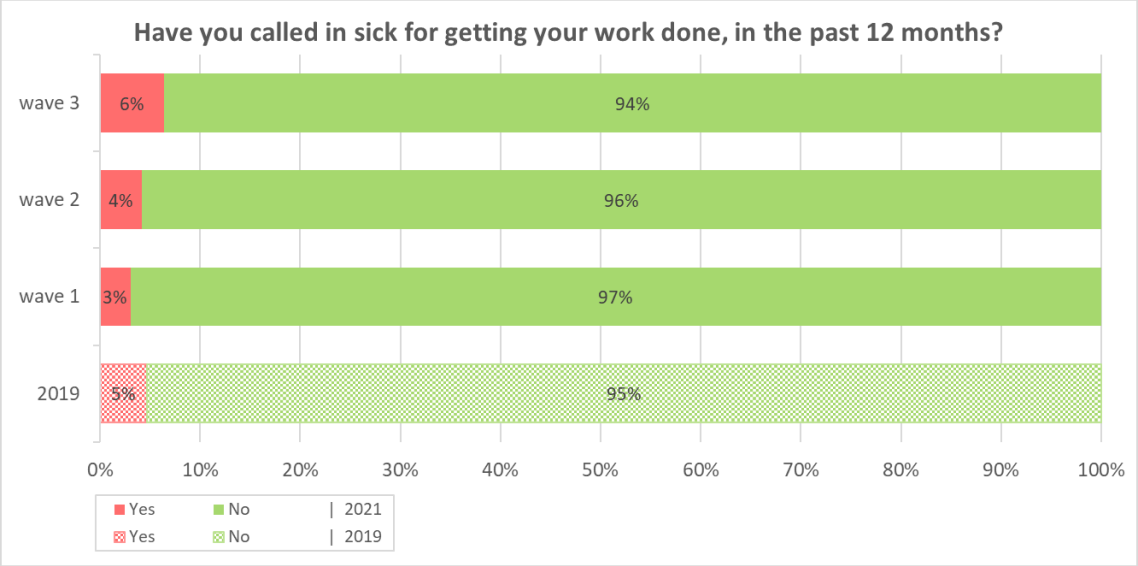


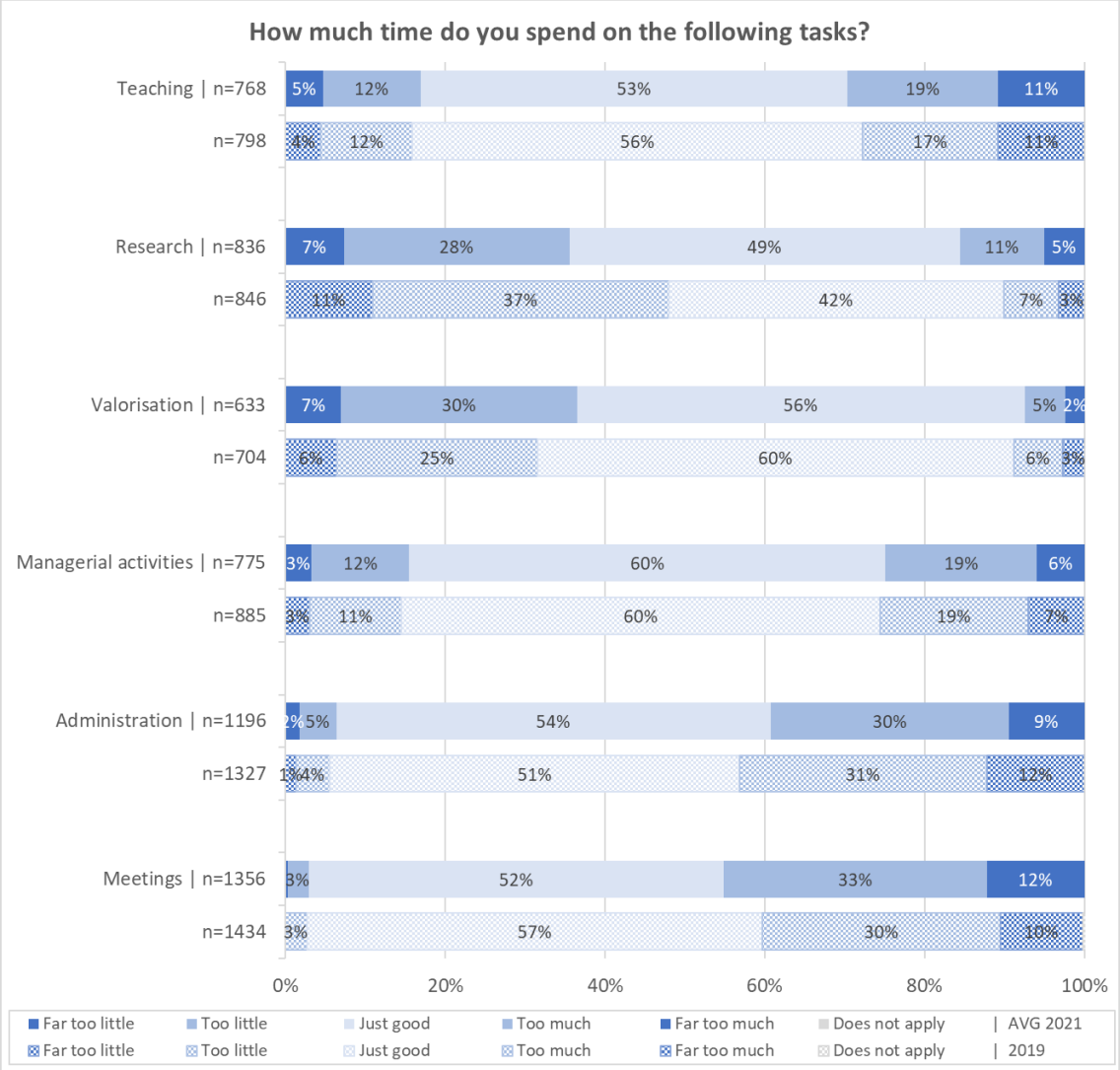
2.2 Job demands



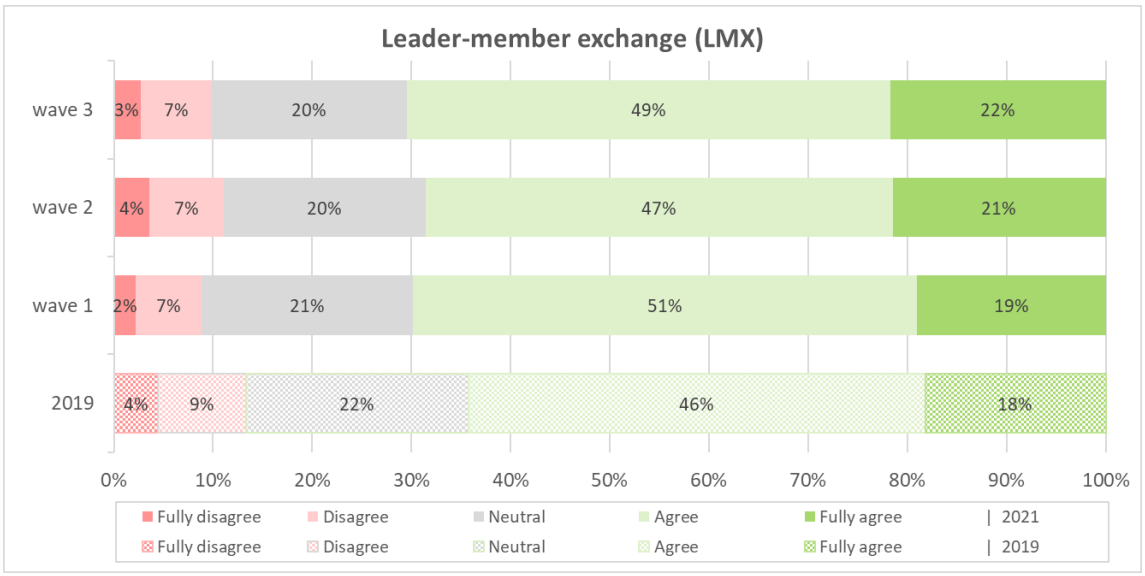

Workload
wave 3
wave 2
wave 1
2019
1%
2%
61%
29%
7%
1%
56%
33%
10%
2%
52%
38%
7%
3%
53%
35%
9%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Way too low
Too low
Good
Too high
Way too high
| 2021
Way too low
Too low
Good
Too high
Way too high
| 2019

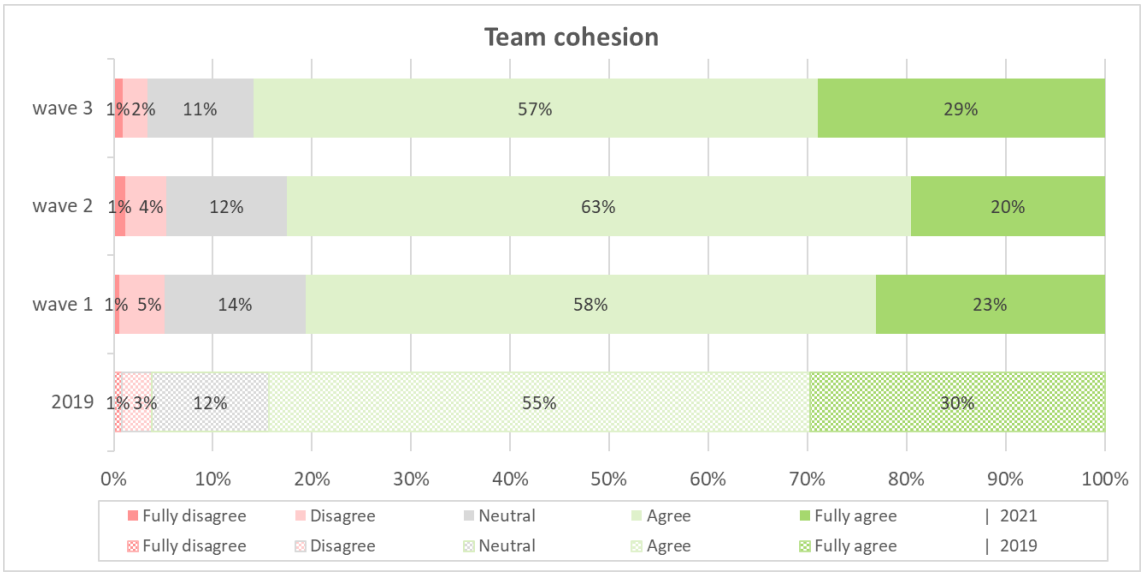

Have you used vacation days for getting your work done, in the past 12 months?
wave 3
wave 2
wave 1
2019
28%
72%
30%
70%
28%
72%
24%
76%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Yes
No
| 2021
Yes
No
| 2019

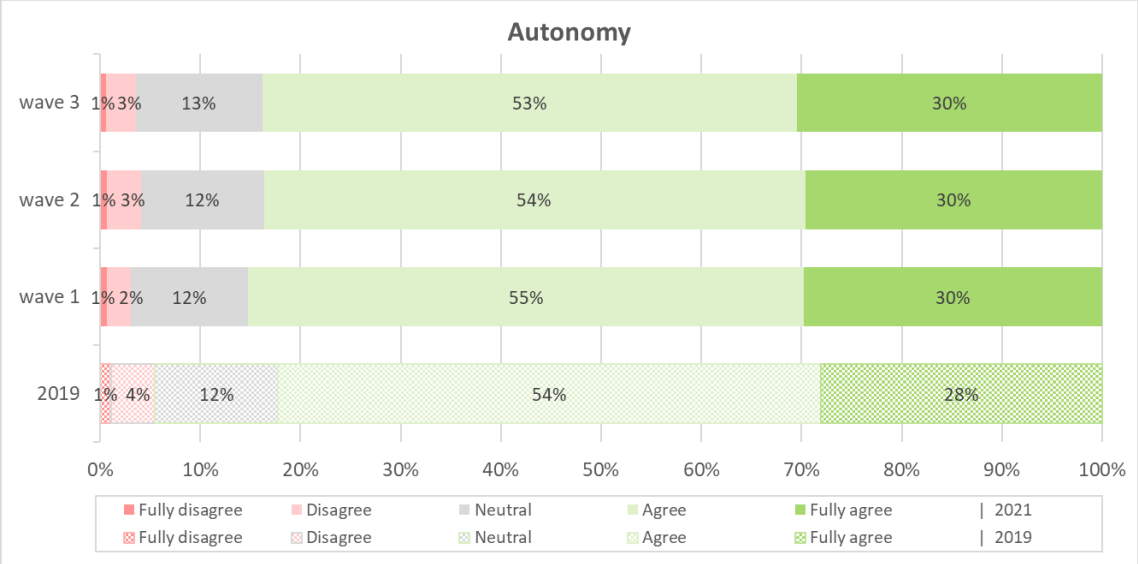

Have you called in sick for getting your work done, in the past 12 months?
wave 3
wave 2
wave 1
2019
6%
94%
4%
96%
3%
97%
5%
95%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Yes
No
| 2021
Yes
No
| 2019

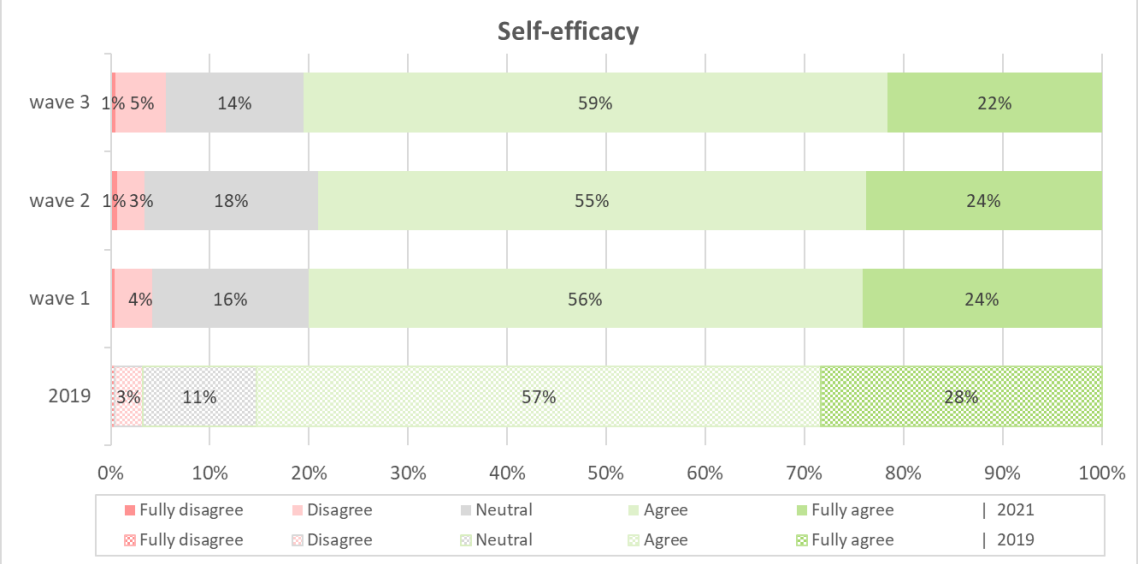

How much time do you spend on the following tasks?
Teaching | n=768
5%
12%
53%
19%
11%
n=798
4%
12%
56%
17%
11%
Research | n=836
7%
28%
49%
11%
5%
n=846
11%
37%
42%
7%
3%
Valorisation | n=633
7%
30%
56%
5%
2%
n=704
6%
25%
60%
6%
3%
Managerial activities | n=775
3%
12%
60%
19%
6%
n=885
3%
11%
60%
19%
7%
Administration | n=1196
2%
5%
54%
30%
9%
n=1327
1%
4%
51%
31%
12%
Meetings | n=1356
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
| AVG 2021
Far too little
Too little
Just good
Too much
Far too much
Does not apply
| 2019

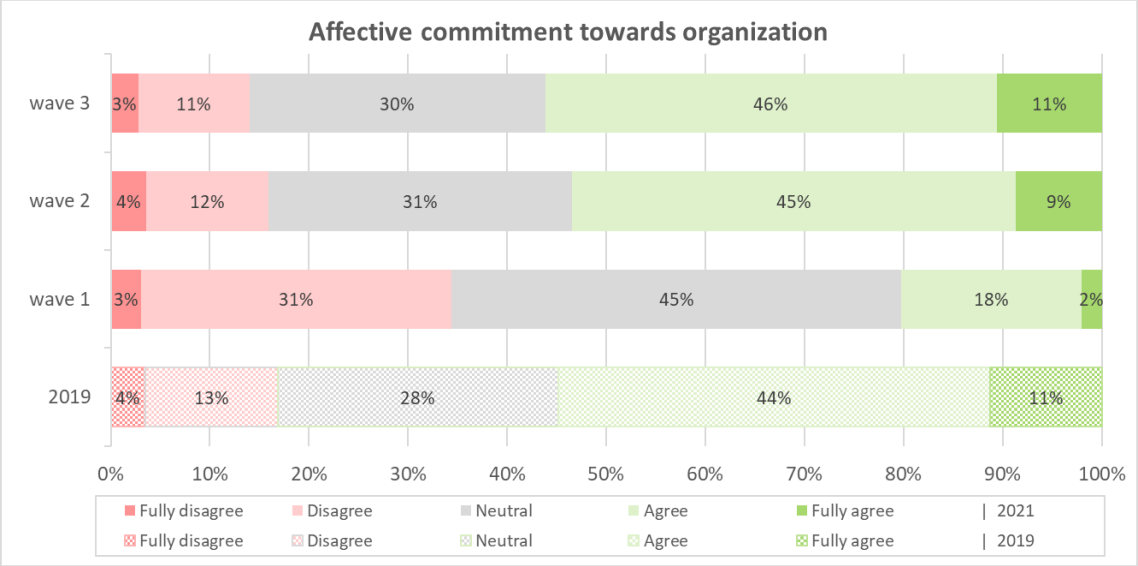
2.3 Job resources



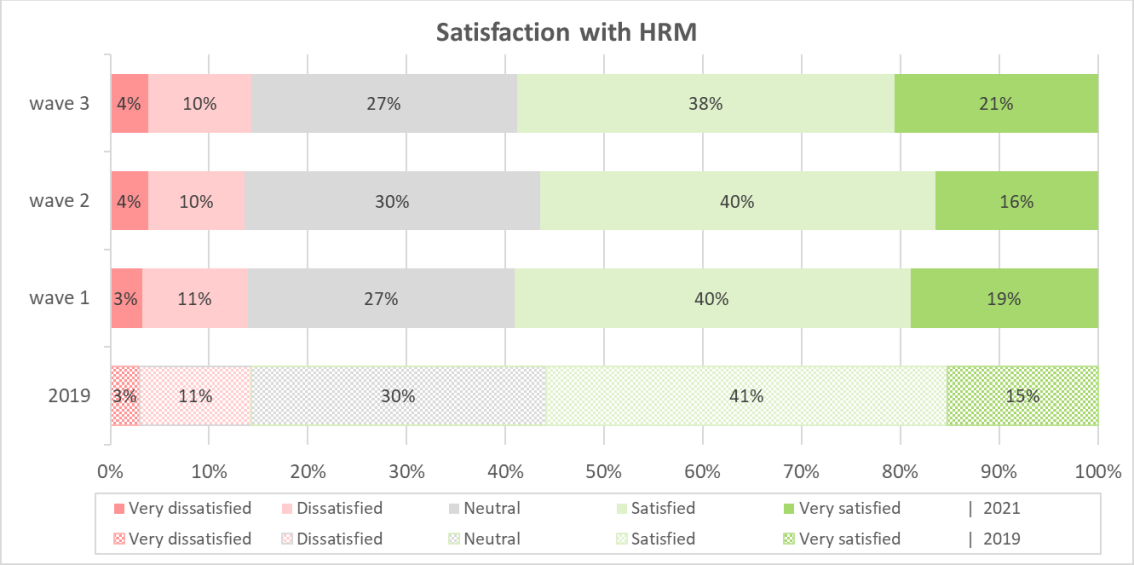


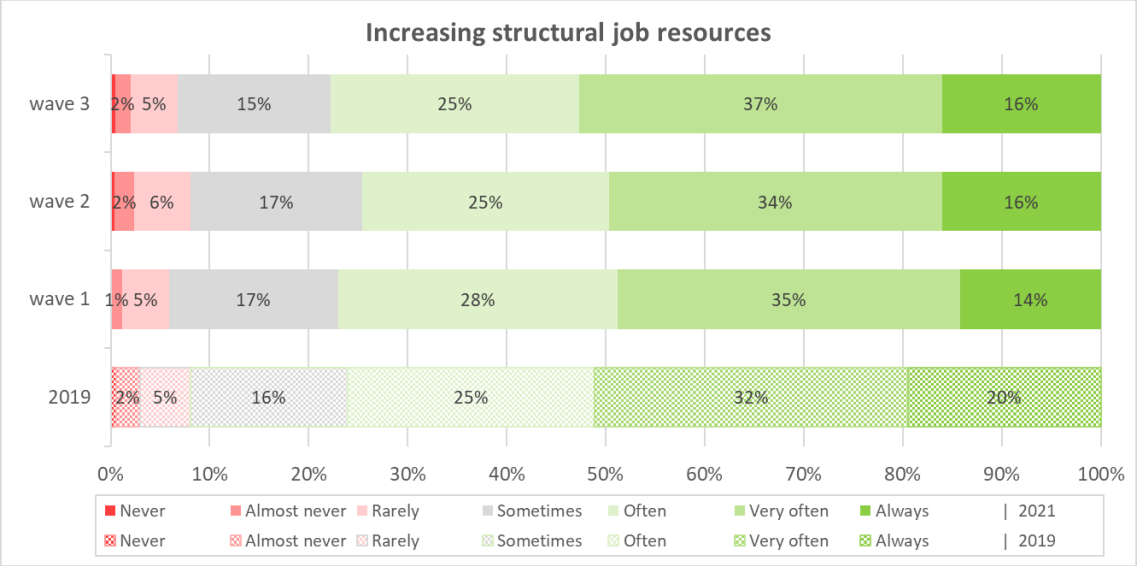

Autonomy
wave 3
1%
3%
13%
53%
30%
wave 2
1%
3%
12%
54%
30%
wave 1
1%
2%
12%
55%
30%
2019
1%
4%
12%
54%
28%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Fully disagree
Disagree
Neutral
Agree
Fully agree
| 2021
Fully disagree
Disagree
Neutral
Agree
Fully agree
| 2019

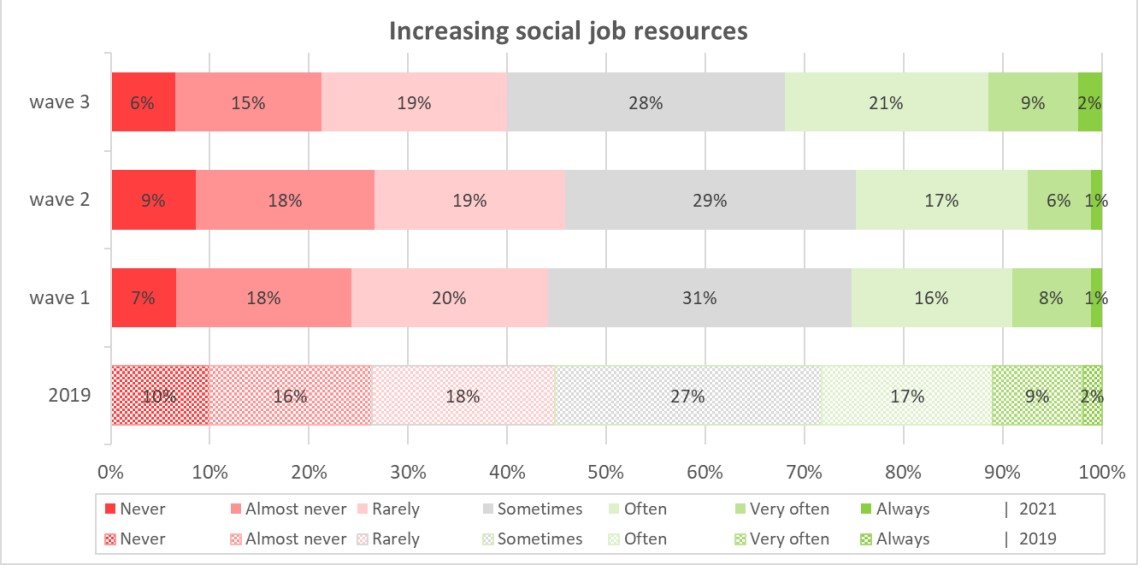

Self-efficacy
wave 3
1%
5%
14%
59%
22%
wave 2
1%
3%
18%
55%
24%
wave 1
4%
16%
56%
24%
2019
3%
11%
57%
28%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Fully disagree
Disagree
Neutral
Agree
Fully agree
| 2021
Fully disagree
Disagree
Neutral
Agree
Fully agree
| 2019

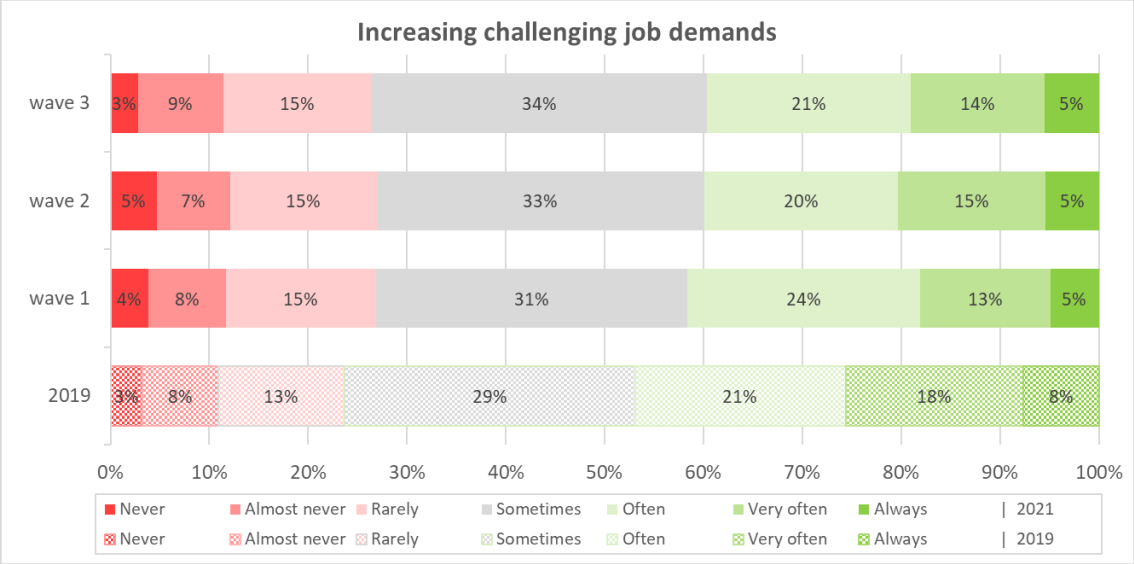


2.4 Organisational stimuli




Increasing structural job resources
wave 3
2%
5%
15%
25%
37%
16%
wave 2
2%
6%
17%
25%
34%
16%
wave 1
1%
5%
17%
28%
35%
14%
2019
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
| 2021
Never
Almost never
Rarely
Sometimes
Often
Very often
Always
| 2019


Increasing social job resources
wave 3
6%
15%
19%
28%
21%
9%
2%
wave 2
9%
18%
19%
29%
17%
6%
1%
wave 1
7%
18%
20%
31%
16%
8%
1%
2019
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
| 2021
Never
Almost never
Rarely
Sometimes
Often
Very often
Always
| 2019


Increasing challenging job demands
wave 3
3%
9%
15%
34%
21%
14%
5%
wave 2
5%
7%
15%
33%
20%
15%
5%
wave 1
4%
8%
15%
31%
24%
13%
5%
2019
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
| 2021
Never
Almost never
Rarely
Sometimes
Often
Very often
Always
| 2019