1   Changes of the model and variables after expert consultation explained

Figure 1: Original model (see document theoretical foundation/onderbouwing)
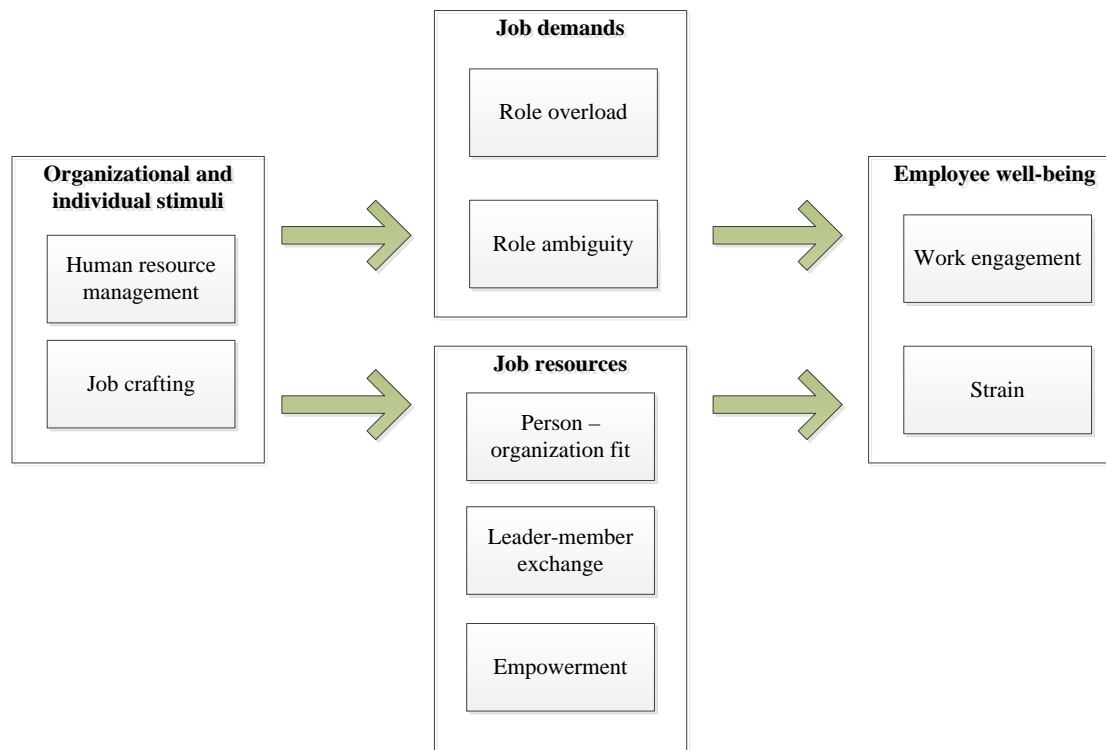
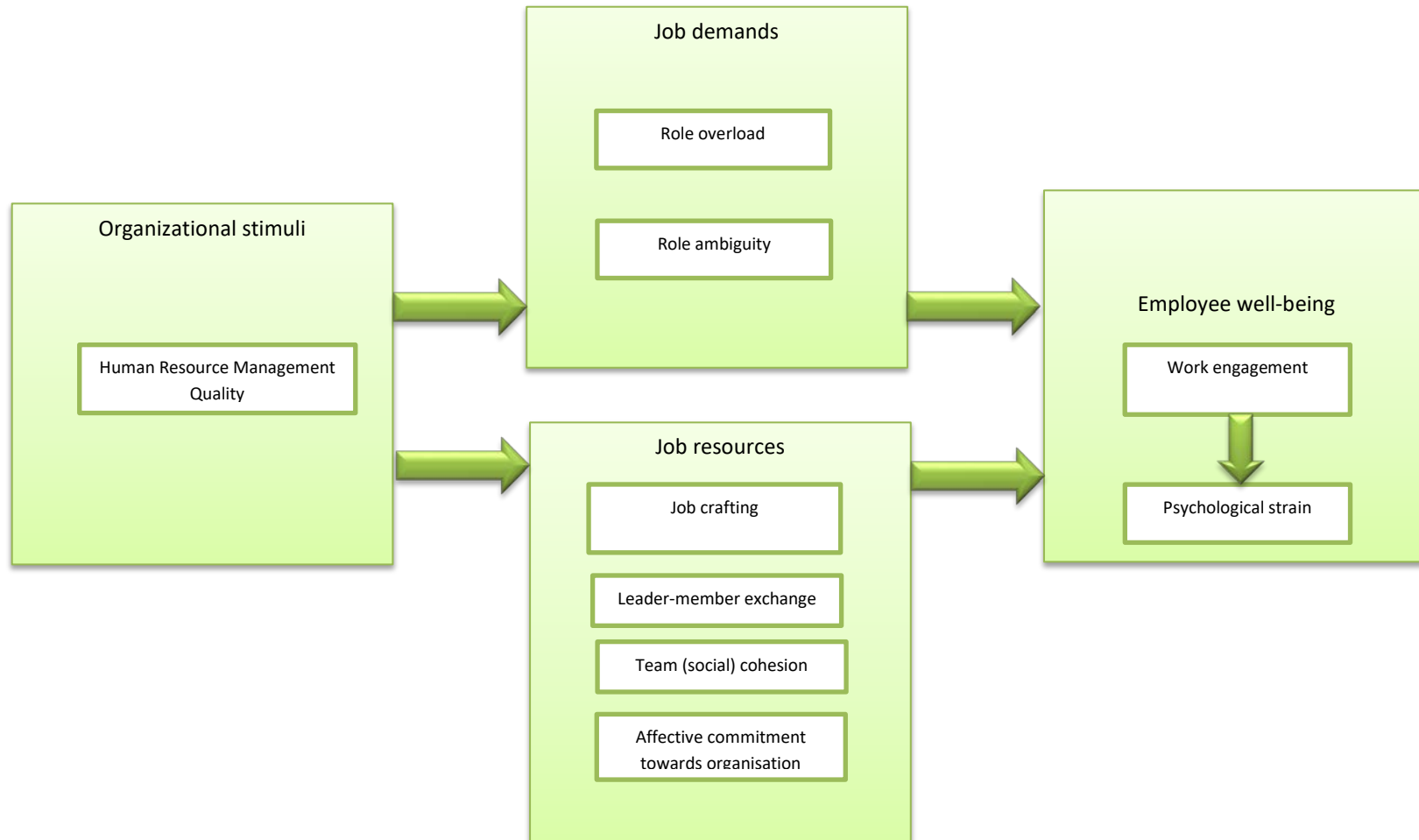Figure 2: Adapted model after feedback and expert consultation

Organizational stimuli

Human Resource Management Quality

Job demands

Role overload

Role ambiguity

Job resources

Job crafting

Leader-member exchange

Team (social) cohesion

Affective commitment towards organisation

Employee well-being

Work engagement

Psychological strain

Table 1: Overview of key concepts/variables before expert consultation

Antecedents	Mediators	Outcomes

- High-commitment HRM
   o Training
   o Carriere mogelijkheden
   o Beoordeling en feedback
   o Participation in decision making
   o Involvement en teamwork
- Job crafting
   o Vergroten van job resources
   o Verkleinen van job demands
   o Work time control
	- Job demands:
	   o Role overload
	   o Ambiguity
	- Job resources
	   o Person-organization fit
	   o Leader member exchange
	   o Empowerment
	      ▪ Self-efficacy
	      ▪ Meaning
	      ▪ Autonomy
	      ▪ Impact
		- Work engagement
		- Psychological strain

Table 2: Overview of key concepts/variables after expert consultation

Antecedents	Mediators	Outcomes

• Human Resource Management Quality
  o Career opportunities
  o Pay
  o Benefits
  o Family-friendly policies
  o etc.
	• Job demands:
	    o Role overload
	    o Ambiguity
	• Job resources
	    o Job crafting
	    o Leader member exchange
	    o Team (social) cohesion
	    o Affective Organisational Commitment
		• Work engagement
		• Strain

1.1 Summary of adaptations/changes with explanations

- **Antecedents**.
  - o Research shows that the perceived quality of HRM can influence the perceived quality of the relationship with the supervisor (LMX). After all, it is expected by the supervisor to implement HR policies. Moreover, HRM quality is an important predictor of affective organizational commitment. After feedback and expert consultation, it was decided to perceive 'job crafting' as a mediator and not as an antecedent. Research show that job crafting is an important job resource.
- **Mediators**.
  - o We have excluded empowerment and person-organization fit from the research. Empowerment shows a strong overlap with questions from other constructs (for example, work engagement and job crafting). Moreover, the number of items is a serious concern and restricts opportunities to include other issues that play a key role at the University of Twente. Person-organization fit: difficult for many people to understand/know the values of an organization. Moreover, it can be assumed that within an organization different values do exist.

- o Addition of team (social) cohesion and commitment towards organisation. Previous research shows relationships with work engagement and strain. Moreover, feedback and expert consultation shows the need to measure team (social) cohesion and employees attitude towards the UT as a whole.
  - o Analysis of relationships between mediators is necessary due to previous research (for example, LMX and role overload are antecedents/determinants of organizational commitment and LMX and job crafting show relationships in previous research).
  - o The adapted model and, thereof, mediator variables shows that resources can exist on four different levels: the job, the supervisor (LMX), the team and the organisation.
- **Outcomes**
  - o Measuring the relationship between work engagement and strain. Some research shows a positive relationship between engagement and strain (e.g. Reilly, 1994).
  - o Work engagement: only measuring one of the three dimensions; that is 'dedication' (strong overlap with affective commitment towards the job). The other subdimensions –Vigor and Absorption – caused problems related to content and language. The questionnaire was shown to 4 employees. They mentioned that the Vigor and Absorption items did not fit their attitudes and experiences. For example, it was mentioned they regularly feel drained and not 'full of energy' due to heavy workloads.
- **Open Questions.**
  - o Addition of two open questions/questions without answering categories/open answer opportunities. Referring to the MO2015, one of the employee complaints was that they had not given the opportunity to aerate on issues that should be improved.
    - ▪ (1) According to your opinion, what are the top-3 'should be improved' issues at your job/at the University of Twente? and
    - ▪ 2) According to your opinion, what are the top-3 you like most about your job/the University of Twente?

Concept and order of survey	Scale	Response options	Source
Work engagement	Dedication 1) I am enthusiastic about my job 2) I am proud of the work that I do 3) My job inspires me	0) Never 1) Almost never / a few times a year or less 2) Rarely / Once a month or less 3) Sometimes / a few times a month 4) Often / once a week 5) Very often / a few times a week Always / every day	UWES-9; Schaufeli, Bakker & Salanova (2006) (Dedication)
Strain	1) I have difficulties relaxing after work (cognitive irritation) 2) Even at home I often think of my problems at work (cognitive irritation) 3) Even on my vacations I think about my problems at work. (cognitive irritation)	1= strongly disagree, 7 = strongly agree	Mohr et al. (2006), European Journal of Psychological Assessment
Role overload	1) The amount of work I am expected to do is too much 2) How much time do you spend on the	1) Fully disagree 2) Disagree 3) Neutral 4) Agree 5) Fully agree 6) Does not apply	Question number 1 from Bolino & Turnley (2005); question 2 UT/academic specific

	following tasks:
	  - Teaching
	  - Research
	  - Management activities
	  - Administration
	  - Meetings
		0=Does not apply
		5=far too much
		4=too much
		3=just good
		2=too little
		1=far too little	

Role ambiguity	1) I know what my responsibilities are 2) I know exactly what my supervisor expects of me 3) It is clear to me of what I need to do in my job	1) Fully disagree 2) Disagree 3) Neutral 4) Agree 5) Fully agree	Rizzo et al. (1970)
Job crafting	Increasing structural job resources 1) I develop my professional capabilities 2) I learn new things at work 3) I make sure that I use my capabilities to the fullest 4) I decide on my own how I do things Increasing social job resources 5) I ask my supervisor to coach me 6) I ask whether my supervisor is satisfied with my work 7) I ask others for feedback on my job performance 8) I ask colleagues for advice Increasing challenging job demands 9) When an interesting project comes	5-point frequency scale (1 = *never*, 5 = *very often*) 1) Almost never / a few times a year or less 2) Rarely / Once a month or less 3) Sometimes / a few times a month 4) Often / once a week 5) Very often / a few times a week	Adapted from Tims et al. (2012)

	along, I am active in becoming a project member 10) If there are new developments, I am one of the first to learn about them and try them out 11) I like to start new projects at work 12) I regularly take on extra tasks even though I do not receive extra salary for them		
Leader-member exchange (LMX)	1) I know how satisfied my supervisor is with what I do 2) My supervisor understands my needs very well 3) My supervisor fully recognizes my potential 4) The chance that my supervisor uses his/her power to help solve my problems at work is very high 5) I have enough confidence in my supervisor that I would defend and justify his/her decisions if s/he were not present to do so. 6) My working relationship with my supervisor is highly effective	1) Fully disagree 2) Disagree 3) Neutral 4) Agree 5) Fully agree	Graen & Uhl-Bien (1995)
Team (social) cohesion	1) I feel a sense of belongingness to my colleagues 2) I get along with members of my colleagues 3) I like my colleagues	1 = Strongly disagree, 5 = strongly agree	Adapted from Sargent & Sue-Chan (2001)
Human	The following questions concern what is provided to you by the University of	1) Very dissatisfied 2) Dissatisfied	Adapted scale from: Satisfaction with HRM: Purcell & Hutchinson (2006)

Resource Management	Twente How satisfied are you with … 1) training/education opportunities 2) opportunities for training on the job 3) career opportunities 4) performance interviews 5) performance appraisal 6) pay 7) benefits other than pay 8) family-friendly practices 9) rewards and recognition for performance 10) influence in decision making related to issues that concern you 11) support during and after illness 12) support for new employees 13) HR information (e.g. pay, benefits, training opportunities, etc.) 14) support when you have a problem related to HR issues (e.g. pay, benefits, contracts, etc.15)	3) Neutral 4) Satisfied 5) Very satisfied 6) Not applicable	
Affective commitment towards organization	1) I would be very happy to spend the rest of my career with the UT 2) I enjoy discussing the UT with people outside it. 3) I really feel as if the UT's problems are my own. 4) I think that I could easily become as attached to another organization as I am to the UT 5)I feel like 'part of the family' at the UT 6)I feel 'emotionally attached' to the UT	1 = strongly disagree; 5 = strongly agree	Allen and Meyer scale (1990) adapted by Jaros (2007), https://pdfs.semanticscholar.org/7546/2d9094b420466ad68c404527c7b6cb38d040.pdf

	7)I feel a 'strong' sense of belonging to the UT		
Seize opportunities	1) How often do you take part in educational/training activities provided by the UT 2) I make use of the opportunities to make a career within the UT (multiple answers can be given)	1 = never; 5 = very often (several times a year) 1= No 2= I am a member of one or more career networks or visit their meetings regularly (e.g. FFNT, Ambassadornetwork, OBP Vrouwennetwerk) 3= I arrange or had meetings with a career coach at the UT 4= I make sure to let people know that I am open to other jobs at the UT	Adapted from Lepak and Snell (2002)
	3) Have you applied for another job at the UT in the last 12 months 4) Have you applied for another job outside the UT in the last 12 months	0=No 1=Yes	
	The aim of the next two questions is to give you an opportunity to report about about issues that should be improved and what you like most about your job at the UT		
Top-3 improvements	Mention the three most important issues that should be improved in your job at and/or the University of Twente	Open	
Top-3 likes	According to your opinion, what are the top-3 you like most about your job/the University of Twente?	Open	
Job function	Which job title best describes your job?	• PhD candidate • Researcher • Teacher • Tenure Tracker	

		• Assistant professor • Associate professor • Full professor • Manager (services) • Manager (faculties) • Support staff • I do not wish to answer this question	
Gender	What is your gender?	• Male • Female • Other • Do not want to answer	
Age	What is your calendar age?	• < 30 years • 30 – 45 years • 46 – 60 years • > 60 years • I do not wish to answer this question	
Family status	What is your family status?	• Single • In partnership • Other • Without children • With dependent children • With independent children • Informal carer • I do not wish to answer this question	
Tenure	How many years have you been working at the University of Twente?	• < 2 years • 2 – 5 years • 6 – 10 years • 11 – 20 years • > 20 years • I do not wish to answer this question	
Nationality	Where have you been born?	• In the Netherlands • In an EU country, but not the Netherlands	

		• In Europe, but a non-EU country • Africa • Asia • North-America • South-America • Australasia • I do not wish to answer this question	
Tenured	What is your contract status with the University of Twente?	• I have a permanent contract of employment • I have a temporary contract of employment • I have a temporary contract with an opportunity for a permanent contract • I do not have a contract status with the University of Twente (e.g. PhD candidates with a scholarship)	
Organizational Unit	Which organizational unit do you work for?	• Faculty of Behavioral, Management and Social Sciences (BMS) • Faculty of Engineering Technology (ET) • Faculty of Electrical Engineering, Mathematics and Computer Science (EWI) • Faculty of Science and Technology (TNW) • Faculty of Geo-Information Science and Earth Observation (ITC) • AZ • CFM • CES • FEZ • HR • LISA	

		• M&C • S&B	
Contract hours	According to your contract, how many hours a week are you expected to work?	• 38-40 a week • 32-37 a week • 24-31 a week • 18-23 a week • less than 18 hours a week	
Hours worked	How many hours a week did you actually work on average a week, in the last three months?		
Safety at work	Self-experienced aggression During the last two years, have you experienced one or more of the following aggressive behaviours against yourself at the UT? (multiple answers can be given) Witnessing aggression During the last two years, have you been a witness of any of the following aggressive behaviours at the UT (multiple answers can be given) Safety climate concerning aggression and violence If you perceived aggressive behaviours against yourself or others, did you share your experience(s) with others? (multiple answers can be given)	• No • Bullying • Discrimination • Intimidation • Sexual harassment • Physical violence • Other forms of aggression at work • Yes, but none of the aforementioned forms of agression • Not applicable • No • Yes, with colleagues • Yes, with my supervisor • Yes, with someone from the HR department • Yes, with a confidential advisor • Yes, with someone from the UT, but none of the persons mentioned above.	