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The EU Human Resource Strategy for Researchers

And the working conditions of Finnish fixed-term researchers

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The Charter and Code incorporating the Human Resource Strategy for Researchers (HRS4R) is a European Commissions initiative to make researchers' careers more attractive, and increase, and support the mobility of researchers by standardizing the researchers' careers in EU area. The reputation of the quality of the working life in Finland has been fairly good. However, the university employees' working conditions are often very precarious. In this article, we study the discrepancy between HRS4R action plans of ten Finnish universities and the survey data dealing the fixed term -researchers working conditions.

1. Introduction

As part of the development to the European Research Area, European governments and the European Commission have been active developing more transparent and attractive researchers' careers and working conditions increasing mobility and strengthening the labour markets within the area. A great deal of attention has been paid to the national institutional practices in recruitment, career models, and employment.

In Europe, the nature of the academic profession and academic careers has changed; there is a considerable increase in part-time and fixed-term contracts. Also e.g. the increased competition among academics for positions, symbolic and financial resources are changing the academic profession. (Fumasoli, Goastellec & Kehm 2015.)

Finland, as a Nordic welfare state, has been regarded to be one of the "exemplary pupils", in working conditions and the social security of workforce (Julkunen 2008). However, the academic work differs in Finland from other public spheres of employment. According to numerous studies, the insecurity and instability in academia is a widespread phenomenon in Finnish universities (e.g. Kuoppala, Pekkola, Kivistö, Siekkinen & Hölttä 2015; Rinne & Jauhiainen 2012; Nikunen 2012).

Since the 1990s, many reforms have been conducted in Finnish universities. The most significant was the new University Act in 2009, which made universities "independent legal persons". With this reform, Finnish universities strengthened the doctrine of new public management and they got a right to carry out their own human resource management (HRM). The study of Finnish university personnel, by Rinne & Jauhiainen (2012) acknowledged that the attitudes of the university employees towards the new higher education policy

were fairly reserved and many felt that this new law would have negative effects on academic work done in Finnish universities (see also Nikunen 2012).

In Europe, there is an aim to uniform the researchers' careers enabling better the researchers' mobility (e.g. Charter and Code). In Finland, the Finnish Ministry of Education and Culture gave recommendations about four stages of researcher career (Ministry of Education and Culture 2008). In addition, according to statistics, seven percent of all person-years made of researcher- and teaching personnel in Finnish universities are done by employees who are not included in four-stage research career model. They are working e.g. as part-time teachers, assistants or project researchers (Vipunen, the statistic service of Finnish educational governance). However, the statistics are not completely standardized and the categories of four stages differ between universities. Officially, the project researchers and assistants are not included in four-stage career model, however, in many statistics, they are included in that model.

The amount of researchers outside the four-stage career model is increasing and they are older at their age, on average, than before, which tells that being a project researcher is not necessary a temporary situation (Kuoppala et al 2015). The reason for this is that as in most of the countries, the lump sum funding from government to Finnish universities has decreased and the amount of external funding increased. Along with this trend, the number of the researchers working on a fixed-term contract based on the external funding has grown significantly.

The status and the working conditions of project researchers in universities are often very precarious due to short working contracts and tough competition of funding. Increasing competition and market-like behaviour in Universities and researchers acting like entrepreneurs are global phenomena and this development is called academic capitalism (Slaughter & Leslie 1997). The question is how the universities can maintain their attractiveness in competition for accomplished and motivated young researchers (see also European Commission 2008).

In our paper we analyse how well the HRS4R-action plans of the Finnish universities reflect the real life of fixed-term researchers. Our article is based on two data sets: the HRS4R action plans of the Finnish universities and a survey on the fixed term Finnish university researchers. The data is analyzed in the framework of HRS4R-principles concerning the basics of academic employment.

The article is built as follows. First we will shortly introduce the European-Union policy for establishing the European Research Area and the Charter and Code which is part of it. Second we will present the HRS4R framework and the quality assurance model attached to it. After the description of the context we thirdly will shortly discuss the methodology of the paper. Fourthly, in the empirical part of the article we describe the state of the working conditions and social security of the Finnish fixed term researchers based on the survey. Fifthly we analyze the mentioned action plans on the working conditions and social security of the Finnish universities. And at the end on this article, we will sum up the findings and provide policy recommendations for the Finnish universities.

This article is related to two research projects: "Academic Careers in Finnish Universities" (Välimaa, Siekkinen, Nokkala, University of Jyväskylä) and "Fixed-term University Researchers in the Finnish Knowledge Economy" (Kuoppala, Pekkola, Kivistö & Hölttä, University of Tampere). Both projects are funded by the Finnish Work Environment Fund.

2. Developing the researchers' working conditions at the European level: Charter and Code incorporating HRS4R

The European Commission adopted the European Charter for Research (Charter) and the Code of Conduct for the Recruitment of Researchers (Code) in 2005. The objective was to support the realization of the European Research Area and the free movement of knowledge within it – goals that were part of the Lisbon strategy that was adopted in 2000. The Charter and Code are the European Commission's recommendations to the member states, but targeted directly to researchers and their employers as well as the funders of research. The member states are expected to secure that their legislation is in harmony with the Charter and the Code. (European Commission 2008.) The Human Resource Strategy for Researchers (HRS4R) was launched later aiming to support the Charter and Code.

The Charter introduces a set of 31 general principles and requirements that define the roles, responsibilities and entitlements of researchers, research organizations and funding agencies. The Code consists of nine principles and requirements that should be followed by employers and funders when recruiting or appointing researchers (see table 1) (European Commission 2015).

The improvement of career prospects is seen as vital for encouraging young people, especially women, to embark on research careers. High-quality research environments, open and just systems of recruitment, as well as sustainable research careers and adequate social security are essential in attracting people into research and in increasing mobility, thus ensuring the performance and productivity of research in the European Research Area. (European Commission 2008.)

In the 2007 Green Paper "The European Research area: New Perspectives" reinvigorated public debate on how to achieve ERA. The meeting of the European Council in spring 2008 and the renewed Lisbon Strategy for Growth and Jobs confirmed investing in knowledge and innovation as priority areas. This was accompanied by the Commission's Communication to the Council and the European Parliament. "Better Careers and More Mobility: A European Partnership for Researchers" states that the progress towards ERA has been too slow and identifies four key areas where fast progress should be made by the end of 2010: recruitment; social security and supplementary pensions for mobile researchers; attractive employment and working conditions; and enhancing researchers' training and skills. (European Commission, no date.)

2.1 The Human Resource Strategy for Researchers (HRS4R)

In November 2008, Commissioner for Research Janez Potočnik announced a new voluntary tool for supporting the aims connected to the Charter and Code: the Human Resources Strategy for Researchers, HRS4R (European Commission, no date).

As an operational tool of HRS4R, the commission has launched a review process of the implementation plans of the institutions entitling the institutions, if approved, to use a "quality brand", namely HR Researcher Excellence. The HR researcher excellence logo is not called a label, because it is a sign of commitment, and plans to implement the ECR and CCRR, but not a sign of audit or accreditation in the first phase. (European Commission 2008, 2015.)

The "HR Excellence in Research" logo gives public recognition to research institutions that have made progress in aligning their human resource policies with the principles set out in the "Charter & Code". Institutions that have been awarded the right to use the logo can exploit it to highlight their commitment to implement fair and transparent recruitment and appraisal procedures for researchers. (European Commission 2008, 2015.)

The implementation of HRS4R is voluntary and can be considered as a steering mechanism for open coordination. The process of obtaining the quality brand has five steps (European Commission 2008, 2015):

- **Step 1** – The research institution or funding organization carries out an internal gap analysis according to a standard template grouping all the 40 Charter & Code principles.
- **Step 2** – The research institution or funding organization publishes its "Human Resources Strategy for Researchers" on its website and on the European EURAXESS Rights webpage. It should summarize the main results of the internal analysis and present the actions proposed to ensure and/or improve alignment with the Charter & Code principles.
- **Step 3** – Provided that the above steps are formally respected, the European Commission acknowledges that the participating research institution or funding organization has adopted a sufficient Human Resources Strategy for Researchers and gets the HR researcher excellence logo.
- **Step 4** – The research institution or funding organization implements its HR strategy and conducts a self-assessment within the framework of its existing internal quality assurance mechanisms. This self-assessment should be undertaken regularly, at a minimum of every second year.
- **Step 5** – External evaluation: at least every 4 years, the research institution or funding organization drafts a short report, showing the progress made towards the objectives of its HR Strategy for Researchers and its compliance with the principles of the Charter & Code. Renewal (or withdrawal) the HR excellence -logo.

The 40 principles introduced by the Charter and the Code have been grouped into four different areas: Ethical and professional aspects, Recruitment, Working conditions & Social security, and Training. The areas have been operationalized as follows (European Commission -Charter and Code template):

<p>1. Ethical and professional aspects</p> <p>1.1. Research freedom 1.2. Ethical principles 1.3. Professional responsibility 1.4. Professional attitude 1.5. Contractual and legal obligations 1.6. Accountability 1.7. Good practice in research 1.8. Dissemination and exploitation of results 1.9. Public engagement 1.10. Non-discrimination 1.11. Evaluation and appraisal of performance</p>	<p>3. Working conditions and social security</p> <p>3.1. Recognition of the profession 3.2. Research environment 3.3. Working conditions 3.4. Stability and permanence of employment 3.5. Funding and salaries 3.6. Gender balance 3.7. Career development 3.8. Value of mobility 3.9. Access to career advice 3.10. Intellectual property rights 3.11. Co-authorship 3.12. Teaching 3.13. Complaints and appeals 3.14. Participation in decision-making bodies</p>
<p>2. Recruitment</p> <p>2.1. Recruitment 2.2. Recruitment (code) 2.3. Selection 2.4. Transparency 2.5. Judging merit 2.6. Chronological order 2.7. Recognition of mobility experience 2.8. Recognition of qualifications 2.9. Seniority 2.10. Postdoctoral appointments</p>	<p>4. Training</p> <p>4.1. Relationships with supervisors 4.2. Supervision and managerial duties 4.3. Continuing professional development 4.4. Access to research training and continuous development 4.5. Supervision</p>

Table 1. The 40 principles of the Charter for Researchers and a Code of Conduct for the Recruitment of Researchers.

These 40 principles are introduced in the Charter and Code template for the use of organizations. The organizations can use them as a part of their human resource management (HRM) planning. The organizational HRM policies are key tools to develop academic researchers' career more attractive.

2.2 The Human Resource Management (HRM)

From the organizational HRM perspective, the essential phases of employment and academic career process comprises the following HR-flows: recruitment, selection and orientation (inflows), university's personnel policies, and practices, such as evaluation of performance, rewarding, career planning (internal flows), and lastly finishing employment and academic career (outflows) (Buchanan & Huczinski 2004, Beer et al. 1984).

HRM refers to all those activities associated with the management of work and people in formal organizations. HRM has become the most widely recognized term referring to the activities of management in organizing work and employing people (Boxall & Purcell 2000).

The HRS4R-template covers inflows (recruitment) and internal flows (ethical and professional aspects, working conditions and training and development) of HRM. In our paper, we are interested in internal flows, especially the working conditions and social security. We consider the working conditions and social security as basic components of HRM.

3. Data and analysis methods

In this article, the focus is on one of the four areas of the Charter and Code: Working Conditions and Social Security. This area consists of 14 different principles. We explore eight of them empirically based on quantitative data. There are differences when comparing the principles of the Charter and Code template and the survey questions. However, we can use the data of the survey to explore the Finnish university researchers' perceptions and make presumptions about the status of the working conditions and the social security in Finnish universities.

The data were collected by a survey, which was implemented in the autumn of 2013. The survey was related to the research project "Fixed-term university researchers in the Finnish knowledge economy" (Kuoppala et al forthcoming). The questions were related e.g. to the respondents' working history, mobility and quality of work. Several likert-scale questions were also created to measure the respondents' perceptions, e.g. satisfaction to salaries, autonomy at work and insecurity caused by the fixed-term contracts of employment.

	percent % / mean
Female	51 %
Age	37
University	17 %
Aalto University	24 %
University of Helsinki	10 %
University of Jyväskylä	7 %
University of Oulu	7 %
University of Tampere	12 %
Tampere University of Technology	

University of Turku	12 %
University of Eastern Finland	10 %
Field of current research	24 %
technology	20 %
social sciences	18 %
natural sciences	13 %
medical- and health sciences	13 %
bio- and environmental sciences	13 %
humanities	11 %
Working title	36 %
Doctoral student (also few assistants)	15 %
Researcher (MS) (researchers and project researchers)	30 %
Researcher (PhD) (mainly post-docs)	20 %
Other (PhD) (mainly university teachers/lecturers, few professors and project managers)	
Total amount of respondents, all working on fixed-term contract of employment	714

Table 2. The survey respondents.

Cross tabulation and mean value comparison are used as analysis methods. The statistical significance is marked with stars in the tables:

*= $P > 0,05$ low statistical significance

**= $P > 0,005$ average statistical significance

***= $P > 0,001$ high statistical significance

Other data used in this study consist of the documents (mainly action plans) of those ten Finnish universities, which have published material about their processes and results in participating to the HRS4R initiative. This material is fetched from the open web pages of these universities. These universities include seven out of those eight universities that have been analyzed in the survey data described above. The two universities not analyzed as participants in the survey are the University of Vaasa and the Lappeenranta University of Technology. The University of Helsinki is missing from the HSR4R universities group.

In the next two chapters, we will analyze the survey data and the HRS4R action plans from 10 universities and make comparisons to the template of the Charter and Code. The question is, how well the targets of the HRS4R and the principles of the Charter and Code come up in practice through the opinions of the fixed-term researchers in Finnish universities.

4. Working conditions and social security of the Finnish project researchers

The area of working conditions and social security includes 14 principles in the Charter and Code template. In this analysis, we are using eight of them, which are:

- Recognition of the profession
- Working conditions
- Stability and permanence of employment

- Funding and salaries
- Gender balance
- Career development
- Teaching
- Participation in decision-making bodies

In the Charter and Code template, which is made for institutions for the use of internal analysis, these principles are quite carefully described. In this article, we are exploring these eight principles from the template and combining them with the questions from the survey data. However, the perspective and the content of dimensions differ between the template and the survey.

The perspectives of gender and educational degree were used in the analysis because according to studies, gender and career stage plays an important role when trying to understand and explain better the differences in academic work and careers (e.g. Brechelmacher, Park, Ates & Campbell 2015; Husu 2005, 2000; Kuoppala et al forthcoming ; Rinne & Jauhiainen 2012).

4.1 Recognition of the profession

At the beginning of each principle we will briefly illustrate, how it is described in the Charter and Code template. In the template, this principle “recognition of the profession” is described as follows:

“All researchers engaged in a research career should be recognized as professionals and be treated accordingly--
“(European Commission - Charter and Code template)

Recognition of the profession is observed from the data through four questions. The perspective of the questions is as follows: how university employees identify themselves as a member of the academic community and the work unit, does the work unit has common goals, and do they find their work meaningful.

Recognition of the Profession	Mean	Gender		Degree	
		female	male	MS	PhD
I identify myself as a member of the academic community (1-5)	3,9	3,8	4,0	3,7***	4,1***
I identify myself as a member of my work unit (1-5)	4,0	4,0	4,1	4,0	4,0
Members of my work unit have common goals (1-5)	3,5	3,4	3,5	3,4	3,5
I feel my work is meaningful (1-5)	4,2	4,3	4,1	4,1***	4,3***

Table Virhe. Viitteen lähdettä ei löytynyt.1 Principle: Recognition of the Profession

In every question, the average mean is quite high and the differences between the groups are minor. PhDs' perceptions of the meaningfulness of their work and the commitment to the academic community are higher compared with employees with lower degree.

According to different Finnish studies, academic employees, especially those who are higher at the career stages, working in Finnish universities are usually very committed to their work and find it highly meaningful. The explanation might be that working in academia is highly competitive so only those, who are committed and find their work meaningful, will succeed. (Kuoppala et al. 2015; Rinne & Jauhiainen 2012.) The same phenomenon can be seen in the international studies as well (Gappa, J. M. Austin, A. E. & Trice A. G. 2007; Bryson 2004; Winter & Sarros 2002).

4.2 Working conditions

“Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions, which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.” (Charter and Code template)

From the survey, we focus on questions about part-timers (the share of part-timers, willingness to work part time), union membership rate and also one question considering the working autonomy.

Working Conditions	Yes/ Mean	Gender		Degree	
		female	male	MS	PhD
Is your contract of employment currently full time	90 %	91 %	89 %	91 %	89 %
Will/Would a part-time contract of employment be a good option in your current situation in life?	18 %	20 %	16 %	17 %	20 %
Willingness to work part time by part-timers.	59 %	68 %	52 %	55 %	62 %
Union membership rate	71 %	77 %***	64 %***	70 %	72 %

Table *Virhe. Viitteen lähde ei löytynyt.* 2 Principle: Working Conditions

Generally, working part-time in Finnish Universities is not very common. Almost all of the universities' fixed-term employees in the survey data (90 %) are working full time and 18 % find that the part-time contract is or would be a good option in their current situation in life. Over a half of the part-timers wants to work part-time. Surprisingly, only 2/3 of employees have a membership in a union and women are members of unions more often than men. In Finland the average union membership rate is around 75 % (Indicator). The guess was that the precarious working conditions would lead to high union membership rate, but in the survey data, especially men's union membership rate (64 %) is rather low in this context.

The research and teaching personnel in the Finnish universities usually work in the “total working time” - system. This means that the annual amount of working hours is 1,600 and employees enjoy high level of autonomy planning their weekly working hours in this context. In the survey, university employees find that they can influence their work sufficiently. In the data, the researchers do mainly research and less teaching which can also increase the level of autonomy especially when it comes to scheduling the working days.

4.3 Stability and permanence of employment

“Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.” (European Commission - Charter and Code template)

The stability and permanence of employment are explored from the survey data through seven questions, which are related to e.g. the negative consequences of fixed-term contracts and the employee perceptions of the continuation of their fixed-term working contract.

Stability and Permanence of Employment	Yes/ Mean	Gender		Degree	
		female	male	MS	PhD
A fixed-term contract of employment increases sense of insecurity (1–5)	4,4	4,4	4,3	4,3**	4,5**
A fixed-term contract of employment creates financial insecurity (1–5)	4,4	4,5	4,3	4,4	4,4
A fixed-term contract of employment is mentally straining (1–5)	4,1	4,2*	4,0*	3,9***	4,2***
How certain are you on the continuation of your current contract of employment? (1–5)	2,6	2,4**	2,8**	2,8***	2,4***
Does your contract of employment cover the duration of your research-funding period?	53 %	51 %	54%	50 %	55 %
Have you been able to influence the duration of your current contract of	17 %	16 %	18 %	17 %	17 %

employment?					
Will/Would a fixed-term contract of employment be a good option in your current situation in life?	29 %	27 %	31 %	34 %**	23 %**

Table Virhe. Viitteen lähde ei löytnyt.3 Principle: Stability and Permanence of Employment

Respondents find the continuation of their current contract of employment very uncertain and they find the consequences of the fixed-term contracts very negative. The perceptions of female respondents and PhDs' are more negative compared with the perceptions of male respondents and employees with a lower degree. Female find the continuation of their current contract of employment clearly more uncertain than men.

All university employees in the survey data have a fixed term contract of employment. The employees' working contract is covering completely the funding period in 53 % of cases. Only 23 % percent of the PhD's find the fixed term contract a good option in their current situation in life.

In Finnish universities, the research staff is usually working with fixed-term contracts especially at the early stages of their career. However, studies in Finland have shown that the insecure position nowadays commonly continues after having a PhD degree (e.g. Kuoppala et al forthcoming.in the survey, employees with PhD degree have more often negative perceptions concerning e.g. the continuation of their working contract and are more willing to move working outside universities). Fixed-term contracts are highly criticized among the university staff members. They have a great effect on the employee precarious working conditions and cause difficulties in planning one's career and research work. (Kuoppala et al. forthcoming; Nikunen 2012) Career paths in academia are internationally precarious by nature and especially the early working years (Brechelmacher et al. 2015).

4.4 Funding and salaries

“Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions --- in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities” (European Commission - Charter and Code template)

Funding and salaries are explored with two questions in the survey, which are related to the satisfaction of the income and employees' perceptions of the justification of their salary.

Funding and Salaries	Mean	Gender		Degree	
		female	male	MS	PhD
I am satisfied with my level of income (1–5)	3,0	2,9	3,1	2,8**	3,2**
My salary is justified in relation to my	3,0	2,9**	3,2**	2,9*	3,2*

Funding and	Mean	Gender		Degree	
tasks and my personal work performance (1–5)					

Table Virhe. Viitteen lähde ei löydynt.4 Principle: Funding and Salaries

Female respondents and respondents with a master’s degree were more unsatisfied with their salaries compared to male and PhD respondents. In the data, female respondents’ average salary was 3,075 euros, and male respondents’ 3,182 euros per month. When exploring the salary in connection with the working title, the male postdocs’ salaries are only slightly higher than the female postdocs’ salaries and the male university researchers’ average salaries are 141 euros higher than female university researchers’ salaries. However, any other variables were not taken into consideration here.

In universities the level of salaries especially in the early career stages are usually lower and the monetary reward systems are claimed to be less supportive compared to many private organizations’ salaries and reward systems. Especially the new salary system, which came into effect in the year 2010 with the new university act, is criticized (Kuoppala et al forthcoming; Rinne et al 2012). However, the studies of the National Audit Office of Finland show that instead of monetary awards, the fairly stable working conditions would be better way to increase the level of commitment among academic employees (National Audit Office of Finland 2010).

4.5 Gender balance

“Employers and/or funders should aim for a representative gender balance at all levels of staff. --- .This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria” (European Commission - Charter and Code template)

In the survey there was one question concerning the gender balance. The differences between genders in the survey data are quite substantial and statistically significant in many questions.

Funding and Salaries	Mean	Gender		Degree	
		female	male	MS	PhD
Men and women are treated equally in my work unit (1–5)	4,0	3,7***	4,5***	4,2	3,9

Table Virhe. Viitteen lähde ei löydynt.5 Principle: Gender Balance

In the survey data, female respondents find clearly more often than male respondents do that equality is not actualized in their work units. In addition, PhDs’ perceptions about the equality differ from the perceptions of the employees with a master’s degree.

When we compare the female PhDs' perceptions with male PhDs', the difference is substantial. One-third (31 %) of the female PhD employees disagree or strongly disagree with the claim, that men and women are treated equally in their work unit. The share of men thinking the same way is less than 8 percent.

According to the research by Kwiek and Antonowicz (2013) there is a gender gap in academia: in employment conditions, academic work and academic power within higher education institutions. The differences are, however, depending on the academic status of the individual and also the country. Women are also less likely to be involved in scientific committees, boards or bodies nationally/internationally. Husu (2005, 2010) has studied the gender discrimination in Finnish universities and found out that gender has a significant role when examining the academic work and academic career; there are (often subconscious) structures, which e.g. helps male academics to proceed in their career.

4.6 Career development

“Employers and/or funders of researchers should draw up, --- a specific career development strategy for researchers at all stages of their career.--- It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future.” (Charter and Code template)

We will concentrate on three survey questions related to the dimension career development: Are the employees identified as members to their work unit, do they have possibilities to develop themselves, do they discuss their career plans with their supervisor, and does their current research benefit their career development?

Career Development	Yes/ Mean	Gender		Degree	
		female	male	MS	PhD
I identify myself as a member of my work unit (1-5)	4,0	4,0	4,1	4,0	4,0
I have good possibilities to develop myself in my work (1-5)	4,0	3,9**	4,1**	4,0	3,9
I discuss my career plans with my closest superior (1-5)	3,1	3,0**	3,2**	3,1	3,1
Does your current research work benefit your career development? (Those who responded yes)	81 %	81 %	81 %	83 %	78 %

Table Virhe. Viitteen lähde ei löydynt.6 Principle: Career Development

Female respondents' perceptions about how good chances they have to develop themselves were more negative compared to male respondents' perceptions. The PhDs find less often than the employees with a

lower degree do, that their current research benefits their career development. The differences are minor between the groups.

The employees with a master’s degree find most often that their current research benefits their career development. However, great shares of them are doctoral students so the research they are working with usually somehow benefits their career development. The PhDs might be more demanding what comes to the research topics they want to work with.

The female respondents are discussing less with their supervisors than the males, and their perceptions about the support coming from their supervisors were more negative. Husu (2005, 2010) has studied the support given to female scholars during their career in Finnish universities. She found out that female scholars usually have less support than men, which is related to many (usually subconscious) gender-discriminative practices in universities. (Husu 2005, 2010; also see Ledwith & Manfredi 2000.)

4.7 Teaching

“Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers’ career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities. (European Commission - Charter and Code template)

Teaching	Category /Mean	Gender		Degree	
		female	male	MS	PhD
I am interested in the academic career of a teacher-researcher at a university (1–5)	3,7	3,6	3,7	3,4***	3,9***
I am interested in the academic career of a researcher-developer at a university (1–5)	3,8	3,8	3,8	3,7*	3,9*

Table Virhe. Viitteen lähde ei löytnyt.7 Principle: Teaching

The differences in the survey data are minor. The PhDs found slightly more often that they are interested having a teacher-researcher or researcher-developer career in a university. Also, the researcher-developer career was slightly more popular. This can also be related to the research fields that these employees are representing, the biggest groups were: technology 24 %, social sciences 20 % and natural sciences 18 %. It might be that the teacher-researcher -career is not so attractive for people working in the field of technology.

In the survey, there was also a question on how the work tasks are distributed between teaching, research and other tasks, and how they should be distributed (in percent, %). The total sum in the question is 100 %. The “other tasks” were not specified in the survey, but generally, it signifies to services and administration. Usually the academics in Europe are expected to spend about 40 % of their time teaching, 40 % on research and 20 % on service and administration, however, it varies a lot. (e.g. Kwiek & Antonowicz, 42, 2013.)

Task	Teaching	Research	Other tasks
Current situation, %	14 %	69 %	19 %
Ideal situation, %	13 %	78 %	11 %

Table Virhe. Viitteen lähde ei löytnyt.8 Distribution of working tasks – current and ideal

As can be seen in the table 10, employees, on average (from this analysis we can't say about the single employee perceptions), find that they would want to increase the working time spend in research. We have to take into account that the employees in the survey are mainly working in research so this is not very surprising.

However, the value of teaching in universities appears often conflicting. Teaching is the basic task of the universities but from the perspective of university employees, it might be considered neither as valued nor rewarded as research. Making a career in a Finnish university requires both, research and teaching, especially at the higher stages of the career (University teacher/researcher, professor). Nevertheless, the employee can weight one or the other in her/his career but success in research and publishing is still usually more valued in recruitment than teaching.

4.8 Participation in decision-making bodies

“Employers and/or funders of researchers should recognize it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.” (European Commission - Charter and Code template)

From the survey we selected two questions: do the employees have the position of trust in their university and are they able to influence their work tasks.

Participation in Decision-Making Bodies	Yes/ Mean	Gender		Degree	
		female	male	MS	PhD
Do you have a position of trust in the university you currently work in (actual/substitute)?	15 %	17%	14%	11 %	20%
Are you able to influence your work tasks? 1. I can plan the distribution of my work tasks 2. I am able to influence how my work tasks are distributed 3. I have some influence on how my work tasks are distributed 4. I cannot influence the distribution of my work tasks	2,0	2,0	2,0	2,2***	1,9***

Table Virhe. Vütteen lähdeä ei löytynyt.9 Principle: Participation in Decision-Making Bodies

Only 15 % of university personnel in the survey have a position of trust in their university, 20 % of the PhDs and 11 % of the employees with a master's degree. In addition, females in the data are more often holding the position of trust than males.

The PhDs' perceptions about their ability to influence the distribution of their work tasks are on higher level compared to the employees with a lower degree. Employees with a master's degree more often are working in tasks given to them. After having a PhD degree, the employees' possibilities to influence their own work tasks are often increasing.

The share of external funding has increased in Finnish universities for several years and at the same time has increased the amount of project researchers (Kuoppala et al forthcoming). Many PhD students fund their own research by working in projects and they often have only minor possibilities to influence the content of their work.

In this chapter, we illustrated how eight principles of the Charter and Code template were actualized among the fixed-term researchers in Finnish universities. We focused on working conditions and the social security. In some questions, there were rather significant differences between groups; gender and degree.

Employees with PhD degree identified themselves more often as members of their academic community and found their work more meaningful than people with lower degree found. PhDs' are also able to influence their work tasks more than employees with master's degree. Still the PhDs' and women's perceptions about the continuation of their working contract were not as positive as men's and persons with a master's degree. Union membership rate among men was significantly lower than among women. Women and employees with master's degree find more often that their salary was not justified in relation to their tasks and performance. Women's perceptions about the gender balance in their work unit were also more negative compared to men.

In the next chapter, we will focus on the Finnish universities: what implementations they have made to carry out the Charter and Code principles to achieve and maintain the HRS4R excellence-logo.

5. Institutional HRS4R Action Plans

As we illustrated at the beginning of this article, to obtain and maintain the HR excellence -logo, institutions have to carry out an internal analysis based on Charter and Code principles and then publish its own action plan to show how they are planning to ensure and/or improve the implementing the principles of Charter and Code.

There are altogether eleven universities in Finland participating to the HRS4R initiative. In addition to the universities one funding organization (the Academy of Finland), one public research institute (the Finnish Institute of Occupational Health) and the Finnish Council of University Rectors have participated to the HRS4R initiative. In order to capture the main challenges in working conditions and social security from the perspective of the institutions we analyze the HR4RS action plans published by the universities:

- Aalto University
- Hanken School of Economics
- Lappeenranta University of Technology

- Tampere University of Technology
- University of Eastern Finland
- University of Jyväskylä
- University of Oulu
- University of Tampere
- University of Turku
- University of Vaasa

One of the participating universities (the Åbo Akademi University) has not published any material on its public web pages. Notably, the largest university in Finland, the University of Helsinki, has not participated to the HRS4R initiative.

We have analyzed the contents of the universities' action plans based on the same selected principles on HRS4R template on the area of "working conditions and social security" as we did with the survey data. On the universities' action plans there were altogether 44 actions related to the area of working conditions and social security. The number of items related to working conditions and social security varied from one to nine out of 14 principles. We have analyzed the same principles qualitatively that we analyzed quantitatively from the survey.

Principles	AU	LUT	SSE	TUT	UEF	UJ	UO	UT	UTA	UV
3.1. Recognition of the profession										
3.3. Working conditions	x		x	x	x	x		x		
3.4. Stability and permanence of employment				x			x	x	x	x
3.5. Funding and salaries				x		x			x	
3.6. Gender balance				x		x				
3.7. Career development	x			x		x		x	x	x
3.12. Teaching						x				
3.14. Participating in decision-making bodies	x					x	x	x		

Table Virhe. Viitteen lähde ei löytnyt.10 Charter and Code principles included in universities' HRS4R action plans

The only principle that was not considered in any of the action plans was the first one: **recognition of the profession (3.1)**. This is surprising because nationally the question regarding the formal title and position of young researchers / PhD candidates in academe has been discussed in depth.

Working conditions (3.3) were among the areas that more than a half of the universities included in their action plan. Six out of ten institutions mentioned working conditions in one way or another. In two universities, the main concern was the inclusion of grant researchers and international faculty in rest of the institutions the remarks were quite generic related to wellbeing, equity, and work load.

Stability and permanence of employment (3.4) was mentioned in five action plans. The action that illustrates well the situation was written in one of the action plans “the duration of the fixed-term employment should be in accordance with the university guidelines”. It gives a more generic picture on the needed action among the research staff. Their employment should follow internal and external regulation on the fixed-term work like any other work. In other action plans, concrete actions for meeting these ideals were mentioned: buffer funding for the time between successful project applications, improvement of the middle career (post-doctoral) labor market position by increasing the number of post doc positions and tenure-positions and developing the internal resource allocations, and expanding the funding base.

Career development (3.7) was among the most cited principles. Six universities had provided actions concerning the career. The actions of career development concerned all HR-flows: inflows (recruitment, selection and orientation), internal flows (personnel policies and practices such as evaluation of performance, rewards, career planning), and outflows (finishing employment and academic career) (Buchanan & Huczinski 2004, Beer et al. 1984). Five universities provided action on the internal career development as well as more generic career development services for young researchers in order to enhance their labor market value (out flow). Only one university did not consider the career development from the perspective of outflows. Aalto University understood the career development from the perspective of internal flows and inflows.

Participation in decision-making bodies (3.14) was mentioned in four action plans. The universities were mostly worried on the participation of the international staff and the awareness of the existing structures. Only few institutions mentioned other principles. Only three institutions, who were mostly concerned on transparency of salaries and the skills related to applying external funding, mentioned the **funding and salaries (3.5)**. Only one institution considered the integration of **teaching (3.12)** to be a challenge for researchers’ work.

Only two universities mentioned **gender balance (3.6)** in their action plans. This is also surprising because we had four universities where technical sciences are dominating. When technical sciences are male dominated, one could have expected some remark on gender balance. The other university that handled this area was a comprehensive university where technical sciences are not included. We return to the comparison of the content of universities’ action plans and the results of the survey at the end of the article.

From the table 12 can be seen the principles included in universities’ HRS4R action plans. The table includes only the principles, which were also used in the analysis of the

6. Summary and Discussion: Measures to fill in the gap

In this article, we have studied how the Charter and Code principles of the areas of working conditions and social security are seen among the fixed term researchers in Finnish Universities.

To combine our empirical data we have produced a table where we have summed up each principle of Charter and Code area “Working conditions and social security” which were also found in the survey. We also entered recommendations to the policy makers and institutions based on the analysis of quantitative and qualitative data, former research about the subject and the template of the Charter and Code.

Principle	In the survey	Action plans	Recommendations
3.1. Recognition of the profession	The respondents consider themselves	0/10	Universities could try finding the ways to increase the employees’ commitment on academic

	as members of academe		community at earlier career stages.
3.3. Working conditions	Some of the respondents are working part-time; not all are willing to.	6/10	The part-time work should be considered as a possibility to increase the work-life balance.
3.4. Stability and permanence of employment	Researchers encounter major insecurity and uncertainty in their work.	5/10	All institutions should pay attention to basic conditions of work and make cost benefit analysis of the short-term employment. The institutions should aim to increase the stability of the work of fixed-term researchers.
3.5. Funding and salaries	The researchers are partly satisfied on their salaries.	3/10	The relatively low salary is not considered the main challenge for researchers' work. However, the institutions should pay attention to the gender equality in payments and ensure the competitiveness of research work. (Pekkola 2014.)
3.6. Gender balance	There is a difference on the subjective experience of gender balance, career support, stability and salary between the sexes.	2/10	The institutions should not consider the gender balance as a self-evidence in the Finnish society, but pay more attention to it.
3.7. Career development	The employees find often that their research benefits their career development. Some difference between female and male views.	6/10	The institutions should pay more attention to the career planning of the female employees.
3.12. Teaching	Teaching and research activities are fairly well balanced.	1/10	The distribution of the work tasks should be planned in the personal working plans.
3.14. Participation in decision-making bodies	Researcher are well represented in positions of trust and are able to influence on their work	4/10	Institutions could more often support also the employees to participate in decision-making bodies.

Table Virhe. Viitteen lähde ei löytenyt.11 Charter and Code principles in the survey, action plans and the recommendations

From the ten action plans that Finnish universities have prepared for the HRS4R process none raises up the first sub area, "recognition of the profession". This is somewhat surprising while there has been discussions among the faculty e.g. about the name given to postgraduates or doctoral candidates when starting their career. The majority of researchers position themselves as researchers, not as students or as trainees. (Finnish Union of University Researchers and teachers 2013).

One of the biggest problems of researchers in Finland is their short fixed-term contracts, which is increasing the uncertainty in employees personal lives and also complicates the planning of their research work. (Kuoppala et al forthcoming; Nikunen 2012). This problem is taken up in the contents of the two sub areas: "working conditions" and "stability and permanence of employment". Six universities mentioned something in their action plan connected to working conditions and five universities something regarding stability and permanence of employment. Remarks connected to working conditions dealt with sabbatical leaves, research periods, tele-

working possibilities, handbook for international staff, information about applying the working hour system, clear statements about duties and entitlements, and support for well-being at work. One university took up the extension of the occupational health care services to scholarship researchers.

Under the title of “stability and permanence of employment“ exploration of possibilities of offering more long-term employment contracts, increase of post-doctoral vacancies, widening of tenure track program, longer duration of fixed-term employments, support for career planning, and clearer budgeting and funding system for project researchers were among the actions mentioned by five different universities. If put concretely into action they offer some practical means to ease the position of fixed term researchers.

University salaries, especially in the early career stages, are on a quite low level in Finland compared to private sector organizations* salaries for academic employees. In the universities’ action plans, attention was paid to support funding opportunities and applications. One university raised also up the aim to a more transparent salary system. Only two universities out of ten mentioned gender balance in their action plans. One university, too, raised up teaching in the form of pedagogical skills as part of the professional development of researchers.

Altogether six universities mentioned something connected to career development in their action plans. These remarks included aims to develop more transparent and clearer career models and paths. One university aims to prolong the duration of fixed-term contracts or to establish more permanent research contracts. Another university aims to increase the amount of five-year post-doctoral positions. Universities also raised up aims to develop mentoring programs, information packages and other support for career development for researchers.

Four universities took up something under the label of “participation in decision-making bodies”. Post-graduate researchers have had problems to participate in the decision-making of their working units. (Finnish Union of University Researchers and teachers 2013). The universities promised to increase the opportunities of researchers to participate in the strategy process for research development. They took up also the question of international researchers’ participation and proposed language policy and intranet as means to increase options for participation.

After the new University Act (2009) the Finnish universities had for the first time in their history all actions and decisions of HRM in their own hands. Consequently, it is possible for them to compete with each other in the field of personnel policy. Based on our empirical data it is not possible to draw any detailed conclusions about the development and particularly about the differences of the HRM of the analyzed Finnish universities. There are slight differences among their action plans connected to the HRS4R -process, but it is too early to draw any conclusions about the future development. In the European level there is a big challenge, how to make researcher careers more attractive and how universities are able to recruit qualified employees (see e.g. European Commission 2008). Will universities take the challenge that existing options and available means give to them, we do not have that answer yet.

References:

- Beer, M., Spector, B., Lawrence, P., Mills Q., Walton R. (1984): Man-aging human assets. The groundbreaking Harvard Business School program. New York: The Free Press.
- Brechelmacher, A. Park, E., Ates, G. & Campbell, D. F.J. (2015). The Rocky Road to Tenure. In: Fumasoli, T., Goastellec, G. & Kehm, B. M. (edit.) (2015) Academic Work and Careers in Europe: Trend, Challenges, Perspectives. Springer. p. 13-40.
- Bryson, C. (2004). What about the workers? The expansion of higher education and the transformation of academic work. *Institutional Relations Journal* 35 (1), 38 al 35

- Boxall, P. & Purcell, J. (2008). *Strategy and Human Resource Management*. New York: Palgrave Macmillan.
- Buchanan, D. and Huczynski, A. (2004). *Organizational Behaviour: An Introductory Text*, 5th edition. Harlow, Essex: Financial Times Prentice Hall.
- European Commission. Charter and Code template.
http://ec.europa.eu/euraxess/pdf/hrs4r/template_HR_Strategy.doc
- European Commission (2015). EURAXESS. Researchers in Motion. Web page.
<http://ec.europa.eu/euraxess/index.cfm/rights/index>
- European Commission, no date. Information Note from the European Commission: The "Human Resources Strategy for Researchers Incorporating the Charter & Code".
http://ec.europa.eu/euraxess/pdf/hrs4r/Paper_on_the_HR_Strategy_for_Researchers.pdf
- European Commission (2008). Better Careers and More Mobility: A European Partnership for Researchers, SEC(2008)1911, Brussels, 23.5.2008 COM(2008)317 final.
- Findicator. Statistical information from Finland. <http://www.findikaattori.fi/en/36>
- Finnish Union of University Researchers and teachers (2013). The bulletin of the Finnish Union of University Researchers and teachers 10.1.2013. Epävarmuus jäytää väitöskirjantekijöitä.
http://tieteentekijoidenliitto.fi/media/tiedotteet/tiedotteet_2013.
- Fumasoli, T., Goastellec, G., Kehm, M. B. (2015) Academic careers and work in Europe: trends, challenges, perspectives. In: Fumasoli, T., Goastellec, G., Kehm, M. B. (2015) (edit.) *Academic work and careers in Europe: trends, challenges, perspectives. The changing academy – the changing academic profession in international comparative perspective* 12. Springer.
- Gappa, J. M.; Austin, A. E. & Trice A. G. (2007). Rethinking Faculty Work, *Higher Education* 7(1). 07-13. The San Francisco, John Wiley & Sons, Inc.
- Husu, L. (2005). Sosiaalinen tuki naisten tutkijanuralla. In: *Tulosohjattua autonomiaa, Akateemisen työn muuttuvat käytännöt* Aittola, Helena & Ylijoki, Oili-Helena (toim.), 84 - 108. Gaudeamus Kirja Oy, Helsinki
- Husu, L. (2000). Gender Discrimination in the Promised Land of Gender Equality. *Higher Education in Europe*, Vol XXV, No. 2. p. 221-228.
- Julkunen, R. (2008). Uuden työn paradoksit: keskusteluja 200-luvun työprosesseista. Vastapaino, Tampere.
- Kuoppala, K., Pekkola, E. Kivistö, J., Hölttä, S. & Siekkinen, T. (edit.) (2015) *Tietotyhteiskunnan työläinen. Suomalaisen projektitutkijan työ ja toimintaympäristö*. No. 2. Tampere University Press.
- Kwiek, M. & Antonowicz, D. (2013). Academic Work, Working Conditions and Job Satisfaction. In: Teichler, U. & H. U. (edit.) (2013) *The Work Situation of the Academic Profession in Europe: Findings of a Survey in Twelve Countries*. Springer. p. 37-54.
- Ledwith, S. & Manfredi, S. (2000): Balancing Gender in Higher Education. A Study of the Experience of Senior Women in a Women's Journal. *The European Journal of Women's Studies*
- Ministry of Education and the Culture (2008). the four-stage researcher career model.
http://www.minedu.fi/OPM/Julkaisut/2008/Neliportainen_tutkijanura.html?lang=en
- National Audit Office of Finland (2010). Yliopistojen inhimillisten voimavarojen hallinta. Valtiontalouden tarkastusviraston tuloksellisuustarkastuskertomus 206/2010. Edita Prima Oy Helsinki.
- Pekkola, E. (2014): *Korkeakoulujen professio Suomessa. Ajankuvia ja kehityskulkuja*. Akateeminen väitöskirja. Tampereen yliopisto. Johtamiskorkeakoulu. Suomen yliopistopaino Oy, Juvenes print, Tampere.
- Rinne, R & Jauhiainen, A (2012) In the shifting sand of policy - University academics and employees' views and experiences on Finland's new higher education policy. In: Ahola, S. & Hoffman, M. D. (edit.) (2012). *Higher education research in Finland*. Finnish Institute for Educational Research. University of Jyväskylä. Jyväskylä university press. p. 89-110.
- Siekkinen, T. Kuoppala, K. & Pekkola, E. (2015) Tutkija(n) työtä etsimässä. Akateemisen tutkijan työ kyselyaineiston valossa. In: Kuoppala, K., Pekkola, E. Kivistö, J., Hölttä, S. & Siekkinen, T. (edit.) (2015) *Tietotyhteiskunnan työläinen. Suomalaisen projektitutkijan työ ja toimintaympäristö*. No. 2. Tampere University Press.
- Slaughter, S. & Leslie, L.L. (1997) *Academic capitalism. Politics, policies, and the entrepreneurial university*. The John Hopkins University Press. Baltimore and London.

- University of Jyväskylä (2014). The feedback from the Ministry of the Culture and Education.
<https://www.jyu.fi/yliopistopalvelut/tilastot/toimintakertomus/palaute/palaute2014>
- Vipunen. The statistic service of the Finnish education administration. <http://vipunen.fi/fi-fi>
- Winter, R. & Sarros, J.(2002): The Academic Work Environment in Australian Universities: A motivating place to work? Higher Education Research & Development 21 (3), p. 241 p. 241
- Universities' action plans: (All electronic sources were correct on: 26.5.2015)
- Aalto-University: Internal Gap Analysis and Action Plan to implement the HR Strategy for Researchers at Aalto University.
http://www.aalto.fi/en/about/careers/human_resource_strategy_for_researchers/hr_strategy_researchers_aalto_analysis_and_actionplan_november_2012.pdf
- University of Eastern Finland. Action Plan at the University of Eastern Finland University of Eastern Finland r_2012.pdf
 Researchers at Aalto University & Development 21 (3), p. 241 1 41 . 241 (3), p. 241 .pd
- University of Vaasa: Developing a sustainable and attractive research environment.
http://www.uva.fi/en/about/careers/hrs4r/hrs4r_final.pdf
- University of Turku: Appreciation and support for researchers e-seation plan 2013-2015.
http://www.utu.fi/en/research/appreciation-support-researchers/Documents/appreciation_and_support_for_researchers_action_plan_2013-2015.pdf
- University of Jyväskylä: HR Strategy for Researchers (HRS4R) Incorporating Charter and Code Action Plan: Development of research career and position of researcher.
<https://www.jyu.fi/en/research/hrs4r/%20of%20Jyvaskyla%20Action%20Plan%20HRS4R%20Final.pdf>
- University of Tampere: Human Resource Strategy for Researchers (HRS4R). Action plan 2014-2016.
https://www.uta.fi/careers/hrs4r/HRS4R%20Action%20Plan_11022015.pdf
- Hanken School of Economics: HR strategy for researchers HRS4R action plan:
http://www.hanken.fi/sites/default/files/atoms/files/hrs4r_hanken_final_april2015.pdf
- Lappeenranta University of Technology: HR excellence in research Lappeenranta University of Technology.
<http://www.lut.fi/documents/27578/78601/lut-hr-excellence-action-plan.pdf/9cc50c6a-93ae-4ddb-a988-5ffb6befd591>
- University of Oulu. Action plan. http://www.oulu.fi/english/sites/default/files/content/action_plan.pdf
- Tampere University of Technology: HR Strategy for Researchers (HRS4R) Action Plan.
http://www.tut.fi/idcprod/groups/public_news/@1102/@web/@p/documents/liit/p066191.pdf
- University of Eastern Finland: European Charter of Researchers and Code of Conduct for the Recruitment of Researchers