Gender inequality in universities: supporting women's career through a multi-method case study intervention project

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Abstract

In this article we formulate policy dilemmas in addressing the underrepresentation of women academics in the higher ranking jobs in a Dutch University. A multi-method tailor made research project is described that was aimed at understanding processes that hamper or facilitate the in- through and outflow of women academics in at a Dutch university. On the basis of a literature review, interviews and focus group meetings, we developed policy recommendations for the university and its constituent five schools. The policy dilemmas we recognized refer to the 'equality' versus 'difference' debate. Employees for instance fear that affirmative action will lead to discrimination and loss of academic quality, but at the same time employees see affirmative action as a necessary antidote to invisible and unintended discrimination. We argue that these dilemmas can only be transcended by reconsidering the 'male' standards.

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Key words

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Policies to support women's careers at universities should be directed at addressing the causes of their underrepresentation. In this article we describe how we used tailor made multi-method research to gain understanding of processes that hamper or facilitate the in- through and outflow of women academics in at a Dutch university. The aim of the multi-method research was to help the Board of the University and the deans of the schools to develop policies for improving the representation of women academics in the organization. During the research process we actively aimed to involve the stakeholders within the Schools (deans, department chairs and employees from all layer in the organization) to reflect on our findings and distil policy recommendations. We recognize dilemmas concerning the rationale underlying possible policies. Finally, we argue how dilemmas can be transcended by rethinking criteria and bases that are commonly used to create academic careers. Before presenting our research and results, we first briefly review research into the causes and obstinacy of the enduring under representation of women in academia.

Gender in Dutch academia

With regard to the representation of women in higher ranking jobs, Dutch academia is an anomaly in Europe. While the percentage of women among those with a PhD degree in the Netherlands is 42% (which is more or less similar to the European average of 44%), these numbers drop down to 11% of full professors, compared to an European Union (27 countries) average of 18% (She Figures, 2009). The progress of women academics through the universities ranks is slower than could be expected from the increasing number of female students and PhDs in the Netherlands (Van den Brink, 2009; Brouns, Bosman, & van Lamoen, 2004). Given the number of Dutch female students in the 1980s, a much higher proportion of female full professors and managers would be expected (Advisory Board Women in Technology (AWT), 2000; Brouns et al., 2004).

Another common explanation is that men and women academics make different individual choice concerning their careers. It is often assumed that women's slower progress through the university's ranks is a result of their investing fewer hours at

work than men. However, in the Netherlands, the part-time factor of men and women academics hardly differs (.85 for women, .88 for men) and therefore are insufficient to account for the large differences in career progression (Korsten, Visser, Willemsen, & van Zwol, 2006). Similarly, in a study amongst US academics, King (2007) found no differences in working hours between men and women.

The combination of work and family life is a second explanation that is usually given for the underrepresentation of women academics (Falkenberg, 2003; Deem, 2003). Empirical results for the Netherlands show contradictory results. Some studies show that motherhood negatively influences publication productivity (e.g. Portegijs & Brugman, 1998), other studies show that women with children are more successful in their academic careers than women without children (Brouns, Bosman & van Lamoen, 2004), whereas yet other studies conclude that motherhood is unrelated to career development (AWT, 2000; Wesseling, 2001). Recently studies suggest stereotype expectations about motherhood may be more important for explaining career progression than actually having children or not (Cuddy, Fiske, & Glick, 2004; Heilman & Okimoto, 2008; King, 2007; Sools, van Engen, & Baerveldt, 2007).

The role of the supervisor is a third explanation for the underrepresentation of women academics. King (2007) showed that the way American supervisors perceive the ambition, motivation, time investments and performance of women academics is a better predictor of their careers than the actual ambition, motivation, time investments and performance of women. In her study she shows that supervisor of assistant and associate professors for instance underestimate the number of publications by women and especially by mothers. In a study of work satisfaction among academics in the Netherlands, Need, Visser & Fischer (2001) found that women academics are less satisfied with their direct supervisors than men academics.

Organizational culture is a fourth explanation for the under representation of women in academia. Some studies suggest women in academia have adjusted to the organizational culture and are just as happy as men (Portegijs & Brugman, 1998). Yet other studies have shown women academics are less satisfied with their employers, especially with the support of their supervisor.

A fifth explanation can be found in recruitment procedures for academics. Van Den Brink (2008) shows that women are rarely represented in selection committees for higher ranking academic jobs and that most selection procedures take place in closed networks. Van den Brink shows that an increase in the presence of women in selection committees leads to an immediate increase of the amount of women academics hired. She argues that increasing the openness of procedures will also increase the amount of women academics to be hired (Van den Brink, 2009; Van den Brink, Brouns & Waslander, 2006).

Summarizing, a literature review shows that there are five main explanations for the under representation of women in academia. We used the topics of individual

choice, the combination of work and family life, the role of the supervisor, selection procedures and organizational culture to develop our interview guide (see paragraph interviews).

Case

The university under study houses five schools: The School of Economics and Management, the School of Law, The School of Social and Behavioral Sciences, The School of Humanities and the School of Theology. The university employs around 1000 scientific staff and has 12.500 students. Table 1 presents the population of the academic personnel of the university, based in the personnel information data of 2003 and 2006. Not included in the personnel files are the scientists that have a job at the university but are not on the payroll. These include PhDs, post-docs and professors financed by third parties. In 2003 the population existed of 526 men and 264 women, and in 2006 537 men and 302 women. As can be seen in Table 1, women are well represented in the functional categories of lecturer, researcher and especially PhD, but the higher the level the fewer women. Men on average are older than women (men 46, women 39 years). Women on average have less often and fewer children than men (47% of the women academics has on average 1,9 children, 53% of the men academics has on average 2,4 children).

TABLE 1. MEN AND WOMEN ACADEMICS IN DIFFERENT SCHOOLS

2006	School of Economics and Management			School of Law			School of Soc and Beh Sciences			School of Humanities			School of Theology			TOTAL		
	M	F	%	M	F	%	M	F	%	M	F	%	M	F	%	M	F	%
lecturer	27	9	25,0	12	31	72,1	14	17	54,8	3	1	25	2	0	0	58	58	50,0
researchr	8	4	33,3	18	16	47,1	3	10	76,9	10	5	33,3	-	-	-	39	35	47,3
PhD	41	24	36,9	19	33	63,5	20	43	68,3	16	18	52,9	2	7	77,8	98	125	56,1
Assistant prof 2	23	7	23,3	10	9	47,4	12	11	47,8	2	4	66,7	1	0	0	48	31	39,2
Assistant prof 1	11	4	26,7	9	6	40,0	8	2	20,0	16	4	20	14	3	17,6	58	19	24,7
Associate prof 2	10	1	9,1	9	4	30,8	8	1	11,1	4	1	20	1	0	0	32	7	17,9
Associate prof 1	24	2	7,7	6	3	33,3	3	1	25,0	7	1	12,5	1	0	0	41	7	14,6
Associate prof 2	28	2	6,7	25	3	10,7	17	1	5,6	10	1	9,1	5	2	28,6	85	9	9,6
Full prof 1	45	3	6,3	17	2	10,5	11	1	8,3	3	0	0	-	-	-	76	6	7,3
TOTAL	217	56	20,5	125	108	46,4	98	90	47,9	71	36	33,6	26	12	31,6	537	302	36,0

Method

The multi method approach consisted of a (a) an inventory and analysis of personnel- and output files in relation to the advancement of men and women; (b) 44 interviews and ten focus groups with academics working at the five faculties of the university. Below we focus on the analyses of the different faculties, in which we use information from (b) and (c). For detailed descriptions of the quantitative analyses we refer to the report (van Engen, Bleijenbergh & Paauwe, 2008), the focus here is on policy recommendations following the faculty analyses based on interviewees and focus groups data.

INTERVIEWS

In total we interviewed five deans (all of them men), five chiefs of Human Resources Management (two men, three women), five female full professors, four female associate professors, eleven female and five male assistant professors, and nine women academics who left the university during the previous year. The interviews were semi-structured. For each respondent group a different questionnaire was developed (depending on the rank of their job). We encouraged the academics to reflect on the critical moments in their individual career paths. We asked them about their career goals, their norms about scientific quality and how they characterize the organizational culture. We asked them to reflect formal and informal hiring and promotion practices in their school. Next, we asked them about their experiences with combining their work with family responsibilities. Furthermore, we talked about organizational support in combining work and family, support from the supervisor, and support from colleagues. Finally, we asked them what they think are necessary steps to improve the gender balance in the organization.

The interviews were transcribed verbatim. After analyzing the first ten interviews the research team developed a coding format. All interviews were coded and the coding was checked by a second team member to support the validity of the analysis. Two team members then created a draft analysis of each of the five schools, which was finalized in a discussion with all the researchers.

FOCUS GROUPS

We used the analyses of the schools as an input for five focus groups with the interviewees to corroborate our findings and deepen our understanding of the processes taking place. This 'member check' helped us to correct interpretation problems. Furthermore, we asked the focus group members to come up with policy recommendations. The corrected analyses were presented in a focus group with the department chairs of the five schools; a total of 35 people, mainly men (31 men, 4 women). We briefly presented our analysis of the interview data and asked them to

reflect on it and come up with policy recommendations. In the next section we briefly present the analyses of each school. In the third section we present the policy recommendations we derived from our analysis and the dilemma's they are based upon.

Results

SCHOOL OF ECONOMICS AND MANAGEMENT

About the school

Of all the schools within the university, the school of economics and management (SEM) in 2006 has the lowest percentage of women full professors (see Table 1). Comparing the school to other schools of Economics in the Netherlands, they are doing slightly better. The interviewees from SEM sketch a consistent image of the school: A financial healthy school with a good international reputation that succeeds in attracting international and future top professionals. There are ample (financial) resources for research and researchers experience a stimulating professional climate.

The interviewees present a rather unambiguous organizational culture within SEM, although differences exist between departments. Fulltime employment and physical presence at the workplace are the standard. Employees are expected to be in the office for more than the usual office hours. Working from home is less common in this school than in all other schools of the university. All of the interviewees indicate to work more than 40 hours on a weekly basis, and most of them work about 50 hours. Employees are expected to visit several conferences per year for which generous funding is available from the school, certainly in comparison with the other schools of the university. There is less pressure on bringing in external grants in comparison to the other schools. Employees who have worked at other universities confirm the financial opportunities available for academic staff.

The allocation of research time for the academics is based on the number of publications and the citation score of these publications. All interviewees experience pressure to keep up with the publication criteria. The continuous pressure on publication causes stress to most of the employees, which has a negative impact on their private lives. Examples of tensions experienced by the employees are tensions in the relationship with their partner, the postponement of having (more) children and the time they have for life outside work. Particularly academics in a tenure track (assistant professors) report high pressure and a negative interference from work into the family. Interestingly, none of the tenure trackers we interviewed were familiar with the fact that by law employees can opt for the prolongation of their contract in case of leave (i.e. pregnancy, parental leave and illness). Moreover, we noted resistance to call for correction of output criteria. In the refusals we found that the fear of a negative image (backlash) plays an important role for not correcting for actual hours worked.

The assistant professors experience a high work pressure caused by teaching loads. During the focus group it became clear that time-management is an important issue for combining research and education, which has to be learned during the first period of the tenure track. To some extent their educational tasks are related to the research they do, making the combination of research and teaching somewhat easier. The strong emphasis on research output within the school leads results in employees taking up their educational tasks as efficient as possible. The dean indicates that he wants to put more emphasis on the quality of education, however, the ambitions regarding to research will stay the same.

Processes of hiring, promotion and turnover

Candidates for a tenure track are recruited actively among doctoral students presenting at conferences and through international networks. In principle, recruitment does not take place among PhD graduates of the school. The reputation of the university and the PhDs supervisor are quite decisive for candidature. Recruitment and selection of full professors generally takes place in an informal way. Deans and department chairs scan the international markets actively and approach international top researchers for positions at SEM. In case top researchers are interested, financial resources are made available. Thus, in contrast to the other schools where candidates for open positions are scouted, at SEM scouting is ongoing and positions are created for attractive candidates.

The promotion from assistant professor to associate professor takes place via the tenure track system. The crucial criteria for promotion towards an associate professor job are the number of publications and individual research reputation. The contribution of education is less important. In contrast to the school of Law, where candidates in early stages of their tenure track are supported to look for alternative careers outside academia, the tenure trackers that fail at SEM do not receive support.

The position of women

The interviewees indicate that there is sufficient inflow of women academics in the tenure track system. Following the dean and the department chair, the recruitment of full professors also leads to a considerable hiring of women. The career transition from assistant to associate professor level seems to be problematic for women faculty. On the one hand interviewees positively evaluate criteria for promotion from assistant professor to associate professor. On the other hand, interviewees indicate that the evaluation system of the tenure track is not gender neutral. The transition from assistant professor to associate professor takes place during the life stage in which people want to raise a family. However, the correction for the reduction of work time during tenure track (due to pregnancy, illness, parental leave, or part-time employment) is problematic. Moreover, women taking up parental leave are confronted

with additional loss of research time as their educational tasks are not reduced. When returning to work after pregnancy they face double teaching loads.

LAW SCHOOL

About the school

In comparison with the other schools, the Law School (LS) includes more women in associate professor and full professor jobs. However, the number of full professors at SL is lower compared to the average number of female full professors at other schools of law in the Netherlands. In the board of the school there is one female vice-dean. In 2007, two women were promoted to professor (in comparison with four male professors). The number of female associate professors and professors differs greatly across departments. The LS includes a high number of female PhD students. This is not reflected in a considerable proportion of female assistant professors.

As the school is financially healthy, career progression is based on individual merits rather than on job vacancies. In comparison with other schools, this individual merit principle seems to have a positive impact on the representation of women in the school. LS is the only school that actively monitors and supports individuals in making career choices, also when this means leaving the university or even academia. When employees do not succeed in advancing to a higher ranking job during a certain period of time the school actively discusses alternative opportunities outside academia. Similar to the other schools within the university, the number of publications and the quality of publications is the most important factor for success. Furthermore, the international reputation and bringing in funds are important as well. However, the dean and the department chairs emphasize that teaching also plays an important role in career advancement. Some of the employees feel to be obliged to make strategic choices, such as prioritizing research more than education.

The organizational climate, although there are differences between departments, is generally described as competitive, yet cooperative. In the focus groups with department chairs there was agreement that the organizational climate is competitive in a healthy way. Yet, in the focus group with interviewees the climate within the school was described as more obstructing than motivating. Employees in all layers within LS indicate that working large part-time jobs is accepted (four days a week). The acceptance of part-time employment is related to the fact that many academics combine work as an academic with work as a practitioner (e.g. as a judge or lawyer in court). This provides academics also to combine their (paid) work-related tasks with care responsibilities. Like a women academic notices:

"with part-time work ED, uhm, you actually buy inner peace in case you join your children a half noon at a schoolwalk".

However, for career advancement within the school one needs to spend more hours on a weekly basis than the formal hours you have signed up for. Interviewees show disagreement concerning the correction of output criteria for part-time employment and leave. The head of the personnel department and the dean indicate that such a correction is applied by giving tenure trackers more time after leave to meet the output criteria. Not all employees however report this practice.

Processes of hiring, promotion and turnover

Interviewees indicate that pregnancy leave, parental leave and part-time employment are obstacles for being promoted to higher ranking jobs. The view exists that mainly women suffer from these circumstances by losing time and rapidity in achieving research goals.

Visibility within the own organization is also an important criterion for promotion and pregnancy leave does have an impact on it. Interviewees indicate that women may be too modest in profiling their qualities in comparison with their male colleagues. Supervisors are important in this respect as well. Formal criteria for promotion within the school are experienced as more strict than criteria for the external inflow. There is more leeway for practitioners in publication criteria.

The position of women

The dean believes that involving women adds value to research as well as to education. However, all layers in the Law School show a shared reluctance against 'affirmative action'. The respondents rather emphasize equal opportunity for promotion decisions. However, there is room for interpreting quality on a broadly basis, by also putting emphasis on the quality of output and not just on the quantity, which in turn can be positive for women, according to the interviewees. The organizational culture also offers room for taking circumstances into account in promotion decisions, e.g. by lengthening the period of evaluation during leave.

SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES

About the school

The school of social and behavioral sciences (SSBS) is a relative large school, which exists of the clusters psychology and social sciences. The positions of women academics differ within the two departments. The department of psychology employs female professors and associate, while the department of social sciences does not have any women in these jobs; the highest ranking job fulfilled by a woman is assistant professor 2. The school has limited financial resources and bases the allocation of research time on output criteria. Career opportunities are based on the vacancy of positions; individual performance is a necessary but not sufficient condition for

being promoted. A high amount of output in terms of international publications is the most important criterion for success. The performance on education is less important. Most interviewees indicate performance on education and -related social relevant activities should be more appreciated. The emphasis on output criteria is indicated as restrictive and slightly beneficial for the intrinsic motivation. As a men academic explains:

"On the one hand it is positive and at the other hand it gives a continuous pressure. You are always worried, to say so. I all ready have a busy family and social live. Anyhow, it's never good. It is never good enough. Sometimes, uuh, yes, it is a hindrance to my motivation. It must come from within, a little bit."

Interviewees indicate that the output criteria are not as neutral as they tend to be. Time is needed to publish articles. Assistant professors and associate professors of both sexes experience a disproportional education load. To be able to publish, employees spend overwork hours during the evening and in weekends. Although interviewees experience education as an obstacle for doing research, they are rather positive about the joyfulness that comes along with their educational tasks.

Processes of hiring, promotion and turnover.
The recruitment of associate and full professors generally takes place within closed networks. Employees express feelings of arbitrariness and insecurity about the way the evaluation is set up. Simultaneously, the interviewees indicate that there is no such thing as discrimination. Interviews held with former employees show that the lack of promotion and the lack of support of the supervisor were reasons for leaving the organization.

The position of women
At nearly all levels within the school employees experience that a loss of research time due to pregnancy leave, parental leave and/or part-time employment is insufficiently compensated when calculating output scores. This loss affects both men and women with children. The respondents have different opinions about it. The majority of the interviewees think that having children during the academic career is a disadvantage for women. Men academics who work more than full-time contractual hours and who do not have to deal with caring tasks, determine the standards within the school. Like an employee says: *"for women, children and careers are not going together"*.

SCHOOL OF HUMANITIES

About the school
The school of humanities (SH) is a relative young school in her current setting. The school came into existence on January 1st 2007, and is a merge of the former school

of culture and communication (SCC), the school of philosophy (SP), and the religious and scientific part of the former school of theology (ST). Due to the reorganization within SCC in the run of 2005, new and larger clusters are formed of the former units within SCC. Employees state that they still have to find their place in the new clusters. They report feelings of loneliness. The financial sources of the school of humanities are scarce. This indirectly has consequences for the hiring and promotion of employees. The permanent staff remains within the current composition. As a consequence, the positions within this school are fixed. Because career opportunities are based on vacancy of positions, employees doubt whether their ambitions can be realized. As a women academic says:

"Well, reaching a full professor position is not only related to… uhhm at the one hand it has to do with hard work and taking care of your CV, at the other hand it has to do with, uhhm… Positions should be available in your field of expertise. And when I have a look at the field I think there is very little chance."

According to former employees, the limited possibilities of getting promoted are the main reasons to leave the organization. Department chairs point out that there are hardly any career opportunities for ambitious PhDs who aspire an academic career. Dominant criteria for success are the number of publications and attracting external funding. In comparison with the other schools, field research is a relative meaningful part of the tasks of the employees. Although output criteria are of great importance, there is much confusion about its exact realization within the new school. It is obvious that the quantity of the scientific output has become more important than before. The performance on education is relatively less important. Employees state that the fulfillment of educational tasks is an undervalued criterion for promotion to a higher ranking job.

Within this school, paying attention to the private life takes place on a daily basis. Interviewees indicate that being employed as an academic creates space for combining work-related and care-related tasks. For some of the employees this refers to flexibility as in being present, others refer to flexibility as in being part-time employed. Simultaneously, the interviewees share the opinion that a scientific career requires working 40 to 60 hours per week. In addition, the idea that female employees have more struggles with this number of hours is commonly shared among the respondents.

Processes of hiring, promotion and turnover
Because of the lack of career opportunities, the relative high amount of female PhD students is not reflected in the amount of female assistant professors and associate professors. The recruitment of employees takes place within the school, through both open and closed procedures. Sometimes employees are recruited through the

use of international media, and sometimes recruitment takes place by approaching members of informal networks.

Not all employees are familiar with the formal promotion criteria. In general, the interviewees indicate that internal promotions are set up informally, in which the networks of the decision-makers play a crucial role. Employees state that acting strategically is of great importance for a scientific career. This refers to exposing yourself in a scientific arena, making yourself visible in relevant external networks, as well as being visible within the school. Employees experience the support of their direct supervisor of crucial importance for getting promoted. This support exists of e.g. being involved in running research projects and research proposals, and also of being invited for specific job applications. When there is a lack of such support, employees experience being hindered in their ambitions.

The position of women

Of the former schools of which SH is formed, SCC maintained a correction for part-time employment in relation to the expected research output. Nowadays, SH wants to continue this way of working. In relation to other schools, SH is the only school in which correction for part-time employment is seen as a common practice. Employees consider the expectation that scientific employees should work more than 50 hours per week to build a career as not being gender neutral. Employees indicate that women in general have more caring tasks, and therefore they could not keep up to this informal criterion. There seems to be a cohort effect. Younger generations of men and women aspire to combine their career and their caring tasks, while the current older generations of employees have a more traditional role conception.

TILBURG SCHOOL OF THEOLOGY

About the school

The school of theology is the only Dutch school of theology with ecclesiastical recognition. With 50 FTE and ca 250 students it is a relatively small school. Because the school results from a merger between schools of the University in Tilburg and Utrecht University in 2007, personal is spread out over two locations. The majority is located in Utrecht, the minority in Tilburg. The school has two female full professors (20%), but no female associate professors. 20% of the associate professors is female. Recent reorganizations and a merger influenced the employees' perception of the work. Employees in Tilburg report feelings of alienation because of increased involvement of the Church with their work. Employees in Utrecht feel out of place because they are situated outside their institution. The transition of a small, informal organization to a bigger, bureaucratic institution causes organizational pressure. Being scattered negatively influences the cohesion of personnel.

The ecclesiastical connection gives the FCT a typical character. Just like at other schools publications in scientific journals are the norm for success, but an additional ideal is preparing people for pastoral work. Employees experience increasing pressure for academic professionalism, but at the same time they feel the need for clerical involvement. A shared feeling amongst employees is that educating people should be valued more heavily in job evaluation. As one of the female faculty explains it:

"That's also something… everything that is hard and has the least with people, has a higher status than irrational things. Education has to do with people and has less status."

Processes of hiring, promotion and turnover

Career trajectories a very slow at this school. At the moment of research, the school had not been taking new personnel for seven years. Becoming a full professor is only possible after another full professor leaves. Becoming an associate professor is sometimes possible on the basis of individual performance. In the last years some men academics were promoted from assistant to associate professor. In general employees report a lack of clearness on promotion criteria. Several employees consider themselves qualified for promotion but don't get it. Others would like to work more hours, but are not allowed to do so.

The position of women

The low percentage of female assistant professors and – in particular – low percentage of associate professors is partly connected to the ecclesiastical character of the school. According to the dean a percentage of jobs is reserved for priests, who are per definition male in the Roman Catholic Church. Moreover, being a practicing catholic is also important for being promoted. The fact that there are no female associate professors is attributed to the application of internal promotion procedures. The intake of two female full professors has been from outside the university. Two other female professors left recently as a consequence of the reorganization. Female staff members are concentrated in fields of study with less status. Moreover, the growing influence of Rome has resulted in a marginalization of gender studies, a field that is traditionally dominated by women.

Several faculty of the FCT are having a part-time appointment. They do so to combine work and family life, or to combine their work with a practice in pastoral work. In general this combination is defined as an enrichment. In some cases part-time work is a forced choice, since extension of the function is not possible. The dean and the HRM are convinced that part-time work is a hindrance for upward career mobility. They considered women academics care giving responsibilities at home as the main explanation for the lack of upward career mobility of women. Employees argue that flexible working hours offer opportunities to reconcile different tasks. Outside these flexible working care giving responsibilities are hardly supported.

Analysis

As appears from the analysis of the personnel information data, the underrepresentation of women academics starts right after academics attain their PhD. Already at the assistant professor level fewer women are hired than there are graduated PhDs. For each consecutive level the proportion of women is smaller. This is true for all five schools. More fine-grained analyses show that within a certain jobs, men more often occupy the better paid salary levels compared to women, and men more often have permanent rather than temporary contracts. This has no base in the performance level of women, as the number of publications that men and women are comparable when age is controlled for. Moreover, our quantitative analysis showed that parenthood is unrelated to the number of publication (there is a positive trend for parents to publish more), disconfirming the commonly shared belief that parent, and mothers particularly, perform worse than men. Women work about the same number of hours (women 1,5 hours less than men) have about the same number of publications. The difference between parents and non-parents is small: mothers work 3 hours less than non-mothers, and fathers too work 2,5 hours less.

When we synthesize the five schools (see Bleijenbergh, van Engen, Scholte & Blonk, 2011 for the methodology used for the synthesis), a shared normative image emerges of what being a successful scientist entails at this university. The ideal scientist is a full-time working, 24-7 available person who is addicted to his work, has high visibility, is entrepreneurial, successful in obtaining grants for research, and above all has many and important publications. Although women and men both struggle to live up to this ideal, this image of the ideal academic is particularly at odds with the image of the women academic that the participants share. She is described as working part-time, heavily invested in teaching and practitioner oriented research and for whom the burden of the publication pressure is too high, particularly when she had children. Interestingly, as described above, the personnel data disconfirm these beliefs. There clearly is a mismatch in how women are represented in the organizations to what the facts actually show. This is problematic as this urges women to outperform men to be equally visible and be seen as feasible for promotion to higher ranking jobs.

Dilemma's in levers for change

In the interviews and focus groups participants were explicitly asked to come with concrete policies or interventions to improve the representation of women at the university. Participants have diverging and sometimes contradicting attitudes about the desirability for specific policies for women. The attitudes reflect the classic debate between equality versus difference described in the gender literature (Bacchi, 1990;

Fraser, 1989). Equal treatment of men and women stresses the equality of men and women but at the same time forces women (and men) to live up to an ideal worker norm, that is not gender neutral, but is specifically male (cf. Acker, 1990). As Benschop and Brouns (2003) argue that academia in particular can be characterized as an institution in which masculine norms. Developing 'special policies' for may help women compensate specific shortcomings, but this inherently stresses rather than transcends differences. The way out of this dilemma is reconsidering the dominant organizational norms and values in such a way that specific circumstances and experiences of women are the starting point of norms rather than the deviation. We highlight three specific themes where this dilemma appeared.

The first dilemma comes to the front in the concept of 'positive discrimination'. On the one hand, participants ventilate the belief that by positive discrimination scientific criteria, e.g. academic excellence, are not met and as a consequence academic reputation and stature is at risk. On the other hand, participants urge the need to scout women specifically as in the current organizational culture men, perhaps even less qualified men, are favored for higher ranking jobs, which pose a risk for academic excellence just the same. Transcending this dilemma is visible in the way two of the deans (School of Law and School of Humanities) stress their responsibility for nourishing female talent, for instance by regularly visiting their women faculty and think along with opportunities in their career trajectories. This support is important in keeping talent of women in the midterm of their career.

The second dilemma appears in the theme of mentoring. The participants express opinions concerning mentoring programs for women ranging from 'denigrating' to 'very valuable'. Some participants argue that special mentoring programs and educational trajectories for women emphasize women's incapability in 'doing science'. Women as a consequence become stigmatized as second rate scientist. Others, in contrast, argue that these programs give women access to and guidance in the informal networks that are important in the academic field. Through mentors with influence and stature in the organization, mentees receive social, emotional or network support in their career advancement. These mentors might provide women academics the necessary resources that they lack that their men colleagues s often 'naturally' seem to have. Our interviews show some cases where this dilemma is overcome through reciprocal mentoring. The mentor-mentee relationship opens doors for the mentee, and the mentor learns about the hidden norms and values of the organization that keep women from rising above a certain level. In such a way a mentoring program may help adjust the masculinity of norms in the organization.

The third dilemma concerns compensation of part-time work, maternity and parental leave in the performance criteria (i.e. publication targets). Some participants argue that career breaks or (temporary) reduction in work hours should be compensated for in output criteria. Others argue that it is the overall performance, the absolute criteria

that should count in allocating resources and career progression. As one interviewee states it, compensation would disqualify her and *"I do not need a present"*. To surpass this dilemma it is important that compensation for career breaks and reduced working hours is not portrayed as a favor, but as a self-evident right that is fair to all. We saw several instances of compensation in performance criteria. Some of the schools extended the time that performance criteria need to be met in case of maternal and parental leave. Thereby criteria stay the same, but the conditions to meet the criteria are adapted to specific circumstances. This measures however does not prevent (wo)men taking up leave to lag behind their colleagues in a period of their life that every publications counts. A measure that is more helpful is guaranteeing (absolute) time for research, for instance by compensating maternity leave with a research sabbatical of similar magnitude as time spent for giving birth and caring for dependents.

Policy recommendations

The analysis on school level led to policy recommendations for the university as a whole. Below we describe the recommendations and how they were implemented in the university.

VISIBILITY

The first recommendation to the Board of Executives was to support a positive image of women in science. Both men and women academics support the stereotype image that women do not fit to the image of the ideal scientist as well as men. Although the analysis of personnel files does not support this, employees have a shared perception that women work less hours and produce less academic output than men do. Gender stereotypes seem to play a more important role is this image than actual performance of men and women.

After the research was published the Board of the University installed a committee to support positive image of women academics. The committee aimed to increase the visibility of women in internal media and in meetings with a symbolic meaning, such as the opening of the academic year. Concrete actions are a three monthly inventory by the communication personnel of the schools for research by women that has national or international appearance for the public media.

CORRECTION IN PERFORMANCE CRITERIA

The second recommendation concerned adjustment of performance criteria for academics with reduced working hours. Since most schools did apply such an adjustment, academics with a part-time appointment had to produce the same output (number of scientific publications) as full time employees. Young parents, mainly mothers but also fathers, are allocated less research time as a consequence. Re-

search time is not only important for producing academic output, but also for keeping expert skills on level. This recommendation was implemented by all the schools.

COMPENSATION FOR LEAVE

The third recommendation concerns compensation for leave. Employees who take up pregnancy leave, parental leave or sickness leave are losing time to perform research and produce academic output. The time they lose because of leave is even disproportionally large, because these employees have to give education after returning from leave. We recommended compensation of missed research time after parental and pregnancy leave to create a level playing field with colleagues without leave. The Board of the University partly took over this recommendation and introduced a research sabbatical for women that return from pregnancy leave. Schools receive a lump sum for every pregnant employee to care for adequate replacement of teaching and so forth after returning. Compensation for parental leave is however not given.

COMMUNICATION

A fourth recommendation is communication about measures to compensate performance criteria for part-time work or leave. Although the deans of different schools claim to apply adjustment of performance criteria employees reported not to be aware of these measures, or feared repercussions when requesting to make use of them. We recommended clear communication about these measures that would emphasize compensation being a right rather than a favor. This recommendation was taken over. Women academics that report a pregnancy automatically receive a form to apply for their research sabbatical.

SCOUTING

A fifth recommendation is scouting of female talent by executives. Executives should actively look for talented women candidates within and outside the organization. We suggested to approach women faculty to nominate female candidates for jobs or to involve more women in application committees. We do not have information about the adoption of this recommendation. However, we do know that gender awareness is part of programs for professionalizing leadership.

NETWORKS

A sixth recommendation concerned actively supporting, investing in and harvesting from professional networks of women academics. Direct supervisors in particular may unlock these networks by asking female colleagues to supervise PhDs, to take a position in promotion committees and to participate in academic fora. We do not know whether this recommendation has been implemented by stakeholders (particularly direct supervisors).

INDIVIDUAL CAREER OPPORTUNITIES

The final recommendation concerned promoting employees to higher ranking jobs s on the basis of individual performance rather than on the basis of the fulfillment of job vacancies. Schools that already apply this individual career principle have many more women in higher ranking jobs than schools that do not. We recommended the Board of the University to financially support schools that the financial means to apply such individual career principles lack. In principle, the Board of the University implemented this individual career principle as an integral element of personnel policies. However, we know that not all schools do adhere to this principle, usually for reasons of financial pressure.

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