

Female professionals' working hours

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The supply of welfare state services depends on women's labour market participation (Esping-Andersen 1991, Hagen 1991). In Norway, seven out of ten professionals employed in the welfare state sector are women (Hagen 1991). Contrary to most European countries, women in Norway combine high labour market participation and high fertility (OECD 1998). However, part-time work appears to be more common in Norway than in other European countries. In Norway, nearly half of all employed women (about 45 percent) work reduced hours. After decades with stability or even decrease in part-time work (Jensen 2000), the tendency among Norwegian women to work reduced hours again seems to increase (Hardoy and Schøne 2004).

The aim of this paper is to examine female professionals' working hours, particularly the tendency to work reduced hours. Earlier research indicates a considerable variation in female professionals' working hours (Hoel 1995, Ellingsæther 1995, Burchell et al. 1997, Raaum 2001, Gjerberg 2003, Abrahamsen 2002a, Abrahamsen and Storvik 2003). While female physicians usually work long hours (Gjerberg 2003, Abrahamsen 2002a), female teachers mainly work fulltime (Hoel 1995), a significant proportion of nurses work part-time (Abrahamsen 2002a, 2003, Olsen 2002). The question raised in this paper is why women's part-time ratio is significantly higher in some professions (like nursing) than in other professions, even if we only compare female dominated professions. This study covers five professions pertinent to the welfare state: nursing, medicine, teaching, preschool teaching and social work. Four of these professions are female dominated. Medicine is still a male dominated profession in Norway. However, the sex composition is moving in direction of equal employment among the sexes. More than half of the new students in medicine are women (Gjerberg 2003).

Women's part-time work is usually explained as an adjustment strategy in order to combine family and work (Hakim 2000, Kjeldstad 1991, Gulbrandsen og Hoel 1986, Jensen 2000). Significant variations in part-time work between professions may reflect different family patterns, but according to recent research this assumption does not seem to be supported. Female physicians' and nurses' employment patterns are significantly different, but their fertility rates are quite similar (Gjerberg 2003, Abrahamsen 2002a). The interplay of

professional women's job characteristics and family situations, and their choice of working hours do not seem to be substantially understood. According to Hakim (2000) women's heterogeneous employment patterns and work histories reflect heterogeneity in their preferences for family work and paid employment. With reference to nurses' and physicians' fertility and employment patterns, this perspective is interesting. Do individual preferences and attitudes to work, like professional commitment and career orientation, explain differences in working hours among female professionals? Structural perspectives emphasise the work content and the work context as more important than individual preferences, and professionals' adjustments strategies are principally seen as a consequence of professional/occupational constraints and opportunities (Crompton and Harris 1998). In the public debates and by asking nurses directly (in questionnaires), work pressure and shiftwork are often mentioned as reasons for part-time work (Skaar 1986, Olsen 2002, Hasselhorn et al. 2005). In addition, recent research indicate an impact of individual career opportunities and part-time opportunities in the profession (Abrahamsen 2002a, 2002b). In this paper, both family situations, preferences to work, and various aspects of the work context will be examined as explaining factors.

Female professionals' labour market participation

Professional work often entails long workdays and workweeks. Especially for physicians and lawyers there has been an expectation that they do not will be "clock watchers" and should not allow competing demands from other spheres of life to undermine their professional work (Epstein et al. 1999). Members of professions, ideally, develop a "deep lifelong commitment to and identification with their work: it becomes a central life interest" (Freidson 2003). In the course of professional socialisation, professionals usually acquire motivation for hard and demanding work, and become embedded in a professional environment where devotion to the task is rewarded by upward mobility while ordinary effort is punished with less possibility for professional development.

Employment patterns which include long workdays and workweeks, however, do not cover all professions. Despite nearly equally high labour force participation rates among female and male professionals in Norway, a significant part of women professionals work reduced hours. Part-time work seems to be most frequent in some female dominated occupations, but women in male dominated professions work reduced hours as well (Abrahamsen 2002a, Raaum 2001). In Norway, the part-time ratio seems to be especially high among nurses. About 60 percent of female nurses' work part-time, most of them work long part-time (20-34 hours per week). Part-time work is relatively rare among physicians, lawyers and journalists, but also in these occupations weekly working hours (average) are higher for men than for women (Gjerberg, 2003, Epstein et al 1999, Abrahamsen 2002a).

There exists a considerable amount of studies on part-time work. Most of them, however, do not include distinct professions, but examine part-time work among women in different age-groups, family situations, educational levels, or among women in different periods of life (Blossfeld and Hakim 1997, Hakim 2000, Kjeldstad 2004, Jensen 2000). Our knowledge about women's working hours in different occupations/professions is limited. Studies that examine female professionals' working hours usually cover only a few occupations or professions. Indeed, there are studies on part-time work among physicians (Gjerberg 2003, Grant et al 1990), lawyers (Epstein et al. 1999), teachers (Hoel 1995) and nurses (Abrahamsen 2002a, Hoel 1995), and relatively few studies cover a set of (minimum two) professions/occupations (Crompton and Harris 2002, Hoel 1995, Abrahamsen 2002a, Coutrot et al. 1997, Ellingsæter 1995, Olsen 2002).

Explaining female professionals' part-time work

The early interest in part-time work was inspired by Parsons' sex role theories, represented by Myrdal and Klein's "Womens two roles" (Myrdal og Klein 1957, in Beechy and Perkins 1987). They saw part-time work among women as a solution to the post-war demand for labour and they lauded the fact that by taking part-time jobs women could keep in touch

with the labour market and balance their responsibility as workers and mothers (Myrdal and Klein 1957 i Ellingsæter 1995). The following years a whole host of studies were discussing part-time employment as helping women with balancing home and work. According to individual-oriented models based on human capital theories, women's part-time work is seen as a reflection of their investments in education and career. Working hours are thus based on rational decisions on how they want to combine career and family (Becker 1985). Individual explanations describe women's employment patterns as a result of women's family situation, preferences and choices of education and career. Numerous studies confirm that part-time work is most frequent in those stages of the life cycle when family obligations are most pressing, when women are mothers. Despite new trends regarding women's labour market employment, women's labour market supply still fluctuates with women's caring obligations at home. Among women engaged in paid work, mothers work fewer hours than childless women (Blossfeldt and Hakim 1997, Jensen 2000, Kjeldstad 2004, Abrahamsen 2002b). Women's tendency to work reduced hours increases with the number of children (Perry 1988, Ellingsæter et al. 1997). Women with children aged 7-10 years seem to have the highest part-time rate (Ellingsæter et al 1997).

We find the same pattern among female professionals, both in female and male dominated professions (Gjerberg 2003, Grant et al. 1990, Abrahamsen 2002b). Longitudinal studies confirm nurses' entry into a fulltime job after completing vocational training. When nurses become mothers, or when they give birth to their second child, they also usually enter part-time work. A longitudinal study, which has information on caring professionals the first 10 years of their professional work life, indicates that nurses do not increase working hours when private caring obligations decrease. Half of the nurses seem to work reduced hours when youngest child is sixteen years old (Abrahamsen 2000).

In previous studies the impact of children on working hours in different professions is not frequently examined. However, there exist differences in the extent to which children affects female labour supply. Female physicians who are mothers to children under seven, only to a small degree work reduced hours (Gjerberg 2003), while most of the nurses with children work part-time (Abrahamsen 2000). A question raised in this paper is why professional

groups like nurses, teachers and physicians make different decisions concerning working hours when they become mothers. Catherine Hakim (2000) has stated that women's choice between part-time and fulltime mainly reflects women's preferences to work and family. She found three divergent preferences among women at all levels of education. The largest group, adaptive women, prefer to combine employment and family work without giving fixed priority to either. They generally transfer to part-time work after childbirth. A second group, a minority, which often remain childless, are characterized as work-centred. The employment rate among these women is rather high and they work full-time most of their work life. A third group, home-centred women, is also a minority. They prefer to give priority to home and family life after they marry and only work outside home in exceptional cases. According to Hakim, preferences are relatively stable through the life course (Hakim 2002). Hakim's Preference theory is controversial and has been opposed by a number of researchers, principally because of the lack of structural perspective (Crompton and Harris 1998, McRae 2003).

In contrast to individual oriented explanations, structural models see women's labour market participation in the light of the context of work and society (Rubery et al 1988, Ellingsæter 1995). In studies of professionals, work conditions such as shift work, work load and restricted career opportunities have been used to explain the high tendency to part-time work and periods out of the labour market (Abrahamsen 2002b, Hoel 1995, Gjerberg 2003). Some researchers have applied an integrated model, emphasising the complex interplay between individual preferences, family situation and the work context (Crompton and Harris 1998, Ellingsæter 1995). Crompton and Harris, however, dispute the assertion that variation in women's orientation to work (or preference) is the major independent variable explaining women's employment patterns. They claim that women's employment behaviour is a reflection of the way in which women actively construct their work-life biographies in terms of their historically available opportunities and constraints.

The two different perspectives, illustrated by Hakim and Crompton & Harris, is the dividing line in the international debate on the relationship between women's labour market participation and her role as a mother and a wife. Hakim's division of women into three

groups are probably less relevant in Norway than in Great Britain, but up to now there has not been paid attention to individual's preferences in Scandinavian countries. The lack of empirical research on professionals' preferences to work, family and leisure is striking. In Norway and Sweden, the main focus has been on structural work conditions on women's working time patterns. An example is the attention to the demand for part-time workers in the health sector as an important structural factor on nurses' working hours (Nyberg 2003, Olsen 2002, Abrahamsen 2002a, Kjeldstad 2004). This perspective brings up the professionals' underemployment as a problem among part-time workers. In studies of female professionals the mismatch between preferred and actual working hours is not only relevant to part-time professionals, like nurses. There are also hour mismatches among full-timers and especially among professionals who work long hours, like physicians (Abrahamsen 2002a, Reynolds 2003).

Data, measures and methods

Data

The analysis is based upon StudData, a Norwegian database for studies of recruitment, qualification and individual careers in the professions. This is longitudinal survey data (panel data) which collects information from individuals both as students and after graduation. In this paper, only data collected nearly three years after graduation are utilised. The data analysed in this paper includes five groups of professionals; physicians, nurses, social workers, school teachers and preschool teachers.

The sample consists of all individuals who graduated from about 15 different professional programs at four different Norwegian universities/colleges in spring 2001. A questionnaire was sent to 2700 professionals by mail in spring 2004. The respond rate was close to 60 percent and data were obtained by nearly 1600 persons. Of these, 658 women had graduated as physicians, nurses, social workers, school teachers and preschool teachers and were employed at the time of the survey and returned the questionnaire with information

on working hours. The number of female respondents in various professions is shown in Table 1. In the regressions analyses the number of respondents drops to 493 due to missing responses on job-related items.

Measures

Working hours are measured by the question “How many hours do you usually work per week?” The respondents report the actual number of hours. Preferred working hours are measured by the question: “Do you have the working hours which fit you best, or do you want to work shorter or longer? “

Work pressure is measured by three items: (1) I have to work fast. (2) I have to work very hard. (3) No one ask me to do disproportionately much work. Each question has four response alternatives: Strong disagreement, disagreement, agreement, strong agreement. Question three is turned.

Career opportunity is measured by the question: “Do you have good career opportunities in your job?” The question has five response alternatives and responses were given on a five-point (increasing) scale (1-5).

Part-time opportunity is measured by the question: “Do you have part-time opportunities in your job?” The question has five response alternatives and responses were given on a five-point (increasing) scale (1-5).

Organizational commitment is measured by four items taken from the Porter scale. Responses were given on a four-point (increasing) scale (1-4).

Professional commitment is measured by five items. Responses were given on a four point (increasing) scale (1-4).

Career orientation is measured by the question: “How important are career opportunities when you evaluate a prospective job?” Responses are given on a five-point (increasing) scale (1-5).

Part-time orientation is measured by the question: “How important are part-time opportunities when you evaluate a prospective job?” Responses are given on a five-point (increasing) scale (1-5).

Parents provider roles are measured by the question: “How should parents share the provider responsibility when children are less than three years old?” Five response

alternatives which are recoded into two alternatives: equally shared provider roles and unequally shared provider roles (per cent).

Methods

Logistic regression analyses were used. Five models were presented. Models 1-4 analyse the tendency to work part-time (34 hours or less per week) versus full time (35 hours or more). Model 5 analyses the tendency to work long hours (38 hours or more) versus the tendency to work less than 38 hours). Nursing were the reference group.

Empirical results

Weekly working hours – actual and preferred

Table 1 shows significant variation between different professions in women's working hours. Weekly working hours range from 43,2 hours among physicians to 34,1 hours among nurses. As expected, the majority of female physicians work long hours (81 percent work 38 hours or more per week), and very few physicians work part-time. The majority of the nurses in this study work full-time (59 percent), but every fourth nurse work part-time. Schoolteachers and social workers work 37,5 hours a week (average), which is full time. Part-time work is relatively common among teachers (21 percent), but not prevalent among social workers (9 percent). Preschool teachers work in average 36,3 hours a week which are approximately one hour less than full time. Nearly 20 percent of preschool teachers work less than full time.

Four of the five professions included in this study, are female dominated fields: nursing, social work, teaching and preschool teaching. Medicine is male dominated. Contrary to previous studies, the results do not confirm a relationship between the professions' gender balance and women's working hours (Raaum 2001, Abrahamsen 2002a). We have to take into consideration, however, that the employees in this survey are relatively fresh in the labour market. Newly graduated professionals' participation in labour market probably differs from

the labour market participation to the profession as a whole. A significant part of the professionals has not yet established own families. Three years after graduation, half, or less than half, of the female professionals have become mothers (table I).

In addition, actual working hours are not necessarily reflecting individual choices. As newly graduated, many professionals probably have to accept jobs where they have to work more or less hours than they prefer. In Norway, underemployment is especially identified as a problem among nurses and practical nurses (Næss 1997), however, according to table I in this study nurses do not seem to be especially exposed to underemployment. Schoolteachers are the group that most frequently report underemployment. Ten percent of the teachers preferred to work more hours than they actually work, while five percent of the nurses face this problem nearly three years after graduation. Physicians are most dissatisfied with hours worked. More than one of three female physicians preferred shorter working hours. Female physicians' preferences do not correspond with their actual working time. According to table I female physicians have stronger part-time orientation than teachers and social workers, but weaker than nurses. With exception of physicians, there seems to be a fair balance between preferred and actual labour market participation among female professionals.

Table I also illustrates broad differences and equalities in work context and individual preferences between the five professions. The results confirm a relatively big work load within all five professions (2.5-2.8 in a scale from 1-4), however, nurses seem to report biggest work pressure and preschool teachers the lowest. Differences between the professions seem to be more prevalent in career opportunities and part-time opportunities. The majority of female physicians report excellent career opportunities, while most preschool teachers and social workers report relatively poor career opportunities. As expected, nurses seem to have very good part-time opportunities, while female doctors generally state poor such opportunities.

In addition, table I predicts occupational differences in individual preferences to work. Preschool teachers and school teachers distinguish themselves by high organizational and professional commitment. Compared to teachers, nurses seem to be less committed, but

report part-time work and individual careers as more important than among teachers. Female physicians support unequally shared provider role among parents to a less degree (5 percent) compared to other professionals in this study. Five percent of female physicians prefer husbands as main provider when children are less than three years old, while 20 percent of nurses do the same.¹

Table 1. Descriptive results. Female professionals' weekly working hours nearly three years after graduation. Physicians, nurses, school teachers, preschool teachers and social workers.

	Physician	Nurse	School Teacher	Preschool teacher	Social worker
Part-time	8	26	21	18	9
Full time	11	59	26	63	62
Long hours	81	14	53	19	31
Total	100	100	100	100	99
N	79	226	85	182	86

Average weekly working hours

All	43,2	34,1	37,5	36,3	37,6
St.dev.	7,0	6,6	9,6	5,4	5,6
N	79	226	85	182	86
Non mothers	44,0	35,9	39,0	36,8	39,4
N	38	116	48	80	40
Mothers	42,5	32,5	35,7	35,7	36,0
N	41	102	31	95	42
Child effect	1,5	3,4	3,3	1,1	3,4

- Part-time: 1-34 hours weekly, fulltime: 35-38 hours, long hours: 39 hours or more

¹ In a Norwegian survey, which includes a representative selection of Norwegian women, 30 percent prefer husband as main provider when children are less than three years old. When asking the same question to the elite, only 2 percent of women prefer husband as main provider (Skeie and Teigen 2004).

Preferred working hours (percent)

Present	64	86	83	85	86
Shorter	36	9	8	12	11
Longer	0	5	9	3	2
Total	100	100	100	100	99
N	77	223	88	183	88

Age and family situation

Age	31,3	30,7	29,0	30,8	35,2
Married/Cohab.	82	77	69	68	71
Children %	55	47	39	55	52
Nmb. children	0,85	0,82	0,69	0,90	1,16

Work context

Work pressure	2,6	2,8	2,6	2,5	2,7 scale 1-4
Career opport.	3,6	2,7	2,6	2,3	2,4 scale 1-5
Part-time opport.	2,5	3,7	3,0	3,0	2,7 scale 1-5

Individual preferences to work

Organ. commitment	2,7	2,7	3,0	3,0	2,7 scale 1-4
Proff. commitment	2,4	2,3	2,5	2,5	2,3 scale 1-4
Career orientation	3,5	3,9	3,4	3,7	3,7 scale 1-5
Part-time orientation	3,5	3,7	3,2	3,3	3,1 scale 1-5
Unequally shared provider roles (%)	5	20	12	14	12

Effects of individual and structural factors

Table 2 shows logistic regression estimates of the tendency to work part-time among female professionals (model 1-4). Both women's family situation, individual preferences and the work context seem to influence female professionals' labour market participation. The results indicate interplay between these factors. As expected, female professionals who have become mothers work less than professionals without children (model 1). Despite a family-friendly public policy and policy improvements the last years, part-time work still seems to be an adjustment strategy among highly educated new mothers. However, the child effect

seems to vary between professions (table 1). The difference in weekly working hours between mothers and non-mothers seems to be highest among nurses, preschool teachers and social workers (3,2 – 3,3 hours per week). Female physicians and preschool teachers do not seem to reduce their work effort to the same degree (1,1 - 1,5 hours per week). Female physicians mainly continue to work long hours after becoming mothers (42 hours per week in average), while most nurses (32 hours), teachers (35 hours) and social workers (36 hours) work long part-time as mothers.

The results in model 2 show that both professional commitment and attitude to own provider role are important factors in explaining working hours. Highly committed women and professionals, who support equal provider roles for both parents, have a lesser tendency to work part-time than other female professionals. This finding supports theories which postulate an impact of individual preferences to work and family on women's employment decisions (Hakim 2002).

The study also examines the impact of structural factors. Various aspects of the work context seem to influence women's working hours (model 3). Three aspects are investigated; work pressure, individual career opportunities and part-time opportunities. Only work pressure and part-time opportunities seem to have significant effects. Unexpected, however, a person's tendency to work part-time seems to decrease when the work pressure increases. Professionals who work part-time seem to have lower work pressure than individuals working full time. The regression estimates show, however, the general relationship between work pressure and part-time work (among female professionals included in the analyses). The impact of work pressure on part-time work within a particular professional group, like nurses or teachers, might be different.

The results in model 4, indicates a direct effect of individuals' profession. Women in medicine and social work have a lesser tendency to work part-time than female nurses. The results confirm a strong impact of the work context, and indicate that professional factors are important in explaining women's working hours, even if we have controlled for the three abovementioned aspects of work conditions.

Explaining part-time work versus explaining long hours

The logistic regression analyses (model 5) examines female professionals' tendency to work long hours. In contrast to professionals' tendency to work part-time, either family situation or individual preferences seem to influence women's tendency to work long hours. On the other hand, the work context seems to be very important in explaining professionals' long hours. Both individual career opportunities and work pressure seem to motivate professionals to work more than full time. It is possible that long hours sometimes solve the problem of high work pressure and the employee thus decides to work more than full time in order to finish on time. In addition, the results indicate a relationship between part-time opportunities and the tendency to work long hours. Reduced part-time opportunities increase professionals' tendency to work long hours. These results confirm the impact of the professional context. The work context, including the organisation of the working time, has an important influence on professionals' labour market participation.

A comparison between the results in model 4 and model 5 indicate that working time decisions are not based on a linear process. Factors that explain female professionals' part-time work are not necessarily the same factors that explain long hours. The regression analyses indicate that individual preferences and attitudes concerning professional work and employment have impact on professionals' tendency to work part-time, but no significant impact on working long hours. These results indicate that part-time work is probably not a coincidence, but seems mainly to be a result of a conscious decision influenced by the family situation, individual preferences and the work context. Working long hours, however, seems more often to be a result of work pressure at the work place and culture/norms within profession or work organization.

Table 2. Logistic regression. The tendency to work part-time (model 1-4) and the tendency to work long hours (model 5). Female professionals (N=493). Nurses as reference group.

	Part-time work				Long hours
	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	-3,43** (0,68)	0,94 (1,28)	1,34 (1,62)	1,88 (1,69)	-7,05** (1,49)
Children	1,39** (0,29)	,55** (0,30)	1,78** (0,34)	1,86** (0,34)	-0,49 (0,25)
Husband/partner	0,60 (0,37)	0,33 (0,40)	0,23 (0,42)	0,25 (0,43)	-0,13 (0,29)
Org. commitment		-0,34 (0,22)	-0,55* (0,25)	-0,58* (0,26)	0,25 (0,22)
Prof. commitment		-1,07** (0,29)	0,96** (0,33)	-1,03** (0,34)	0,46 (0,28)
Career orientation		0,07 (0,18)	0,17 (0,20)	0,13 (0,20)	0,15 (0,18)
Parents provider roles		-1,07** (0,31)	-1,02** (0,35)	-0,93** (0,35)	0,37 (0,38)
Work pressure			-0,92** (0,27)	-0,96** (0,29)	0,95** (0,25)
Part-time opportunity			0,69** (0,11)	0,64** (0,12)	-0,26** (0,09)
Career opportunity			-0,17 (0,17)	-0,07 (0,18)	0,38* (0,15)
Physician				-1,33* (0,62)	3,19** (0,44)
Schoolteacher				0,15 (0,45)	2,10** (0,39)
Preschool teacher				-0,19 (0,37)	0,73* (0,36)
Social worker				-0,25* (0,59)	1,20** (0,39)
N	493	493	493	493	493
-2 Log Likelihood	438,6	406,1	350,5	339,9	454,0

Discussion

The significant effects of work commitment and provider attitudes confirm individual preferences as important in understanding female professionals' labour market participation. In order to explain women's labour market adjustments the subjective aspects of work hours seem to be important (Reynolds 2003). To secure sufficient supply of professionals in the future, attention to professionals' preferences and the development of these during training and at the workplace, seem to be important. We have to know the number of hours that different groups of female professionals prefer to work, and how these preferences are formed.

The direct effect of individual preferences partly supports Hakim's (2000) work. She emphasizes the importance of individual preferences on women's decisions concerning employment and part-time work versus fulltime. The results in this comparative study, however, do not support her findings when she argues women's preference as the only important factor in explaining women's labour market participation. As well the work context has a strong effect on female professionals working time decisions.

The influence of both individual and structural factors, indicate that female professionals choice of employment participation is complex and cannot be explained either by structural or individual factors alone. The results predict interplay between contextual and individual factors. This supports Crompton's and Harris' (1998) research on women's employment behaviour as a complex interplay between women's family situation, orientation to work and occupational constraints and opportunities. The impact of the work context on professionals' working hours seems to be very strong. When including work pressure, career opportunities and part-time opportunities in the regression analyses the model (table 2, model 3), the Log likelihood-estimate decreases considerably (from 406,1 to 350,5). When including professions in model 4 (medicine, teaching, preschool teaching and social work) the LL estimate decreased further (to 339,9). But how do we interpret the additional influence of profession which turn up in model 4?

Differences in working time patterns in medicine and social work versus nursing (model 4) is probably related both to individual factors, work content and work organization. The analyses in this paper do not cover important individual factors as financial situation and husband's work hours. Significant contextual factors that might influence working hours are shift-work, social support, own influence at work etc. Earlier research also indicate that high share of part-time work in nursing, depends on a substantial share of part-time positions (Abrahamsen 2002a). Announcement of part-time positions are common in nursing, but do rarely appear in medicine and other professions. High share of part-time positions is a strategy to meet the requirements for nursing personnel on weekends and church holidays. The need for personnel during weekends and holidays is the same in medicine, but to understand the differences in part-time work, we have to consider physicians' collective wage agreement, which includes working time arrangements. Compared to other professions in the welfare state sector, physicians' wage level is high, but they have to work long hours and have few opportunities to work part-time. Doctors', who work reduced hours, usually work outside hospitals (Gjerberg 2003).

Professional culture and norms may be an equally important factor in explaining variations in female professionals' employment patterns (Pfau-Effinger 1998). Professionals (within the same profession) are assumed to share same norms, attitudes and commitment to work (Freidson 2003). A shared professional culture shapes norms regarding working hours, with consequences for individuals rank, mobility, autonomy and pace of work (Epstein et al 1999). In medicine, the norms probably fit the dominant working time pattern in male dominated professions, which is continual fulltime (or even more than fulltime) during the entire working period. In most female dominated professions, the work culture seems to accept great diversity in working time patterns, but the results indicate variation between these professions. Within nursing and teaching, the results uncover numerous working time patterns and the professional norms seem to accept diversity and flexibility. Part-time work and full time seem to be equally accepted.

This study shows that we have to improve our knowledge on the interplay between individual preferences, the work context (both structural and cultural aspects) and

professionals' actual working hours. We have to know to what extent and when structural and cultural constraints and opportunities in professions, influence prospective professionals' preferences. Do individual preferences develop during professional training, do they strengthen during professional work, and do opportunities in prospective jobs influence women's educational choice? In most professions, women's actual working time seems to a large degree to be in accordance with their preferences. Female physicians' dissatisfaction seems to be an exception. Female physicians included in this study report part-time opportunities as more important than school teachers, preschool teachers and social workers, but actually work many more hours.

Conclusion

Significant differences between female professionals' working hours are identified. Three years after graduation female physicians work weekly nine hours (average) more than female nurses. School teachers and social workers work weekly three and half hours more than nurses. According to this study nurses do not seem to be especially exposed to underemployment. School teachers are the group that most frequently want more hours. Physicians are most dissatisfied with hours worked. More than one of three female physicians preferred shorter working hours.

Working time decisions do not seem to be a linear process. Factors explaining female professionals' part-time decisions are not the same that explain long hours. Female professionals' tendency to work reduced hours depends both on family situation (children), work commitment and various aspects of the work context (opportunities to work part-time, work pressure). Working long hours seem mainly to be a result of work pressure and professional norms.

References

- Abrahamsen, B. (2003), "Yrkesavgang blant pleiepersonell". Rapport 2003:11. Oslo: Institutt for samfunnsforskning.
- Abrahamsen, B. (2002a), "Heltid eller deltid. Kvinners arbeidstid i kvinnedominerte og mannsdominerte yrker." Rapport 2002:6. Oslo: Institutt for samfunnsforskning.
- Abrahamsen, B. (2002b), "Hvorfor utdanne to pleiere for å få en? En studie av yrkesløpet til hjelpepleiere og sykepleiere." Oslo: Unipax.
- Abrahamsen, Bente (2000), "Deltid – en tilpasning til belastningene i yrket?" (Parttime work – an adjustment to the work load in the occupation?). *Tidsskriftet Sykepleien* 2000(9),52-56.
- Abrahamsen, B. and Storvik, Aa. E. (2002), "Hvem opplever tidsklemma? Barnefamiliers lønnsarbeid og ektefellenes yrke" *Søkelys på arbeidsmarkedet* 19, 233-242.
- Becker, G. (1985), "Human Capital, Effort, and the Sexual Division of Labour". *Journal of Labour Economics* 3 (Supplement), S33-S58).
- Beechy, V. and Perkins, T. (1987), *A Matter of Hours*. Cambridge: Polity Press.
- Blossfeldt, H-P. and Hakim, C. (1997), Introduction: A comparative Perspective on Part-Time Work. In Blossfeldt, H-P. and Hakim, C. (eds): *Between Equalization and Marginalization*. Oxford: Oxford University Press.
- Burchell, B.J. et al. (1997), Part-Time Work among British Women. In Blossfeldt, H-P. and Hakim, C. (eds): *Between Equalization and Marginalization*. Oxford: Oxford University Press.
- Coutrot, L. et al. (1997), The family Cycle and the Growth of Part-Time Female Employment in France; Boon or Doom? In Blossfeldt, H-P. and Hakim, C. (eds): *Between Equalization and Marginalization*. Oxford: Oxford University Press.
- Crompton, R. and Harris, F. (1998), Explaining women's employment patterns: Orientation to work revisited. *British Journal of Sociology*, Vol. 49 (1): 117-136.
- Ellingsæter et al. (1997), Sosial ulikhet blant kvinner: Polarisering, utjevning eller status quo? *Tidsskrift for samfunnsforskning*, 38: 33-69.
- Ellingsæter, A.L. (1995), *Gender, Work and Social Change. Beyond Dualistic Thinking*. Report 95:14. Oslo: Institute for social research.

- Epstein et al (1999), *The Part-time Paradox. Time norms, professional life, family and gender.* New York: Routledge.
- Esping Andersen, G. (1991), *The Three Worlds of Welfare Capitalism.* Cambridge: Polity Press
- Freidson, E. (2003), *Professionalism. The Third Logic.* Cambridge: Polity Press.
- Gjerberg, E. (2003), Women doctors in Norway: the challenging balance between career and family life. *Social Science & Medicine* 57 (2003) 1327-1341.
- Grant et al. (1990), Gender, Parenthood and Work Hours of Physicians. *Journal of Marriage and the Family*, 52:39-49.
- Gulbrandsen, L. and Hoel, M. (1986), "Norske kvinners arbeidsdeltakelse på 1980-tallet." Rapport:86:7. Oslo: Institutt for sosialforskning.
- Hagen, K. (1991): Welfare State Employees: Where Did They Come From? I Kolberg, J.E. (red): *The Welfare State as Employer.*
- Hakim, C. (2002), Lifestyle preferences as Determinants of Women's Differentiated Labour Market Careers. *Work and Occupations* 29:428-459.
- Hakim, C. (2000), *Work-Lifestyle Choices in the 21st Century. Preference Theory.* Oxford: oxford University Press.
- Hardoy, I. and Schøne, P., (2004), "Mindre betaling for færre timer? En analyse av sammenhengen mellom uønsket deltid og timelønn." Rapport 2004:16. Oslo: Institutt for samfunnsforskning.
- Hasselhorn, H.M et al. (2005), Work and health of nurses in Europe. Results from the Next-study. www.next-study.net.
- Hoel, M. (1995), *Yrkestilpasning og yrkesutvikling.* Report. Oslo: Institute for social research.
- Jensen, R.S. (2000), "Kvinner og jobb etter småbarnsfasen". Rapport 10:2000. Oslo: Institutt for samfunnsforskning.
- Kjeldstad, R. and Nymoen, E.H. (2004), "Kvinner og menn i deltidsarbeid. Fordeling og forklaringer". Rapport 2004/29. Oslo: Statistisk Sentralbyrå.
- Kjeldstad, R. (1991), "1990-årene: Småbarnsmødrenens tiår på arbeidsmarkedet". *Samfunnsspeilet* 91-3. Oslo: Statistisk sentralbyrå.
- McRae, S. (2003), Constraints and choices in mothers' employment careers: a consideration of Hakim's Preference Theory. *British Journal of Sociology.* Vol 5 (3): 317-338.

- Merton, R., Reader, G.R., and Kendall, P.L. (eds.) (1957), *The Student-Physician: Introductory Studies in the Sociology of Medical Education*. Cambridge: Harvard University Press.
- Nyberg, A. (2003), "Deltidsarbeite og deltidsarbetsløshet – en oppfølging av DELTA utredningen". Working Paper fra Hela-prosjektet. *Arbetslivsrapport 2003:19*. Stockholm: Arbetslivsinstituttet.
- Næss, B. (1997), "Fleksibel arbeidskraft – helsesektorens B-lag?" Hovedoppgave i sosiologi. Trondheim: NTNU.
- OECD (1998): *The future of female-dominated occupations*.
- Olsen, T. (2002), "Arbeidskraftreserven blant deltidsansatte." Rapport: 3/2002. Kristiansand: Agderforskning.
- Perry, S. (1988), The supply of female part-time labour over the life cycle. *Applied Economics*, 20:1579-1587.
- Pfau-Effinger, B. (1998), Gender Cultures and Gender Arrangements – A Theoretical Framework for Cross-National Gender Research. *Innovation 11:147-66*.
- Raaum, N.C. (2001), Norske likestillingsparadokser? Refleksjoner over kjønn, arbeid og politikk. I Vollebæk, D. and P. Selle (eds.) *Svekket kvinnemakt?* Oslo: Universitetsforlaget.
- Reynolds, J. (2003), You Can't Always Get the Hours You Want: Mismatches between Actual and Preferred Work Hours in the U.S. *Social Forces*, Vol. 81, No.4, pp. 1171-1199.
- Rubery, J. et al. (1998), National working-time regimes and equal opportunities. *Feminist Economists 4(1):71-101*.
- Skaar, S. (1986), "Mangel på spesialsykepleiere – et spørsmål om utdanningskapasitet eller arbeidsvilkår?". Rapport. Trondheim: IFIM/Sintef.
- Skeie, H. and Teigen, M. (2004), "Menn imellom". Oslo: Gyldendal.