Nordic journal of working life studies Volume 4 ▮ Number 2 ▮ May 2014

Former Glory and Challenges Ahead: The Definition of Working Life Research in Sweden

▮ **Carin Håkansta**[1]
PhD student, Division of Human Work Science, Department of Business Administration, Technology and Social Science, Luleå University of Technology, Sweden

ABSTRACT

This conceptual paper looks into the definition of "working life research" in Sweden and poses two questions: (1) How has the definition of the concept working life research changed over time? (2) Why has it changed? The paper is based on two studies using two different empirical sources. The first source consists of government documents related to science policy in general and working life research in particular. The second source consists of interviews with Swedish researchers. According to the results of the first study, there has been a gradual decrease in attention to working life research in government science science policy documents since the 1990s. Furthermore, there was a conceptual change in the early 1990s when working life research went from referring to work organization research to a broader definition also including work environment and labor market research. The results from the second study show that work science decreasingly appears in university curricula and in titles of university departments. They also show that currently active researchers, especially the younger ones, tend not to refer to themselves as "work scientists" and "working life researchers." The author argues that the root cause of the apparent disappearance of the concept working life research has been the influence of neoliberalism, which, since the 1980s–1990s, has affected science policy as well as labor market policy. The effects of policy change on working life research are the loss of its previously so privileged position in the public science system and the weakening of what used to be its most important political ally: the trade unions.

KEY WORDS

Government policy / neoliberalism / overlapping working life / research policy / Sweden / working life research / work science

Introduction

The results presented in this article show that the concept "working life research" is decreasingly used in government policy documents. A similar trend is noticeable in Swedish academia where the scientific discipline that corresponds to working life research, "work science," is decreasingly used in names of university departments and in curricula. This raises several questions. Why is the concept disappearing? And what does it mean for the research field? Is it a reflection of the decline of Swedish working life research, which was announced already 15 years ago (Johansson, 1999) and again after the close-down of the National Institute for Working Life (NIWL) in 2007 (Albin

[1] The author will be happy to receive comments: E-mail: chakansta@hotmail.com

et al., 2009; Rolfer et al., 2012; SOU, 2011:60; Wegman & Hogstedt, 2007)? Or does it merely reflect a change in terminology for a research area doing fine?

Contradicting the apparent disappearance of the concept in Sweden is the surge of new energy flowing through the Nordic working life research community. In 2008, the Swedish network Forum for Working Life Research (*Forum för arbetslivsforskning*, FALF) was established. In 2011, the first issue of the Nordic Journal of Working Life Studies (NJWLS) was published, and in 2012, the Nordic Working Life Conference (NWLC) was organized for the first time in a decade.

The purpose of this article is to find out what the concept "working life research" means and why its definition has changed over time. The study has been limited to Sweden, but the developments it looks into with regard to science policy and working life are similar to what has happened in other countries. The time frame begins in the 1970s, when "working life research" first appeared in government policy documents and ends in 2014. The focus is on government-funded research, that is, research taking place at universities and institutes and not in enterprises. That is because it is a study of the relationship between public science policy and researchers, and not the type of research and development that is typically carried out in enterprises.

The principal actors of the study are two: the Swedish government and Swedish researchers. Like all research areas, working life research is affected by the public science policy since it dictates how much public research funding is allocated to different research areas.

To investigate the changes in terminology and the reasons for these changes, two sources of data were collected. These sources were selected because they represent the discourses of the two key actors in this study: the government and the scientists. The first source consists of government policy documents with relation to science funding in general and working life research in particular. The second source consists of interviews with researchers carried out over a period of 3 years. After collecting the material, the results were analyzed by placing them in relation to changing political ideologies and other relevant factors in the socioeconomic context. The results were furthermore placed in relation to "overlapping working life" (OWL, Jacobsen et al., 2013). According to Jacobsen and her colleagues, current research tends to compartmentalize the life spheres of working people into one of three roles: individual (welfare research), employee (work environment research), or citizen (human resource management). They argue that cross-fertilization of the three perspectives, "overlapping working life," would be beneficial to science.

The article is set up as follows: presentations of theory, method, and sources are followed by a brief contextual description of Swedish working life research and science policy. After that, the results of the two studies are presented: (1) The definition of working life research according to the government; (2) The definition of working life research according to the researchers. The last section presents the main conclusions and a brief discussion of the results.

Theoretical framework

The definition of working life research has, in different forms, been around for quite some time. Some scholars, for example, Hvid and his colleagues from different Nordic

countries (2011) and the authors of a report for the Swedish Council for Working Life and Social Research on the status of the field (Albin et al., 2009; FAS, 2009) concluded that working life research does not have any exact demarcation lines. A group of Swedish work psychologists (Aronsson et al., 2012, p. 416) made a more ambitious attempt at illustrating the multidisciplinary nature of the field in a model consisting of one axis representing the aggregation level of research from macro (economics) to micro (technical and medical disciplines, e.g., chemistry and physiology) and another axis representing change from concept development and basic research at one end to training and development research at the other.

This article does not attempt to establish a new definition. It is rather a search for how the concept has actually been used by two of the central actors to working life research: the scientists and the government. As such, the article will add to the work by Torsten Björkman, who in an essay for the Swedish National Agency for Higher Education (Högskoleverket, 2006, pp. 17–26) described the evolution of "work science" in Sweden. He claimed that the concept "work science" spread from technical faculties to social science faculties in the 1980s in order to gain critical mass nationally. This article also builds on the conceptual discussion presented by Jacobsen, Bramming, Holt and Holt Larsen (2013), who concluded that Nordic working life research would benefit from the cross-fertilization of welfare research, working environment research, and human resource management (HRM), which they call OWL. In the concluding section of this article, the findings from the study are placed in relation to the concept of OWL.

The retrospective design of the study furthermore adds to previous historical descriptions, including biographies and overviews of behavioral and psychosocial work environment research (Abrahamsson & Johansson, 2013; Gustafsson & Kjellberg, 1983; Levi, 2002; Theorell, 2007), work environment research (Håkansta, 2013; Johansson, 1999; Skerfving et al., 2007), and the role of the engineers in working life research (Abrahamsson & Johansson, 2013; Giertz, 1981, 2008; Glimell, 1997; Johansson, 1999).

One aspect taken into account in this article is the effects of changing labor market policy on working life research. This aspect has, for example, been discussed in relation to the effects of changes in government policy on industrial relations research in Anglo-Saxon countries (Delaney, 2006; Hyman, 2006; Kaufman, 2004). Kaufman (2004) argued that the political philosophy of neoliberalism and neoclassical free market economics were to blame for the decline of trade unions, the demise of industrial relations, and, consequently, for the weakening of industrial relations research. Hyman (2007) and Delaney (2006) agreed with Kaufman but claimed that the scientists should also take some of the blame due to the lack of clear theoretical foundation and the inability to adapt the field to changes in society and the economy. In Sweden, the adoption and implementation of the Co-determination Act (MBL) in 1976 caused a significant increase in funding and in number of researchers to the field in the 1970s and 1980s. There was also an increase in the influence of trade unions in the development of working life research, which persisted until the "depolitisation" of the field in the 1990s (Johansson, 1999; Lennerlöf, 2008). This article continues the discussion by Johansson (1999) and Kaufman (2004) who argued that changing labor market policies caused the weakening of the traditional ally of working life research, the trade unions, as well as a normative change that has legitimized individualism and reduced other sets of norms, including the social affirmation of having a job (von Otter, 2008).

The inclusion of a science policy perspective was inspired by Ruivo (1994), Elzinga and Jamison (1995), and Edqvist (2003), who argued that industrialized countries have followed comparable patterns of science policy making since the mid-20th century. Following a laissez-faire approach and focus on basic science after the Second World War, the 1970s brought more emphasis on the usefulness of science to society. The results of this study are placed in the context of the rise in popularity of neoliberalism in the 1980s and 1990s, leading to a more competitive science system (Olssen & Peters, 2005). In the Swedish context, this article builds on previous work on the science policy shift from problem-oriented research in the 1970s–1980s to strategic and innovation-driven research from the 1990s, for example, by Benner (2001, 2009) and Schilling (2005).

In sum, this article builds on previous work on the history and definition of working life research and on the effects of labor market policy. What is new in this article is the inclusion of the science policy dimension into the analysis and the use of empirical material that has not been used for this purpose before. Agreeing with the argument that policy change and the decline of trade unions affected working life research negatively (Johansson, 1999; Kaufman, 2004), this article argues that science policy change was another important factor. Two previous publications have looked closer at the effects of science policy on working life research. One is a study of the effects of science policy on working life research in Australia (Young et al., 2011) that found that the field of industrial relations was negatively affected by a journal ranking system used to determine levels of research funding to Australian universities. The other is a study by Håkansta (2013) about the effects of Swedish science policy on work environment research.

Method and materials

The empirical sources used for this article were selected because they represent the discourses of the two central actors of the study: the government and the researchers.

The first source consists of government policy documents relevant for working life research during different points in time. The most important of these documents were the 11 research bills hitherto presented to the Swedish parliament, starting in 1978/1979, ending in 2012/2013. These research bills, which are presented every 3–4 years, are good sources of information due to their central role in the planning of Swedish research policy. They present the priorities of public research, including the organization and levels of funding of research funding organizations, research institutes, and higher education institutions. In addition to these bills, other documents were added to the analysis for their relevance for the development of working life research. These documents include directives to government organizations and official investigations into the organization of the area written before and after government decisions to reform working life funding organizations and research institutes. One of these documents is an unpublished report outlining a reform of working life research in 1995, written by the person who would subsequently become the first Director General of the National Institute of Working Life.

The methods used to analyze these texts include an assessment of how much space was dedicated to working life research in the research bills and how working life research was described or referred to in headings and texts of bills and other documents at the time. Shifts in the amount of text and in how the area was described were placed

in the historical context of science policy shifts caused by changing popularity of political ideologies and external factors such as recessions and changing composition of the labor force.

The second source consists of 21 interviews with active and retired working life researchers carried out between October 2010 and August 2013. The selection of interviewees was based on persons known to FAS and a deliberate attempt was made to select a representative sample of men and women from different geographical locations, university departments, and disciplines. The 13 currently active researchers consisted of seven Associate Professors and eight Professors active at Gothenburg University, Stockholm University, Luleå University of Technology, Karlstad University, Lund University, the KTH Royal Institute of Technology, and the Labour Movement Archives and Library. Disciplines represented included occupational and environmental medicine, work science, ergonomics, psychology, business administration, labor history, and economics. Nine of the interviewees were women, five were men. The eight retired interviewees, who had been selected because of their role in shaping the field in the past, included former researchers and heads of research departments. All interviews were carried out in Swedish. Quotes reproduced in this article have been translated into English by the author. All interviews were semi-structured and lasted between 30 min and 2 h; they were recorded and transcribed. Three questions were asked. The first related to the person's identification with work science and working life research, the second to the definition of work science and working life research, and the third to changes in the definitions over time and their causes.

The results of the interviews, which resulted in more than 160 pages of transcribed text, were grouped according to the type of response, seniority, discipline, university, and background from a public institute or not. In a search for similarities and differences between and within the groups, patterns emerged of present and past use of the concepts "work science" and "working life research" as well as causal factors for changes in the terminology. The conclusions of the studies were drawn from the emerging patterns.

In the ensuing analysis of the results, the results of the two studies were placed in relation to the socioeconomic context of different time periods and the theories on ideologies and policy change presented above.

The context: Public funding and research institutes in the area of working life research

In the 1970s and the beginning of the 1980s, the Swedish government gave working life research high priority (Håkansta, 2013). The research field received significant levels of ear-marked public research funding via a new research funding agency, the Work Environment Fund established in 1972. The Work Environment Institute, which had existed in different constellations and under different names since 1938, grew in size and in 1977 it was complemented by a new institute focusing on working life: the Working Life Centre (see Tab. 1 below). The costs of this expansion were borne by a percentage of the payroll tax. The social partners were represented in the management boards of the research institutes as well as the funding agency, giving them influential roles in the development of the area (Håkansta, 2013; Lennerlöf, 2008; Oscarsson, 1997).

Table I Public research institutes and research funding organizations of particular importance to Swedish working life research 1938 - 2014

Year	Public research institutes		Public research funding organizations	
1938	Work environment institutes[2]			
1972			Work Environment Fund	
1977		Working Life Centre		
1995	National Institute for Working Life (NIWL)		Swedish Council for Working Life Research (RALF)	
2001			Swedish Council for Working Life and Social Research (FAS)	Swedish Governmental Agency for Innovation Systems (Vinnova)
2007				
2014				

In the early 1990s, all public institutions involved in working life research were reviewed by the government and a reform was implemented in order to improve their efficiency and scientific quality. Both the Working Life Centre and the Work Environment Fund experienced a drop in funding levels. In 1995, the Working Life Centre and the Work Environment Institute were merged into a new institute: the NIWL. In the same year, a new funding organization for working life research was established called RALF (see Tab. 1). The creation of NIWL caused a further drop in public funding levels due to a reduction of work environmental health research compared with the previous Work Environment Research (FAS, 2009).

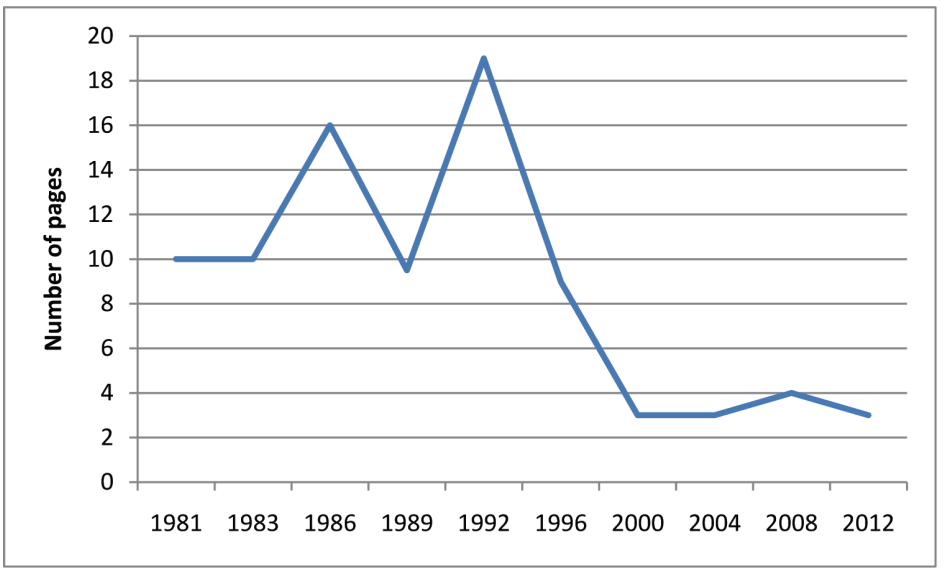
In 2001, as part of a complete reorganization of Swedish science policy, RALF's budget was split in two and distributed to two new organizations. Half the budget went to Swedish Governmental Agency for Innovation Systems (Vinnova). The other half went to the Swedish Council for Working Life and Social Research (FAS)[1]. Vinnova's share became integrated in the overall budget with only limited focus on working life questions. As a consequence, there was yet a further reduction of the public research funding levels dedicated to working life research (FAS, 2009).

In 2007, the government closed down the National Institute of Working Life, which led to a dramatic decline in the number of people active in the field. Two years after the closure, only half of the 200 scientists who had been employed by NIWL were still active in the field (Sturesson, 2008). Today, instead of one large public institute, the government funds a few smaller institutes dedicated to issues that partly or fully relate to work: the Swedish Agency for Health and Care Services Analysis (*Vårdanalys* in Swedish), established in 2011; the Swedish Social Insurance Inspectorate (*Inspektionen för socialförsäkringen* in Swedish) established in 2009; and the Institute for Evaluation of Labour Market and Education Policy (*Institutet för arbetsmarknads- och utbildningspolitisk utvärdering* in Swedish), established in 2007.

The first study: Working Life Research in Governments texts

The first study made for this article is based on government documents. The purpose of the study is to detect changes in how the Swedish government used the concept

Figure 1: Number of pages dedicated to working life research in Swedish research bills 1980–2012



"working life research" in the research bills and in other government documents. These research bills present Swedish science policy and are presented to parliament every 3–4 years.[3]

One outcome of this study was that there has been a quantitative decline in the space allotted to the area in these bills. As illustrated in Fig. 1, approximately 10–20 pages were written about working life research in the 1980s and 1990s, with a peak before 1995, and a significant decline after 2000 (the exact number of pages is listed in the Annex). To some extent, this has to do with a decline of the overall number of pages after 2000, when the structure changed from a division by ministry (Labor market, Social affairs, and so on) to a more integrated approach based on strategic areas of research. In the 1980s and 1990s, the bills contained between 340 and 530 pages; from 2001, onwards they contained between 290 and 301 pages. Nevertheless, the percentage of pages dedicated to working life research was much higher (2%–3.6%) before than after 2001 (between 1% and 1.4%).

Another outcome of the study was that "working life research" has been decreasingly present in the headings in the research bills (the headings are listed in the Annex). Until the mid-1990s, all research bills contained a separate section with a heading with the focus on working life research (*Arbetslivsforskning* in Swedish). After Gov. bill. 1996/97:5, working life research became one of several topics listed in a chapter on "other research areas" (i.e., it was not included among the "strategic" research areas mentioned earlier in the bills). In the last bill (Gov. Bill 2012/2013:30), for the first time since 1978, working life research was not mentioned in any heading of the bill except in relation with the Swedish Council for Working Life and Social Research.

In addition to the count of pages and the search for the concept in headings, the study also included an analysis of the texts. The results showed that the concept "working life research" first appeared in the 1970s under the name "behavioral scientific working life

research" (*Beteendevetenskaplig arbetslivsforskning* in Swedish) (SOU, 1973:55). However, until the 1990s, this concept did not include work environment research. All research bills published in the 1980s used the heading "work environment and working life research," describing two closely related but separate areas, carried out not only at the universities and hospitals but also in two separate institutes: the institute dedicated to work environment research and the Working Life Centre, with a purpose to:

> *carry out and promote research and development about conditions related to individuals and groups in working life, relations between the social partners, questions relating to influence in working life as well as work organization and its functioning.* (Gov. bill 1986/87:80, Annex 8, p. 15, author's translation)

In the 1989 bill, the division between environmental health and working life disappeared and "working life research" came to indicate both areas, as mentioned in a government report about the organization of working life research that preceded subsequent reforms of the research area: *Furthermore, the investigation does not make any difference between the increasingly integrated concepts work environment and working life research. The former is rather considered a part of the latter*. (SOU, 1990:54, p. 13. Author's translation). The conceptual integration of the two areas was confirmed in a bill outlining the new organization of working life: *Working life research is here used as a generic term for research including physical working environment, ergonomics, work organization, working times and codetermination in the working life* (Gov. bill 1990/91:69, p.3. Author's translation). Furthermore, the establishment of the NIWL in 1995 was a deliberate attempt at promoting multidisciplinary research along the lines set out 5 years earlier. The instruction to the institute stated that:

> *The purpose of the National Institute for Working Life is to carry out and promote research, training, development projects and international collaboration relating to working life, work environment, the conditions of women in working life and labor market relations. (…) Relevance for the development of working life and scientific quality shall be two important assessment criteria for the activities of the institute. Multidiorganizationsciplinary research shall be one of the hallmarks of the institute.* (Gov. bill 1996/97:5, Part 12, p.242, author's translation)

Since the millennium shift, descriptions of working life research in the research bills have increasingly reflected the current priority of Swedish labor market policies: to increase the labor participation rate. The following passage from the 2012/2013 research bill illustrates the current policy with regard to working life research. It also reveals that the government seems to have gone back to the linguistic division between work environment and working life research:

> *The functioning of the labor market and development of working life are of great importance to the development of society. It is therefore of great importance that working life and work environment research of high quality are carried out to sufficient extent. In order to obtain a high labor participation rate and longer participation in the labor force, research is needed about how an inclusive, developing and healthy working life is created with good work environment that does not prematurely exclude people because of injuries or ill health.* (Gov. bill 2012/13:30, p. 163, author's translation).

Related to this focus on an inclusive labor market, the last government bill (Gov. bill 2012/13:30) provides additional levels of public research funding to certain areas. One of these areas is the demographic challenges of an aging population. Another area, which is related to demographic change, is the efficiency and organization of the healthcare system. A third priority is mental health.

The second study: Interviews with researchers

One conclusion from the second study, which consisted of interviews with scientists, was that "working life research" is a concept that has been used more by public institutes and research funding organizations than by scientists at universities. According to Torsten Björkman in an essay on the establishment of work science as a university discipline (Högskoleverket, 2006), two groups call themselves work scientists in Sweden. The first consists of engineers specialized in man-machine interaction/human factors at work. The second is a heterogeneous group of scientists with roots in one of a number of "work sciences", including occupational medicine, work psychology, work sociology, and others. The results from the interviews partly confirm Björkman's picture. When asking the 13 currently active researches if they considered themselves working life researchers, one said no, four gave ambiguous answers, and eight were clearly affirmative. The only person who gave a clear "no" was an economist active at the Swedish Institute for Social Research (SOFI, part of Stockholm University), who claimed that although work was the object of much research at the institute, none of its employees would define themselves as working life researchers. When asked why, the interviewee referred to the history of SOFI and that it had been important to those employed there to be identified with their academic discipline:

> *I think that there was some kind of differentiation between the National Institute for Working Life and SOFI. It is very possible that when this institute started in the 1980s, people defined themselves as working life researchers but to obtain a position at the university, it is necessary to be very connected to your discipline and be able to publish in your discipline. And our discipline is exactly these disciplines [sociology and economics], and then you have to write in a particular way and publish in the general sociologist journals or economist journals.*

The main reason for doubt among the persons unable to give a straight yes or no was that their own discipline (two persons from the field of occupational health, one from business administration, and one from economic history) was more important to their professional identity than their identification with working life research. The economic historian described the relationship to working life research as one field of many in this person's identity:

> *in a way yes and in a way no, I would say. And maybe that is because I work here and I am increasingly calling myself a feminist labor historian. The concept labor history, to me, includes both working life research and research about the labor movement.*

Another of the hesitant persons had not reflected on the question earlier:

> *I have never thought in those terms. I have always perceived myself as an environment health researcher but during the past years one has started to use the term working life to*

a greater extent so today maybe I would call myself a working life researcher. I see myself primarily as researcher in occupational and environmental health. That would actually be my first identity.

The persons who identified themselves as working life researchers had, with only one exception, one or both of the following characteristics: either they had worked at the NIWL or they worked for departments of work science or universities/institutes of technology. The exception was a person at a department of occupational medicine who said that working life research is very broad, as it includes occupational health and many other areas.

On the question whether the interviewees considered themselves work scientists, a similar pattern emerged: only those employed at departments of work science and at technological universities and institutes said yes.

When asked about the definition of working life research, all interviewees presented slightly varying descriptions of a broad multidisciplinary research area. Several said that a working life researcher must understand several disciplines and be able to master several levels of analysis. One respondent said that salaried work was a continuous theme in working life research. Another researcher described working life research as the combined knowledge about work, forms of work, and the human in work.

On the follow-up question, whether the interviewees thought that work science and working life research was the same thing, responses were more varied. The economist from SOFI did not know what work science was, so was not able to make the comparison. Among the others, a majority said that work science and working life research are not the same. Most respondents viewed work science as one of several university disciplines included in the broader concept of working life research. One pointed at the fact that work science has a set of theories, like any other discipline, whereas working life is the object of study:

working life research can be exercised within many disciplines. (…) I see work science as something you bring with you into working life research. You bring theory. But this is not, in my opinion, a clear delimitation (…) the object working life is being researched and then that is what you do, while work science in some way is a discipline.

Three respondents, all affiliated to university departments of work science, considered working life research and work science to be the same thing. According to one of them:

I see them as the same thing. Within sociology we sometimes talk about labor market research and there is a strong tradition of labor market research here. (…) But working life research is broader. It is also about what happens at the level of the workplace, what happens to the working conditions of individuals for all levels: society, organization and individual level. I think that it is strength in work science to be able to look at problems from all angles, to give a much more complex picture of a phenomenon and that you can look at it at several levels.

When asked about changes and current trends in the definition of the area, several of the respondents declared that "work" and "working life" had become less visible in the names of departments and in the curricula at the universities.

The respondent from KTH Royal Institute of Technology commented that the department of work science had shrunk in the past years, whereas the department of ergonomics had grown. When asked about other technical universities, the interviewee from KTH

added that work science has had a similar declining development at other technical universities, such as the University of Linköping and Chalmers University of Technology, where research increasingly deals with human factors, and Lund University where design is overtaking work science. In conclusion, the respondent was under the impression that Luleå University of Technology would soon be the only technical university using work science in the name of a department. When asked whether the declining use of the concept work science is related to bad reputation, the interviewee said that many connect it with the 1970s in a negative way. To illustrate this point, the person told about a student survey carried out at the University of Linköping to find out about attitudes toward different concepts:

> *It transpired that ergonomic design, not ergonomics only but the word "design," was very popular among the students. Work science came out very low, but they were not experienced enough to know what it meant. When they tried to guess they said: "I guess it is the history of Marxism and that we are certainly not interested in!"*

The interviewee from Luleå University of Technology repeated the point that work science was becoming invisible:

> *At my own university, the department of work science disappeared and we became a department under the Institution for Economics, Technology and Society. We had to fight pretty hard for the department to be able to keep the name work science.*

When asked why the concept was disappearing, several of the interviewees referred to the increasing pressure on institutions to be financially self-sufficient through teaching and external research grants. If financial goals were not met, there was a risk that departments would have to merge with others in order to fund the (larger) economic unit. The respondent from Luleå University of Technology lamented that work science was not included in the university's marketing strategies:

> *instead they display other key words, among which work science does not fit as a word and hardly as a phenomenon (…) I can imagine that it is the pressure from trends of profitability and that one must publish and pull in money. Also, there are fashionable words that circulate. Right now they are innovation; growth etc. (…) universities must market themselves and market their courses. (…) Today it is completely impossible to organize work environment courses for civil engineers. (…) This is a sign that work environment does not sound good, it does not sell (…) it changed names a few years ago and now it is called "technical design". It is still exactly the same course (…) design sounds cooler than work environment.*

Analysis: Why "working life research" seems to be disappearing

The main results from the first study were two. The first of those was that there has been a gradual decline in attention to working life research in the research bills since the 1990s. The second result was that the meaning of the concept changed in the early 1990s from being related to co-determination and work organization into a broader concept, including work organization, work environment, and the labor market.

To explain the decline in attention to the area, it is first necessary to look into why there was so much attention to working life research before 1990. One explanatory factor for the increased levels of political attention and public funding to the area was the reigning science policy paradigm of the 1970s and 1980s, which was generally favorable to problem-oriented research and questions related to democracy and utility (Edqvist, 2003; Elzinga & Jamison, 1995; Ruivo, 1994). Another reason was the Social Democratic political project (in government from the 1930s to 2006 with exception for 1976-1981 and 1991-1993) to create a middle way between capitalism and socialism. This project led to a big government administration apparatus with considerable influence by the social partners through a corporativist administrative system. Increased political influence of the trade unions in the administration, and in particular in matters related to work, gave working life research a political ally (Johansson, 1999) that worked for the establishment of the co-determination law in 1976, new work environment laws, and increased levels of public funding to working life research.

Another explanatory factor for the increased focus on working life research was changes in the composition of the labor force. The successful political efforts to bring more women into the workforce brought issues of work-life balance to the political agenda, making "working life" a more suitable term than previous labels for work related research (Hirdman, 1998). In addition, Sweden experienced previously unknown levels of immigration from non-Scandinavian countries, bringing new issues to the agendas of politics and research.

One explanation for the gradual decline of working life research in research bills, illustrated in Fig. 1, was a shift in international science policy making in the 1980s-1990s from problem-oriented, applied research to strategic research, and to a model based more on competition between scientists and universities than on government intervention (Edqvist, 2003). The policy shift explains why working life research, from the 1996/1997 research bill onwards, was no longer included in the first sections of "strategic research areas," but became one of many "other research areas" further back in the document. The decline in attention to working life research is probably also explained by the abolishment of the NIWL in 2007, which was, it has been argued, motivated by criticism of its close relationship with the Social Democratic party and the trade unions (Johansson & Abrahamsson, 2009).

The quote below, from the editorial page of a leading Swedish Newspaper (DN 3 Nov 2006), illustrates both arguments listed above: (1) that NIWL was "ideologically tainted" (i.e., too close to the Social Democratic government and the trade unions); (2) that NIWL was scientifically weak, which was an argument inspired by the dominant science policy paradigm, according to which any research except for the "free" and unbiased science that is performed at universities is of lower quality:

> Sweden needs research about conditions at work, and maybe this should take place at an institute. But it cannot be so biased, so tainted ideologically and so scientifically weak as NIWL. If the National Institute for Working Life had done its academic homework it would probably not have been forced to close down.

Another possible explanation for the disappearance of working life research from the science bills is the shifts in labor market policy, especially after the recession in the early 1990s. The co-determination debate of the 1970s (von Otter, 2008) and the trade union appeals for "Good work" in the 1990s (Johansson, 1999; Johansson & Abrahamsson,

2009) were replaced by a political focus on a more "inclusive" labor market, in which it is up to each individual, rather than society as a whole, to become and stay "included." Instead of allocating more public funding to working life research, priority areas include research on how to combat mental ill health and problems associated with demographic change and how to improve the performance of the Swedish healthcare system.

In the early 1990s, the official explanation for including work environment research into the concept working life research was the perceived need to promote multidisciplinary research. An unofficial explanation was the recession that hit Sweden in the early 1990s, leading to budget cuts to all of the public sector including science. The merger of work environment and work organization research in the NIWL in 1995 gave the government the possibility to make reorganizations, including reduced funding of work environment research (FAS, 2009).

When placed in relation to OWL (Jacobsen et al., 2013), Swedish working life research of the 1970s and 1980s can be said to include two of the three suggested spheres: the individual sphere of welfare research, because of focus on work/life balance and the citizen sphere of HRM research, because of the emphasis on co-determination. The third sphere, work environment and the focus on the employee, was not integrated since work environment research was carried out separately in the Work Environment Institute (see Tab. 1) and university departments. The government reform in the 1990s, which led to a new funding organization and the NIWL, changed the situation as work environment research became integrated into the concept working life research. The objective of NIWL was in many respects similar to the idea of OWL, that is, to combine research focusing on different aspects of the individual in relation to work. In 2014, multidisciplinary research related to various aspects of work still takes place at Swedish universities. However, as demonstrated by the interviews, not all researchers identify themselves as work scientists or working life researchers. Furthermore, a forthcoming article by Håkansta will show that only a fraction of the project grant applications submitted to the Swedish Research Council for Health, Working Life and Welfare classified as working life research come from university departments or institutes labelled "work" or "labor." Instead, disciplines represented among the applicants include health care management, nursing science, architecture, sports science, and geriatrics.

The second study showed that "work science" is disappearing from university curricula as well as from the names of university departments. Another finding was that the identification of researchers with "work science" or "working life research" is stronger among scientists previously employed by one of the research institutes (Working Life Centre and NIWL) and that younger people seem to be either negative about or unfamiliar with the concepts. The varying degree to which scientists in Sweden identify with the concepts "work science" and "working life research" was manifested in 2008 during the establishment of the Swedish organization for working life research FALF (www.falf.se). The interviews revealed that a discussion took place between those who believed that "work science" was a more overarching and summarizing concept and those in favor of "working life research." In the end, those in favor of "working life research" won, hence, the current name of the organization.

One reason why work science is disappearing from the universities, according to the interviewees, is increasingly a tough competition among university departments and between universities for students and research funding, leading to reorganization and strategies that seldom seem to favor work science. This situation is related to the current science policy paradigm by which a competitive, market-oriented system has been

introduced (Olsson & Peters, 2005). In order to attract students, who have become increasingly important for the survival of university departments and universities, the term work science has been replaced by other terms with apparent more appeal, such as design and productivity. This shift in interest and terminology, especially in the younger generation, is likely to be explained by normative changes in society causing a more instrumental and individualist attitude to work, as argued by von Otter (2008).

A root cause of the apparent disappearance of working life research and work science from government documents and the universities is the influence of neoliberal ideas on policy making that began in the 1980s-1990s. For science policy making, this ideological change of emphasis meant that problem-oriented research received less political attention (Olsson & Peters, 2005). For labor market policy-making, the ideological shift meant a weaker position for the traditional ally of working life research: the trade unions (Johansson, 1999; Kaufman, 2004). In addition to its effects on policy making and its associated lower levels of research funding, the ideological shift also affected norms and behaviors from a more solidary attitude of the "right to good work" (Johansson, 1999; Johansson & Abrahamsson, 2009) to a more individualistic approach whereby individuals must be "employable" and stay integrated in the labor force for as many years as possible.

Concluding remarks

This article argues that the concept "working life research" appears to be disappearing both from Swedish science policy documents and from the Swedish universities. The author argues that a root cause of this trend is the influence of neoliberal ideas on Swedish policy making since the 1990s, which has affected Swedish labor market policy as well as Swedish science policy, causing declining interest in working life research at universities and decreasing levels of ear-marked public research funding to the area.

However, the apparent decline of the concept does not mean that there is no interest in research about working life. This article argues that university courses about the environment and organization of work are still available at Swedish universities, but under other names than work science. Furthermore, although the government does not call it working life research any more, it is investing substantial amounts of funding to research areas associated to work, such as the health of groups currently excluded from the work force and problems related to the demographic challenge of an ageing population. Another prioritized area is the health care sector where government encourages the scientific community to come up with innovative solutions to improve organization and quality.

The interviews done for this article revealed that some of the scientists engaged in work related research identify with "work science" and others with "working life research." However, not everyone does so and in the younger generation of researchers the identification with working life research appears to be disappearing.

When placing these results in relation to the suggestion by Jacobsen et al. (2013) for multidisciplinary OWL, a question of attitude and strategy presents itself. Is the working life research community, for example, the organizers of this journal and the Nordic Working Life Conference, taking the changing attitudes and interests identified in this article into account? More concretely, are the scientists who do not identify themselves as working life researchers aware of this journal or the conference? And are they asked to participate in multidisciplinary working life projects?

Another pertinent question is considering the increasing pressure on scientists to perform in their academic discipline and the shortage of scientific journals with a

multidisciplinary approach, is it possible or even desirable to aim for OWL and a larger circle of working life researchers? These are questions that could be taken up by future research on the development of working life research as well as by the working life researchers themselves in their endeavors to consolidate and strengthen the area.

References

Abrahamsson, L, Johansson, J (2013) 'One hundred years of inertia. An exposé of the Concept of the Psychosocial Work Environment in Swedish Policy and Research'. *Nordic Journal of Working Life Research* 3(1): 5–29.

Albin, M, Johansson, G, Järvholm, B, Wadensjö E (2009) 'Att säkra arbetslivsforskning av hög relevans och kvalitet' (To secure working life research of high relevance and quality). *Arbetsmarknad & Arbetsliv* 15(2): 55–68.

Aronsson, G., Hellgren, J., Isaksson, K., Johanson, G., Sverke, M., Torbiörn, I. (2012) *Arbets- och organisationspsykologi: Individ och organisation i samspel* (Work and organisation psychology: Interaction between individual and organisation). Stockholm: Natur & Kultur.

Benner, M (2001) *Kontrovers och konsensus. Vetenskap och politik i svenskt 1990-tal* (Controversy and Consensus: Swedish Science and politics in the 1990s). Stockholm: SISTER.

Benner, M (2009) *Kunskapsnation i kris?* (Knowledge nation in crisis?) Stockholm: Sister.

Delaney, J. T. (2006) 'The Flattening of Industrial Relations' in *Industrial and Labor Relations Review* 59(3): 497–501

Edqvist, O (2003) 'Layered Science and Science Policies', *Minerva* 41: 207–221.

Elzinga, A and Jamison, A (1995) 'Changing Policy Agendas in Science and Technology' in *Handbook of science and technology studies*. Jasanoff, S., Merkle, GE, Petersen, JC, Pinch, T (eds.): 572–597. London: Sage.

FAS (2009) *Svensk arbetslivsforskning – en resurs för välfärd, hälsa och tillväxt. Att säkra forskning av hög relevans och kvalitet (Swedish working life research. To secure research of high relevance and quality)*. Stockholm: FAS.

Giertz, E (2008) 'Arbetsstudier – en grundbult i den svenska modellen. In E Giertz (Ed.) Då förändrades Sverige. 25 experter beskriver drivkrafter bakom utvecklingen. Pozkal, Poland: Studentlitteratur.

Giertz, E (1981) *Om arbetsstudieutbildningens institutionalisering i Sverige.* Stockholm: Institutionen för industriell ekonomi och organiosation. KTH.

Glimell, H (1997) *Den produktiva kroppen. En studie om arbetsvetenskap som idé, praktik och politik*. (The productive body. A study about work science as idea, practice and policy). Stockholm/Stehag: Symposion.

Government Bill 1978/79:119: *Om vissa frågor rörande forskning och forskarutbildning* (About certain questions related to research and graduate training)

Government Bill 1983/84:107 *Om forskning* (About research). Stockholm: Government.

Government Bill 1986/87:80 *Om forskning* (About research). Stockholm: Government.

Government Bill 1989/90:90 *Om forskning* (About research). Stockholm: Government.

Government Bill 1992/93:170 *Forskning för kunskap och framsteg* (Research for renewal and progress). Stockholm: Government.

Government Bill 1996/97:5 *Forskning och samhälle* (Research and society). Stockholm: Government.

Government Bill 2000/01:3 *Forskning och förnyelse* (Research and renewal) Stockholm: Government.

Government Bill 2004/05:80 *Forskning om ett bättre liv* (Research about a better life). Stockholm: Government.

Government Bill 2008/09:50 *Ett lyft för forskning och innovation*. (A Lift for Research and Innovation). Stockholm: Government.

Government Bill 2012/13:30 *Forskning och innovation* (Research and Innovation). Stockholm: Government.

Gustafsson, R. Å. and Kjellberg, A (1983) *Beteendevetenskaplig arbetsmiljöforskning. Historisk bakgrund och utveckling i Sverige* Rapport 1983:6 (Behavioral science in work environment research. Historical background and development in Sweden). Stockholm: Arbetarskyddsfonden.

Hirdman, Y (1998) *Med kluven tunga. LO och Genusordningen*. Atlas: Uddevalla.

Hvid, H., Bergholm, T, Gonäs, L, Juul, I, Kamp, A, Karlsson, J., Kasvio, A, Klemsdal, L., Salomon, R., Skorstad, E. (2011): 'Nordic Working Life Research – Continuity and Renewal' in *Nordic journal of working life studies* 1(1): 3–21.

Hyman, R (2006): 'An Anglo-European Perspective on Industrial Relations Research' in *Arbetsmarknad & Arbetsliv* 13(3–4): 29–41.

Håkansta, C (2013): 'Between Science and Politics' in *Arbete och Hälsa* (Work and Health) 47(7).

Högskoleverket (2006): *Utvärdering av grund- och forskarutbildning i arbetsvetenskap vid svenska universitet och högskolor* Rapport 2006:5 R (Evaluation of undergraduate and graduate university programmes in work science at Swedish universities and colleges). Stockholm: Högskoleverket.

Jacobsen, S, Bramming, P, Holt, H, Holt Larsen, H (2013) 'Quality in Modern Nordic Working Life – Investigating Three Related Research Perspectives and Their Possible Cross-Fertilization'. *Nordic journal of working life studies* 3(3): 47–80.

Johansson, J (1999) 'A survey of Swedish work environmental and occupational research during the twentieth century'. *Human Factors and Ergonomics* 9(4): 1–14.

Johansson, J, Abrahamsson, L (2009) 'The good work – A Swedish trade union vision in the shadow of lean production'. *Applied Ergonomics* 40: 775–780.

Kaufman, B (2004)Geneva : International Labor Office.

Lennerlöf, L (2008): *Mitt arbetsliv* (My working life). Stockholm: Premiss.

Levi, L (2002): *Stressen I mitt liv* (The stress in my life). Stockholm: Natur och kultur.

Olssen, M; Peters, M. A. (2005) 'Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism' in *Journal of Education Policy* 20 (3): 313–345.

Oscarsson, B (1997) *25 år av arbetslivets förnyelse – forskning och utveckling på arbetslivsområdet 1972–1997* (25 years for the renewal of working life – research and development in the area of working life 1972–1997). Stockholm: Rådet för arbetslivsforskning.

Rolfer, B, Mathiasson, SE, Vingård, E (2012) *Forskning i fara? Forskarna själva om dagens arbetsmiljöforskning* (Research in danger? Researchers about today's Swedish occupational health research). Gävle: Gävle University Press.

Ruivo, B (1994) 'Phases" or "Paradigms" of Science Policy?'. *Science and Public Policy*. 21 (3):157–164.

Schilling, P (2005) *Research as source of strategic opportunity? Re-thinking research policy development in the late 20th century*. Umeå: Umeå University Press.

Skerfving, S, Hogstedt, C, Welinder, H (2007) 'Broad overview of the history of Swedish occupational health research'. *Scand J Work Environ Health*, vol 33, suppl 1. pp 6–19.

SOU 1973:55 *Beteendevetenskaplig arbetslivsforskning* (Government Official Reports, Behavioural working life research). Stockholm: Government.

SOU 1990:54 *Arbetslivsforskning: Inriktning, Organisation, Finansiering.* (Government Official Reports, Working Life Research – Direction, Organisation, Funding). Stockholm: Government.

SOU 2011:60 *Ett nationellt kunskapscentrum för arbetsmiljö – behov och förutsättningar*. (Government Official Reports, A National Knowledge Centre for the Work Environment – Objectives and Activities). Stockholm: Government.

Theorell T (2007) 'Psychosocial factors in research on work conditions and health in Sweden'. *Scand J Work Environ Health*, vol 33, suppl 1. Pp 20–26.
Von Otter C (2008)'MBL i postmodern tid: om arbetslivet som konkurrensfördel' (Co-determination in postmodern times: about working life as comparative advantage). *Arbetsliv i omvandling* 1: 8–43.
Wegman, DH, Hogstedt, C (2007) 'Status report on Swedish work environment research—history, context and international evaluation'. *Scand J Work Environ Health* 33 suppl 1: 1–53.
Young, S, Peetz, D, Marais, M. (2011): 'The impact of journal ranking fetishism on Australian policy-related research'. *Australian Universities Review* 53(2): 77–87.
Newspaper article:
Dagens nyheter 11 March 2006: Debatt av Peter Wolodarski: *När dålig forskning blir "världsledande"* (When bad research becomes "world leading").

Annex. Working life research in research bills presented to the Swedish parliament

Research bill	Working life research under the Ministry of Labor	Headings related to working life research in the research bills (translated from Swedish by the author)	Appr. number of pages	Phases
Gov. bill 1978/79:119	-	-	½	
Gov. bill 1981/82:106	Yes	• Work environment and *working life research* • The labour market political research	8 + 2 = 10	Build-up
Gov. bill 1983/84:107	Yes	• Work environment and *working life research* • Labour market political research	8 + 2 = 10	
Gov. bill 1986/87:80	Yes	• Work environment and *working life research* • Labour market political research	10 + 6 = 16	Re-organisation
Gov. bill 1989/90:90	Yes	• *Working life research* • Labour market political research	7 + 2,5 = 9,5	
Gov. bill 1992/93:170	Yes	• *Working life research* etc. • Labour market political research	11 + 8 = 19	
Gov. bill 1996/97:5	Yes	• *Research* and development in the area of *working life* • Labour market political research	6,5 + 2,5 = 9	
Gov. bill 2000/01:3		• Research council for working life and social research • *Research* around transports, emission, *working life*, tourism, competition, regional politics etc.	1 + 2 = 3	Decline
Gov. bill 2004/05:80		• Research council for working life and social research • *Research* around IT, transport, *working life*, energy, equality, tourism etc.	1 + 2 = 3	
Gov. bill 2008/09:50		• *Working life research* • Research about labour market, work organization and working environment	1,5 + 2,5 = 4	
Gov. bill 2012/13:30		• Research council for working life and social research	3	

End notes

[1] In 2013, after a government decision, FAS changed name to Swedish Research Council for Health, Working Life and Welfare (Forte).

[2] During this period, occupational health was conducted in four different organisations. 1938–1965: a department of National Institute of Public Health (*Statens institut för folkhälsa*), 1966–1971: Institute of Occupational Medicine (*Arbetsmedicinska institutet*), 1972–1986: Department at National Board of Workers' Protection (*Arbetarskyddsstyrelsen*), 1987–94: Work Environment Institute (*Arbetsmiljöinstitutet*).

[3] The first bill (Gov. bill 1978/1979:119) was not been included because it was more of a discussion paper setting the scene for future bills and had not the structure of the proceeding ones.