Telework: A new mode of gendered segmentation? Results from a Study in Canada

Diane-Gabrielle Tremblay

Abstract: Telework is seen as a way to reduce traffic congestion and urban pollution, as a new mode of work organization, and oftentimes as a way of balancing work and family. Our research not only provides a picture of teleworkers in Canada, but also goes beyond the non-gendered percentages which are more frequent in the analyses. This reveals an interesting fact, which we call a gendered segmentation of telework or telecommuting. In this paper, we stress the gendered differences in the type of work done, differentiations in tasks, in the autonomy of the decision to telecommute, as well as differentiations in work organization. We show that work organization and tasks are differentiated according to gender and we will see that while the practice of telework is gendered in types of task and time spent at home, the motives for telework, advantages and disadvantages, are similar for men and women.

Résumé : Le télétravail est vu comme un nouveau mode d’organisation du travail, et parfois aussi comme une façon de mieux concilier l’emploi et la famille. Notre article présente une analyse différenciée selon le sexe du télétravail au Canada, et met en relief ce que nous avons appelé une segmentation différenciée selon le sexe du télétravail. Nous soulignons les différences relatives au type de travail effectué, aux tâches, à l’autonomie dans la prise de décision de faire du télétravail, autant d’éléments différenciés selon le sexe. Nous exposons aussi les avantages et inconvénients que voient les hommes et les femmes dans le fait de faire du télétravail et constatons que contrairement à ce qu’indiquaient certains auteurs, les avantages du télétravail sont relativement les mêmes chez les deux groupes.

Keywords: Telework, Gendered segmentation, Autonomy, Work organization, Canada

Introduction
Telework has been given more and more attention over recent years as as telework possibilities expand with information technology developments. It is seen as a way to reduce traffic congestion and urban pollution (Benchimol, 1994), as a new mode of work organization (Boivin, Rivard, & Aubert 1996; Tremblay, 1997, 1998).

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2001), but also oftentimes as a way of balancing work and family (Tremblay, 2001a; Duxbury, Higgins, & Neufeld 1998; Richter & Meshulam, 1993). Various authors have held different views on this issue (Cooper, 1996; Kurland & Bailey, 1999), but a good number of American authors have centred their interest on how to make telecommuting function well within a firm (Goldsborough, 2000), although there have been relatively few critical studies, and practically no gendered study, partly due to the fact that most authors concentrate on one professional category and do not have a general view of the telecommuting labour market. Our own research not only provides a picture of who are the teleworkers in Canada, but goes beyond the non-gendered percentages towards a gendered view of the subject. This reveals an interesting fact, which we call a “gendered segmentation” of telework or telecommuting.

In this paper we present data to support this thesis of gendered segmentation of telework, indicating who the teleworkers are in terms of sector of activity and also of the type of work they do, but more importantly as concerns the gendered differentiation of tasks, the autonomy of decision to telecommute, as well as work organization and conditions of work. We hypothesized that work organization and tasks are differentiated according to gender (Tremblay & De Sève, 1996), and we also explored whether men and women see the same advantages and disadvantages in telework or if, as some studies indicate (Felstead & Jewson 2000; Duxbury, Higgins, & Neufeld, 1998), work-family balancing is really an important objective for women, while men telecommute for other reasons.

Literature review
Telecommuting has been the object of many articles in the popular press, but also of a few scientific studies over recent years, although it seems less scientific studies were done in America than in Britain to date (Felstead & Jewson, 2000; Felstead, Jewson, Walters, & Phizacklea, 2000a, 2000b; Huws, Wermner, & Robinson 1990; Cooper, 1996; Kurland & Bailey, 1999). Telework has also attracted interest in Canada (Akyeampong & Nadwodny, 2001; Duxbury, Higgins, & Mills, 1992; Duxbury, Higgins, & Neufeld, 1998; Menzies, 1997). However many of these studies treat all forms of “home work” simultaneously, and few consider women and men separately, and when they do, they fail to consider the issue we focus on. Further, most studies concentrate on one or a few professional groups.

Our study differs, since it is based not only on case studies of six organizations but also on a large, representative survey of the Québec population and because it takes gender into account on all dimensions. We also centred our research on new forms of telework based on the use of IT (information technology). This newer form of home work, which we prefer to call telework, has attracted attention in Europe (CEE, 1994; Bangemann, 1994), in Belgium (Thomsis, 2002; Vandercammen, 1996) and in France (Benchimol, 1994), and is sometimes also considered in some of the U.S. and British studies mentioned previously, but is rarely the only mode of telework considered in the surveys.

Many studies have only tried to determine the number of telecommuters, and this is a difficult endeavour, especially when one wants to compare different coun-
tries (Akyeampong 1997; Akyeampong & Siroonian, 1993; Felstead & Jewson, 1997, 2000). Other works have centred on the management of telecommuters (Chapman, Sheehy, Heywood, Doolley, & Collins, 1995; Bussières, Lewis, & Thomas, 1999) and on the impacts of telecommuting and the factors that contribute to success in telecommuting (St-Onge & Lagassé, 1996; St-Onge, Haines, & Sevin, 2000; Olson, 1989; Korte, 1988; Christensen, 1987; Konradt & Mälecke, 2000).

Studies on conditions of work and autonomy of persons doing telework are clearly less numerous, although some British studies did look at tasks done by teleworkers (Felstead & Jewson, 2000; Huws, Werner, & Robinson, 1990; Hafer, 1992). Hafer for example, indicated that some tasks could not be done by using telecommuting.

This article presents results from a research study on telework which was carried out in 2000. It basically deals with the following questions: Who are the teleworkers (their sex, age, the main sectors they are in, and the tasks they perform)? What is the impact of telework on work organization, on working conditions, and on work-family balance? The last question is included because telework is sometimes presented as a solution to problems of reconciling work and family responsibilities. Finally, what is the level of satisfaction among teleworkers? What advantages or disadvantages do women and men see in this type of work organization?

**Methodology of the research**

Our research was carried out in two stages. Firstly, we conducted a telephone survey in order to assess the proportion of the labour force that consists of teleworkers in Québec, the specific tasks they carry out, the satisfaction they derive from their work, and the advantages and disadvantages of their work. For this, we hired a survey firm to add a question to its regular phone survey in order to identify potential participants. After 10,590 phone calls, we had identified 520 respondents who worked from home with IT equipment and agreed to answer our survey. It should be noted that until now, no studies have measured the extent of “telework” (in opposition with “home work” in general, wherein many women are also found in piecework, that is work that is paid per product or piece work), nor is there a sufficient body of representative data on the reality and social issues of telework as experienced by those involved in it. This is a gap that we fill with our survey results.

Secondly, we carried out case studies in six organizations, interviewing 63 teleworkers, their supervisors, a number of their co-workers, as well as union representatives. The survey and interviews were carried out in 1999-2000. In the case studies, we covered both private and public organizations, teleworkers who have access to advanced technologies, others who use intermediate or average levels of technology as well as organizations with different types of management (rather traditional vs. rather modern participative contexts), who are for the most part unionized.
We interviewed various organizational actors associated with the telework program: managers (immediate supervisors and those in charge of the program), teleworkers, union representatives, information technology managers, and the teleworkers’ co-workers. Through these interviews, we were able to gather information on both the individual, organizational, and societal aspects of telework as well as on assessments of the telework program. We conducted semi-structured, face-to-face interviews, except for one case, where the interview was done by phone. Most of the interviews with the teleworkers themselves took place in their homes. All the interviews were recorded and lasted from one and a half to two hours. A case study was produced for each of the participating organizations based on the analysis of the interviews and the survey results. The data presented here are drawn from these two stages of the study, which is the survey plus six case studies.

**Extent of telework: A question of definition**

The lack of a common definition of telework makes it difficult to quantify this phenomenon. Moreover, many studies that provide data on the extent of telework or “home work” were not designed originally to study telework and thus the definitions are sometimes vague. Although telework often refers to those who work at home, various studies also refer to all the other forms of electronic outworking such as mobile work carried out in various locations outside the central office (by sales representatives, technicians, etc.), work by employees from a number of firms through telecentres or telecottages, and work by employees of the same firm in satellite offices. These two latter forms (the telecentre and satellite office) are apparently well developed in certain European countries, but they seem relatively rare in Canada.

The status of the teleworker is also poorly defined. The term teleworker may apply to a full-time home worker, which would include a self-employed worker, but it may also include a part-time travelling teleworker, or even a casual teleworker who occasionally works at home. The survey conducted as part of this research allowed us to identify the relative importance of these diverse realities. While bearing in mind these problems in defining telework, which have been analyzed in more detail in Tremblay (2001), let us now examine some of the data on the extent of telework in general.

A 1994 European Commission survey (CEE, 1994) indicates that the percentage of teleworkers varies from country to country, but they also indicate that this is a problem of definition, some being more restrictive than others.

Table 2 gives the percentage of teleworkers working at least half the time from home, according to another European survey. Here again, we need to stress the fact that definitions are not necessarily identical from one country to another. The European average seems rather stable, but there are disparities in the various countries and sudden changes (see Ireland and Great Britain) when definitions are changed.

The state of knowledge on the extent of telework in Canada reflects the definitional problems described above. The Labour Force Supplement on work
arrangements, carried out in November 1991 showed that 5.8% of Canadian workers work at home and this figure was confirmed by data from the 1991 Census in which it was found that 6.2% of the employed labour force worked at home; here, the definition is rather large, including all types of work at home. It is interesting to note that the two percentages are similar, which means that the measure is undoubtedly valid, although the definition is rather broad. More recent Labour Force data (2000) indicate that 8% of Canadian workers do so from home (either full or part time).

The trend is increasing, but only approximately 4% of the 10,590 initial respondents said that they were teleworkers in the restricted sense that we had defined, i.e., with use of IT. Of those who did, 58.8% were self-employed, 35%
were non-unionized employees, and 6.6% were unionized employees. It is interesting to note that our survey found that 60% of the teleworkers had been engaged in telework for more than two years, compared to only 11% for less than 6 months and 28% between 6 months and 2 years. These data may provide a clue as to the predictable growth of telework, which has increased 2 percentage points over a decade, and will probably continue to increase in coming years.

Who are the teleworkers?
The survey data relate to those persons who responded to the following screening question designed to identify teleworkers: “By teleworker, we mean a person who carries out paid work at home, mainly by computer; generally this work is transmitted to a client or employer via the Internet or on a diskette.” This broad definition includes self-employed workers. However, because our case studies refer only to salaried teleworkers working at home, some of the Tables in this article will include only the salaried workers in the survey, that is, 210 teleworkers in the stricter sense of the term. To better compare the data gathered in our interviews, we will sometimes present available survey data that specifically concern the teleworkers working full-time in their homes.

Personal characteristics of teleworkers
The following portrait emerges from our survey of salaried teleworkers:

- There are more men (58.8%) than women (41.2%) who do telework, but we will see later that their conditions and hours of telework are different;
- Most teleworkers (70%) are between 26 and 45 years old; 41.7% are between 35 and 45 years old;
- 47% have a spouse and one or more children; 22.7% have a spouse but no children; 19.4% are single without children;
- 60.6% of teleworkers have a university degree, 25.6% have a college diploma, and 12.5% have a high school diploma; these percentages are higher than those for the population as a whole.

The following profile emerges for the full-time teleworkers interviewed for our case studies, which represent a convenience sample:

- There is a higher representation of women (60%) than men (40% of the 63 people interviewed) in these teleworkers, who are full-time out of the office;
- The majority of teleworkers are between 36 and 45 years old;
- The majority live with a spouse and have children;
- One third have a high school diploma, one third have a college diploma, and one third have a university degree; the percentage of interviewees with diplomas or degrees is therefore lower than that of the population of teleworkers identified in our survey, because our case studies were conducted with mainly full-time teleworkers and these were administrative or clerical workers;
The workers interviewed have at least 5 to 10 years’ seniority in the organization, particularly because in the organizations studied, a certain level of seniority is often required to be eligible for telework.

Although the majority of salaried teleworkers in our survey are men, this is not true of salaried teleworkers who work exclusively out of their homes. In 67% of the latter cases, these teleworkers are women. It is therefore important to consider these data in relation to the type of job held. It should be recalled that women are over-represented in our case studies precisely because we studied full-time teleworkers and the majority of the full-time home jobs are those traditionally held by women (telephone operators, clerical workers, etc.). Most often, men hold the autonomous professional jobs and women hold salaried clerical jobs. Thus, our research highlights a pronounced gender-based differentiation of telework jobs in this specific dimension (full-time or part-time telework) and we will highlight more in the following pages.

On the other hand, the survey and case study data on age and family status are similar. The majority of teleworkers in the case studies are between 35 and 45 years old and live with their spouse and children. The survey showed that individuals engaged in telework belong to this same age group, that is, between 26 and 45 years old, and a high proportion of these are aged between 35 and 45.

**Sectors of activity of teleworkers**

Table 3 shows the distribution of sectors in which the respondents to the survey work. These data could unfortunately not be differentiated according to gender, but data from Table 4 will indicate clearly that women are concentrated in certain types of tasks.

<table>
<thead>
<tr>
<th>Sectors of activity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector (administration, health, education)</td>
<td>24.6</td>
</tr>
<tr>
<td>Manufacturing and industrial (transportation, construction, manufacturing)</td>
<td>13.0</td>
</tr>
<tr>
<td>Private Services (Financial, business, publicity, sales and others)</td>
<td>58.3</td>
</tr>
<tr>
<td>Agricultural sector</td>
<td>2.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**Types of tasks and jobs**

The studies on telework suggest that certain types of tasks lend themselves more to telework than do others (Hafer, 1992). However, our case studies seem to indicate that supervisors think that it is the characteristics of both the individual and the tasks which determine whether or not a situation is suited to telework.

In any event, our survey indicates that the tasks carried out by teleworkers at home have certain elements in common. In the case of individuals who carry out only a part of their work at home (executives and managers)—administrative
tasks, writing, accounting, and other tasks tend to be carried out at home. Many of
the other tasks carried out at home are done by computer, in particular tasks
related to software and Web site design or computer graphics in the case of men;
to secretarial work, accounting, and translation in the case of women (see
Table 4). There thus appears to be a gendered segmentation of telework tasks. This
is interesting since telework is often considered a new form of work organization
and one might expect it to be less differentiated according to gender and to be
prevalent mainly in new occupational categories.

Table 4: Distribution of persons* in telework according
to tasks and to gender**

<table>
<thead>
<tr>
<th>Type of work</th>
<th>Men %</th>
<th>Women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>12.3----</td>
<td>24.9++++</td>
</tr>
<tr>
<td>Software design or testing</td>
<td>10.3++++</td>
<td>1.4----</td>
</tr>
<tr>
<td>Website design or testing</td>
<td>8.1+++</td>
<td>1.9---</td>
</tr>
<tr>
<td>Infographics or commercial design</td>
<td>11.6++</td>
<td>6.1--</td>
</tr>
<tr>
<td>Writing or text entry</td>
<td>27.7</td>
<td>30.5</td>
</tr>
<tr>
<td>Secretarial work</td>
<td>0.3----</td>
<td>7.0++++</td>
</tr>
<tr>
<td>Editing</td>
<td>3.2--</td>
<td>7.5++</td>
</tr>
<tr>
<td>Translation</td>
<td>1.9----</td>
<td>9.9++++</td>
</tr>
<tr>
<td>Administration-management</td>
<td>14.5</td>
<td>11.3</td>
</tr>
<tr>
<td>Research on the Internet</td>
<td>11.0++</td>
<td>5.6--</td>
</tr>
</tbody>
</table>

* Here we have included self-employed teleworkers, so that there are 310 men respon-
dents and 213 women.

** The signs indicate statistical significance, from 0.05 (+ or -) to 0.001 (++++ or ----). This
was an open question and we do not show here the very small percentages, with no gen-
dered differences, such as music, consulting, or statistical work, which concerned only
about 1% of respondents.

As concerns professional categories of teleworkers, we find 16.2% of office
workers (women), 8.3% technical personnel (men), 35.2% professionals (mixed),
37.5% of managers (mainly men), and less than 1% for various other categories. If
we include self-employed, we find 10.3% office workers, 10.3% technical, 45.7%
professionals, and 26.8% managers. Others are sales persons, or blue collar
workers, in negligible percentages. Professionals are therefore the most important
category in telework, and all the more so if the self-employed are considered.
However, office work and technical categories are also important, and the first
especially for women. In office work, it is especially work that does not require
direct contacts with others, as was noted in the case studies. Office work is often a
mix of secretarial work, sometimes call centre work.

As concerns time spent working from home, Table 5 indicates that women
(and especially office workers) are the ones who find themselves most often
working full-time from home. On the contrary, men tend to work from home on a
part-time basis only. Only young men in the multimedia, Web site development,
and similar jobs work a higher percentage from home, up to full-time.
Our survey data indicate that of the persons working full-time from home, 45% are office workers, 25.8% managers, 22.6% professionals, 3.2% technical workers, and 3.2% salespersons. In our case studies, 40 of the 63 persons interviewed were always working from home, mainly in a clerical type of office work. The technical and professional workers (mainly men) tended to go to service calls, to clients’ offices, or to the office once in awhile. Here again, there is a gendered distribution, since women are more frequently full-time at home than men.

**The issues of autonomy and working conditions**

Felstead and Jewson (2000) note that there are often differences in working conditions between teleworkers and the rest of the organization’s employees. This may be surprising and certainly does not seem to apply to unionized environments such as the those in our case studies. However, since the majority of telework jobs are non-unionized, it is reasonable to ask whether or not Felstead and Jewson’s observations for England would hold for Canada.

**Work organization and autonomy of teleworkers**

In addition to teleworkers’ occupational categories or tasks (Table 4), which are often used as an indicator of degree of autonomy, the way in which the decision to do telework is made is an element that can be used to characterize degree of autonomy or discretion. Thus, the possibility of making one’s own decision reflects a degree of autonomy, while having to make the decision jointly with an employer reflects a more limited degree of autonomy.

Thus, 48.6% of all our survey respondents made the decision to do telework jointly with their supervisor while 45.8% made the decision on their own. According to the survey results, telework was imposed by employers on only 5.1% of respondents, which is confirmed by the data from our case studies, in which all the subjects had made the decision to do telework voluntarily. It should be noted that telework in the organizations is suggested on a voluntary basis and that the employee must first decide whether or not he or she would like to do telework. On the other hand, in the majority of cases, teleworkers are selected according to a number of criteria such as seniority in the organization, level of performance, type of task and so on; in fact, the final decision rests with the immediate supervisor.

**Table 5: Distribution of salaried teleworkers according to time spent at home and to gender**

<table>
<thead>
<tr>
<th>Time spent at home</th>
<th>Men %</th>
<th>Women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1 to 10%</td>
<td>17.3 ++</td>
<td>6.7--</td>
</tr>
<tr>
<td>From 11 to 20%</td>
<td>29.1</td>
<td>24.7</td>
</tr>
<tr>
<td>From 21 to 30%</td>
<td>21.3+</td>
<td>12.4-</td>
</tr>
<tr>
<td>From 31 to 50%</td>
<td>13.4</td>
<td>18.0</td>
</tr>
<tr>
<td>From 51 to 98%</td>
<td>11.0</td>
<td>14.6</td>
</tr>
<tr>
<td>100%</td>
<td>7.9---</td>
<td>23.6+++</td>
</tr>
</tbody>
</table>

Our survey data indicate that of the persons working full-time from home, 45% are office workers, 25.8% managers, 22.6% professionals, 3.2% technical workers, and 3.2% salespersons. In our case studies, 40 of the 63 persons interviewed were always working from home, mainly in a clerical type of office work. The technical and professional workers (mainly men) tended to go to service calls, to clients’ offices, or to the office once in awhile. Here again, there is a gendered distribution, since women are more frequently full-time at home than men.
even when it is said to be a joint decision. The immediate supervisor may in effect refuse to allow a person to opt for telework if he or she thinks that this employee does not have the required skills.

The survey data confirm that executives and professionals have greater autonomy in their decisions regarding telework: 58% of the executives and 47.4% of the professionals made the decision on their own while 85.7% of the clerical workers made the decision jointly with their employer. The data according to gender reflect occupational segregation: 55.9% of men made the decision on their own while 64% of women made the decision jointly with their supervisor.

**Family status, gender, and autonomy**

Examination of the family status of the teleworkers in our study reveals that the majority have a spouse and one or more children (47.2%) or are single parents (7.4%); 54.9% of the respondents who have a spouse and one or more children made the decision to do telework independently while 62.5% of the single parents made this decision jointly with their supervisor. The case studies confirm that telework is more attractive for those who have a spouse and children because it allows them to reduce their travel time, to be at home later in the morning and earlier in the evening, and thus to achieve a better balance between work and family responsibilities. Along these lines, Table 6 indicates the main advantage that teleworkers see in this type of work organization.

<table>
<thead>
<tr>
<th>Main advantage</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. More flexible schedule</td>
<td>29.2%</td>
<td>30.7%</td>
</tr>
<tr>
<td>2. Not having to take transport to work</td>
<td>23.1%</td>
<td>24.9%</td>
</tr>
<tr>
<td>3. I am more productive</td>
<td>10.2%++</td>
<td>4.4%--</td>
</tr>
<tr>
<td>4. Stay at home, more with family</td>
<td>5.1%</td>
<td>8.3%</td>
</tr>
<tr>
<td>5. Economies (transportation, clothing, meals ...)</td>
<td>5.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>6. More tranquility</td>
<td>5.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>7. Better quality of work</td>
<td>2.0%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

The interviews revealed that fewer single people opt for this form of work, partly because it would result in greater isolation for them. However, single people without children make up 19.4% of all of the teleworkers surveyed (42 out of 216).

If we look at the same data according to gender, Table 8 indicates that women are more often subjected to their superior’s approval than is the case for men.

Of the 216 salaried teleworkers interviewed, 73.1% stated that they did not have any formal agreement with their employer regarding working conditions. Only 26.4% had signed an agreement. Thus, 80.2% of the executives and managers had not signed an agreement and it is known that the majority of them had simply made the decision on their own. It should be noted that most managers and executives work at home only one day per week (51.8% spend up to 20% of their
work time at home). As for professionals, 30.3% have an agreement with their employer, compared with 69.7% who do not. Finally, 28.6% of the clerical employees have an agreement, compared to 71.4% who do not. Thus, telework is mainly based on informal agreements with the supervisor, which presents risks of arbitrary decisions, or reversal of the agreement.

These data differ from those collected for our case studies since the great majority of teleworkers interviewed in the case studies were unionized in large firms and had signed an agreement (though some of them could not recall the details of the terms of agreement). The survey results indicate that the larger the firm, the greater the likelihood that the teleworker has an agreement with his or her employer. In fact, 36.8% of the teleworkers who signed an agreement work for a firm with 500 or more employees, 22.8% work for a firm with 10 to 15 employees and 12% work for a firm with between 200 and 500 employees.

| Table 7: Type of decision according to family status of teleworkers (vertical %) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Type of decision                | Single parent   | Single without child(ren) | Spouse with child(ren) | Spouse without child(ren) | Other cases     |
| Decision imposed by employer    | 6.3%            | 7.1%            | 2.9%            | 8.2%            | 2.8%            |
| Personal decision               | 31.2%           | 57.1%           | 54.9%**         | 24.5%           | 33.3%           |
| Joint decision, with supervisor’s approval required | 62.5%           | 35.7%           | 41.2%           | 67.3%***        | 66.7%           |

Generally, these agreements clearly describe the conditions in which the telework must be carried out and may include work schedules, security measures to be adopted to safeguard the confidentiality of information and data as well as the conditions for returning to work in the office. They usually do not contravene the collective agreements, except in certain cases where the teleworker may be required to maintain a level of productivity that is equal to or higher than that required of workers in the office. Given that most of the professionals and executives in the case studies do telework on an occasional or part-time basis under conditions that do not appear to be as strict, they generally do not sign a specific agreement.

| Table 8: Autonomy in decision according to gender |
|---------------------------------|-----------------|-----------------|
| Type of decision                | Men %           | Women %         |
| Imposed by the employer         | 5.5             | 4.5             |
| Personal decision               | 55.9+++         | 31.5----        |
| Supervisor’s approval required   | 37.8----        | 64.0++++        |
Work organization and job content
Some authors (Felstead and Jewson, 2000) have also raised the possibility that telework can create a differentiation of tasks between those who work in the office and those who work at home. Indeed, our case studies revealed a number of interesting factors regarding the content of work and its evolution in the context of telework. For example, the findings from our interviews indicated that most teleworkers (two-thirds of the 63 people interviewed) basically do the same work at home as they do in the office. However, it should be noted that the tasks of 20 of the 63 teleworkers (or a third) in the three different organizations were changed.

Different situations were observed, including certain cases in which the teleworkers work with a less prestigious market segment than those who still work in the office (for example, the former work with individual as opposed to business customers). In other cases, the content of work is less varied since the telework tasks to be carried out must be more defined. These two situations are rather negative in terms of the content of tasks and the possibility of developing new skills and knowledge. On the other hand, several of those interviewed thought that they had more autonomy in solving problems that arise while working and have even been able to acquire new skills and knowledge since they have had to manage on their own at home whereas at the office they might have consulted a co-worker. Also, some of the teleworkers dropped certain less interesting tasks, such as printing and sorting of documents, since they transmit their documents via e-mail to the office where these tasks are carried out by the workers located there, which sometimes results in conflicts between teleworkers and office workers. Thus, the differentiation of work content is clearly an important factor to consider when developing telework.

Since there are rarely specific agreements in this regard, changes sometimes occur “naturally,” without a specific decision having been made to change tasks in one direction or another (diversification or standardization of tasks, deskilling or reskilling). However, it must certainly be considered since both the teleworkers and those who remain in the office may either complain about such changes or welcome them, depending on the case.

In broader social terms, these aspects should be considered because of the increasing attention given these days to concepts such as learning organization, the importance of challenges and training for maintaining the motivation of individuals at work, and developing innovation and creativity within the organization.

As regards work organization, our case studies indicate that teleworkers (women in call centres especially) generally feel that they have a fair degree of freedom in their work, even though some of them may be monitored from a distance through the computerized systems that they use to carry out the work. In fact, although the practice appears to be infrequent, the connect time of a number of respondents is monitored.

Disadvantages of telework
Our case studies showed that the greatest source of dissatisfaction among teleworkers is related to technology. Several mentioned the slowness of computer
systems and telephone lines and cumbersome security measures, even though this security aspect was considered to have improved over the years. However, this situation hampers the performance of teleworkers and may lead to a surplus of work for those located in the office. The teleworkers also expressed some dissatisfaction, although to a lesser degree, with their supervision and training. Several thought that there should be specific training for teleworkers, including training in time management, work organization, and in computer and communications systems.

Respondents to the survey most often mentioned the lack of co-workers and isolation (15.4% and 10% of respondents) as disadvantages, followed by the risk of working more (9%), the difficulty of motivating themselves (6%) and work-family conflict (5%). However, it should be noted that 26% of respondents thought that there were no inconveniences in teleworking, compared to 20% of the full-time home teleworkers, 24% of whom thought that not having co-workers was a disadvantage. If we differentiate according to gender, we find that women are somewhat more inclined to find the absence of colleagues a disadvantage, and to have difficulty in disciplining themselves to work (however, only 7%) but overall, the percentages are similar.

Table 9: Disadvantages of telework according to gender

<table>
<thead>
<tr>
<th>Disadvantages</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absence of colleagues</td>
<td>14.2%</td>
<td>17.1%</td>
</tr>
<tr>
<td>2. Isolation</td>
<td>10.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>3. Work more or too much</td>
<td>10.1%</td>
<td>9.3%</td>
</tr>
<tr>
<td>4. Difficulty to motivate or discipline oneself</td>
<td>4.7%</td>
<td>7.3%</td>
</tr>
<tr>
<td>5. Conflict between work and family</td>
<td>5.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td>6. Computer or IT are slower than at the office</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>7. No disadvantage</td>
<td>27.7%</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

Work intensification and productivity
As we observed in our case studies and as Vandercammen (1996) points out, for some, the improvement of working conditions is not so much a matter of reducing work time, but of “de-intensifying” work. The intensification of work linked to tighter and tighter deadlines, a more aggressive search for clients, and the development of new activities is increasingly motivating employees to seek working conditions that are less stressful than those prevailing in the office (Tremblay, 2002, 2002a, 2003; Tremblay, Davel, & Rolland, 2003). In this context, telework is sometimes seen as an attractive option. Indeed, studies show that many workers, particularly women office workers, are not in a position to reduce their work time when it would result in a proportional reduction in salary (Tremblay & Vaillancourt, 2003; Tremblay & De Sève, 2003). Telework thus appears to be a way to avoid workplace stress, or at a minimum, to reduce it without incurring a salary loss.
Our case study findings nevertheless showed that telework had sometimes intensified work as well, but in a less noisy or more pleasant work environment which, according to the teleworkers interviewed, helped them produce more in the same amount of time. Indeed, they pointed out that the impression of a heavier work load did not always come from an additional burden imposed by the employer, even though several employers did, in fact, require a higher level of productivity. Conversely, the impression of a reduced work load at home, in their opinion, was due to a work environment that was more conducive to a higher level of production.

Moreover, the individualization of service provided by teleworkers sometimes leads firms to introduce productivity and performance standards that are different from those applied to other employees in the central office. Our interviews revealed that some firms required performance levels that were 10 to 20% higher than those required of other employees and that teleworkers agreed to these conditions despite warnings from their unions. As was mentioned above, it seems that they consider this an acceptable price to pay to have a more pleasant work environment, to escape the office and bureaucracy, and to reduce travel time and time spent in traffic jams.

Conclusion
This section will conclude on the risks associated with telework and the general conclusion from our research. Firstly, since there is no Canadian legislation to cover the specific case of telework or to ensure that the working conditions or productivity requirements of teleworkers are the same as those of other employees, this could result in a gradual polarization of workers, which may be particularly harmful for women by creating less attractive work content and working conditions, as well as more isolation, since they are often full-time at home (see Table 5).

It was mentioned above that certain organizations differentiate between the tasks offered to teleworkers and those offered to employees located at the firm. This can be justified for all sorts of reasons (confidential data, the need for team work or for more regular monitoring of certain tasks, etc.), but the risk of task differentiation certainly exists. In certain organizations, the teleworkers carried out more long-term, complex, and interesting tasks while in others, their tasks were simpler, more repetitive, and easier to measure.

The risks of the job becoming more precarious should also be considered in a context in which the salary and working conditions of many new self-employed workers are inferior to those of workers who previously had comparable positions in the firm. There have been evolutions in some sectors of the labour market, for example translators and accountants, where more individuals are self-employed rather than employees. As such, they do not receive social benefits and have reduced wage stability. Here again, a high percentage of women are concerned by this development since these are sectors where women teleworkers are involved (in Table 4).
Finally, it must be noted that new information and communication technologies may accelerate the use of sub-contracting and self-employment outside the firm. The absence of protection from governments for this category of workers may result in abuse. Many researchers fear that telework will be used to exploit a less skilled work force. Even professionals and other white-collar workers are more likely to find themselves in a less advantageous position for negotiating their working conditions. We therefore recommend that the unions and the state pay close attention to developments in this area because of the effects for individuals, but also because of the macro-economic effects of a deterioration of working conditions, particularly wage conditions (reduction of demand, economic slowdown, etc.), as telework possibilities expand with IT developments.

Telework reflects what is happening on the labour market more generally, that is, the increasing segmentation or division between a core of stable, well-paid jobs and non-standard jobs that are often precarious and poorly-paid (Tremblay, 2001, 2002, 2003). This is one of the potential consequences of telework of which the state and society should be aware. This segmentation or division is also observed along gendered lines, particularly as concerns the decision to telework and autonomy in work.

What is especially important to retain from our article is that our results clearly show that working conditions, autonomy, and discretion in work, as in the decision to do telework, are differentiated according to occupational category and gender. Female teleworkers are more concentrated in accounting, translation, word processing, and secretarial work and the decision to do telework more often has to be made jointly with their supervisor. In contrast, male teleworkers are concentrated in executive, management, professional, and technical positions and they are more likely to have made the decision to do telework on their own. This confirms that, like the labour market in general, the telework market is characterized by a gendered segmentation. Since many of the studies on telework examine only one occupational category or one firm, this particular aspect of teleworking has not been highlighted, and this appears to us an important contribution to knowledge on telework.

Notes
1. The research presented here was financed by the Centre francophone pour l’informatisation des organisations (www.cefrio.qc.ca).
2. Although the data are Québec based, the firms, the economics, the collective agreements, and the work environment are similar to other provinces, as was pointed out by one of the reviewers. We want to thank the two anonymous reviewers for their helpful comments.
3. These are the most frequently cited responses for the main advantage of telework; the total differs from 100% since we did not indicate other answers which present percentages inferior to 2%.

References


