THE BENEFITS AND PITFALLS OF EMPLOYEES WORKING FROM HOME: STUDY OF A PRIVATE COMPANY IN SOUTH AFRICA

Ajay K Garg*, Jan van der Rijst**

Abstract

Working from home is a worldwide trend and effect companies in various ways. This study focussed on South African circumstances and examined the cost saving implications for a private company and their employees if they would be able and allowed to work from home. Further, relationships between structural and relational factors with experience with virtual work were studied. Based on the data collected from 48 respondents, study found that majority of the employees were willing to work from home and the savings to company was estimated at R1 058.25 per month on rental, electricity, levy, rates, sewer and water expenses, while employees could save an average of R8 822.06 per month if they do not travel to work. On the other hand employees will spend only R347 per employee if they work from home. Relationship between structural factors and relational factors with perceived virtual work experience was found positive. Professional isolation and job performance was found highly negatively correlated.

Keywords: Professional Isolation, Job Performance

JEL Classification : M1, M29

*Associate Professor, 159 Skinner Street, TUT Business School, Pretoria
** MBA Student, TUT Business School 27 Kembali Estate, 539 Kentucky Drive, Faerie Glen, Pretoria, 0081

1 Introduction

Benefits for employees for working from home includes that employees are happier working from home than in the office; increased time to spend with the family, less stress of traveling in peak traffic, and the flexibility that comes with working in the home are all contributing factors to their increased happiness (Cascio, 2000:82). It started in the early 1980's that both companies and employees was intrigued by the idea of working from home. It was seen as an alternative to traffic in peak hours, captivity in small cubicles and flexible working hours. A few companies has allowed selected employees to work from home as experiment while others was worried about the potential organisational and social hazards of working from home. As a global trend, estimates indicate that home-based/virtual working is becoming increasingly more popular. In the United Kingdom it has more than doubled in popularity in eight years to 2.4 million employees working from home, and in the United States of America (USA) it is growing between 11% and 20% per year, currently representing over 20 million employees. According to Golden (2006:177), at least 37% of all companies offer working from home arrangements. Teleworking, increasing by 11% per year, is becoming a highly popular way for professionals to ease ever-increasing work demands, yet still fulfil personal and family needs.

Distance in time and space was broken with working from home while opportunities for face to face communication was reduced. A critical issue to working from home is that the distance caused by working from home will challenge the communications of employee and their managers (Wiesenfeld, Raghuram & Garud, 2001:215) which is mainly because that working from home, employees are isolated from their colleagues and managers in organizations, feeling lonely and even pressure.

This study covered a private company under Midrand (South Africa). The main objectives of the study were to assess the willingness of employees to work from home, to evaluate the impact of working from home. The relationship between operational and professional factors, and virtual work was also studied.

2 Literature review

In the past, the term "work" referred to activities involving physical effort for a particular purpose at a place designated for those activities (Felstead, Jewson & Walters, 2005:415), and places of work were, in turn, classified according to the nature of the activities carried out there. An office, for example, is a place where administrative work is done, while a factory is a place where goods are manufactured and/or assembled. For many years, the restriction of work to those places has been seen as a given, since most work activities have not been portable.

Liaw, Liang and Wang (2007:107) note that "virtual work means that employees do not need to physically go to corporate headquarters to work, but instead perform their professional jobs through Internet connection from remote home, car, hotel, satellite office, or other places different from the traditional central office." Golden (2007:1642) confirms that telework, or working from home, is a form of virtual work also known as telecommuting. It entails working away from the office, and communicating by way of information technology. According to Tietze (2002:385) work thus becomes "disembedded" from the time/space compression and can develop into an action to be done anywhere and at any time, rather than being a place to go to.

Introduction of notebooks and cell phones made working away from a fixed office location a distinct possibility. These changes include the ability to work in a range of places within the same building rather than being tied to a fixed location (Felstead, Jewson and Walters 2005:415).

Working from home could benefit both employees and employers, and lead to decreased costs and increased productivity. Some of the benefits of allowing employees to work from home are cost saving to company, employee travel benefits are discussed below.

2.1 Cost savings for company

The savings for companies, as explained by Radcliffe (2010:2), are infrastructure, electricity, water and air-conditioners, and include infrastructure such as phones and the internet, cleaning crews, and security. The trend of becoming more environmentally friendly also helps this movement, as the average commuter travels alone in a car to the office, thereby increasing the consumption of fossil fuels.

Felstead, Jewson and Walters (2005:426) state that two-thirds (64.6%) of companies have already investigated innovations in their offices, for example, 'hot desks', which workers have to book in advance and are used by three out of ten (31.3%) large companies at the time of the interview, rising to almost two out of five (39.6%) large private sector employers (see Table 1, panel 1a). Uncertainty about the use of these desks was reported, since in almost all cases less than 5% of office staff actually used the hot desks. A quarter (27.8%) of respondents reported using hot desks over the past five years and nearly half (44.6%) planned to make greater use of them in the near future. According to the Location of Work Survey, desks that were set aside for use by anyone in the company, also called touchdown desks, were used to some extent, albeit only in a limited way, in two out of five (43.3%) large companies. Many companies are expected to roll out their use further in the next few years (see Table 1, panel 1b). Almost half (47.2%) of the companies interviewed had plans in place at the time of the interview to reshape their offices. The plans ranged from equipping particular areas (such as restaurants, cafés and breakfast bars) with internet access and laptop plug-in points, to wholesale reviews of space usage and identification of ways in which space per office worker could be reduced (see Table 1, panel 1c).

De Graaf and Rietveld (2007:157) state that companies save on salaries when their employees work from home, as the salaries of such workers are 19% lower on average than the salaries of workers attending traditional office locations.

2.2 Employee travel benefits

In addition to the energy saved by working from home, working from home has other benefits, such as positive time and safety impacts delivered through reduced travel requirements and congestion. For example, Fu *et al.* (2012:416) found that homeworking represents a valuable energy saving option of at least 9.33 kWh on average per work from home day. Swink (2008:862) adds that homeworking employees may enjoy reduced expenses for work attire, less stress, and reduced transportation expenses. Working from home also provides significant benefits to society, including reduced air pollution, traffic congestion, and energy consumption. Taxpayer benefits include reduced costs of road maintenance and repair and a smaller demand for public transportation.

According to Wen, Kite and Rissel (2010:2), travelling to work not only contributes to traffic congestion, air pollution, greenhouse gas emission and lower levels of physical activity, but it is also significantly linked to overweight and obesity in the general population.

To conclude this section in the words of Fu *et al.* (2012:421), "therefore, land use patterns and public transport infrastructure are shown to have significant effects on the choice of home working. Commute distances and internet access significantly increase the probability of homeworking, suggesting that long commute distances stimulate an individual to work from home and ICT connectivity delivers the technical platform for the realisation of teleworking."

Table 1. Past, current and future locations of work.

Location of work	Percentage of organisations		
	All	**Private**	**Public**
1.　　Inside the office			
(a)　　Hot desks			
Increased use over the last five years	27.8	32.6	24.3
Currently used	31.3	39.6	25.3
Greater use planned	44.6	36.0	50.0
(b)　　Touchdown desks			
Increased use over the last five years	29.4	37.3	24.0
Currently used	43.3	61.5	30.7
Greater use planned	43.9	40.8	46.0
(c)　　Redesigned office space			
Issue under construction	64.6	76.9	56.0
Plan to redesign office space	47.2	44.0	49.3
2.　　Outside the office			
(a)　　Working at home			
Increased use over the last five years	51.6	49.0	53.3
Currently used	89.0	86.5	90.7
Greater use planned	72.2	59.6	81.1
(b)　　Working in a variety of places			
Increased use over the last five years	40.5	38.5	42.0
Currently used	93.8	94.3	93.3
Greater use planned	48.4	42.3	52.7

Source: Felstead, Jewson and Walters (2005:426)

2.3 Employee pride, motivation, reduced absenteeism and better performance

Work individuality will increase employees' confidence in stand alone operations and have a positive impact on psychological reworking, in which case employees tend to adjust their jobs to virtual work more easily (Raghuram *et al.*, 2001). According to Fonner and Roloff (2010:339), research has revealed that employees who work from home for at least 2.5 days a week experienced considerably lower work-life conflict and lower quality co-worker relationships than those who worked from home for more than 2.5 days per week. These studies also found that employees who worked from home for more than 50% of the week experienced different stressors and motivations than employees who worked in the office for at least 50% of their workdays. The positive outcomes of the tests associated with working from home were employee productivity and improved work-life balance.

The findings of Baard and Thomas (2010:14) support the identified benefits of working from home by others. These benefits include increased productivity, stronger organisational loyalty, increased morale and job satisfaction, additional flexibility, increased family time and a better work-life balance, decreased stress, fewer monthly expenses, and fewer sick days taken. All these factors lead to increased productivity.

Fonner and Roloff (2010:337) mention that working in an office environment may foster mutuality, connection and common ground, better communication, and produce greater levels of information exchange. On the other hand, employees working from home (working with information technology) may experience lower levels of appropriate communication, which would include a smaller degree of communication richness. Golden (2006:176) indicates that there is a positive relation between working from home and commitment, and a negative relation between working from home and turnover intentions, so that a higher degree of working from home is associated with more commitment to the organisation and with weakened turnover intentions.. He also found that employees who have continual face-to-face contact with other employees are prone to more exhaustion.

2.4 Pitfalls

While the work-from-home lifestyle has significant incentives, it is not without challenges. Employees who work from home may not have to deal with the daily traffic, but there are new struggles that are unique to working from home.

2.4.1 Travel-related pitfalls

Wen, Kite and Rissel (2010:2) found that there is a growing body of research signifying that people who are involved in active walking, cycling or using public transport are healthier and happier than those who do not travel regularly.

2.4.2 Disaster/business continuity strategy

Another concern mentioned by Lapedis (2013) is that more companies are implementing the home office as a workplace recovery strategy. When an incident occurs, it is imperative that critical employees get back to work, because the recovery of information systems would be critical to the survival of the company. In most cases, a home office will not meet this key requirement.

2.4.3 Individuals' identity at the company

In traditional organisations, offices were geographically and chronologically separate from the home. Tietze (2005:50) states that the question of identity was easier to address in this traditional system. Academically, at least, it was possible to be an employee related with a particular identity at the office mainly from 08:00 to 17:00, while one could be a parent, a spouse, a friend or neighbour outside office hours and elsewhere than in the traditional office.

Felstead and Jewson (2000) argue that the most powerful sources of meaning and identity are work and home, and that in and through working from home, homeworkers' values, ideas and roles collide. This forces the teleworker and the household to become entrepreneurs. "Such entrepreneurialism requires changing the network of relational identities, which, in turn, necessitates both teleworker and household to cope with such change in the existing household matrix" (Tietze, 2005:51).

2.4.4 Professional isolation and organisational identification

Workers who work from home feel professional isolation. Golden, Veiga and Dino (2008:1413) state the following: "Although not all teleworkers report feeling professionally isolated, interview data suggest that they often lack 'social barometers' that they can use to compare themselves with others, making it difficult to determine how they should behave or react to work (Mann, Varey & Button, 2000:670; Vega, 2003:83). Given such feelings, professionally isolated teleworkers are less apt to be confident about their abilities and knowledge, which can put them at a distinct disadvantage in performing their jobs. Professional isolation is also likely to be associated with a teleworker's desire to leave the organization."

Baumeister and Leary (1995:522) agree with the above and state that employees working from home who experience the most professional isolation are likely to feel frustrated, as one of people's basic needs is to belong to specific groups. In this instance they might be excluded from this group of employees who work in the office. Employees working from home might feel that they are not just excluded from this group, but also experience rejection by their colleagues. This would lead to a reduced sense of belonging in the company, and to to greater professional isolation, less organisational commitment, increased job exhaustion and unhappiness, which would increase the likelihood of departure (Arches, 1991). According to them behaviour and performance are impacted by a strong sense of organisational identification. Employees working from home with a strong sense of organisational identification will make an effort keep close contact with the organisation and make themselves loyal members of the company, which would strengthen the cooperative atmosphere among colleagues and improve organisational performance.

2.4.5 Manager-employee relationship

When employees change from their workplace at the office to working from home, it unavoidably changes the frequency and quality of interactions they have with managers and colleagues of that organisation. Therefore, working from home and the reduction in face-to-face communication (affective signals more difficult to send, sustain, and receive) with less feedback from managers, has the potential to have a negative impact on the quality of the manager-subordinate relationship (Gajendran and Harrison 2006:2).

Family members could disturb workers at home and that some people may find it very difficult to combine family and working life, especially with children around. The other negative is that although the cost of office space is lower, the monitoring cost of the manager is higher and less efficient when some employees work at home, as coordination would be more difficult. Companies might also see working from home as a fringe benefit and may offer employees lower salaries as trade-off to work from home. From a long-term perspective, it may well be that when employees work from home they experience that they are less informed on career opportunities or are less considered by managers for promotion (De Graaf and Rietveld 2007:148)

2.4.6 Employee-employee relationship

Colleague coordination, flexibility and workload between office and working from home employees will change as work environment changes. With the number of employees working from home increasing, the remaining office workers are likely to encounter restrictions more often when coordinating tasks and work activities, not to mention maintaining and building co-worker relationships, which will be an increasing obstacle. More tension will be experienced by office workers as they have to cover homeworkers. This could also lead to inequity and jealousy. Technologies like e-mail and teleconferences to interact with colleagues in the office lack the warmth and social presence of face-to-face communication, making it more problematic and time-consuming to conduct work activities effectively, especially as far as complex tasks are concerned (Golden 2007: 1664)

Other challenges include lack of job offering opportunities for feedback, friendship and dealing with others as result of lack of face-to-face communication (Roloff, 2010: 337). The employees working from home who rely on their colleagues in team work in office may experience time pressure and show decreased individual productivity (Wong 1999).

2.5 Neutral aspects

2.5.1 Gender, race and overtime

Osnowitz (2005:87) found that in gendered divisions of professionals working from home, both women and men had to arrange their daily schedules to be available as parents and to develop their longer-term career paths. Phizacklea and Wolkowitz (1995) clearly demonstrate in a complete and procedurally varied study that homeworking merely replicates the discriminations of race, gender and class evident in the labour market, thus reflecting rather than challenging the wider structure and material circumstances in which employees are located. Working from home does not exclude employees from receiving payment for overtime work, as is confirmed by Guiler and Kelly (2009:24).

3 Objectives of this study

Although technological developments have made it possible for employees in many industries to work from home, some industries will still have to do it in the traditional way of travelling to their office and to their customers. According to Felstead, Jewson and Walters (2005:427), 89% of companies reported that at least some of their employees worked from home. This implies that the place of work has changed dramatically and that this trend will continue. The employees involved still represent a minority of the workforce and it is a fact that many employees currently using their home as a place of work still belong to categories of employment and jobs that have a long history of working in this way.

Tietze and Musson (2010:154) indicate that a balance between work and home is central to understanding the mutually constructive relationship between domestic and professional domains of life. Therefore, different companies will address working from home differently, and will achieve different outcomes. The benefits of working from home, according to Raghuram *et al.* (2001:384), are improved productivity, significant cost reductions, less travel time in peak traffic and more motivated employees who are able to spend quality time with their families. However, although it is possible to work at home thanks to ICT, it still remains to be seen if the trend to work from home can continue to grow and generate benefits to organisations and employees.

Another benefit, according to Wheatley (2012), is that working from home removes employees from office distractions and allows them to concentrate on the tasks at hand without interruptions. This leads to higher productivity and the completion of work in a shorter time. With all the work completed, they have more time for themselves at the end of the day.

Some of the pitfalls, according to Venkatraman, Tanriverdi and Stokke (1999:523), are that working from home comes at the cost of informal unpaid overtime and a noticeable intrusion into the employee's private life. The company will need to update its policies to include working from home in terms of payment for overtime, working hours, insurance for work at home and communications costs.

Employees who work from home could cause problems for managers by not working as they should. Therefore it is important to make sure that trusted, experienced employees are the ones who work from home, and not the most recently appointed employees. These should be people who have consistently performed well with very little supervision, and have earned the right to work from home. Allowing more experienced employees to work from home (Fonner & Roloff, 2010) also increases their overall job satisfaction, and keeps them healthier.

Other pitfalls such as professional isolation and organisational identification caused by remote working (Liaw, Liang & Wang, 2007) can be minimised by the creation of business centres where people working remotely can go to interact, socialise and share ideas. This would involve interaction with people who work in different fields, thereby providing opportunities for the exchange of ideas. Studies show that the effect on organisational identification would be weaker for older employees who are in higher posts and earn higher salaries.

Another negative is that disaster recovery solutions may seem more expensive than equipping employees to work from home, but unless companies have done a business impact analysis on disaster recovery, they cannot be certain that the cost is not more than offset by the potential losses they would incur if their business came to a halt (Lapedis, 2013).

Accordingly, the specific objectives of this study were as follows:

Objective 1: To assess the willingness of employees to work from home.
Objective 2: To evaluate the financial impact of working from home on the company and its employees.
Objective 3: To study relationship between structural and relational factors with experience with virtual work. Raghuram et al. (2001) studied relationship between structural and relational factors with virtual work adjustment. However in this study, employees had not started working from home, their perceptions with virtual work experience was tested. Further relationship between professional isolation and job performance with virtual work was studied.

3.1 Questionnaire design

The questionnaire used for collecting data from the research participants was developed based on the structure contained in Table 2, and was divided into three sections.

Section A: Demographic information of the participants, including variables like age group, gender, marital status, children, educational level, and whether they were willing and able (whether they had the infrastructure) to work from home. This was relevant to the study in order to be able to determine if working from home was conceivable, to which age group it would appeal, and whether level of education had an influence on the decision.

Section B: Breaking down the impact of the cost and of travelling on employees. The questionnaire focused on the cost to employees of travelling to the offices (one employee per vehicle), and included vehicle cost per kilometre and toll fees. The time spent travelling to and from the office was also highlighted.

Section C: To study relationship between structural factors (Work independence and clarity of evaluation criteria) and relational factors (interpersonal trust, organisational connectedness and stress factors) with perceived experience with virtual work. A seven-point scale was used to measure the replies to the questions contained in the questionnaire. Higher values indicate a higher level of agreement.

As part of the process of developing the questionnaire, five sample questionnaires were distributed to randomly selected respondents. The purpose of the exercise was to pilot and test the questionnaire for any issues such as questions that might be interpreted ambiguously. After obtaining feedback from the respondents and further analysis, the questionnaire was refined to produce the final version that was distributed to the targeted group of participants.

To measure the internal consistency (how closely related a set of items are as a group) of the questionnaire, Cronbach's alpha criterion was used to measure the scale of reliability and is reported later in this paper.

4 Data analysis and results

The study population consisted of 1612 employees. Of the 320 distributed questionnaires, 48 completed questionnaires were received from participants while 272 questionnaires were not returned. This means that the response rate was 15%. The low response rate was possibly due to the fact that the questionnaire was distributed in the middle of December (just before the holidays). The length of the questionnaire may also have played a role, and employees might have been wary of completing it in the office environment.

Demographic profile of respondents

Fifty-four percent of the respondents were males and 46% were females. The largest group (42%) fell in the age group 36 - 45 years, the age group 18 - 25 years represented 10% of the respondents and the age group 26 -35 years represented 21%, with the age group 46-54 represented by 23%, while 4% were aged 55-60. The age group 60+ presented 1%.

In terms of education and qualification level, 40% of the respondents had matric or Grade 12. A total of 56% of the respondents had diplomas or degrees, and 4% had postgraduate qualifications.

Of the 48 participants, 52% were on level C (supervisors). The second largest group of participants (29%) were on level D (managers). The third largest group (15%) were employees on level B (junior semi-skilled employees).

Assessing the willingness of employees to work from home

Ninety-four percent of respondents agreed that if they had the opportunity to work from home, they would do so. A total of 71% of the respondents had a separate space to work from at home while 17% had air-conditioning at home and 94% stated that their homes were silent. Of the 48 respondents, 90% indicated that they had internet connections at home.

Table 2. Relationship between the research objectives and the survey questionnaire

Research objective	Question from the questionnaire	Source
Section A: Biographic information	Your gender	Golden (2007:1655)
	Age of respondent using range scales?	
	Job grade at Business Connexion?	
	What is your highest level of education?	
	Marital status?	
	Do you have children?	
	Infrastructure at home (space, quiet, air-conditioning, internet connection)?	This study
	Willingness to work from home?	This study
Section B: Cost savings for company and employees	Savings on infrastructure for company?	This study
	Your toll fees to office?	This study
	Distance in km to office (one way)?	This study
	Travel time in minutes to office (one way)?	This study
Section C: Relationship between structural and relational factors	1.　　Work independence. •　　My performance does not depend on working with others. •　　To perform at my best, I need to work independently. •　　My work primarily involves completing independent tasks or projects.	Sims, Szilagyi and Keller (1976:200)
	2.　　Clarity of evaluation criteria. •　　There are objective criteria by which my performance can be evaluated. •　　It is easy to measure and quantify my performance. •　　The measures of my job performance are clear.	Raghuram *et al.* (2001:403)
	3.　　Interpersonal trust •　　I trust my supervisor. •　　My supervisor trusts me. •　　I trust my peers. •　　My peers trust me.	Brockner *et al.* (1997:563)
	4.　　Perceived organisational connectedness •　　The social events in my office are adequate to build a sense of community. •　　The work-related meetings in my office are adequate to build good working relationships.	Raghuram *et al.* (2001:403)
	5.　　Perceived experience with virtual work •　　Working from home would allow me to perform my job better than when I work in the office. •　　If I worked from home, I would be able to balance my job and personal life. •　　My productivity (e.g. sales orders) would increase if I worked from home.	Raghuram *et al.* (2001:403)
	6.　　Stress factors due to meetings and interruptions •　　How often do you feel pressurised because meetings take you away from your work? •　　How often do you feel interrupted when colleagues talk to you? •　　How often are you distracted by other things in your work environment, such as background noise?	Fonner & Roloff, (2010:346)
	7.　Professional isolation •　　I would feel left out from activities and meetings that could enhance my career. •　　I would miss out on opportunities to be mentored. •　　I would feel out of the loop. •　　I would miss face-to-face contact with co-workers. •　　I would feel isolated. •　　I would miss the emotional support of co-workers. •　　I would miss informal interaction with others.	Mann, Varey & Button, (2000:1413)
	8.　　Perceived job performance with virtual work •　　I would miss physical interaction with others to coordinate complex tasks. •　　Contextual information is likely to get lost with electronic correspondence.	This study

The impact of working from home on company and its employees

The following section is a breakdown of expenses for employees and for company.

Table 3. Respondents' expenses per month for transportation

Description	
Average Kilometres travel per day return	66.8kms
AA rate per km, per day	6.13 Rands
Cost per respondent to and from office, per day, return (Rands)	66.8 x 6.13= R409.48
Vehicle expenses (total) per month (20.75 days per month)	409.48 x 20.75=R8 469.72
Toll fees, return (Rands) per month	16.98 x 20.75= R 352.34
Total travel expenses per person per month	8 469.72 + 352.34=R8 822.06

Table 4. Average m² office space per employee per month

Description	
Office Park total size **m²**	17 763
Storeroom space **m²**	1 782
Warehouse space **m²**	1 374
Seating space (excluding common areas and parking) **m²**	14 760
Total employees number	1 612
Office space per employee m²/employee	9.16

Table 5. Home rental: Average cost per employee per m² per month

Description	
Mean cost for bond/rental (rand)	6818.75
Mean residents (m²)	180
Size per individual for office space (m²)	9.16
Cost per month per employee Rands	=6818.75/180*9.16= R 347.00

Table 6. Cost per m² breakdown per employee per month

Description	Cost (Rand/m²)
Rent	66.72
Management fees (security and cleaning included)	2.15
Levies	0.03
Rates and taxes	11.10
Sewer	1.97
Water	2.68
Electricity	30.86
Total cost*	**115.53**

*Telephone cost excluded.

Financial saving to parties

From the above calculation, it is evident that for every employee that works from home, the company would save a calculated R1 058.25 per month on rental, electricity, levy, rates, sewer and water expenses, while employees could save an average of R8 822.06 per month if they do not travel to work. On the other hand employees will spend only R347 per person if they work from home.

Relationship between structural and relational factors with experience with virtual work

From the literature review, the following factors pertaining to working from home were identified: work independence, clarity of evaluating criteria, trust, organisational connectedness, experience with virtual work, stress, professional isolation, and job performance with perceived experience with virtual work. These factors were surveyed at the Midrand Campus of company to test the working-from-home perceived environments, for instance, experience with virtual work and job performance.

Table 7 below shows the coefficient of correlation between various variable tested.

Table 7. Coefficient of correlation between various variable tested

Description	(r) n=48
1. Relationship between work independence and employee experience with virtual work.	0.46
2. Relationship between clarity of evaluation criteria and employee experience with virtual work.	0.63
3. Relationship between interpersonal trust and employee experience with virtual work.	0.41
4. Relationship between organisational connectedness and employee experience with virtual work.	-0.46
5. Relationship between stress factors due to meetings and interruptions and employee experience with virtual work.	0.39
6. Relationship between professional isolation and job performance.	-0.97

5 Independence of association tests

Chi-square tests were completed to test whether gender, age, job grade and level of education had a relationship with work independence, stress, evaluation criteria, organisational connectedness, trust, professional isolation, experience with virtual work and job performance with virtual work.

Chi-square test did not show any degree of association between age, job level and the virtual work variables. However gender was found to be associated with organisational connectedness (P value 0.0485) and qualification was found to be associated with stress (P value 0.0077)

For all the attributes the distribution is skewed to the left, meaning that most values are concentrated on the right of the mean, with extreme values to the left.

Cronbach's alpha is an index of reliability supplementary to the variation accounted for by the true score of the "underlying construct." The construct is the hypothetical variable that is being measured (Hatcher, 1994).

Using Cronbach's alpha to measure the internal consistency (reliability) on the multiple Likert questions used in the questionnaire, with the cut-off value for being acceptable is 0.70, the lowest value of 0.70 on evaluation criteria and highest of 0.95 on professional isolation indicate that all the factors are considered internally consistent.

Table 7. Summary of statistical figures

Construct	Mean	Std. dev.	Kurtosis	Skewness	Cronbach's alpha
Work independence	4.67	1.70	-0.48	-0.64	0.84
Stress	4.28	1.86	-0.68	-0.42	0.72
Evaluation criteria	5.68	1.16	0.93	-0.91	0.70
Organisational connectedness	5.00	1.34	-0.68	-0.11	0.75
Trust	5.81	1.11	-0.16	-0.69	0.85
Professional isolation	3.98	1.81	-0.91	-0.03	0.95
Experience with virtual work	5.20	1.35	-0.99	-0.13	0.73
Job performance with virtual work	4.25	1.79	-0.62	-0.42	0.85

6 Discussion and conclusion

With 56% of respondents having either a diploma or a degree, and the average age being 38.8 years, the group studied in this research was mature. Ninety percent of the respondents had an internet connection at home, while 94% confirmed that they had a separate space at home to work in and that their homes were silent. This indicates that the employees were ready to work from home. This finding was confirmed by 94% of respondents mentioning that they would work from home if given the opportunity to do so.

This study found that work independence, interpersonal trust and stress had a weak positive relation to experience with virtual work. On both the questions about perceived experience with virtual work, the professionals working from home would have a better work-life balance and their productivity would increase. Based on a mean of 4.28 on a 7-point scale, less perceived stress was observed by employees working from than by office-based employees, due to fewer interruptions. A very strong relationship exists between professional isolation and job performance, with a correlation coefficient of 0.97 and a mean of 3.98 suggesting that greater isolation is associated with lower performance.

Shia and Monroe (2006:472) agree that greater employee productivity and an improved work-life balance are among the most common improvements. These are desirable benefits, as employees' professional isolation and organisational connectivity would be negatively impacted if their work and personal responsibilities interfered with each other.

The most negative finding of the literature review, which was confirmed by comments in the returned questionnaires, was the danger of professional isolation. Professional isolation played a huge part in any negativity towards working at home, as professionals working from home could feel isolated and neglected by the company. This is in line with previous research.

Desanctis, Staudenmeyer and Wong (1999:92) state that professionals working from home may initially focus on learning how to best use ICT to communicate with their managers and colleagues from a distance to obtain control and focus on immediate task issues, which may be addressed through organisational mechanisms directed at managing the distance inherent in working from home. If the evaluation criteria for working independently are clear, these employees will have better control of the working-from-home environment. As they gain more experience, they may be less concerned about the uncertainty and ambiguity surrounding the tasks that they need to complete.

Graen and Scandura (1987) note that the focus of virtual employees may become broader in terms of long-term outcomes, as well as in terms of their relationships with managers and colleagues. Therefore, the adjustment of employees with greater experience with working from home may be more strongly related to implicit relational mechanisms such as trust and organisational connectedness.

References

1. ARCHES, J. 1991. Social structure, burnout, and job satisfaction. *Social Work*, 36:202-206.
2. BAARD, N. & THOMAS, A. 2010. Teleworking in South Africa: Employee benefits and challenges. *SA Journal of Human Resource Management*, 8(1):1-33.
3. BAUMEISTER, R. & LEARY, M. R. 1995. The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3):497-529.
4. BROCKNER, J., SIEGEL, P. A., DALY, J. P., TYLER, T. & MARTIN, C. 1997. When trust matters: the moderating effect of outcome favourability. Administrative Science Quarterly, 42:558-583.
5. CASCIO, W. F. 2000. Managing a virtual workplace. *The Academy of Management Executive*, 13(3):81-90.
6. DE GRAAF, T. & RIETVELD, P. 2007. Substitution between working at home and out-of-home: The role of ICT and commuting costs. *Transportation Research Part A*, 41:142-160.
7. DESANCTIS, G., STAUDENMEYER, N. & WONG, S. S. 1999. Interdependence in virtual organizations. *Trends in Organizational Behavior*, 6:81-104.
8. FELSTEAD, A. & JEWSON, N. 2000. *Work at Home: Toward and Understanding of Homeworking*. London: Routlegde.
9. FELSTEAD, A., JEWSON, N. & WALTERS, S. 2005. The shifting locations of work: new statistical evidence on the spaces and places of employment. *Work, employment and society*, 19(2):415-431.
10. FONNER, K. L. & ROLOFF, M. E. 2010. Why Teleworkers are More Satisfied with Their Jobs than are Office-Based Workers: When Less Contact is Beneficial. *Journal of Applied Communication Research*, 38(4):336-361.
11. FU, M., KELLY, J. A., CLINCH, J. P. & KING, F. 2012. Environmental policy implications of working from home: Modelling the impacts of land-use, infrastructure and socio-demographics. *Energy Policy*, 47:416-423.

12. GAJENDRAN, R. S. & HARRISON, D. A. 2006. *The good, the bad, and the unknown about telecommuting: meta-analysis of individual consequences and mechanisms of distributed work*: Academy of Management Best Conference, held in USA. Pennsylvania.
13. GOLDEN, T. D. 2006. Avoiding depletion in virtual work: Telework and the intervening impact of work exhaustion on commitment and turnover intentions. *Journal of Vocational Behavior,* 69:176-187.
14. GOLDEN, T. D. 2007. Co-workers who telework and the impact on those in the office: Understanding the implications of virtual work for co-worker satisfaction and turnover intentions. *Human Relations,* 60:1641-1667.
15. GOLDEN, T. D., VEIGA, J. F. & DINO, R. N. 2008. The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology,* 93(6):1412-1421.
16. GRAEN, G. & SCANDURA, T. 1987. *Toward a psychology of dyadic organizing.* (9). Greenwich: JAI Press.
17. GUILER, K. & KELLY, M. 2009. Don't look for me, I'll be working from Starbucks today. *A review of regulations that may apply to off-site workplaces*, 23-31.
18. KEEFE, J. 2008. Managing a fleet fuel efficiently [Online]. Available from: http://www.employeebenefits.co.uk/industry-sectors/managing-a-fleet-fuel-efficiently/7567.article, [Accessed: 23 February 2014].
19. LAPEDIS, R. 2013. The weaknesses of a work-from-home disaster recovery plan. *Business runs on IT -- All the time* [Online]. Available from: http://www.forbes.com/sites/sungardas/2013/10/30/the-weaknesses-of-a-work-from-home-disaster-recovery-plan/.].
20. LIAW, G., LIANG, S. & WANG, Y. 2007. Relationships between Critical Factors Associated with Virtual Work and Virtual Worker's Organizational Identification. *Fu Jen Management Review,* 15(1):105-136.
21. MANN, S., VAREY, R., & BUTTON, W. 2000. An exploration of the emotional impact of teleworking via computer-mediated communication. *Journal of Managerial Psychology,* 15(7):668-690.
22. OSNOWITZ, D. 2005. Managing time in domestic space. Home-based contractors and household work. *Gender and Society,* 19(1):83-103.
23. PHIZACKLEA, A. & WOLKOWITZ, C. 1995. *Homeworking Women. Gender, Race and Class at Work.* London: Sage.
24. RADCLIFF, J.2010. Working from Home: Issues and Strategies, 25 October 2010.
25. RAGHURAM, S., GARUD, R., WIENSENFELD, B. & GUPTA, V. 2001. Factors contributing to virtual work adjustment. *Journal of Management Development,* 27:383-405.
26. SIMS, H. P., SZLAGYI, A. D. & KELLER, R. T. 1976. The measurement of job characteristics. *Academy of Management Journal* (19):195-212.
27. SHIA, S. M. & MONROE, R. W. 2006. Telecommuting's past and future: A literature review and research agenda. *Business Process Management Journal,* 12:455-482.
28. SWINK, D. R. 2008. Telecommuter law: A new frontier in legal liability. *American Business Law,* 38(4):857-900.
29. TIETZE, S. 2002. When "work" comes "home": Coping strategies of teleworkers and their families. *Journal of Business Ethics,* 41(4):385-396.
30. TIETZE, S. 2005. Discourse as strategic coping resource: managing the interface between "home" and "work". *Journal of Organizational Change Management,* 18(1):48-62.
31. TIETZE, S. & MUSSON, G. 2010. Identity, identity work and the experience of working from home. *Journal of Management Development,* 29(2):148-156.
32. VEGA, G. 2003. *Managing teleworkers and telecommuting strategies.* Westport: Praeger.
33. VENKATRAMAN, N., TANRIVERDI, H. & STOKKE, P. 1999. Is it working? Working from home at Statoil, Norway. *European Management Journal,* 17(5):513–531.
34. WEN, L. M., KITE, J. & RUSSEL, C. 2010. Is there a role for workplaces in reducing employees' driving to work? Findings from a cross-sectional survey from inner-west Sydney, Australia. *BMC Public Health,* 10(50):1-6.
35. WHEATLEY, D. 2012. Good to be home? Time-use and satisfaction levels among home-based teleworkers. *New Technology, Work and Employment.* 27(3):224-241.
36. WIESENFELD, A.B. RAGHURAMB, S. & GARUDA, R. 2001. Organizational identification among virtual workers: the role of need for affiliation and perceived work-based social support. *Journal of Management,* 27:213-229.

Appendices

Annexure A: Questionnaire

Questionnaire:
The questionnaire starts here, please indicate your answer with an 'X" in the appropriate box or follow instructions as indicated elsewhere.

1.   Your Gender

Male		Female	

2.   Your age?

18-25		26-35		36-45		46-54		55-60		60+	

3.   Job Grade?

B		C		D		E	

4.   What is your highest level of education?

Matric		Degree/Diploma		Postgraduate Degree	

Please complete the following three questions with your estimated one way cost/expense to place of work.

5.   Your estimated one way toll costs to office each day?

In Rands	

6.   One way distance in km to place of work?

In Kilometres	

7.   One way travel time in minutes to place of work?

In Minutes	

8.   Indicate your estimate cost for rental/bond per month?

In Rands	

Please indicate your answer with an 'X' in the appropriate box for question 9, 10 and 11.

9.   Please complete the following.

Do you have:-	Yes	No
- Internet connection at home?		
- Air-conditioning at home?		
- Separate space to work from home?		
Will you work from home if the opportunity is given?		
Your home office silent?		

10.   Please rate the following:

On a scale of 1 to 7 please rate the following questions, 1 being strongly disagree and 7 being strongly agree	Rating Scale						
	Strongly Strongly Disagree Agree						
Do you feel that the travel savings to and from office will offset cost	1	2	3	4	5	6	7

you will incur for expenses at home if you are allowed to work from home?							
My performance does not depend on working with others.	1	2	3	4	5	6	7
To perform my best, I need to work independently	1	2	3	4	5	6	7
My work primarily involves completing independent task or projects	1	2	3	4	5	6	7
How often do you feel pressure because meetings take you away from your work?	1	2	3	4	5	6	7
I feel interrupted when colleagues talk with me?	1	2	3	4	5	6	7
I am distracted by other things going on in my work environment, such as background noise?	1	2	3	4	5	6	7
There are objective criteria by which my performance can be evaluated.	1	2	3	4	5	6	7
It is easy to measure and quantify my performance.	1	2	3	4	5	6	7
The measures of my job performance are clear.	1	2	3	4	5	6	7
The social events in my office are adequate to build a sense of community.	1	2	3	4	5	6	7
The work-related meetings in my office are adequate to build good working relationships.	1	2	3	4	5	6	7
I trust my supervisors.	1	2	3	4	5	6	7
My supervisors trust me.	1	2	3	4	5	6	7
I trust my peers.	1	2	3	4	5	6	7
My peers trust me.	1	2	3	4	5	6	7

11. Please rate the following:

On a scale of 1 to 7 please rate the following questions, 1 being strongly disagree and 7 being strongly agree	Rating Scale Strongly Strongly Disagree ⟷ Agree						
If I start working from home:							
- I would feel left out on activities and meetings that could enhance my career	1	2	3	4	5	6	7
- I would miss out on opportunities to be mentored	1	2	3	4	5	6	7
- I would feel out of the loop	1	2	3	4	5	6	7
- I would miss face-to-face contact with co-workers	1	2	3	4	5	6	7
- I would feel isolated	1	2	3	4	5	6	7
- I would miss the emotional support of co-workers	1	2	3	4	5	6	7
- I would miss informal interaction with others	1	2	3	4	5	6	7
Working from home allows me to perform my job better than I could when I worked in the office.	1	2	3	4	5	6	7
If I work from home:							
- I would be able to balance my job and personal life	1	2	3	4	5	6	7
- My productivity (e.g. sales orders) will increase if I work from home.	1	2	3	4	5	6	7
- I would miss physical interaction with others to coordinate complex tasks	1	2	3	4	5	6	7
- Contextual information is likely to get lost with electronic correspondents	1	2	3	4	5	6	7

12. Any comments from yourself about this study?

THANK YOU FOR TAKING PART IN THIS SURVEY!