

Employee Outcomes When Working From Home: The Influence of Organizational, Job, Individual and Household Factors

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Track: Organizational Psychology

Word count (incl. references): 6916

Acknowledgments

Assistance was kindly provided for this paper by Macquarie University; ICAN Key Research Centre, University of Technology, Sydney; Gillian Lucas; and Lenka Bilik.

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Summary

Expectations that large numbers of employees would be working from home (WFH) in an increasingly connected, global world remain unfulfilled. To understand why, the impact of organization, job, individual and household factors on WFH was examined in experienced WFH employees. Questionnaire responses from 50 employees of 20 organizations yielded significant correlations between the outcome measures of WFH satisfaction and perceived productivity and most organizational and job-characteristic variables, but not with individual work style or household variables. Further, satisfaction and productivity exhibited different relationships with the influence variables. Scales for organizational climate, technical support, manager's trust, human-resource support, and training received by others correlated with satisfaction but not productivity; financial support and task identity correlated with productivity but not satisfaction. Results suggest that organizational and job-related factors are the ones that most influence WFH outcomes.

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Introduction

Expectations that in a globalizing, connected world, many people would work away from the traditional workplace (e.g. Cairncross, 1997; Cascio, 2000; Wilde, 2000) have not been fulfilled. Reported proportions of remote workers generally remain far below predictions: typically under 10% (European Teleworking Online, 2000). Surveys indicate that many more employees are interested in 'working from home' (WFH) than actually do so (e.g. Australian Bureau of Statistics, 2002; EcaTT, 1999; Eiszele, 1998; Morgan, 1999). This raises the question of why this is so.

Lack of opportunity provides part of the answer (Brocklehurst, 1996). However, WFH is reportedly terminated for other reasons, including inadequate technical support, problems managing home-work boundaries, insurance and occupational health and safety (OHS) issues, and home-office running costs (Eiszele, 1998). Social isolation is another frequent complaint (Gainey, Kelley & Hill, 1999; Gray, Hodson & Gordon, 1993). Further, an organization may not have essential mechanisms in place to support WFH (Mirchandani, 1999).

Comparing the results of existing WFH studies directly is difficult. Reasons include that remote working has been studied under various names, with no generally accepted definition (Duxbury, Higgins & Neufeld, 1998; Sullivan, 2003), terms are used differently and interchangeably from study to study (Depickere, 1999; Hill, Ferris & Martinson, 2003; McCloskey & Igarria, 1998), and data gathering methods and definitions vary (Lindorff, 2000). Further, many studies have focused on single categories of variables, such as the role in WFH of technology, individual characteristics, the task or the household. Given the complexity surrounding WFH, researchers are calling for broad, multi-factor approaches to advance single factor studies (Bailey & Kurland, 2002; Baruch, 2000; Depickere, 1999). Summarizing research related to the slow growth in the numbers of employees who WFH, Baruch (2000) concluded that four variables – the telework interface, job, individual and organization – need to be present *simultaneously*. The absence of the appropriate variants for any of these components appears to undermine WFH effectiveness.

In particular, WFH is often viewed as a technology-based work form. Research into technology implementation demonstrates that different consequences can result from the 'same' technology being implemented in comparable settings (Robey & Boudreau, 2000). For WFH, potentially relevant social contexts and processes stem from at least four factors, namely, organizational, job, individual and household characteristics. The *organization's impact* is illustrated at IBM where, unusually, WFH employees consider home as their primary work site (Hill *et al.*, 2003). WFH has been used so extensively at IBM that these arrangements have become normalized. Thus, IBM offers a different WFH social context from most other organizations, and IBM employees are even optimistic about career advancement opportunities (Hill *et al.*, 2003), contrary to other WFH findings (McCloskey & Igarria, 2003). A second influence, *characteristics of the WFH employee's job*, has long been recognized as a limiting factor (Konradt, Schmoock & Malecke, 2001). A third influence concerns *individual characteristics and preferred work styles*, such as preference for autonomy or self-discipline (Belanger, 1999; Katz, 1987). The fourth potential influence on WFH has been given less attention in the literature (Avery & Baker, 2002), namely the characteristics of the *employee's household* (Baruch, 2000; Konradt *et al.*, 2001).

Accordingly, overcoming some of the limitations of previous research, we evaluated the impact of multiple influences stemming from the organization, job, individual and

household within the one group of full-time professional employees with considerable WFH experience. Using consistent terminology and measures, we sought to understand the contribution of these four sets of influences to WFH employees' reported satisfaction and productivity.

Research variables and hypotheses

The organizational, job, individual and household variables are described below.

Organizational factors

Organizational climate: Evidence mentioned above suggests that characteristics of employing organizations influence how WFH is carried out and integrated into office-based activities. More generally, whether the climate of an organization is traditional, that is rule-bound, bureaucratic and hierarchical, or more supportive, open and power sharing, affects performance. Cultures that enable organizations to anticipate and adapt to environmental change tend to be associated with high levels of performance over time (e.g. Kotter & Heskett, 1992), as do cultures where managers share information and delegate decisions. Research indicates that rigid structures contribute to work alienation, a sense of employee powerlessness and meaninglessness, and reduce intrinsic interest in the job (Sarros, Tanewski, Winter, Santora & Densten, 2002). This suggests that WFH employees would be more satisfied and productive in supportive climates than in traditional organizations that are controlling and less receptive to new ways.

H1: A non-traditional organizational climate will be associated with more positive WFH outcomes than a traditional climate.

Technical support: Although the practitioner literature and common-sense lead to expectations that the more support provided for WFH, the more likely a positive outcome would be, there is little direct empirical evidence for this apart from a pioneering study by Hartman, Stoner & Arora (1991). They studied the 'technical and emotional support' (measured as a single variable) provided by the 'telecommuting supervisor', and found that supervisor support increased satisfaction, but not productivity. In this study, we separated these two forms of support into three variables to allow for the source of technical and emotional support for WFH employees arising from sources other than just a particular manager (e.g. from helpdesk or HR staff). Since additional evidence suggests that lack of technical support contributes to reported teleworker stress (Deepprose, 1999; Mann, Varey & Button, 2000), we hypothesize that more technical support will improve WFH outcomes.

H2: More technical support related to WFH will be associated with more positive WFH outcomes.

Manager's trust: In the general absence of specific telecommuting supervisors, we assessed the impact of the relationship with the WFH employee's manager as a source of emotional support. This is because the amount of manager trust seems to affect WFH outcomes (Davenport & Pearlson, 1998; Depickere, 1999; Konradt *et al.*, 2001).

H3: More trust from the WFH employee's manager related to WFH will be associated with more positive WFH outcomes.

Human-resource support: Human-resource (HR) support may provide part of the emotional support that Hartman *et al.* (1991) found increased WFH satisfaction, but not productivity. Therefore, we examined support from the HR department for the WFH employee. Others have reported HR support as facilitative (Alford, 1999; Deeprouse, 1999). In an instructive example, Alltel adopted a 'thorough' approach to implementing remote working (Deeprouse, 1999), and a major reason given for its success was the preparation, including anticipating HR issues that could act as impediments.

H14: More human-resource support related to WFH will be associated with more positive WFH outcomes.

Financial support for WFH: Reducing costs may induce employers to introduce or extend WFH, but this typically shifts costs e.g. for use of space and utilities, from employer to employee (Baruch, 2000). Incurred costs were frequently mentioned as a problem by employees who WFH (Mann *et al.*, 2000). Therefore, better WFH outcomes are expected where employers provide some financial support (Hawkins, 2000).

H15: More employer financial support provided for WFH costs will be associated with more positive WFH outcomes.

Training for WFH: Training for WFH employees generally involves instruction in technology use, but may include topics such as running a home office, OHS, and even organizational communication (Deeprouse, 1999). In addition, some evidence suggests that training managers, co-workers and household members for WFH can also be facilitative (Davenport & Pearlson, 1998), although this is not a consistent finding (Felstead *et al.*, 2002). Therefore, employee training for WFH and training of others (managers, co-workers and household members) were included in our study.

H16a: More training related to WFH given to the employee will be associated with more positive WFH outcomes.

H16b: More training related to WFH given to others (the employee's manager, co-workers, household) will be associated with more positive WFH outcomes.

Job characteristics

General characteristics of the job appear to affect suitability for WFH (Belanger, 1999; Konradt *et al.*, 2001), such as how crucial interaction with others is to accomplishing tasks. In their classic analysis of job characteristics, Hackman & Oldham (1975) identified four characteristics for distinguishing most jobs, and we applied these to WFH. *Task identity* refers to whether a job consists of entire pieces of work, and we expect that roles high in task identity would be easier to accomplish when WFH than tasks with low identity. *Feedback from the job* refers to whether the task itself provides information about how well the person is performing that job, and we also expect that jobs high in this characteristic suit WFH. *Feedback from agents* refers to whether supervisors and co-workers often let the person know how well they are performing in the job. Jobs high in this characteristic are predicted to suit WFH. *Dealing with others* refers to how much jobs involve cooperative work. We predict that jobs high in this characteristic, such as teamwork, would be harder to accomplish when WFH, given Hill *et al.*'s (1998) findings. These expectations are linked to the outcomes in the hypotheses below.

H7: Higher task identity will be associated with more positive WFH outcomes.

H8: Higher feedback from the job itself will be associated with more positive WFH outcomes.

H9: Higher feedback from agents will be associated with more positive WFH outcomes.

H10: Lower dealing with others will be associated with more positive WFH outcomes.

Individual work-style

Evidence predicts differences in suitability for WFH due to personal qualities such as preference for autonomy or self-discipline (Katz, 1987; Belanger, 1999). We studied these effects indirectly, assessing behaviour reflected in the employee's work style when WFH by including four aspects of work style expected to affect WFH outcomes. We expected that those who plan their day more when WFH, those who find it less difficult to quit working when WFH, those who perform different tasks when WFH, and those who compartmentalize their activities more would all report more positive WFH outcomes. Compartmentalizing is often suggested to novices when they begin WFH. The alternative to this is to muddle up various activities.

H11a-d: More planning of the day, less difficulty quitting work for the day, doing different rather than similar activities when WFH and compartmentalizing rather than muddling activities will be associated with more positive WFH outcomes.

Household characteristics

In WFH, the impacts on the household can be far-reaching and unexpected (Avery & Baker, 2002), although participants in the Avery & Baker study were mostly self-employed individuals or small-business owners. Other research also suggests that household characteristics can limit WFH (Baruch, 2000; Konradt *et al.*, 2001). One possibility is that the presence of others distracts from the person WFH from the task. We therefore examined five characteristics expected to enhance WFH outcomes – whether other people are also present when WFH, size of household, and number of children in the household, including under 5 and school-age children.

H12a-e: Fewer others present, fewer in the household, fewer children in the household, fewer children under 5, and fewer school-age children will be associated with more positive WFH outcomes.

Outcome measures

Two outcome measures, satisfaction and perceived productivity, were used.

Satisfaction when WFH: Extending Shadur, Kienzle & Rodwell's (1999) definition, satisfaction refers to an affective, evaluative response towards WFH. Satisfaction is a commonly used outcome measure in studies of remote work (Baruch, 2000; Hartman *et al.*, 1991; Staples, Hulland & Higgins, 1999). Supporting the use of satisfaction as a measure are results of a meta-analysis of 7,939 business units in 36 companies, finding that irrespective of whether employee satisfaction directly affects individual employee performance, enhanced

employee satisfaction and engagement may increase the outcomes, including profit, at the business-unit level (Harter, Schmidt & Hayes, 2002). We measured employee satisfaction when WFH, rather than overall job satisfaction.

Productivity when WFH: Remote working is frequently claimed to enhance productivity (e.g. Cascio, 2000; Davenport & Pearlson, 1998; McInerney, 1999; Solomon, 1996, 1999), and indeed WFH employees commonly report increases in their own perceived productivity (e.g. Baruch, 2000; Duxbury *et al.*, 1998). Rreviewing the published benefits to individuals of WFH, Baruch (2000) reported that 'improved performance and better productivity' was top of the list.

In developing satisfaction and productivity measures, we drew upon measures Staples *et al.* (1999) used for remote working employees. These outcome measures employed 5-point scales coded so that higher scores represented more positive outcomes. Two items on the satisfaction scale covered employees' satisfaction with how they were managed, one measured satisfaction with hours of work, and one variety in the job. A fifth item was added to the Staples *et al.* (1999) scale that asked directly how satisfied respondents were with working from home. The productivity scale consisted of four items that dealt with effectiveness, efficiency, productiveness and quality.

Method

A three-step procedure was followed: organizations were selected, each of their HR departments was asked to identify full-time, professional employees who WFH to the researchers, and then the researchers mailed a self-administered, anonymous questionnaire to WFH employees. Respondents returned the completed questionnaires directly to us to protect their identity within the employing organization, as ethical guidelines required. Questionnaire items relating to each variable were selected from the literature when available, or else developed for this study as described below. WFH was defined on the questionnaire as: 'working at your home for your organization. It does NOT mean working at a client's site or at any location other than your home'. All measures were obtained from questionnaire items. Demographic and WFH information included age, gender, tenure with this organization, who initiated the decision to WFH, how long respondents had been WFH for this organization and whether they wished to continue to spend about the same amount of time WFH.

Sampling involved two requirements. The first requirement was for employer organizations to be diverse on the variables being investigated. We contacted a wide range of organizations, whose selection could not be random because it is difficult to locate organizations that have employees who WFH (Lindorff, 2000). A targeted selection process was employed. Organizations were selected from *Business Review Weekly's* 25 largest employers in Australia, the 25 'Best Employers To Work For in Australia' identified in 2000 (Hewitt & Associates, 2001), major public-sector organizations, and smaller organizations from both the private and public sector not on these lists. In total, the HR departments of 101 organizations in Australia were approached, of which 20 organizations, from various industries and of different sizes, identified WFH employees. Within them, 130 questionnaires were distributed over a six-month period, yielding 50 usable questionnaires.

To ensure that participants were reasonably experienced with WFH, the second sampling requirement was that respondents must be full-time employees who WFH on a regular basis and had done so for at least three months. This 'intensity' sampling entails selecting "participants who are experiential experts and who are authorities on a particular experience" (Morse, 1994, p.229). We adopted the criterion of WFH for at least three months from Igbaria & Tan (1998), and used the official Australian definition for separating part-time from full-time employees. We applied the European Teleworking Online's (2000) relatively stringent criterion concerning the regularity of WFH – that employees WFH at least one day per week on average. Respondents were restricted to those in professional roles because of evidence suggesting that professionals and operatives should be studied separately (Felstead *et al.*, 2002; McCloskey & Igbaria, 2003). The requirements were set out on the front of the questionnaire. If a potential respondent did not meet these criteria, s/he was asked to pass the questionnaire on to a colleague who did.

Organizational factors

The influence variable measures are described below. On all of these variables, a higher score represents a greater degree of the relevant concept.

Organizational climate: The climate measure assessed the extent to which the organization's culture is 'non-traditional' or 'new' based on a test developed by Ashkenas, Ulrich, Jick & Kerr (1995, pp. 342-45). The 6 items covered decision-making, information-sharing, recognition and reward system, leadership style, work specification and risk-taking. However, the item on work specification was removed from the calculation of this scale to increase the value of the Cronbach reliability coefficient.

Technical support, Manager's trust, Human-resource support: Items for these three variables were presented together. The scales are shown in Appendix (A). Responses to each item ranged from Strongly Agree to Strongly Disagree, and a higher score represented greater support.

Financial support for WFH: A separate scale was constructed to measure the perceived extent of employer financial support for WFH costs. Items were based on whether the employee, the organization, or both paid for various costs. A scale, Organization-pays, was formed from the average of responses to the four items listed in Table 2 under C. Responses to these items were coded as 'I do' = 1; 'some me, some org' = 2; and 'my organization' = 3.

Training for WFH: Questions relating to employer-provided WFH-related training were grouped within the questionnaire. Respondents reported on training for using the technology, other WFH training they had received, and on whether their manager, co-workers or people in their household had received any training related to their WFH. Two scales were constructed, one for the training received by the employee, the second for training received by others. The scale for Training-employee was formed by calculating the mean of the responses to four items listed in Table 2 under A. (The item 'managing others in the household' was excluded, as no respondents indicated that this type of training was provided.) For each item, a 'yes' was coded '1' and a 'no' was coded with a zero. For the scale Training-others, responses to the three items shown in Table 2 under B were averaged, coded as follows: Extensive = 4; Moderate = 3; Minimal = 2; and No training = 1. No items needed to be removed from the training or Organization-pays scales based on the scales' reliability.

Job characteristics

Job characteristics were measured for the person's overall job, not just for WFH, and were based on Hackman & Oldham's (1975) Job Diagnostic Survey. It uses a 1-7 scale ranging from very accurate to very inaccurate. There are two items for each of the job descriptions, one of them is reverse coded when calculating the scale. Although five job description scales were initially evaluated – task identity, autonomy, feedback from the job itself, feedback from agents, and dealing with others – autonomy was eliminated because its Cronbach's alpha was only .31.

Individual work-style

Hypothesis 11 dealt with more planning of the day, less difficulty quitting work for the day, differing tasks when WFH, and compartmentalizing activities. The first three work-style characteristics were each based on one question (see Table 4). A scale evaluated the extent to which respondents' work practices when WFH were compartmentalized and regular, rather than muddled up and irregular. The content of these items is given in Appendix (B).

Household characteristics

Hypothesis 12 dealt with others present in the home during WFH, how many people are in the household, number of children in the household, the number of children under 5 and the number of school-age children. These were all based on single questions, shown in Table 4.

Results

Table 1 gives the demographic characteristics for the sample. Noteworthy is that females comprised 82% of our sample, consistent with other studies reporting that women are more likely to WFH (Belanger, 1999; Lindorff, 2000). The results confirm that our respondents WFH on a regular basis and are experienced with this mode of work: 68% worked from home more than 1 day/week and 70% had been WFH for their employer for at least one year. That 70% of respondents had worked for their organization for 4 or more years is consistent with Barnes' (1994) report that WFH employees tend to be long-serving.

Most respondents had initiated the decision to work from home themselves (84%), and 60% prefer to continue spending about the same amount of time WFH. About 47% of respondents reported having a formal contract relating to WFH, with a further 51% having an agreement under development.

INSERT TABLE 1 ABOUT HERE

Over one third (38%) had staff reporting to them, and averaged about 31% of their time on managerial duties. A high proportion was involved in teamwork (80%). This is consistent with today's tendency for work to be conducted in teams, but is surprising given earlier findings that WFH tends to negatively influence teamwork (Hill *et al.*, 1998).

INSERT TABLE 2 ABOUT HERE

Results for training are shown in Table 2 (under A and B). Some form of employee training was provided to half the sample (50%), mostly for using technology (42%), sometimes for OHS (30%), and very little else. It was rare for training to be provided to others.

Table 2 (under C) indicates considerable employer financial support for WFH expenses. Except for costs relating to home modifications, fewer than 12% of respondents bore all their WFH costs. Even for home modifications, only about 30% of respondents reported bearing the entire cost themselves; for another 30%, the employer paid.

Table 3 shows the descriptive statistics for all scales. Most yielded Cronbach alpha coefficients that could be regarded as adequate, being above the generally accepted value of about .70. Six coefficients were marginally below this value. Manager's-trust, Technical-support and Non-traditional-climate were rated positively by respondents (means exceed 4). The results for satisfaction and productivity reported in Table 3 indicate that the WFH experience of the respondents was positive. Mean satisfaction was 4.07 and mean productivity was 4.60. There were no gender or age differences in the outcome measures but those who had been WFH for longer were significantly more satisfied with WFH, although it did not affect WFH productivity ratings.

INSERT TABLE 3 ABOUT HERE

Table 4, under A, provides results for individual work-styles. Some respondents plan their day more when WFH than working in the office (38%), but 50% work similarly in the two locations. Many (56%) find it more difficult to quit when WFH compared with at the office, although it makes no difference to 32%. For the majority, work-related activities carried out at home are much the same as those done in the office (58%).

INSERT TABLE 4 ABOUT HERE

Results on household characteristics were quite diverse (see Table 4, under B). Most (80%) had children in the household. The most striking result was that 64% of those responding to this question had one child under 5, and 50% of the sample as a whole had one child under 5 years of age. For comparison, only 34% had one school-age child.

Table 5 reports correlations between the investigated variables and WFH outcome measures. Seven influence variables correlated significantly with satisfaction, four with perceived productivity. (Note that for tests of statistical significance, one-tail tests were used because of the directional nature of the hypotheses.)

INSERT TABLE 5 ABOUT HERE

The dependent variables, satisfaction and productivity, were significantly but not highly correlated ($r = .326, p < .05, 1$ -tailed). Although both reflect positive WFH outcomes, their correlations with the influence variables were quite different. Thus, Non-traditional-climate, Technical-support, Manager's-trust, Human-resource support, and Training-others all correlated with satisfaction but not with productivity. In contrast, Organization-pays and Task-identity were correlated with productivity but not with satisfaction.

Discussion

A multi-factor approach was used to try to understand the influence variables contributing to WFH outcomes in a sample of experienced WFH professional employees. Our sample could be described as predominantly females in their 30s with one child under 5 years of age. This suggests that WFH may be part of the solution for professional women with preschool children. US research has found that people who WFH report lower levels of work-family conflict (Madsen, 2003).

A major finding is that in terms of impact on WFH outcomes, organizational variables appear to be the most influential, with job characteristics second. None of the hypotheses relating to individual work-style variables or to household characteristics was significantly correlated with either outcome measure. Thus, individual work-style and household characteristics were not as predictable in relating to the outcome measures as organizational and job characteristics. These findings suggest that people may adopt very different styles in how they work and organize their households when WFH. Further research is needed into how best to support employees with different work styles or different household contexts. Some of the blanket advice and policies aimed at supporting WFH may need to be refined to accommodate particular situations. However, our results show that organizational factors and job characteristics do influence satisfaction and perceived productivity when WFH, albeit in complex ways.

Many of the hypotheses were at least partly supported but a pattern emerges in which the two measures of WFH outcome have different correlates. Five organization variables related to satisfaction but not to productivity. (Note that perceived productivity cannot be interpreted as a measure of actual productivity (Bailey & Kurland, 2002) because people who WFH may be biased in this judgment.) A non-traditional climate was significantly correlated with satisfaction (H1), and although the correlation with perceived productivity did not reach significance, it was in the predicted direction. This supports predictions derived from the literature. Technical support significantly correlated with satisfaction but not with productivity (H2), as did manager's trust (H3), human-resource support (H4) and WFH training for others (H6b). By contrast, the organization paying costs was significantly correlated with productivity, but not with satisfaction (H5). This contrasting pattern of results implies that the two outcome variables are measuring different aspects of WFH outcomes, corroborating Hartman *et al.* (1991).

Somewhat surprisingly, training for employees was not correlated with either outcome measure (H6a). Particularly noteworthy is that training in using technology, measured as a separate component, was also not related to any of the outcome measures. Relatively few respondents received WFH-related training, and the training that was provided had a narrow focus on using technology or OHS, rather than on WFH, communicating with the office or managing householders. That training-others was related to satisfaction is not surprising as this could make others more understanding of issues facing the WFH person. This finding needs further investigation because of the small proportion receiving this training in our study.

Results for job characteristics were more similar to each other in relation to the outcome measures except for task-identity (H7), which was significantly correlated with productivity but not with satisfaction. Feedback from the job itself was significantly correlated

with both satisfaction and productivity (H8), as was feedback from agents (H9). However, dealing-with-others (H10) was not significantly correlated with either outcome measure.

Conclusion

This study simultaneously examined the effects of multiple factors on the satisfaction and perceived productivity of professional employees working from home. Results indicate that organizational and job factors influence WFH satisfaction and perceived productivity, but individual work style and household characteristics do not. Recommendations for organizations seeking to support WFH are to focus on those influence variables whose effects are relatively predictable, namely organizational factors and job characteristics.

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Tables

Table 1: Respondent sample descriptive statistics

No. of respondents from various types of organizations:
 Best employers = 14 (28%), Largest private = 5 (10%), Other private sector = 23 (46%),
 Public sector = 8 (16%), Total = 50 (100%)

Age:
 Less than 30 = 4%, 30–39 = 65%, 40–49 = 18%, 50–59 = 10%, 60+ = 2%

Gender:
 Male = 18%, Female = 82%

Length of time working for this organization:
 Less than 1 year = 6%, 1–3 yrs = 24%, 4–10 yrs = 40%, over 10 yrs = 30%

Number of days per week working from home:
 1 = 32%, 2 = 26%, 3 = 10%, 4 = 14%, 5 or more = 18%

Who initiated the decision for you to work from home?
 I initiated it = 84%, Someone else in organization = 14%, Other = 2%

How long have you been working from home for this organization?
 Less than 1 year = 30%, 1–5 years = 62%, more than 5 years = 8%

Would you prefer to increase or decrease the amount of time you spend working from home?
 Decrease it a lot = 0%, Decrease it a little = 8%, Continue about the same = 60%,
 Increase it a little = 30%, Increase it a lot = 2%

Do you have a formal written agreement or contract with your organization, regarding your working-from-home arrangements?
 Yes = 47%, Agreement is being developed = 51%, No = 0%, Not sure = 2%

Do any staff report directly to you? Y = 38%, N = 62%
If so, proportion working time on managerial duties (___ %): No. = 19 Mean = 31.05

Are you involved with teamwork? Y = 80%, N = 20%

Table 2: Employer financial support for WFH costs and training related to WFH

A. Has your organization provided you with training in any of the following areas related to working from home? (please tick all that apply)
 Using the technology = 42%
 Managing others in household = 0%
 Running a home office = 4%
 Occupational health and safety = 30%
 Organizational communication = 6%

B. To what extent has your organization provided training that is relevant to your working from home to the following people? (tick the most appropriate box in each case):

	Extensive	Moderate	Minimal	No training
Your manager	0%	11%	6%	83%
Your co-workers	0%	8%	11%	82%
People in your home	0%	2.5%	5%	92%

C. Who pays for the various costs incurred in working from home? (Please tick the most appropriate box in each case)

	I do	some me, some org	my organization
<i>Who pays running costs?</i>	12%	46%	42%
<i>Who owns (leases or finances) the technology?</i>	6%	40%	54%
<i>Who pays for repairs?</i>	8%	30%	62%
<i>Who paid home modifications? (N/A 18%)</i>	30%	22%	30%

Table 3: Cronbach's alpha, mean and standard deviation for scales

Scales	Number of items	Cronbach's Alpha	Mean	S.D.
Satisfaction	5	.73	4.07	0.68
Productivity	4	.87	4.60	0.49
Technical-support	3	.74	4.34	0.64
Human-resource-support	3	.63	3.68	0.93
Manager's-trust	3	.64	4.40	0.67
Organization-pays	4	.79	2.36	0.56
Training-employee	4	.62	0.20	0.26
Training-others	3	.86	1.23	0.55
Task-identity	2	.75	5.55	1.51
Feedback-job	2	.69	5.12	1.42
Feedback-agents	2	.78	4.70	1.64
Dealing-with-others	2	.63	5.02	1.71
Non-traditional-climate	5	.81	4.28	1.39
Compartmentalization	7	.68	4.04	1.37

Table 4: Individual work-style and household characteristics

<p>A. Individual work style</p> <p><i>How much do you plan your day when you're working from home, compared with when you're working in the office?</i> Much more, more = 38%, neither = 50%, less, much less = 12%</p> <p><i>How difficult is it to decide that it is time to quit for the day when you are working from home, compared with when you're working in the office?</i> Much more, more = 56%, neither = 32%, less, much less = 12%</p> <p><i>How different are the work-related activities you carry out when you're working at home, compared with the activities you carry out when you're working in the office?</i> Completely, mostly different = 14%, somewhat different = 18%, slightly or not at all different = 58%</p>
<p>B. Household</p> <p><i>When you are working from home, how often are there other people also present in your home?</i> Never = 6%, rarely = 30%, sometimes = 20%, much of the time = 20%, always = 24%</p> <p><i>How many people, besides yourself, live in your household (including children)?</i> None = 2%, 1 = 18%, 2 = 30%, 3 = 30%, 4 or more = 20%</p> <p><i>How many children live in your household?</i> None = 20%, 1 = 40%, 2 = 26%, 3 = 10%, 4 or more = 2%</p> <p><i>How many of these children are under 5 years? (39 respondents)</i> None = 25%, 1 = 64%, 2 = 10%, 3 = 0%, 4 or more = 0%</p> <p><i>How many are school-age children? (38 respondents)</i> None = 45%, 1 = 34%, 2 = 18%, 3 = 2%, 4 or more = 0%</p>

Table 5: Correlations between influence variables and WFH outcomes

Scales	Satisfaction WFH	Productivity WFH
Organizational variables		
<i>Technical-support</i>	.356**	.031
<i>Human-resource-support</i>	.304*	.213
<i>Manager's-trust</i>	.374**	.192
<i>Training-employee</i>	.187	.107
<i>Training-others</i>	.421**	.052
<i>Organization-pays</i>	-.128	.291*
<i>Non-traditional-climate</i>	.267*	.230
Job characteristics		
<i>Task-identity</i>	.090	.337**
<i>Feedback-job</i>	.277*	.245*
<i>Feedback-agents</i>	.345**	.269*
<i>Dealing-with-others</i>	-.141	-.076
Individual work style		
<i>Planning-the-day</i>	.153	.123
<i>Difficulty-deciding-to-stop</i>	.073	.230
<i>Different-activities</i>	-.097	-.066
<i>Compartmentalization</i>	.141	.063
Household characteristics		
<i>Other-people-present</i>	-.039	-.073
<i>Number-living-in-household</i>	.227	.126
<i>No.-Children-in-household</i>	.060	.210
<i>No.-Children-under-five</i>	-.174	.041
<i>No.-School-age-children</i>	.181	.219

* p <.05, ** p <.01, 1-tailed

Appendix

A. Items for three organizational support scales are given below. These items were presented to respondents in a single section, in the order given by the item numbers. For the formation of summative scales, items indicated by "(Rev)" below were reverse coded.

Technical support (items 3.1, 3.4, 3.13)

- I receive as much technological support I need when working from home
- The quality of the technological support I receive when working from home is not high. (Rev)
- When I have a technology-related query from home, someone in the organization is always accessible

Human-resource support (items 3.8, 3.11, 3.15)

- No specific person in my organization is responsible for the people side of working from home. (Rev)
- The quality of the support for the people side of working from home that I receive is not high. (Rev)
- I receive as much support as I need to resolve issues related to working from home when they arise.

Manager's-trust (items 3.10, 3.14, 3.16)

- My manager doesn't think I slacken or goof off when I'm working from home
- My manager worries that I am not getting on with the job when I work from home. (Rev)
- My manager is trusting me more and more as I continue to work from home.

B. Compartmentalizing scale. A 7-item scale was constructed to assess respondents' work practices when they work from home. The items covered using the same or separate locations for work and non-work activities, same or different computers, whether or not they keep in contact with other members of the household during work times, how frequently their work is interrupted by other people for either work or non-work reasons, whether their work timetable is regular or varied, whether or not they tend to 'fit in' non-work activities during work times, whether they work at any time or at specified hours.