

**Communication and Control:  
Case Studies in Australian Telecommuting**

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## **ABSTRACT**

This paper discusses the results of in-depth semi-structured interviews with 39 telecommuters from 12 Australian organisations. The paper serves two broad aims: firstly, it identifies current trends in telecommuting and offers a perspective on Australian developments. Secondly, it provides a focus on significant communication aspects of the Australian telecommuting experience.

Findings are that the majority of interviewees reported overall satisfaction with telecommuting as an important contributor to their improved work and lifestyle outcomes. Overall, telecommuters appear to cope with communication aspects of their work environments. They also were not over-reliant on advanced communications media when telecommuting. Difficulties as reported by telecommuter interviewees included: perceived discomfort over lack of management support for their telecommuting; reduced levels of interpersonal communication suggesting the likely need to adopt a 'media mix' approach to servicing their communication needs; problems of information access; and telecommuters' reported levels of difficulty with their uses of some computer and communication technologies. Problems relating to telecommuters' perceived professional and social isolation, were also identified.

Finally, the paper underscores where organisational communication theorists and practitioners need to more energetically embrace the concepts of virtual work and telecommuting.

## INTRODUCTION

Technological, social, economic, and organisational factors are converging to facilitate the trend to remote work. Telecommuting--working at home or at some other remote location and using communications technologies in lieu of travel to the office--is the best-known of the new remote work options (for useful overviews of these trends, see Gray, Hobson & Gordon, 1993; Huws, Korte & Robinson, 1990; Jackson & Van Der Wielen, 1998; Kugelmass, 1995; Nilles, 1998; Switzer, 1996). Yet telecommuting is not new: it has been touted for over twenty years as an impending work option. It has also been actively promoted as a powerful tool to reduce traffic congestion, save on energy consumption, and cut back on pollution. It has been further suggested that telecommuting can reduce office space and other costly overheads, increase worker productivity, and make organisations more competitive. Telecommuting, most intriguingly, has been cited as a means to reconcile conflicts between 'work' and 'home', and significantly address 'quality of life' concerns.

Difficulties nonetheless exist with respect to deciding what the term 'telecommuting' means. To cite examples, Telecommuting has been variously described as 'telework', 'electronic homework', the 'electronic cottage', 'location-independent work', and 'flexiplace' (Huws, 1991; Kugelmass, 1995; Reymers, 1996). An addition to this confusing list is 'worksteading' (Farmanfarmaian, 1989).

The competing definitions 'telework' and 'telecommuting' are particularly worth noting. Broadly speaking, 'telework' is often used as a generic descriptor of to refer to all forms of remote work and in this general context embraces self-employed home-based workers, independent contractors, as well as 'telecommuters' (e.g., Huws, Korte & Robinson, 1990; International Labour Office, 1990). Another example of interchangeability comes from Jack Nilles who coined the term 'telecommuting' (Nilles, Carlson, Gray, & Hanneman, 1976) but more recently has adopted both 'telework' and 'telecommuting' when describing current developments (Nilles, 1998). However, drawing on Kugelmass's (1995) useful criteria, telecommuting is the preferred term as well as being the one most frequently-adopted in the literature to reflect current research trends. 'Telecommuting' is also the term adopted industry-wide by Hewlett-Packard, IBM, the TELSTRA Corporation Ltd as well as representatively by other Australian organisations. Therefore, telecommuters are, first and foremost, either full-time, part-time, or contract corporate employees (versus fully self-employed home-based workers).

Accordingly, accounts of interviewees as reported below indicate that they met the three core criteria for telecommuting (Kugelmass, 1995, pp.20-22). They were corporate employees who combined flexiplace (they worked at home or at some other remote location as well as in the traditional office); they often had relative control of the time aspects of their work (i.e., flexibility in choosing actually when to work); lastly, in varying degrees, they relied on electronic communications to achieve work outcomes.

#### **TELECOMMUTING: GROWTH TRENDS**

Telecommuting in both Australia and other 'information' societies is on the increase. At May, 1999 nearly 5% of employed Australian adults (0.4 million persons) self-reported that they had a formal telecommuting arrangement with their employers to work from home, compared to only 2% (0.1 million of employed persons) in May, 1998 (Australian Bureau of Statistics. Year Book Australia 2000, p. 632). However, such figures may be only the 'tip of the iceberg' given that informal telecommuting arrangements, based on overseas trends, may also be reasonably extensive. In any case, more Australian organisations appear willing to embrace telecommuting as an adjunct to other flexible work options. Representatively, the Brisbane City Council, ENERGEX Queensland, Lend Lease Australia, The Road Transport Authority of New South Wales, TELSTRA Corporation Ltd., and BP Oil Australia already have formalised arrangements to encourage staff to telecommute.

In the United States, Apgar (1998) and Conrad and Poole (1998) have concurred that the number of telecommuters may be as high as 15 million. Downsizing and outsourcing; the ongoing refinements to communication technologies; promise of higher employee productivity; projected savings on costly downtown office space; and employee's increasing needs for work and lifestyle flexibility – these factors are spurs to the future growth of U.S telecommuting (Apgar, 1998).

Telecommuting growth patterns can also be usefully viewed within a three-tiered model. The initial stage comprises 'volunteer' telecommuters (for the most part, valued professionals and some clerical workers) able to negotiate flexible work-at-home arrangements with their employers. The second tier comprise 'mandatory mobiles' (sales and servicing staff). Such workers – building on their earlier work-place traditions – are currently required to spend even more time in the field for more direct client contact (Apgar, 1998). After moving its sales staff into home offices, for example, the Compaq Computer Corporation reportedly was able to triple its revenue per person in two years (Compaq, cited in Hill, 1995, p.30). Most recently, the third

tier of telecommuting has emerged: the cybernetters, who are telecommuters adapting themselves to other unique demands of the virtual office (for overviews see Grenier and Metes, 1995; Lipnack and Stamps, 1997; Meyers, 1997). In such work environments, teams and customers work together in flexible 'virtual' environments; they exchange ideas and information electronically; they may never meet face to face. Some writers (Hearn, Manderville & Anthony, 1998, Lipnack & Stamps, 1997) have similarly forecast new marriages of technology, markets, and work-sharing. These writers have wide-ranging expansion of electronic work, which is likely to see expansion of telecommuting.

### **TELECOMMUTING AND ORGANISATIONAL COMMUNICATION: SELECTED THEORETICAL FRAMEWORKS**

Most of what is written about organising, managing, and leading in modern organisations is predicted on the assumption that the bridge to such activities is effective communication (e.g. Conrad & Poole, 1998; Irwin & More, 1994). Communication competence is often perceived as the direct outcome of one's ability to control or influence the environment through successful interactions with others (Parks, 1985 cited in Albrecht, 1988). A further assumption is that, in order to discharge work-related communication responsibilities and fulfil social needs, the physical proximity of coworkers is needed for substantial parts of the workday (Kraut, 1989, p. 26). Drawing on other rich traditions from symbolic interactionism (Goffman, 1959), and more recently impression management theory (Giacalone & Rosenfeld, 1991), organisational members are actors playing many different roles in different groups and usually require the co-presence of others in both the creation and maintenance of desired identities. Situations that deny effective interpersonal interactions may also have negative impacts on an individual's sense of psychological well-being (Brenders, 1987).

However, telecommuting as a form of 'virtual work' may significantly reduce interpersonal communication opportunities and therefore challenge communication efficacy (Duxbury & Neufeld, 1999; Ramsower, 1985). At a more instrumental level, having ready access to both coworkers and task-related information per se is usually regarded as the 'glue' that allows achievement of work-related outcomes (Boist, 1994)

Drawing on these and other theoretical frameworks, it is useful to turn to the experiences of telecommuter interviewees within their organisational settings. In terms of the present paper, this selective focus is quite deliberate. The importance of 'spill-over' effects of the telecommuter experience into domestic and personal domains, as well as the potential for telecommuting to

reduce/increase role conflict, burnout, and stress, are readily acknowledged; indeed, a rich corpus of literature reports on such effects (e.g., Gurstein, 1990; Huws et al., 1996; Kelloway & Gottlieb, 1998; Kraut, 1989; Shamir, 1992). Moreover, such issues were included as part of this exploratory study. However, in the present paper, the aim is to take a more restrictive view, while focusing in greater depth on telecommuters and their intra-organisational communications.

Such an emphasis on organisational factors is worthwhile from another standpoint: as frequently noted, in the literature, these factors have a significant bearing on effective and sustainable telecommuting as well as telecommuter work and lifestyle satisfaction (Kugelmass, 1995). However, communication aspects are too frequently glossed over or, in some cases, barely acknowledged. Accordingly, interviewees were encouraged to comment on such potentially key factors as levels of management support; working relationships with supervisors and coworkers; levels of professional and social isolation; network maintenance; and other communication aspects.

Such organisational relationships were also seen to have two major over-lapping concerns for telecommuters. Firstly, it was decided to selectively focus on the extent to which such relationships—in particular, communication relationships—facilitated individual telecommuters' instrumental coping (by way of providing adequate technical and human support to allow overall task completion). Secondly, the ancillary aim was to examine the extent to which such relationships assisted with emotional coping, by providing social and emotional support, given the relative isolation that exists in telecommuting environments.

#### **TAKING THE STUDY FURTHER USING QUALITATIVE METHODS**

A plethora of reporting, mostly anecdotal, exists with respect to overseas (predominantly North American) trends in telecommuting. By contrast, there has been a dearth of literature on Australian case studies in telecommuting. Therefore, one of the main purposes of the present research was to explore what Australian employees could report (i.e. 'tell their own stories') about their telecommuting experiences. An ancillary aim was to tap into a broader range of telecommuting experiences than had been noted from reports of single Australian organisations (e.g. Telecom Australia, 1993; Road Transport Authority of New South Wales, 1996).

To meet these research aims, semi-structured one-hour interviews were adopted as the basic methodology for the study (a full list of interview questions is available from the authors). The application of this method, as well as ways to construct relatively open versus closed questions, are well-covered in standard texts dealing with qualitative research methodology (e.g., Flick, 1998; Robson, 1993). Consistent with the inductive approach of the study, the analytical procedure adopted was essentially exploratory (Strauss, 1987).

Interviewees were employees from twelve Australian organisations and comprised the following work categories: academics, (1), administrators (4), computer systems designers (4), journalists (1), legislative drafters (3), managerial consultants (3), project workers (9), public relations consultants (1), sales-marketing personnel (11), solicitors (2). Altogether 46 per cent (N=18) of the sample were female telecommuters.

In assessing interview results, the overall aim was to exhaustively extract all constructs from the interview transcripts that were relevant to the telecommuters' experiences. However, some preliminary categorisations, based on an earlier literature review, were also adopted. The typed transcripts were treated as holistic documents, and the primary categories were elaborated from the data used (Flick, 1998; Strauss, 1987).

To deal with the qualitative data management which this mass of diverse material created, recourse was made to NUD\*IST (Non-numerical Unstructured Data Indexing Searching and Theorising). This computer software package has been highly useful to manage, analyse and interrogate considerable amounts of qualitative data (Richards & Richards, 1991), as well as assist in conceptual development (e.g., Barry, 1998).

Consistent with standard practice when using NUD\*IST, the project entailed building two data bases: (i) documents arising from transcripts and comprising the 39 semi-structured interviews; and (ii) an index comprising codes and categories created by the researcher to conceptualise the data. As a computer software package, NUD\*IST has many features enhancing various aspects of qualitative research (as outlined by NUD\*IST developers Richards & Richards, 1991). However, for the purposes of the present study, its main utility value was that it allowed groupings of subjects' statements regarding core aspects of their telecommuting experiences (including communication relationships with management, supervisors, and peers, reliance on networks, as well as other communication aspects). In short, adoption of NUD\*IST allowed groupings of respondents' comments, isolation of issues and themes, while allowing a free exploration of

patterns. This is the approach recommended for inductive studies by the developers of NUD\*IST (Richards & Richards, 1991).

Other procedures to enhance the reliability and validity of the findings were adopted, consistent with the other well-established practices for exploratory research (Flick, 1998; Kirk & Miller, 1986; Strauss, 1987).

### **OVERALL FINDINGS FROM INTERVIEWS**

As noted in the previous section, the over-riding vocational aspects of the interviewees in this study is that they are all 'information workers' and appropriately fit the well-accepted telecommuter-teleworker classifications (Huws et.al., 1990; International Labour Office, 1990; Kinsman, 1987; Kugelmass, 1995). Altogether, 31 interviewees were 'volunteer' telecommuters whereas 20 percent (n=8 interviewees) were 'mandatory' telecommuters (i.e. company policy dictated that they telecommute). To give additional context, it is useful to begin with a summary of the most important constructs, which explained interviewees' choices to telecommute. The most frequently cited reasons for choosing to work at home (allowing, in some cases, for multiple responses where participants gave more than one reason) included:

- combine child care with work (31%)
- achieve greater control of work including fewer interruptions (31%)
- derive greater autonomy in one's workstyle (26%)
- conform to company policy and use home as office (20%)
- enjoy greater flexibility and convenience in life-style (20%)
- save on commuting time (20%)
- spend more time with family (13%)
- continue in one's profession (13%)

These reported motivations to telecommute are consistent with those as noted elsewhere in the literature (e.g. Huws, Korte & Robinson, 1990; International Labour Office, 1990, Kugelmass, 1995). As noted, 'family reasons', and 'greater control of work' were the most frequently cited reasons to telecommute; linking both sets of reasons was the frequently-stated need for flexibility in order to balance family and work obligations.

Almost 74% of interviewees had spent 3-4 years telecommuting; they telecommuted, on average, 1-2 days per week. A two-days' per week telecommute is also frequently cited elsewhere in the literature (e.g., see International Labour Office, Geneva, 1990). In terms of present study respondents, 46% said they preferred to work between 1-3 days per week at home; another 18%

of interviewees were happy to work four days or more at home; other interviewees either had recently exited telecommuting or did not comment.

In terms of satisfactions, one third of the interviewees gave unequivocal support for telecommuting, while, overall, 65 per cent of the interviewees also reported that they wanted, in varying degrees, to continue their telecommuting arrangements. However, interviewees also identified across their work-home domains several 'push-pull' factors adding to the strains of their telecommuting. Because of the overall aim of this paper, it is proposed to selectively examine the communication aspects.

### **TELECOMMUTERS: RELATIONS WITH MANAGEMENT**

The importance of the explicitness of managerial support for the telecommuting arrangement is a common theme in the literature. Managers have been empirically found to be either ignorant about telecommuting (Bernardino, 1996), or they remain distrustful because telecommuting threatens their desire for control (Tomaskovic-Devey & Risman, 1993). Conversely, in one major IBM program, it was found that mobiles rated their managers more favourably than did the non-mobile workers (Hill, 1995, p.141).

A core finding of the present study was that the majority of interviewees (53 per cent) indicated reasonable levels of satisfaction in their relations with managers-supervisors; however, 23 per cent expressed strong views on the lack of managerial support; and 24 per cent gave ambiguous responses or skirted around the question. Telecommuters reporting favorably often linked their satisfaction to a manager's communicator style, which, in turn, attracted such descriptors as 'encouragement', 'trust', and 'supportiveness'. One telecommuter, a public relations consultant, appeared to paint a picture of the 'ideal' telecommuter manager when she commented:

*Your employer's attitude is really crucial. I'm really lucky that I've got a smart employer who will extend boundaries for people because he knows that they put in extra – and who is willing to give people more freedom so that they can achieve more for the organisation and be happier overall.*

By contrast, seven other telecommuters specifically mentioned lack of management 'trust', representative comments being 'my boss was always looking over my shoulder'; 'management was aghast at my telecommuting arrangement'; 'my section head allowed me to telecommute very reluctantly'.

As also emerged in interviews, the degree of explicit support management gives to telecommuting signals to telecommuters that their managers value them and their work. It can also communicate that the company is technologically progressive and is keen to experiment with new forms of flexible work options such as telecommuting. Probably the clearest form of such explicit communication is actual formal policies and guidelines ensuring that telecommuters-management-coworkers mutually understand what is involved in the telecommuting arrangement. This consequently reduces role ambiguity and ensures technical and administrative support for the telecommuter. Such formal policies were found to be significantly lacking in most of the organisations discussed in this study.

This absence of demonstrated management commitment appeared, in a number of cases, to significantly affect resource allocation. Thus, communication over resource allocation was a one-sided battle for some telecommuters; highly-valued employees, however, fared better in securing what they needed. As reported by one telecommuter, 'It all comes down to power...I've got a better sort of bargaining power'. Another telecommuter, a solicitor, commented:

*My bosses just didn't think about some things – it was atrocious! They didn't set me up with a computer; I had to ask my husband to get me his. I didn't have a fax machine. Then, to really stuff, things, I didn't have a printer. I mean it happened like magic for them because I got my own act into gear. Employers don't think of us!*

Lack of management support for telecommuting could be communicated in other ways. For example, most telecommuters reported a lack of telecommuter-specific training, an important ingredient for sustainable telecommuting (The California Telecommuting Pilot Project, 1990) Other overall concerns were: lack of programming administrative support; poor planning in job design; and lastly, lack of management concern for professional and social isolation ('out of sight, out of mind' becoming, in the present study, a frequently-espoused interview theme)

#### **OTHER FORMS OF ORGANISATIONAL COMMUNICATION**

Meetings were rated as an important formal office contact. Meeting frequencies varied according to 1) complexity of task and need for feedback; 2) management predilections for keeping in touch with their telecommuters; and 3) need for currency of information. Thus, meeting frequencies ranged from virtually zero encounters to intensive weekly meetings. Telecommuter satisfaction levels varied across all three areas. However, sales-marketing telecommuters, for instance, met with their superiors weekly, as reported by one telecommuter, 'to bring each other up to speed as to what we're all doing and set ourselves projects for the week' Nonetheless, 18% (n=7) of

interviewees said they found meetings either difficult to attend or disruptive to their work-at-home scheduling. Also lacking, for some telecommuters, was sufficient advanced communication about meeting scheduling.

Daily telephone or other contact was the chief communication medium for roughly 30% of telecommuter interviewees. This proved a major compensatory factor 'for not being there'. The sales-marketing telecommuters ranked highest in intensity of daily communication (e-mail being regularly used as well as the telephone) Communication was often two-way once communication patterns had been established. As noted by one telecommuter:

*I'd ring in at least once a day, usually. I'd have some sort of problem to ask someone about. There were no hassles. If they wanted me, they'd leave a message on my computer and I'd ring in.*

For other telecommuters, communication could be employer-initiated. For instance, one sales-marketing telecommuter noted as company policy:

*They're constantly in touch with us—daily, I mean. They ask. 'What's happening out there? What's the market doing? What are you doing?'*

By contrast, one 5 day per week telecommuter, a project officer, commented that 'I had far less contact with my boss—far less than I should have, given the poor way my job was set up'. Whereas another telecommuter, noting how communication could be substantially-improved on a two-days-per week telecommute, reported:

*Communication? No, it really wasn't a problem because I was in the office quite regularly and people knew they were able to contact me at home—and they did. It would be quite different if you were working at home full-time and reliant on only a telephone.*

*This telecommuter's* comment highlights another key point: peers and co-workers need fully to understand the telecommuting arrangements (and the telecommuter's availability to be contacted when needed). Other interviewees reported, for instance, co-workers were reluctant to ring them at home. Consequently, important messages might not be timely received. Noted one irate telecommute: 'Once people knew I wasn't there, they wouldn't ring me at home; they would make decisions without me!' A recurrent theme noted in the interviews was expressed this way: 'Everybody needs to know what's going on: not just the telecommuter and the supervisor!'(telecommuter). Reported another telecommuter: 'Regular in-office workers need as much education about telecommuting as do the actual telecommuters themselves'.

Memos, because of their frequency and volume, are often regarded as the bane of in-office workers. However, their value appears to be 'rediscovered' by several of this study's telecommuters to communicate job-related information and reduce ambiguity. Memos were

nonetheless notable in their absence (either by e-mail or in written form) for at least some telecommuters. Overall, memos were regarded as an important part of the formal communication network, and could be linked to another interview theme: timeliness of communication. This need for timeliness appears extra-important to telecommuters since they lack proximity and quick referral to co-workers as well as other information cues for immediacy of information taken for granted 'in the office'. As well, 'timeliness' may have more than instrumental (work-related) value; it may well have affective value, and remind the telecommuter that he or she is 'in touch' and still part of the team.

As indicated by respondents, telecommuting situations—and telecommuter communication needs—offer considerable variability. Therefore, organisations need to spend more time in analysing actual communications needs (from both the management and telecommuter's end); management can then develop an appropriate 'media mix' to service them.

Several reported difficulties were well-summarised by this telecommuter:

*From the point of view of communication with actual supervisors on immediate tasks, we had regular contact. But overall communication about the office in general was dismal. At home you certainly didn't get any of the memos, newsletters, and that sort of thing—things that circulated around the office. And that's something that needs to be addressed—I mean, if people aren't going to be at work physically, how are they going to be kept in touch with what's going on in the wider sense?*

Many organisations (outside those identified in the present study) have adopted electronic or voice mail capabilities to keep employees informed of important news or actions within the company. Periodic communication 'audits', acknowledging the respective needs of managers, their co-workers and telecommuters, could also be useful to resolve apparent difficulties. Whatever 'media mix' is decided, interviewees re-affirm that it is essential that vehicles for consistent communication be established and followed.

## **USE OF COMMUNICATIONS TECHNOLOGIES**

Registering frequencies of use of particular communications technologies was outside the scope of the preliminary interviews. Rather, broader user patterns were sought to be identified as well as likely areas for later follow-up. At the individual level, location independence is achieved through communications technologies. These technologies are, therefore, essential to 'coping'. Interviewees did, however, report some difficulties with their uses of communication technologies across three critical areas earlier identified by Olson (1985): 1) overall

communications with supervisors and co-workers; 2) communications with clients; and, lastly, 3) access to information for research and overall decision-making in aspects of daily work. An added research interest (for the writers) was the extent to which the technologies might compensate for lack of 'social presence'—that is, sufficiently compensate for lack of face-to-face meetings in work and social support situations. A brief analysis of these aspects follows.

#### Communications with supervisors and co-workers.

A significant number of respondents (n=16 telecommuters, 44% of subjects) reported varying levels of difficulty with their actual uses of computers and communications technologies. Specifically reported were equipment as well as systems problems, which affected their work performance across all three of the above categories identified by Olson (1985). Allied were reports (n=6 interviewees) that they missed the presence of someone immediately available (as would have been the case back in the office) to assist with advice and help problem-solve when technologies proved non-user-friendly. Other aspects, drawn from the telecommuter litany, related to 'the system going down', 'lack of system back-up', and the need for re-training. (or, in the words of one telecommuter, 'simply getting used to the technology').

#### Communications with clients

Actual frequencies of use of communications technologies for client contact were outside the scope of the exploratory interviews (but are deemed, in the context of the writers' on-going research, to have obvious links to telecommuter control-of-work outcomes). However, interesting perspectives were volunteered. Six telecommuters considered that the technologies actually contributed to 'communication overload', that 'control' rested more with the client than the telecommuter who, in all six cases, had to respond, day and night, to calls. One telecommuter added, representatively, regarding the increased volume and frequency of his communications: 'I have a pager, I have a mobile; in fact, it's downright embarrassing how easy it is to get me these days!' Another telecommuter, working for an international company, found he had to resign his job because of 'stress over international time differences and over-tight deadlines from my American boss!'

#### Information access and back-up documentation.

In many cases, such information and documentation could not be accessed on-line. This was reported by a third of the interviewees (n=14 telecommuters) as a problem. In short, bulky office

files, manuals, and other hard-copy materials could not be so easily photocopied or faxed but had to be located by physical visits to the main office (or, as in the case of one telecommuter, a solicitor, by excessive reliance on couriers for extensive legal documents), causing job interruptions and personal frustrations. As reported by one telecommuter, 'the raw data often comes in the form of paper, and, when it does, you have to get someone from the other end to fax or scan the document'.

### Technologies and social support.

Little evidence emerged from respondents' reports that electronic communication was perceived as a tool of social support (as evidently the Internet has become for many users: Rheingold, 1994). However, one telecommuter, a legislative drafter noted that:

*I've always got the computer on—I check for messages; I talk to people in there. Otherwise, I'd go brain dead!*

For other interviewees, communications technologies appear to have the more functional (i.e. work-related) attributes as well-outlined in Tung and Turban (1996).

### Communication technologies and control of work.

From the information supplied by these interviewees, the overall conclusion is that communications technologies may provide, in the real world of telecommuting, quite varying levels of 'control' over work processes (according to both human and technical factors). On the other hand, maintenance of individual client contacts was enhanced by 'invisible' communications technologies which meant, to quote one sales-marketing telecommuter, 'Clients didn't know whether I'm at home: I'm using technology to communicate just as effectively as if I'm in the office'. Another telecommuter commented that his customer maintenance system, electronically maintained and updated, was an indispensable tool for external servicing of clients' needs. As reported by interviewees, numerous other benefits of the technologies might be cited as contributing to control of work outcomes.

However, there are many 'unknowns' with respect to interviewees' actual perceptions of the role of computers and communications technologies to support their remote working. For example, telecommuter interviewees' efficacy or competency beliefs regarding the effective use of the technologies at their disposal might usefully have been obtained. Such efficacy beliefs have been empirically found to correlate with both adoptions and effective use of computers and related technologies (see Hill, Smith & Mann, 1987).

### Continuing reliance on traditional communication technologies.

Despite myth-making to the contrary in the popular-mainstream press, telecommuting does not always lead to an increased adoption of communication media (Duxbury & Neufeld, 1999; Olson, 1989). Further, as representatively noted by Kugelmass (1995), 'many successful telecommuters do, in fact, work remotely with nothing more sophisticated than a conventional telephone' (p.119). The present study lends support to this view (Kugelmass, 1995). For the majority of the present study's respondents, communication needs were met firstly by the telephone, secondly the fax machine, and lastly, electronic mail. This observation has also been empirically borne out by Duxbury and Neufeld (1999). In their study of Canadian federal government telecommuters, for example, it was found that e-mail did not increase as a result of telecommuting. Among other factors, approximately one third of their telecommuters were simply unable to access e-mail messages from home. Further, the perceived importance of asynchronous media (such as e-mail, written communications, and fax) remained constant over the telecommuting pilot program (Duxbury & Neufeld, pp.16-17). Earlier findings were similarly noted in two separate studies of the communication patterns of computer professionals; despite their 'hi-tech' environments, these telecommuters overwhelmingly preferred the telephone as the next best substitute for face-to-face communication (Olson, 1989). Similarly, from a United Kingdom perspective, Huws (1993) also found that her teleworkers relied on the telephone used, far greater than any other medium, by nine out of ten of the teleworker occupational groups in her extensive survey.

### **TELECOMMUTERS: COPING WITH PROFESSIONAL ISOLATION**

Professional isolation is widely regarded as one of the greatest potential problems for roughly 60% of all telecommuters (International Labour Office Review, 1990). A core hypothesis – as reported in much of the telecommuting literature – is succinctly noted by McClintock (1984):

Limiting an employee's face-to-face contact with coworkers may inhibit opportunities for advancement and create problems if issues requiring personal contact cannot be discussed (p 5).

Consequently, the majority of telecommuters say they need to make extra efforts in order to ensure maintenance of adequate communications with both co-workers and clients. A number of well-known telecommuting programs in the United States have collapsed because participants felt they were 'losing touch' with the office grapevine. To cite one of the best-known examples, enrolment in Control Data Corporation's alternate work site programs dropped from 60 to 48 programmers, despite tangible productivity gains, as employees perceived they were becoming

increasingly 'out-of-touch' with in-office matters.

These are important issues. In many work situations, only peers 'really understand the problems faced by the individual, and only they can provide the instrumental support required' (Shamir & Salomon, 1985, p. 460). Moreover, when asked about professional isolation, 30% (n=13) of telecommuter interviewees reported that their own interpersonal communication decreased, and by implication, reduced both the frequency and intensity of professional contacts.

Altogether, 51 % (n=20) of Study 1 interviewees also saw this as a problem, claiming physical separation from the office potentially restricted, severely, their ability to tap into both formal and informal information networks. This telecommuter's viewpoint was representative:

*A real problem? It's isolation—not being on the grapevine so to speak. Having to make a real effort to network and not hearing about job opportunities—those sorts of things.*

Other telecommuters reported they had other 'out of sight, out of mind' concerns. These were cited as either an actual problem, or an anticipated problem, the longer subjects telecommuted. The result was often perceived as reduced 'on the job' feedback as well as a tapering-off in their relations with management (who, from some reports, allowed their employee telecommuters simply 'to drift').

Allied to such perceived concerns were: 1) reduced opportunities for professional growth; and 2) a risk of loss of actual career growth. Among the most specific comments were those from TCI who said that, for him, telecommuting had limited currency 'because it's not a good career path'; and TC7 who reported that each year she telecommuted, her standing in her legal firm 'diminished' so that 'the most important briefs are being allocated to my more visible colleagues; memos to me about meetings also dried up'. In addition, another telecommuter admitted, 'I feel miserable or anxious—no, forgotten—when I spend too much time at home'. In one major organisation whose telecommuters contributed to the present study, concerns were expressed that to telecommute too regularly, when the same organisation was considering further downsizing, was 'hazardous'. More visibility, not less, was a perceived survival strategy for these employees.

Four interviewees stated that, as much as they liked working at home, they missed professional exchanges with peers (as representatively reported from these comments by one telecommuter, 'there is nothing better than working in a team').

To cite other concrete examples, two Brisbane sales-marketing telecommuters (both known to the

writers but not formally interviewed) found that their home offices were too isolating, both professionally and socially. Incrementally, over time, they relocated work files and other items from their home offices back into the company's main office; management did not approve of this violation of the company's 'mandatory telecommuting' policy; both employees' positions were terminated.

#### Programmed regularity of office contacts.

For many telecommuters, timing and sequencing of their communication activities had beneficial effects for both their instrumental coping (i.e. getting valuable job-related information) and emotional coping, reporting less professional and social isolation. As one telecommuter commented:

*There were times I knew I had to be in the office—Thursdays for instance was a mandatory day, and I'd adhere to that. But there were other days, too, when I knew it was important to come to the office for a particular meeting or visitor or particular thing that needed to be discussed where you really needed face-to-face communication.*

In general, workers who telecommute only two days per week appear to be less 'isolation vulnerable' than those who work three days per week (or longer) at home. On balance, a shorter telecommute appears to allow communication channels between employer and employee to remain more open; helps prevent the sense of isolation noted in longer periods of absence from the office; and may prove an important determinant of overall satisfaction with telecommuting.

#### Individual proactivity in communication.

Telecommuters in their various responses indicated both the need for greater self-reliance in maintenance of existing communication contacts—and, where necessary, in the need to create new communication contacts for both technical and emotional support. For several telecommuters, such efforts entailed: 1) being proactive and initiating contacts with management, supervisors, and peers; and 2) being equally proactive in both network maintenance and network creation. Yet a third network arrangement was noted in the interviews: more active involvement in professional organisations being deemed as important by several telecommuters (n=S) in order to achieve dual 'social' and 'professional' goals.

#### Reliance on networks.

Conrad and Poole (1998) have stressed the value of such networks (strategically, functionally, and socially) as an indispensable part of organisational life. It is possible that telecommuters

place an even higher value on networking than do their in-office counterparts. Networking, in any case, attracted considerable comment from the telecommuter interviewees. Overall, networks for the telecommuter interviewees performed two key functions: 1) they facilitated the exchange of important information necessary to instrumental coping (i.e. doing one's job); 2) they provided social support (thereby also assisting emotional coping). Such benefits did not occur by accident: as reported, they frequently demanded extra efforts on the part of individual telecommuters. Varying levels of difficulty were noted according to levels of effort required in either (a) network maintenance (retaining existing, pre-telecommuting, contacts); or (b) in creating new professional and social contacts as appropriate to telecommuting-generated needs.

To cite one example, networks could be relatively extensive and easily transferable because of frequent (almost daily) contacts. Accordingly, for this female telecommuter, network maintenance was virtually automatic: 'At home I networked with some forty people—the same people I networked with previously. And they were simply needed in order to do my job'. Whereas another telecommuter reported:

*I think you really have to make a conscious effort to keep in contact and to network; and, as a person working at home, you tend to put far more into it than in the office.*

A small number of telecommuters (n=3) commented that they had to be proactive in making extra efforts to ensure adequate client contact. Representative was this sales-marketing employee:

*At home It's a lot easier not to go and see them. You have to make more of an effort to go out; whereas, in the office, you're already dressed, primed and ready to go.*

Overall, greater attention to network maintenance would appear to be part of what Conrad and Poole (1998) have termed the 'new communication discipline' – the learning of new sets of behaviours that are more appropriate for the 'virtual organisation' (pp.188-190).

#### **TELECOMMUTERS: COPING WITH SOCIAL ISOLATION**

Social isolation is frequently reported as a major disadvantage of telecommuting (International Labour Office, 1990; Korte et al. 1990). Based on one empirical study (Trent, Smith & Wood, 1994), telecommuters need either supportive managers or supportive families (or a combination of both), in order to diminish their sense of social isolation. Adequate levels of communication and social support have also been linked to mental and physical well-being (Albrecht & Adelman, 1988). Based on other extensive research (Holahan & Moos, 1987), social resources are also important 'because they provide emotional support, tangible assistance, and information guidance' (p. 947).

Present study interviewees, in practically every case, shared work time and space with either family members or a partner. This reportedly contributed in varying degrees to meeting their social needs. Nonetheless, many interviewees (a third of subjects) placed a high value specifically on social interaction with work colleagues. This need for such on-going contact with peers and supervisors 'back in the office' became an often-repeated theme in the interviews. On-going inclusion in office rituals (birthday and other social gatherings) was deemed important to many interviewees.

In fact, 46% (N=18) of Study 1 telecommuters perceived social (both work and non-work) relations as inadequate after they began to telecommute. Accordingly, telecommuters reported they believed extra efforts were justified in reducing the communication deficit. For example, sales-marketing telecommuters made certain, in company time, that once a fortnight they golfed-lunched together. Beyond the scope of elaboration here, other telecommuters adopted various other proactive methods they believed necessary to ensure they 'stayed in touch'. By contrast, two telecommuters reported they enjoyed their increased self-imposed isolation through working at home.

Although it has been noted elsewhere in this paper that work occurs predominantly in a social context and that co-operative relationships with co-workers are likely to be important determinants for successful telecommuting, it is conceivable that some telecommuters may be less dependent on such relationships than others in meeting 'work' and 'social' needs. For example, other research by (Hamilton, 1989 cited in Kugelmass, 1995) has found that some telecommuters experience a stronger sense of self-confidence and less dependence on co-workers than do non-telecommuters. In short, selected employees may develop higher self-efficacy through telecommuting. This observation is related to a considerable body of research drawn from social cognitive theory in terms of how certain individuals may see novel work environments as particularly challenging and enact appropriate coping behaviours, irrespective of obstacles they encounter (Bandura, 1986, 1997). Moreover, it is a mistake to assume that all employees have the same needs for affiliation, or that such needs are experienced at the same levels of intensity (McClelland, 1989). While beyond the scope of the present study, psychological tests, notably measures of 'introversion' versus 'extroversion' as personality variables, might also help explain differences in telecommuters' needs for affiliation as well as help screen candidates for telecommuting (Hogan, Johnson, & Briggs, 1997).

## OVERALL VOLUME OF ORGANISATIONAL AND CLIENT COMMUNICATION

Actual assessments of frequencies of communication were outside the scope of the present qualitative study. However, broad assessments were sought concerning whether interviewees perceived that their communication load had increased, decreased, or remained the same, as a result of their telecommuting. Interviewee responses can be summarised as follows:

More communication overall	- 15% (n=6)
Less communication overall	- 43% (n=17)
Unclear/unstated	42% (n=16)

Consequently, roughly a third of telecommuters (n=11) believed interpersonal communication (including communication with management) had *decreased* because of their telecommuting; the same telecommuters reported this as a *disadvantage* in terms of their communication effectiveness. A further 10% of telecommuters noted that their *communication with clients* had *decreased* (impact on actual communication effectiveness unknown). Conversely, another 15 per cent (n=6, all sales-marketing telecommuters) perceived that the volume of their communication had *increased*, with considerable potential for ineffectiveness, especially where company policy, or the nature of their work, favored daily communication.

Issues of communication effectiveness are more prominent for these sales-marketing telecommuters. For example, all sales-marketing telecommuters reported that they had particular difficulties in responding to client communication needs, and in practically all cases, had to perform supplemental work during evenings and weekends at home to cope with sales enquiries and company reporting needs. These interviewees commented that when actually 'out of the office' they had 'too much communication with clients', leading to communication overload. As was earlier mentioned when discussing communication technologies, sales-marketing telecommuters perceived that their accessibility via pagers and other technologies particularly exacerbated their communication load. Resultant difficulties in responding to enquiries in an effective and as well as timely manner were also noted for these telecommuters.

Overall, the present study's findings support the general view that telecommuting results in less, not more, communication, and that to many telecommuters this is often perceived as a detriment (Duxbury & Neufeld, 1999). Moreover, while the majority of telecommuters in the present study

are evidently coping with communication aspects of their work, a representative number of issues have been raised elsewhere in this paper to suggest desired improvements to enhance overall telecommuter communication effectiveness.

In direct contrast to some of the above findings, more than 90 per cent of respondents (participants and their supervisors) in an extensive 12 month telecommuting pilot programme reported that they had found no change in the effectiveness of work-related inter-personal communication. Where changes had occurred, they were perceived as an increase in communication effectiveness (United States. Department of Transportation, 1994). Similarly, McClintock (1984) found that his subjects (n=20 telecommuters) reported greater interdependence with coworkers as well as more effective use of face-to-face communication, after they telecommuted. Absence of frequent face-to-face contact required, however, 'greater efforts to specify the requirements of the work, both in terms of quality and scheduling' (McClintock, p.15). Therefore, both managers and telecommuters increased their task-related communication; they also relied less on potent social cues (p.11). Clearly, as suggested by the present study, interesting further research beckons as to those communication aspects that telecommuters identify as actually 'important' as well as telecommuter levels of 'satisfaction' with these same aspects. For individual organisations, the resultant 'gap analysis' between 'importance' and 'satisfaction' (where one is perceived to exist) offers to managers a form of audit to review telecommuter-specific communication practices.

## **CONCLUSION**

The vast majority of workers still work within 'traditional' office environments. However, the number of telecommuters in Australia doubled between 1998 and 1999 and indications are that telecommuting numbers can only increase. Although beginning as a 'voluntary' work option, telecommuting is also moving towards become a 'mandatory' work option as organisations continue to cut costs as well as promote more direct client contact. With increasing applications of communication technologies and proposed significant expansion of Internet communication capabilities, more aspects of office work have the potential to become streamlined, online, and universally accessible – making work less location-dependent. Technological determinism aside, predictions are that opportunities will increasingly be found to extend applications of virtual work such as telecommuting. Consequently, there will be less need for a hierarchical work structure and spatially-bounded offices. Perhaps more intriguingly, telecommuters (as potential

‘cybernetters’) may increasingly participate in virtual teams, developing new partnerships with co-workers they may never actually see. Thus, managing and communicating with invisible employees thus will continue to present new challenges for organisational communication theorists.

Exploratory information in this study about the impact of telecommuting on work aspects has been generally positive. Lack of management support for telecommuting –demanding perhaps a new set of managerial competencies appropriate to the emergent demands of ‘virtual work’—remains an underlying issue. As well, new issues with respect to telecommuters’ communication practices as well as levels of organisational support for telecommuting have also been identified, in each of the major sections of this paper and are yet to be addressed.

Limitations of the present research need, however, to be acknowledged. The research has been limited in its focus: the aim was to allow telecommuters themselves to ‘tell their own stories’ and apply a rich ethnographic method to lay the groundwork for further research. Thus, we did not collect data from telecommuting managers or from the telecommuters’ co-workers. Therefore, the paper’s focus has been more aligned with ‘issues raising’ than ‘issues solutions’. Our later research has concentrated on follow-up of many of the outstanding issues, as well as adding empirical assessments to complement findings as reported from the present study. To some extent, therefore, this limits the conclusions that can be drawn from this study.

However, it can be broadly hypothesised that effective communication will remain a major factor for telecommuting employees needing to exercise control of their work and lifestyle environments. By the very nature of telecommuting, those employees have the disadvantage of reduced personal contact with co-workers and management and often find themselves outside the communications loop. Specifically, telecommuters, as relatively isolated workers, are likely to continue to experience reduced feedback from their management, supervisors, co-workers and clients; face reduced access to information for task completion; as well as problems of professional and social isolation. As reported in the presented study, telecommuters themselves had pointed the way to some of the solutions.

Communication support, which is taken for granted in traditional office environments and in which physical closeness advances collaboration among employees, needs to be realigned to these emergent virtual work needs. In short, ‘telecommuters, separated by both time and place,

need communication links that bridge both' (Kugelmass, 1995, p 109). Organisational communication theorists will therefore need to spend more time in developing a holistic view of virtual communication, including, perhaps, a taxonomy of individual communication competencies and organisational support systems that are suited to the new electronic work environments.

In short, the game is shifting increasingly from 'within' to 'outside' traditional office boundaries. So, too, must our theories if we – as communication theorists and practitioners – wish to help manage the transition.

ENDS

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