## Association for Information Systems AIS Electronic Library (AISeL)

**AMCIS 2001 Proceedings** 

Americas Conference on Information Systems (AMCIS)

December 2001

### Performance Appraisals of Telecommuters and Supervisor-Related Factors: An Exploratory Study

Klara Nelson The University of Tampa

Catherine Kirchmeyer Wayne State University

Follow this and additional works at: http://aisel.aisnet.org/amcis2001

#### Recommended Citation

Nelson, Klara and Kirchmeyer, Catherine, "Performance Appraisals of Telecommuters and Supervisor-Related Factors: An Exploratory Study" (2001). AMCIS~2001~Proceedings.~368. http://aisel.aisnet.org/amcis2001/368

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2001 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

# PERFORMANCE APPRAISALS OF TELECOMMUTERS AND SUPERVISOR-RELATED FACTORS: AN EXPLORATORY STUDY

Klara G. Nelson
The University of Tampa

krnelson@alpha.utampa.edu

Catherine Kirchmeyer Wayne State University c.kirchmeyer@wayne.edu

#### **Abstract**

Despite predictions to the contrary, telecommuting programs are gaining in strength. While research has explored many aspects of telecommuting, little is known about telecommuter performance appraisals and supervisor-related factors such as relationship with supervisor, location of supervisor, or frequency of face-to-face contact. Using data from semi-structured interviews with 20 telecommuters, this exploratory pilot study addresses questions regarding the types of appraisal processes in place, employee's feelings towards those processes, as well as the importance of frequency of contact and location of supervisor in the relationship with the supervisor.

Keywords: Telecommuting, performance appraisal system, employee satisfaction, relationship with supervisor

#### Introduction

Contrary to predictions that telecommuting is losing popularity, telework programs are not fading away but appear to be gaining in strength (Wilde 2000). Recent research by the International Telework Association and Council (ITAC 2000) shows that there were 23.6 million teleworkers in the US as of October 2000 compared to 19.6 million a year earlier. While research has focused on attitudes towards teleworking, adoption and diffusion of telework programs, work and family tradeoffs, job satisfaction, and relationship with managers, systematic research regarding career implications is sparse and consensus in the literature is lacking (Igabaria and Guimaraes 1999, Wellman 1996). This includes research on performance appraisals, which is an integral part of the career development process in many organizations. In the context of an exploratory study on telecommuting and its effects on careers, learning, and teamwork, this paper seeks to explore the following questions:

- 1. What types of performance appraisal processes are in place?
- 2. How do employees feel about the appraisal processes in place?
- 3. How frequent is the contact between the remote employee and the supervisor/boss?
- 4. Does the location of the supervisor matter?
- 5. What is the relationship between the remote employee and the supervisor/boss?

#### **Prior Literature**

Managers have been reported to be less enthusiastic about alternative work arrangements (Kavan and Saunders 1998), and resistance may stem from poor understanding of their new roles and responsibilities and a sense of loosing control (Belanger 1999; Watad and DiSanzo 2000). Supervisors believe that it will be difficult to measure performance when they cannot see their employees (Girard 1997). Monitoring the performance of a telecommuter represents a challenge to supervisors who need to rely on measures other than physical observation to control and monitor performance (Kurland and Egan 1999). Many suggest that telecommuter *evaluations should be based on results or outcomes*, using the same appraisal process used for non-telecommuters (Wright and Oldford 1993). Davenport and Pearlson (1998) recommend the need for changing controls and supervision processes to work virtually to include use of customer satisfaction as an indicator of the success of the telecommuter. A study of telecommuting and organizational variables (Rotter 1999) found that productivity measures used to assess employees generally

focused on work outcomes, not work process. With respect to the appraisal format, no problems existed using the current performance *appraisal format*. However, several problems were noted such as difficulty to set the interview up in a timely fashion or the need for managers to see employees. In addition, several respondents indicated difficulties with getting to know the employee. A study by Igbaria and Guimaraes (1999) showed that telecommuters were overall more satisfied with supervision than non-telecommuters. Research regarding justice and control in telecommuting environments found no relationship between outcome-based evaluations and any form of organizational justice (Kurland and Egan 1999).

Bogdanski and Setliff (2000) hypothesize that satisfaction with performance evaluation is directly correlated to the *amount and quality of contact* with the supervisor. Telecommuters have been called part of a leaderless supervision group who may see their supervisors infrequently limiting the amount of direct contact and the opportunity for performance feedback (Thomas 1999): "... is there regular contact between the employee and manager so that the manager is fully informed of work progress?" (Rotter 1996). Another potentially important dimension in performance appraisals of telecommuters is the *relationship with the supervisor*. Prior research has highlighted the critical role of supervisory support and the telecommuter's relationship with his or her manager in promoting satisfactory telecommuting arrangements (Hartman, Stoner and Arora 1992; Reinsch 1997). At the same time though, the relationship between a telecommuter and manager is seldom an explicit consideration in the selection of telecommuters (Reinsch, 1997). A final important dimension of the appraisal process for telecommuters may be the *distance between the telecommuter and its supervisor*. Thomas (1999) argues that the challenge lies in providing meaningful performance evaluations to professionals at distant sites.

#### Method

As part of an exploratory study on career issues of teleworkers, data in this study was collected via semi-structured interviews of 20 telecommuters. Utilizing a snowball strategy (Simon and Burstein 1985), we relied upon professional networks to identify a variety of potential participants. To be included in our study, a person had to telecommute at least 20% of the time. To measure telecommuting, we asked interviewees to indicate the percentage of time in their workweek that they spent telecommuting. Background information on our sample is provided in Table 1. The sample of 10 men and 10 women came from a wide variety of industries including computer software, insurance, publishing, engineering, manufacturing, packaged food, business consulting, broadcasting and telecommunications. Interviewees had a variety of different job titles. The average job tenure in their present position was 8.82 years (St. Dev. = 9.17). On average, interviewees telecommuted 87.76% of the time (St. Dev. = 26.07) reflecting the high number of full-time telecommuters shown in Table 1.

We prepared an interview guide based on reviews of the telecommuting and relevant other literatures. The interview guide was provided to each participant in advance and consisted of questions addressing background information as well as a variety of questions related to the participants' telecommuting experience. The interviews which were approximately one hour in length were conducted by a single researcher, audiotaped with the permission of the interviewee, transcribed for analysis, and coded according to a coding scheme we developed as part of a larger study regarding telecommuting and its effect on career development. We independently coded all of the original interviews. In cases of disagreement, we discussed and resolved the differences together until total agreement was reached.

**Table 1. Background Information of Sample** 

Software analyst/consultant         3           Systems engineer         1           Special projects engineer         1           News reporter         1           Account representative/manager         3           Sales agent/representative         3           Graphic designer         1           Campus recruiter         1           Business analyst         1           Senior business consultant         1           Telecommunications installer         1           Project manager         2           Quality leader         1           **O of Time Telecommuting           20         2           66         1           82         1           90         4           100         12           Years with Employer         5           2-5         5           10-15         6           16-20         2           34         2	Job Titles	Number of Interviewees				
Systems engineer       1         Special projects engineer       1         News reporter       1         Account representative/manager       3         Sales agent/representative       3         Graphic designer       1         Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         % of Time Telecommuting         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2	Software analyst/consultant	3				
News reporter       1         Account representative/manager       3         Sales agent/representative       3         Graphic designer       1         Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2		1				
Account representative/manager       3         Sales agent/representative       3         Graphic designer       1         Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         20       2         66       1         82       1         90       4         100       12         Years with Employer         1       5         2-5       5         10-15       6         16-20       2	Special projects engineer	1				
Sales agent/representative       3         Graphic designer       1         Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2	News reporter	1				
Sales agent/representative       3         Graphic designer       1         Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2	Account representative/manager	3				
Campus recruiter       1         Business analyst       1         Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         **O of Time Telecommuting**         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2		3				
Business analyst 1 Senior business consultant 1 Telecommunications installer 1 Project manager 2 Quality leader 1  % of Time Telecommuting  20 2 66 1 82 1 90 4 100 12  Years with Employer  1 5 2-5 5 10-15 6 16-20 2	Graphic designer	1				
Senior business consultant       1         Telecommunications installer       1         Project manager       2         Quality leader       1         **O of Time Telecommuting         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2	Campus recruiter	1				
Telecommunications installer       1         Project manager       2         Quality leader       1         **O of Time Telecommuting         20       2         66       1         82       1         90       4         100       12         Years with Employer       5         2-5       5         10-15       6         16-20       2	Business analyst	1				
Project manager 2 Quality leader 1  % of Time Telecommuting  20 2 66 1 82 1 90 4 100 12  Years with Employer  1 5 2-5 5 10-15 6 16-20 2	Senior business consultant	1				
Quality leader     1       % of Time Telecommuting       20     2       66     1       82     1       90     4       100     12       Years with Employer       1     5       2-5     5       10-15     6       16-20     2	Telecommunications installer	1				
% of Time Telecommuting       20     2       66     1       82     1       90     4       100     12       Years with Employer       1     5       2-5     5       10-15     6       16-20     2	Project manager	2				
20 2 66 1 82 1 90 4 100 12  Years with Employer  1 5 2-5 5 10-15 6 16-20 2	Quality leader	1				
66 1 82 1 90 4 100 12  Years with Employer  1 5 2-5 5 10-15 6 16-20 2	% of Time Telecommuting					
82 1 90 4 100 12 <b>Years with Employer</b> 5 5 10-15 6 16-20 2	20	2				
90 4 100 12 Years with Employer  1 5 2-5 5 10-15 6 16-20 2	66	1				
100     12       Years with Employer     1       1     5       2-5     5       10-15     6       16-20     2	82	1				
Years with Employer       1     5       2-5     5       10-15     6       16-20     2	90	4				
1 5 2-5 5 10-15 6 16-20 2	100	12				
2-5 5 10-15 6 16-20 2	Years with Employer					
10-15 16-20 6 2	1	5				
16-20 2	2-5	5				
	10-15	6				
34 2	16-20	2				
	34	2				

We coded our interviews with respect to presence or absence of an annual review process. Mechanisms to measure work were coded into three categories: results oriented, process oriented, or both. The frequency of face-to-face contact with the supervisor fell into nine categories (daily, weekly, monthly, quarterly, every six months, yearly, more than 1 year, infrequent). The location

of the supervisor was coded as same city, different city/same state, or different state. Finally, based on the remarks of our interviewees, we coded the relationship with the supervisor as good, do not know well, or bad.

#### Results

#### Performance Evaluations

With respect to performance evaluations, the majority of interviewees (n=11,55%) were evaluated based on results. Seven (35%) interviewees indicated the presence of both a results as well as a process orientation. Eleven (55%) of the interviewees indicated their companies used formal evaluations in the form of an annual review. In addition to the manager writing the review, companies used a variety of measures including client satisfaction and sales performance. Six interviewees were promoted while telecommuting. Following are some of the comments describing the review process:

"They used to sent out follow up forms with the client once the contract had expired to get feedback from the client. Sometimes that was followed up and sometimes it wasn't.... The performance appraisals, unfortunately, have also pretty much dissipated.... Have not [had any formal feedback on how well I'm doing] for probably about the last two or three years." (Case 14)

"There is an evaluation sent to the client to fill out, and then it's reviewed. My agent reviews it with me." (Case 11)

"Basically it's a matter of delivering against metrics, and those metrics are your G's and O's. Everyone has goals and objectives and those are set at the beginning of the year. You're reviewed against these goals and objectives. So that keeps ... the "out of sight, out of mind" situations from occurring." (Case 5)

"I have to submit who are the people I have worked for through the last year that would have input in my promotion...and so after I have submitted who those people are, the database is rolled out to all of those managers and above and they open it up ... and they evaluate me based on my contribution to the client, how well did I add value, ... how well did I play with others." (Case 1)

While some of the interviewees were comfortable with being reviewed by a remote manager, the following comments show that distance and the frequency of appraisals may play a role in the employee's satisfaction with the process.

"You can only communicate so much through e-mail or over the phone" (Case 12)

"I'm as comfortable as anybody with evaluations. ... Again, it's the personality of the manager I have right now. I get very short answers – yes, no, thanks, bye, later! ... Too little offered at this stage of the game". (Case 4)

"Frankly, I don't have a problem with the review process at all. I wish it happened more frequently frankly." (Case 17)

Additionally, frequent contact *initiated by the employee* to provide the manager with information regarding an employee's progress may play a role in the employee feeling that his or her evaluation is accurate.

"I am really good a cc'ing my manager and my supervisor on everything I do. I cc both of them. There is a little bit of confusion there, too, for me. I understand the chain of command, but who has authority to do what?" (Case 20)

#### Supervisor Relationship

Results related to the supervisor are shown in Table 2. Five interviewees (25%) indicated problems with the supervisor/boss in terms of poor relationships with, or inadequate support from the supervisor. One interviewee complained that "my boss does not understand what I do". Another one stated that "he doesn't take the time to know me... when you don't talk to and spend time with the individual, how do you know what they're doing and evaluate them based on that". About half of the supervisors were located in the same city, while the others were not collocated with the telecommuter. Some of the interviewees had frequent face-to-face contact with their supervisors, seven only saw him or her every three months, while another five interviewees had rather infrequent face-to-face to contact.

**Table 2. Supervisor-Related Information** 

Relationship with Boss	Number of Interviewees
Good	7
Do not know him/her well	5
Bad	5
Unknown	2
No boss	1
Supervisor Location	
Same city	9
Different city, same state	2
Different state	8
No boss	1
Frequency of Face to Face Contact	
Daily	2
Weekly	2
Monthly	2
Quarterly	7
Every six months	1
Yearly	0
More than 1 year	1
Infrequent	4

To investigate if location and frequency of contact mattered with respect to the relationship with their supervisor, we computed correlation coefficients shown in Table 3. The data suggests that there is no significant relationship between location and telecommuter/supervisor relationship. Also, the positive relationship between the frequency of contact and the location, indicating that more frequent contact exists when the supervisor is in the same city as the telecommuter, is not significant. Interestingly, the correlation between frequency of face to face contact and the relationship with the supervisor is negative, indicating that less frequent face-to-face contact is associated with a better relationship. This analysis, however, needs to be used with caution as it is very difficult to obtain statistical significance with very small samples even if relationships are strong.

**Table 3. Correlation Coefficients** 

		Location	Relationship	Frequency of Contact
Location	Pearson correlation	1.000	.056	.361
	Sig. (2-tailed)	•	.831	.170
	N	17	17	16
Relationship	Pearson correlation	.056	1.000	273
•	Sig. (2-tailed)	.831		.305
	N	17	17	16
Frequency of Contact	Pearson correlation	361	273	1.000
•	Sig. (2-tailed)	.170	.305	
	N	16	16	16

#### **Discussion**

Our findings that the majority of interviewees were evaluated based on results are consistent with prior research. In addition, our study indicates that remote employees undergo similar appraisal processes as non-telecommuting employees in the form of an annual review process. While many of our interviewees did not voice any concerns with the process, one of the telecommuters in our sample indicated that greater frequency may be desirable in the telecommuting context consistent with a study by Hartman et al. (1992) in which respondents suggested more feedback on job performance more promptly. This is also line with research on expatriate performance appraisals which found that more frequent appraisals in general are related to increased perceived accuracy of such appraisals (Gregersen, Hite, and Black 1996). While half of the supervisors are not collocated with the remote employee the relationship between the employee and the supervisor from the employee's perspective appears to be location-independent. Also, despite rather infrequent face to face contact with the immediate supervisor or boss, data from our exploratory study suggests that face-to-face contact may not be necessarily better or critical for a good relationship. Instead, the key appears to be in the content of the communications (Nilles 1998).

#### **Implications and Conclusions**

To date, scholars have paid little empirical attention to performance appraisal systems of telecommuters despite prior research that highlights the strong impact of organizational performance evaluation systems on telecommuting satisfaction (Hartman et al. 1992). Using a purposeful sample of telecommuters from a wide range of alternative work arrangements as described by Davenport and Pearlson (1998), our study was designed to explore current practices of telecommuter performance appraisals and some of the variables surrounding them. The exploratory nature of this study into an underresearched area has its limitations. The small sample size does not allow for generalizations beyond the sample and may limit the findings of this study to the kinds of occupations and organizations represented by the 20 participants. Future research could extend this exploratory pilot study by examining in more detail and with larger sample sizes the research questions we posed at the beginning of the paper. Other important questions are: To what extent should performance appraisal systems of telecommuter differ from those of non-telecommuters? Which types of performance appraisals are associated with the highest degree of success, satisfaction, or accuracy of the appraisal process as perceived by the telecommuter? Are their differences associated with the frequency of telecommuting in terms of satisfaction, success, or perceived accuracy? Does the organizational size play a role? Are appraisal systems for novice telecommuters different from those of experienced telecommuters? Are more frequent appraisals related with increased perceived accuracy of such appraisals?. As an integral part of career advancement, performance appraisal systems of telecommuters and factors that influence such performance them clearly deserve more research attention.

#### References

- Belanger, F. "Workers' Propensity to Telecommute: An Empirical Study," *Information and Management* (35), pp. 139-153. Bogdanski, C., and Setliff, R. "Leaderless Supervision: A Response to Thomas," *Human Resource Development Quarterly* (11:2), Summer 2000, pp. 197-201.
- Davenport, T. H., and Pearlson, K. "Two Cheers for the Virtual Office," *Sloan Management Review*, Summer 1998, pp. 51-65. Gregersen, H. B., Hite, J. M., and Black, J. S. "Expatriate Performance Appraisal in U.S. Multinational Firms," *Journal of International Business Studies*, 4<sup>th</sup> Quarter 1996, pp.711-738.
- Hartman, R.I., Stoner, C. R., and Arora, R. "Developing Successful Organizational Telecommuting Arrangements: Worker Perceptions and Managerial Prescriptions," *SAM Advanced Management Journal* (57:3), Summer 1992, pp. 35-42.
- Igbaria, M. and Guimaraes, T. "Exploring Differences in Employee Turnover Intentions and Its Determinants Among Telecommuters and Non-Telecommuters," *Journal of Management Information Systems* (16:1), Summer 1999, pp. 147-164.
- ITAC, "Telework America (TWA) 2000", accessed at www.telecommute.org/twa2000/research\_results\_summary.shtml.
- Kavan, C. B. and Saunders, C. S. "Managers: A Key Ingredient to Alternative Work Arrangements Program Success," *Journal of End User Computing* (10:4), Fall 1998, pp. 23-41.
- Kurland, N. B., and Egan, T. D. "Telecommuting: Justice and Control in the Virtual Organization," *Organization Science* (10:4), July-August 1999, pp. 500-513.
- Nilles, J. M. Managing Telework: Strategies of Managing the Virtual Workforce. New York: John Wiley and Sons, 1998.
- Reinsch, N. L. Jr. "Relationships Between Telecommuting Workers and Their Managers: An Exploratory Study," *The Journal of Business Communication* (34:4), 1997, pp. 343-369.
- Rotter, N. G. "Moving Telecommuting Forward: An Examination of Organizational Variables," A Final Report for NJ-99-006-NCTIP10, New Jersey Institute of Technology, July 1999, accessed at kimon.njit.edu/nctip/publications/.
- Rotter, N. G. "Performance Appraisal and Telecommuting: Insights from an Information Processing Approach," *Telecommuting* '96 Proceedings, accessed at http://www.terry.uga.edu/management/TC96/restore1/TC96/proceedings.html..
- Simon, J. L., and Burstein, P. Basic Research Methods in Social Science (3rd ed.), New York: NY: Random House, 1985.
- Thomas, G. E. "Leaderless Supervision and Performance Appraisal: A Proposed Research Agenda," *Human Resource Development Quarterly* (10:1), Spring 1999, pp. 91-94.
- Watad, M. M., and DiSanzo, F. J. "The Synergism of Telecommuting and Office Automation," *Sloan Management Review* (41), pp. 85-96.
- Wilde, C. "Telework Programs are on the Rise," *InformationWeek*, April 10, 2000, accessed at www.informationweek.com/781/prtelecommute.htm.
- Wright, P. C., and Oldford, A. "Telecommuting and Employee Effectiveness," *The International Journal of Career Management* (5:1), 1993, pp. 4-9.