The Effect of Working from Home on Work and Private Life: Automotive Sector Application

Murat Durucu and Cahit Ali Bayraktar[(✉)]

Industrial Engineering Department, Management Faculty, Istanbul Technical University, Istanbul, Turkey
{durucumur,cahitali}@itu.edu.tr

Abstract. Today, the increase in the sense of independence and developments in communication technology increase the importance of working from home. Working from home is not defined as bringing home the work that the employee cannot rise to the workplace, but rather working from home by the management at a certain frequency rather than going to work. Working from home has positive and negative effects on work-life. While some studies have positive findings that working from home will improve work performance, some studies have found that being away from the workplace will decrease team performance, create obstacles for progress and adversely affect business life. One hundred eighty employees, including 66 managers of the company to apply to work from home in the Turkish automotive sector, did take part in this study. As a result of the study, it has been concluded that the increase in transportation time and frequency of working from home reduces the level of communication between the manager and the employee and contributes positively to the establishment of work-family balance. It was obtained that working at home posed a barrier to progress at both the executive and employee levels and prevented teamwork. As a result, to increase the motivation of employees to work from home, it may be suggested that companies should place systems of teamwork in their enterprises, provide the necessary technological tools for remote teamwork and establish systems that closely monitor the results of the work of workers from home in their career plans.

Keywords: Working from home · Human resource management · Work/private life · Life quality · Motivation

1 Introduction

Working from home can have both positive and negative effects on work-private life. Rupietta and Beckmann (2018) thought that the feeling of independence brought by working from home would increase employee performance. Klopries (2018) stated that smartphones and internet-connected computers provided by the sense of independence and developing technology could reduce business performance by using them for arbitrary situations (Rupietta and Beckmann 2018). Working from home will provide a quiet area to the employee and increase employee working motivation (Church 2015). The employee is unsettled by teamwork failure (Hill et al. 2003). Studies also indicate that

working from home has an effect on motivation and job performance, but gives different results on the direction of the relationship. However, according to Rupietta and Beckmann, highly motivated employees are willing to do more for the job (Rupietta and Beckmann 2018). In this study, the effect of working from home in the automotive sector on work-private life was investigated.

Working from home is defined as working from home instead of going to work. It refers to the systematized home-work system of salaried employees (non-freelance, etc.) (Rupietta and Beckmann 2018). The necessity of bringing the work that is not within this scope to the home and working outside the office due to field work are not included in this definition.

It is seen that three different types of offices are mentioned in the literature in general. These are traditional, virtual office, and working from home (Hill et al. 2003). Traditional work is the working environment in which people go to their office and work with colleagues in the same company. Virtual office refers to a common working environment where people go to a different environment outside the company, and people from different companies can come. Working from home is defined as the maintenance of work from home.

It expresses the underlying causes of behavior characterized by motivation, willingness, and will (Lai 2011). Rupietta and Beckmann (2018) focused on intrinsic motivation while investigating the effects of working from home on motivation and work-life and stated that individuals with high intrinsic motivation provide better job outcomes. Organizational success increases with increasing motivation, which enables employees to benefit more from their talents and focus on employees towards organizational goals (Hill et al. 2003).

Working from home has numerous contributions to companies. Among its most important contributions, it can be said that employees' job performance increases, both the employee and the company have a positive financial impact and the opportunity for the best employees to overlap with the best job. According to Rupietta and Beckmann, both work and employer can benefit at the same time work from home (2018). Employees can benefit financially by avoiding traffic and dressing costs, while employers can cut office costs (Church 2015).

Every company wants to recruit and retain good employees. This leads to high costs. Working from home to do this can be good additional support. Because working from home appears to be both an additional benefit and an additional financial contribution to the employee, it provides support to connect the employee to the firm (Hill et al. 2003). At the same time, firms that offer better working opportunities are more successful in attracting more talented and hardworking employees (Rupietta and Beckmann 2018). Working from home increases the attractiveness of the company as it is seen as additional opportunities from the employees' point of view.

The aim of this research is to show the effect of work from home on the working life and private life of the employees in the automotive industry, to explain the benefits and harms of the application for the companies that may wish to apply this practice and also to show the elements to be taken into consideration when applying. However, in this study, it is aimed to show whether the effect of working from home in Turkish culture is similar to the effects in other countries.

2   The Effect of Working from Home on Work and Private Life

Work from home should not be confused with bringing work that cannot be completed within the day. According to the rules of business of home-work organizations, employees can officially do their work from home (Rupietta and Beckmann 2018).

The effect of work from home on family life is undeniable. Working from home has become an important strategy, especially for women with children, to maintain work and family balance (Loo and Wang 2018). Since there is no physical difference between work and home during work from home, problems may arise in the family-work balance of individuals. Also, when the start and end times of work is not clear, the person is likely to work too hard to become burnout. This is a factor that reduces motivation (Hill et al. 2003).

Determining the line between working from home and professional time (work at work) is very difficult for employees. Because not going to the workplace, not attending meetings and choosing clothes, may seem like a good dream for the employee, but it will be very difficult for employees to make the distinction between work and non-job responsibilities when personal responsibilities are effective (Saunders 2017). At the same time, employees try to make up their daily chores, housework, and childcare during normal working hours and extend their working hours before work in the morning or evening after work. This situation manifests itself as employees who have difficulty setting the work-to-work border (Hill et al. 2003).

There is evidence that working from home adversely affects career development (Hill et al. 2003). People working from home are less likely to be in the same physical environment and time as their colleagues and supervisors. It is, therefore, less likely to be part of the informal political network necessary for career development. For this reason, employees who spend less time in the office are worried about career prospects because of the possibility of missing promotion opportunities. Therefore, they try to neutralize this effect by working more than normal on the days they work at home, and as a result, they experience a decrease in motivation because they are burn-out (Hill et al. 2003). Making a similar observation, Church observed that there was a perception that working from home reduced the opportunities for promotion (Church 2015).

Unlike traditional office work, communication characteristics with the team also vary with work from home. Workers from home may feel that their connection with the team is diminishing by thinking that their connections to the team are diminishing (Church 2015). Some studies have shown that isolation from professional life is encountered in working from home (Hill et al. 2003). Working from home varies not only in social life but also in terms of actions taken for work. People seem to be quite happy with communication through electronic communication tools, but they prefer the office environment to give job-related feedback (Young 1995). Previous studies suggest that the lack of opportunities for social and work-related interactions may restrict people's choice of working at home (Loo and Wang 2018).

Working from home creates a feeling of more workload and increases stress (Hill et al. 2003). This is in line with the finding that Rupietta and Beckmann observed that those working at home had fewer breaks. One of the most important factors that affect the occurrence of stress in work from home is the 'Attitude of Management' (Rupietta and Beckmann 2018).

Managers are more than happy to work in front of their employees (Church 2015). Managers assume that employees do not use this situation for their benefit when they work at home, and this is due to loss of control (Church 2015). The opportunity to work from home creates a sense of independence for employees when planning and organizing work. Employees with a high sense of independence can achieve better business results without control (Rupietta and Beckmann 2018). If control is desired, a result-oriented management culture is required (Manca et al. 2018). Thus, managers can rely more on workers from home by setting specific goals (Hill et al. 2003). Giving the employee the flexibility of where the work will be done allows the person to determine how the work will be done and what situations will be done, which leads to an effective work outcome (Hill et al. 2003).

Geographical and demographic characteristics also affect working from home. The distance from the workplace was found to affect the frequency of choosing to work from home. The rate of work from home increases as it provides the necessary flexibility for childcare (Loo and Wang 2018). Nowadays, it has been observed that the responsibility of caring for the child affects both working parents. In this case, fathers need more flexibility in terms of the need to make similar contributions (Hill et al. 2003).

Although the geographical location of the workplace is seen as both the distance from the central points and the distance from home, the duration of transportation to the workplace is one of the most important factors affecting the motivation of employees to work from home. Workers from home can accept 5.7% further away from traditional workers and accept an additional workplace distance of 3% for each additional eight hours of work (de Vos Meijers and van Ham 2017).

Overall, it is clear that working from home has an impact on work/private life. In the research model, the effect of factors motivating work from home on work/private life was examined (Fig. 1).
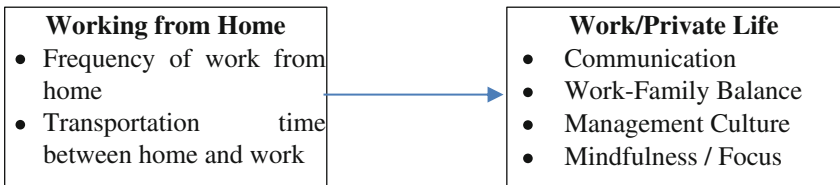

Fig. 1. Conceptual model of the study

Hypotheses:

Hypothesis 1: Working from home has a positive effect on work/ private life.
Hypothesis 2: Working from home affects work-family balance.
Hypothesis 3: People who work more often from home have higher motivation.

3   Methodology

The research was carried out using google forms without contact information. Survey respondent all participants in Istanbul (Turkey) and all employees working in the automotive sector with a sampling issue a certain number of days of the week should have rules about the execution of the company they work from home jobs.

Questionnaires measuring the perception of working from 16 houses in the questionnaire were taken from (Church 2015). It was adapted from 7 questions containing demographic information, and four questions answered only by the administrators (Church 2015). A 5-point Likert scale ranging from 1 to 5 (strongly agree-strongly disagree) was used. A total of 180 employees participated in the study, and 66 of them were in the managerial position.

4   Findings

Looking at the data set used in the study, the skewness-kurtosis values of all item collection form expressions should be within the range of ± 1.96 in 0.01 significance (Hair et al. 1995) and all values were observed in the appropriate range.

Papacharissi and Rubin (2000) stated that Cronbach's Alpha values should be between 0.6–1. As a result of the reliability test of the sub-dimensions in the research model, the Cronbach's Alpha values of all dimensions were greater than 0.6.

The data were then subjected to factor analysis. In factor analysis, it was confirmed that the correlation matrices of the dimensions used in the study were greater than 0.30, and the anti-image matrices were greater than 0.50. This shows that the sub-dimensions are factorizable. As a result of factor analysis, each dimension turned into a single factor. Then, correlation analysis between factors (Table 1) was performed.

Table 1. Evaluation criteria

	Communication level	Work-family balance	Management culture	Focusing
Frequency of working from home	$0,298^{**}$	$0,303^{**}$	0,174	0,089
Transportation time between home and work	0,183**	$0,266^{**}$	−0,039	−0,041
*p < 0,001				

After correlation analysis, regression analysis was performed between working from home sub-factors and work/private life sub-factors. In the analysis, the Durbin-Watson coefficients were confirmed to be in the range of 1.5–2.5. Collinearity between independent variables was checked with Vif and Tolerance values. Tolerance values over 0.1,

Vif values below 5.3 shows that there is no collinearity between independent variables (Hair et al. 1995). These values have been confirmed to be in the appropriate range.

As seen in Table 2, a significant relationship was found between communication and the frequency of working from home. As the frequency of working from home increases, the level of communication deteriorates. Table 3 shows the results of the regression analysis between work-family balance and working from home. It was concluded that the work-family balance was positively affected as the frequency and time of working from home increased.

Table 2. Regression analysis results for communication level

	Durbin-Watson	R^2	β
Frequency of working from home	2,087	0,104	−0,270
Transportation time between home and work			−0,113
Dependent variable: communication level p < 0,05			

Table 3. Regression analysis results for Work-Family balance

Main criteria	Durbin-Watson	R^2	β
Frequency of working from home	2,188	0,129	−0,248
Transportation time between home and work			−0,198
Dependent variable: work-family balance p < 0,05			

5   Results and Conclusion

When the results of correlation and regression analysis were analyzed in our sample, there was not enough evidence to show a significant relationship between management culture and attention/focus sub-dimensions and working from home sub-dimensions. A significant but weak relationship was found between work-family balance and communication level and frequency of working from home. Similarly, a poor relationship was found between the level of communication and the frequency of working from home. In general, it can be said that there is a relationship between working from home and communication level and work-family balance, which are sub-dimensions of work/ private life variables for the automotive sector.

The second hypothesis was especially focused on work-family balance, and working from home provided a positive relationship between work-family balance. In the examples in the literature, Hill et al. (2003) showed that the most important difference between working from home and working from the office was on the work-family balance side. In this study, it was seen that the two concepts affecting motivation are related to working from home and expresses the same direction as Hill et al. (2003).

In the third hypothesis, it was stated that the frequency of working from home had a positive effect on the sub-factors of work/private life. When we look at the results, we can say that we cannot find enough evidence to reject the third hypothesis because it positively affects communication and family-balance.

When evaluated based on the sub-dimensions asked in the research, the perception of productivity in work from home in the Turkish automotive sector did not differ from the US, and the perception of the chance of rising varies downwards. The participants in the sample think that working from home may affect their chances of promotion. When the analysis results of the communication factor are analyzed, it is seen that this situation is confirmed. Working from home adversely affects Manager-Employee communication, which raises the concern that it will create problems for the employee to rise. Similarly, it was obtained from the perception that working from home can play a negative role in employee promotion.

In terms of work-family balance, the results of this study showed that the perception that work-family balance could be established more easily was positively different from other studies. This may be due to the cultural structure of the Turkish family.

In terms of the feasibility of teamwork, it was found that work from home would not affect teamwork, but in this study, it was found that both employees and managers could not make teamwork from home. We can conclude that the culture of teamwork is not fully established and that tools for teamwork in the sector need to be improved.

In this study conducted in the Turkish automotive sector, it has been concluded that the increase in transportation time and the frequency of working from home decreases the level of communication between the managers and employees while contributing positively to the establishment of work-family balance. We can say that the perception of decreasing level of communication constitutes an obstacle to progress at both the executive and employee levels. Besides, the decrease in the perception of communication level is another obstacle to teamwork. To increase the motivation of employees to work from home, it may be suggested that companies should place systems of teamwork in their enterprises, provide the necessary technological tools for remote teamwork and establish systems that will closely monitor the results of employees working from home in their career plans.

This study was performed in the Automotive Sector Employees sample in Istanbul, Turkey. In the future, it can be realized in other regions where the automotive sector is concentrated, and the general result can be reached for the Turkish automotive sector.

References

Bloom N, Liang J, Roberts J, Ying ZJ (2015) Does working from home work? Evidence from a Chinese experiment. Q J Econ 130:165–218

Church NF (2015) Gauging perceived benefits from 'Working from Home' as a job benefit. Int J Bus Econ Dev 3:81–89

de Vos D, Meijers EJ, van Ham M (2017) Working from home and the willingness to accept a longer commute. IZA discussion papers

Hair J, Anderson R, Tatham R, Black W (1995) Multivariate data analysis. Prentice Hall, Upper Saddle River

Hill J, Ferris M, Martinson V (2003) Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life. J Vocat Behav 63:220–241

Kaoud M (2017) Investigation of customer knowledge management: a case study research. Int J Serv Sci Manage Eng Technol 8:12–22

Kim H-S, Kim Y-G (2008) A CRM performance measurement framework: Its development process and application. Ind Mark Manage 38(4):477–489

Klopries T (2018) Discussion of "Working from Home—What is the Effect?". Schmalenbach Bus Rev 70:57–62

Kotler P, Rackham N, Krishnaswamy S (2006) Ending the war between sales and marketing. Harvard Bus Rev 84(7–8):68–78

Lai ER (2011) Motivation: a literature review. Pearson

Loo B, Wang B (2018) Factors associated with home-based e-working and e-shopping in Nanjing, China. Transportation 45:365–384

Manca C, Grijalvo M, Palacios M, Kaulio M (2018) Collaborative workplaces for innovation in service companies: barriers and enablers for supporting new ways of working. Serv Bus 12:525–550

Moreno AG, Meléndez AP (2011) Analyzing the impact of knowledge management on CRM success: the mediating effects of organizational factors. Int J Inf Manage 31:437–444

Moreno AG, Lockett N, Morales VG (2014) Paving the way for CRM success: the mediating role of knowledge management and organizational commitment. Inf Manag 51:1031–1042

Papacharissi Z, Rubin AM (2000) Predictors of internet use. J Broadcast Electron Media 44(2):175–196

Reinartz W, Krafft M, Hoyer WD (2004) The customer relationship management process: its measurement and impact on performance. J Mark Res 41:293–305

Rupietta K, Beckmann M (2018) Working from home. Schmalenbach Bus Rev 70:25–55

Saunders EG (2017) How to stay focused when you are working home? Harvard Bus Sch

Troup C, Rose J (2012) Working from home: do formal or informal telework arrangements provide better work-family outcomes? Commun Work Family 15:471–486

Young DP (1995) The relationship between electronic and face-to-face communication and its implication for alternative workplace strategies. Facilities 13:20–27