
A META-ANALYSIS OF THE EFFECTS OF FLEXTIME

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Fifty-four studies, taken from the Social Sciences Indexes and the Business Periodical Index, were examined to gather data to be used for a meta-analysis. Both objective and subjective results were compiled to study the overall effects of flextime on the work organization. The results of the meta-analysis showed positive effects of flextime on work aspects such as productivity and absenteeism.

There is an extensive amount of literature studying the effects of flextime scheduling on the workforce. Flextime is basically any form of work scheduling system that allows employees to select arrival, departure, and/or lunch times.

There are three basic types of flextime and slight variations of each are commonly found. The first type is called gliding or variable time. This schedule allows workers to change their work times as often as they want as long as they are present for a "core period" which is usually between 9 and 11 a.m. and between 1 and 3 p.m..

The second type is called flextour. This type of schedule allows workers to change their schedules but they must specify for a period of one or more weeks exactly when they will arrive and depart. Employees must also be present for the "core period."

The third type is a completely flexible schedule that allows workers to arrive and depart whenever they want as long as a certain amount of hours are worked per week or month with no core period to attend. Of the three basic types, the most prevalent is the flextour schedule since it is more conducive to the schedules of most workplaces.

The purpose of this paper was to conduct a meta-analysis of the results of the scientific research conducted on flextime. A meta-analysis statistically utilizes the results of research articles to obtain an overall effect of

one variable on another. Meta-analysis is useful because it can determine the effects of flextime over a large number of circumstances. Objective data from previous studies were used to measure the overall effect of flextime on absenteeism, productivity, overtime costs, leisure/family time, job satisfaction, and role conflict. Subjective data were used to determine the perceived effects of flextime on the above variables as well as on turnover, transportation ease, and desire to continue the use of flextime.

METHOD

The meta-analysis technique used was based on the Hunter, Schmidt, and Jackson (1982) method. The studies used in this analysis were located through the Social Sciences Index and the Business Periodicals Index from 1974 to 1988. Previous literature reviews were also used including Golembiewski et al. (1979), Nollen (1979), Glueck (1979), and Golembiewski and Proehl (1980).

Most research in organizations first established baseline data on variables such as absenteeism and productivity and then compared these figures to figures obtained after the implementation of flextime. Few studies used control groups. Over 60 studies were located and used in the current meta-analysis.

RESULTS

In general, the results from the meta-analysis showed positive effects for flextime scheduling on a variety of work variables. Table 1 shows the overall effects of flextime. In Table 1, "d" indicates the mean effect size, "LB" stands for the lower boundry of the confidence interval, and "UB" stands for the upper boundry of the confidence interval. If zero falls between the LB and the UB, it is an indication that flextime may not actually have an effect on a particular variable. As indicated in the table, all outcome measures have reasonable effect sizes. However, there was great variability between studies resulting in large confidence intervals.

Table 1
Overall Meta-analysis Results

Variable	Studies	d	LB	UB
Productivity	29	.19	-.41	.79
Satisfaction	9	.27	-.93	-1.47
Leisure Time	3	.23	.18	.28
Absenteeism	10	.59	.36	.61
Leave Usage	13	.15	.03	.27
Role Conflict	2	.48	.43	.53
Commuting Costs	3	.68	.66	.70

Table 2 breaks the studies down by the size of the organization. As shown in the table, effect sizes are larger in smaller organizations.

Table 3 shows the subjective perceptions of employees about the effects of flextime. These data indicate that both employees and supervisors feel that flextime has positive effects on a variety of work behavior.

Table 4 indicates the number of studies that reported positive, negative, and neutral effects for flextime. This table is an important addition to the earlier tables because most articles on flextime do not report the type of statistics necessary to be included in a traditional meta-analysis. Thus, Table 4 represents a summary of all articles, whether

the article included statistics or not.

This meta-analysis clearly indicates that flextime has positive effects on employee behavior. It appears that even though flex-time reduces absenteeism and leave usage and increases job satisfaction, it does not have a large effect on productivity. However, it is well received by employees and management and therefore may pay off in the long run.

Table 2
Meta-analysis results by size of organization

Variable	Studies	d	LB	UB
< 300 EMPLOYEES				
Productivity	16	.45	.20	.70
Satisfaction	9	.26	.23	.29
Attendance	5	1.38	.78	1.98
Leave Usage	5	-1.24	-2.48	.00
> 300 EMPLOYEES				
Productivity	12	.14	.02	.30
Satisfaction	4	.27	.22	.32
Attendance	5	.38	.22	.44
Leave Usage	8	.11	.09	.13

Table 3
Subjective Opinions of Flextime

Statement	% Agreeing
Productivity improves	40
Would continue to use	95
Increases satisfaction	71
Increases leisure time	74
Eases transportation problems	61

Table 4
Number of Flextime Studies Showing Effects

Variable	+	-	Neut
Productivity	51	2	8
Turnover	8	0	0
Transportation Ease	23	0	0
Leisure Time	21	0	0
Job Satisfaction	43	0	0
Attendance	47	1	6
Leave Usage	4	1	3
Commuting Costs	6	5	5
Overtime Pay	9	0	1

CONCLUSION

It seems that flextime does not have as much effect on employees in large organizations as it does in employees in smaller organizations. This may be due to increased time and effort required to schedule large numbers of workers on a flexible schedule.

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