

# Flexible Work and Well-Being Study

Phyllis Moen and  
Erin L. Kelly  
Directors

final report

UNIVERSITY OF MINNESOTA

fall  
2007



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# EXECUTIVE SUMMARY

In March 2005 researchers from the University of Minnesota undertook the *Flexible Work and Well-Being Study* to investigate a workplace innovation at Best Buy that focuses on the **results** of employees' work efforts, not the **time** employees spend at work. The innovation is appropriately called the *Results Only Work Environment* (ROWE).

The aim of the University of Minnesota study is to assess whether working in a ROWE environment changes the nature and quality of employees' work experiences, reduces conflict between employees' work and their family or personal lives, affects employees' health and health-related behaviors, and/or alters their commitment to and perceptions of the organization. This report summarizes findings from two surveys fielded six months apart.

The sample consists of 658 employees who participated in both surveys. The sample is divided roughly equally between 1) employees whose teams began the ROWE migration just after the first survey (49.2%) and 2) a comparison group of employees in teams who were not yet slated for ROWE at the time the surveys were launched (50.8%). We compare differences between the ROWE and comparison respondents in terms of any changes employees experienced in the six months spanning the period before and after the ROWE migration.

We find remarkable evidence that ROWE has a statistically significant impact on some (but not all) measures of employees' schedule control and decisions about where and when they work, their health and wellness, and their work pressures and commitment. The evidence is particularly convincing because we examine changes within people over the six month period and see different patterns of change for ROWE and comparison employees.

- **Changes in Schedule Control and Work Patterns**

- › Fewer ROWE employees than comparison employees:

- » Have had their commute times to and from work increase
- › More ROWE employees than comparison employees:
  - » Have greater control over where and when they work
  - » Choose to work at home or off campus more frequently
  - » Have greater variability in their work hours and schedule each week
- **Changes in the Work-Family Interface**
  - › More ROWE employees than comparison employees:
    - » Report a decrease in negative spillover from work-to-family
    - » Report less work-family conflict
    - » Report better 'fit' between their work and family/personal schedules
    - » Report an increase in time adequacy
    - » Report increased job security
- **Changes in Health and Health-Related Behavior**
  - › Fewer ROWE employees than comparison employees:
    - » Come to work on campus when sick
- › More ROWE employees than comparison employees:
  - » Begin to sleep more than seven hours a night
  - » Improve in the quality of their sleep
  - » Now go to the doctor when sick
  - » Begin to exercise more frequently (3 or more times a week)
  - » Report gains in energy
- **Changes in Work Conditions and Effectiveness**
  - › Fewer ROWE employees than comparison employees:
    - » Do low-value (unnecessary) work
    - » Have high turnover intentions
    - » Experience interruptions at work
    - » Feel pressure to work overtime
  - › More ROWE employees than comparison employees:
    - » View the work culture as being family friendly
    - » Have greater organizational commitment
    - » Report more job satisfaction

## Conclusions

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Most quasi-experimental studies of organizational change find few effects, especially over so short a period as six months. We are still engaged in more complex analyses, and will have additional findings later on, but the fact that we have early evidence of ROWE's impact suggests that this may well be an especially fruitful innovation.

We conclude that ROWE is a realistic innovation with potential for broad adoption and impacts. It has been developed in a company (Best Buy), rather than by academics, giving it a certain legitimacy that may help other organizations adopt it as well. The ROWE innovation also makes intuitive sense, given the many anecdotal reports that characterize today's workforce by increasing work loads, greater work-family conflicts, and growing time-related pressures and distress.

ROWE is also an innovation that makes sense based on existing evidence in the academic literature. A large body of theory and research underscores the importance of flexibility and sense of control for employees' health

and engagement. Findings from the *Flexible Work and Well-Being Study* clearly contribute to existing theory and evidence on the importance of psychosocial work environments, and especially employees' sense of control over the time and timing of their work.

Our next steps will be to assess the impacts of this workplace innovation on the work-family conflicts, time adequacy, health and work effectiveness and performance of Best Buy employees in particular family and job circumstances. We also have a study of actual employee turnover between survey waves currently underway.

We plan to draw on the ethnographic data gathered by observing teams during the ROWE migration. Our goal is to develop an understanding of the implementation process as it occurred across units at Best Buy. It seems that employee participation in this team-level change is important to the process, but additional analysis is needed in order to identify exactly what teams and individuals do after the initial migration and which individual and team strategies are most beneficial for employees, their families, and the organization.



“I am able to better balance my work and personal life because of amenities provided to me by Best Buy on the job (i.e. workout facility, banking, cafeteria, pharmacy, etc.).”

-Single 30-year-old man, manager in ROWE



# Contents

EXECUTIVE SUMMARY . . . . .	vi
Introduction and Overview of the <i>Flexible Work and Well-Being Study</i> . . . . .	2
The Nature of the Best Buy Sample . . . . .	6
Change is the “New Normal” in Life as Well as Work. . . . .	10
Does ROWE Affect Employees’ Schedule Control Over the Time and Timing of Their Work?. . . . .	14
Does ROWE Affect Employees’ Work-Family Interface? . . . . .	20
Does ROWE Affect Employees’ Health and Health-Promoting Behaviors? . . . . .	26
Does ROWE Affect Employees’ Working Conditions, Commitment, or Effectiveness? . . . . .	32
APPENDIX . . . . .	40



# Introduction and Overview of the *Flexible Work and Well-Being Study*

This report summarizes findings from a research partnership between the University of Minnesota's Flexible Work and Well-Being Center and Best Buy, a retail corporation headquartered in the Twin Cities. As a high-performance workplace responsive to employee needs, Best Buy is pioneering an innovative culture change initiative in their corporate headquarters focusing on **results**, not simply the **time** employees put in at Best Buy's headquarters campus. This initiative is called the *Results Only Work Environment* or "ROWE."

ROWE was developed by Cali Ressler and Jody Thompson, now Culture Rx ([www.culturerx.com](http://www.culturerx.com)).

## Study Goals

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Professors Phyllis Moen and Erin Kelly, along with an interdisciplinary team of other faculty, staff and students at the University of Minnesota's Twin Cities campus, have been engaged in a multi-method study over the last several years aimed at investigating whether working in a ROWE environment has any effect on employees. They have collected observational, interview, and survey data to assess whether being part of a ROWE team alters employees' work experiences, the interface between their work and family or personal lives, their health and/or health behaviors, and their appraisal of and commitment to Best Buy.

Moen and Kelly have each previously investigated workplace policies and practices in a wide range of firms over the years, but they have never before found an initiative directly addressing the time pressures of employees. To be



sure, many of the organizations they have studied offer flexibility, but it typically takes the form of “accommodating” individual employees who confront high family demands or else are dealing with a health or family crisis. Such accommodations (e.g. working reduced hours, or working several days a week from home) typically are seen as deviations from the “norm.” Moreover, these accommodations may work well in the short term, but often come with (sometimes hidden) costs – including few prospects for future advancement.

By contrast, the ROWE initiative appears to be about changing the “norm” about where and when work should be done. The migration from traditional to ROWE working environments takes place at the team level and requires manager buy-in. It includes a critical analysis of the preexisting work culture, as well as each team setting new norms and expectations, and trying them out during an experimentation period. The University of Minnesota study is investigating whether or not working in a team that has undergone the ROWE migration offers employees and teams

more *built-in flexibility and control* over when, where and how they do their work.

Specifically, the main goal of the *Flexible Work and Well-Being Study* is to investigate whether the Results Only Work Environment (ROWE) innovation produces shifts in employees’:

- 1 Schedule Control and Actual Work-Time Arrangements
- 2 Work-Family Conflict, Strains and Fit
- 3 Health and Health-Related Behaviors
- 4 Job Involvement, Satisfaction, and Commitment

## Research Design

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With Best Buy’s cooperation, the *Flexible Work and Well-Being Study* investigators conducted a multi-method study of two groups of employees: those undergoing the ROWE innovation and a comparison (“control”) group who have not yet undergone the ROWE migration. We report here on findings from two

computer-based employee surveys, conducted six months apart (before and after the ROWE migration). Note that both groups were surveyed over the same time period, making any subsequent distinctions between them less likely to be the result of other changes implemented at Best Buy during that period. Our sample consists of 658 Best Buy employees who completed both surveys (a “pre-ROWE” test and a “post-ROWE” test) six months apart at some time between February 2006-April 2007. We had an 80% response rate at Wave 1, and 93% of Wave 1 respondents completed the Wave 2 survey as well. We label the two groups of survey respondents ROWE employees and “comparison” employees. See the Appendix for more details on the study.

To evaluate the effects of the ROWE initiative while simultaneously controlling for individual differences in employee dispositions and abilities, we investigate change in various outcomes over the six months between surveys. Specifically, we code any increases or decreases between surveys in, for example, employees’ work-family conflict, and then assess whether the proportions experiencing

any increases/decreases are statistically significantly different for ROWE employees and the comparison group.

In other words, are any changes occurring among employees going through the ROWE innovation significantly different from changes occurring among other employees not undergoing ROWE? When we contrast the average scores of sub-groups of employees we only report differences that are statistically significant. This means we are fairly certain they are not due to random variation but instead reflect real differences between subgroups.



“I would enjoy more flexibility in how and when I do my job. My overall personal well-being would increase if I did not spend an hour a day in rush hour, and another 9 hours sitting at my desk. When in reality, I could be doing so much more work during those same 10 hours per day if I was given the opportunity to schedule my time in a way that worked best for me.”

- Married 26-year-old woman, manager in comparison group

# The Nature of the Best Buy Sample

## Age, Occupational Category and Tenure

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Best Buy employees participating in the *Flexible Work and Well-Being Study* are relatively young. The average age of employees is only 32. In fact, 45% of employees are under age 30, with only 15.5% over 40 years old. Those under 30 are slightly more likely to be women (52%), while those are over forty are more apt to be men (55%).

There is also an age difference by job category. Almost nine in ten Best Buy employees in our sample who are under 30 are individual contributors. Among thirty-year-olds, just over half are individual contributors, while 30% serve as managers and 20% are in the senior management (or above) ranks. Among employees over 40, two in five (39%) serve as individual contributors, a fourth (25%) are middle managers, and over a third (36%) are part of senior management.

Most Best Buy respondents have been working for the corporation less than five years, with their average tenure being 4.3 years. However, tenure varies with employees' age and job category. For example, about two-thirds (64%) of those who have been with Best Buy less than a year are under 30. Eight in ten of these "new" employees are individual contributors (80%). Only six in a 100 respondents have been at Best Buy 10 years or more, and approximately two-thirds (65.8%) of respondents with long tenure are mid-level managers or senior-level managers.

## Gender Distinctions and Family Circumstances

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Respondents in the study are almost evenly divided by gender, 51.5% men and 48.5% women. There are few demographic differences by gender in the sample (see Table on pg 7). Seven in ten respondents are married, and over a third (35%) are raising children at home. There is no significant difference by gender in employees' family status.

But family situations do vary by age. For example, those who are not married tend to be younger; two-thirds of singles (67%) are under age 30. As you would expect, those with children tend to be older, with 77% of those raising children over 30.

Family status also differs across job categories. Eight in ten (81%) singles are individual contributors, as are most (72%) of those who are married but do not have children. Almost half (47%) of the employees who have children at home are individual contributors, 30% are managers and 23% are senior managers. Put another way, over half of managers have children (53% of managers and 58% of senior managers).

# Characteristics of the Flexible Work and Well-Being Sample

Characteristic			
	Total % N=658	Men % 339 (51.5%)	Women % 319 (48.5%)
Family Situation			
Not Married, No Children:	30.2	30.1	30.4
Married, No Children (or none at Home):	34.8	34.2	35.4
Children at Home (Mostly Married):	35	35.7	34.2
Age Group			
20-29	45.3	42.4	48.5
30-39	39.2	40.9	37.3
40-60	15.5	16.7	14.2
Job Level			
Individual Contributor	66.3	63.4 †	69.3
Manager	19.8	19.8	19.7
Senior Management	14	16.8	11
Exempt Status			
Exempt	95	97*	92.8
Non-Exempt	5	3	7.2
Education			
High School or Less	1.6	.9	2.2
Some College	12.8	14.6	10.8
Bachelor's Degree	73.2	70.4	76.1
Graduate or Professional Degree	12.5	14	10.8
Tenure at Best Buy			
Less than one year	18.8	17.3	20.5
1-5 years	46.7	45.2	48.3
Longer than 5 years	34.5	37.5	31.2

Gender differences significant at the †p <=.10 \*p<=.05 levels

## ROWE Subsample versus Comparison Subsample

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An important part of the study was making sure that those who completed the ROWE migration (49.2%) are similar on some key characteristics to the employees serving as the comparison group (50.8%). ROWE and non-ROWE respondents are nearly identical in terms of gender, but differ slightly in age: the mean age of ROWE employees is 33, while the mean for the comparison group is 31 ( $p < .001$ ). There is no statistically significant difference in marital status between the two groups of respondents, but more of those in ROWE tend to have children at home: 40% of respondents in ROWE are actively parenting, compared to 30% in the comparison group ( $p < .01$ ). Finally, their work habits appear similar. Average hours per week worked on the job reported at the first survey were identical (a mean of 47 hours per week for both groups).

# Change is the “New Normal” in Life as Well as Work

Many people today lead complex and fast-changing lives. The employees we surveyed at Best Buy are no exception. Of the 658 respondents completing both survey waves, four in five report at least one major life change within the past year. The average (mean) number of major life changes in the past year among those experiencing any change is approximately two and a half.

What kinds of transformations are employees experiencing? Almost one in ten (56 employees or 8.5%) had a new child, either from birth or

adoption. Twice that number (103 employees or 16%) married or began living with a significant other. One in five (132 employees) purchased a new home within the last 12 months. An amazing one in three (209 or 32%) changed jobs within Best Buy.

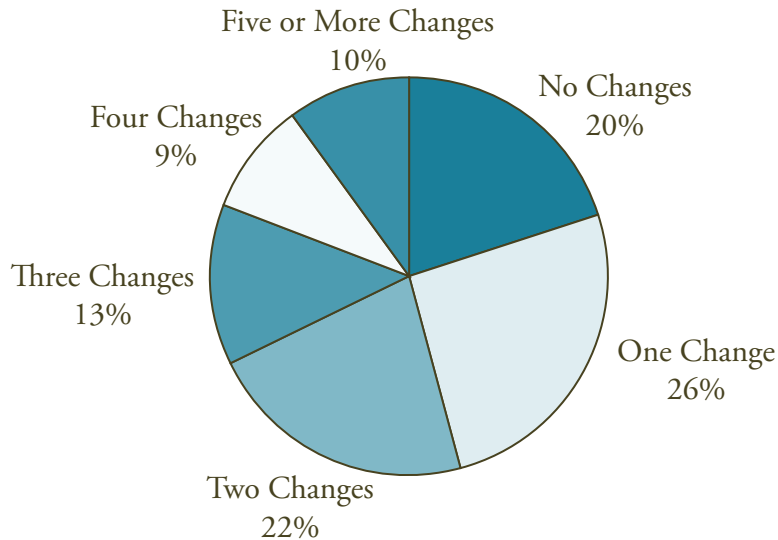
Unfortunately, one in four employees (162 or 25%) in our sample experienced a serious illness, affecting either themselves or a family member. And nearly one in every five (127 or 19%) lost a loved one over this last year.

Some employees (97 or 15%) list other key life changes that are not on the chart above. The largest single category of “other” life change is school or work related, with 25 employees reporting this type of change (such as going back to school or losing a job).

Other “life changes” are not always captured in surveys but may nevertheless be important to employees. For example, 12 people in our sample (2%) report a life change involving pets, with nine employees ( $\approx 1\%$ ) telling us they have new dogs. Seven people ( $\approx 1\%$ ) have begun remodeling their homes.



## Number of Life Changes in the Past Year



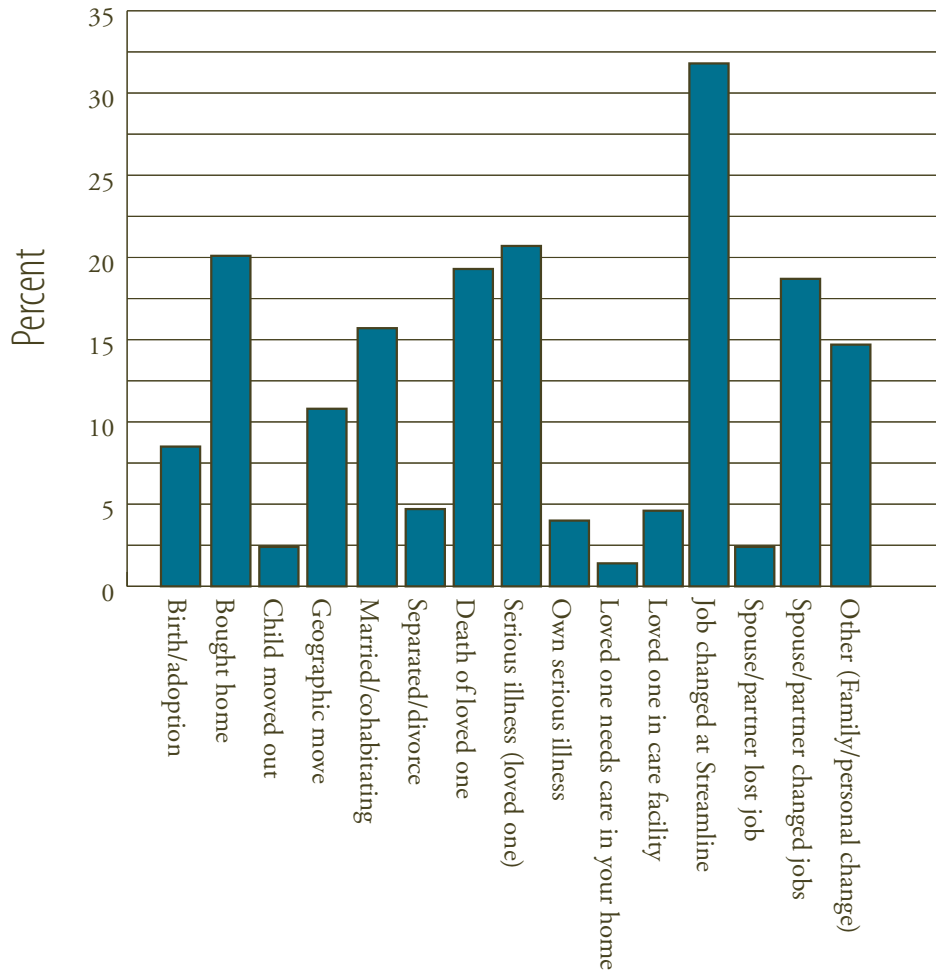
Other changes relate to family building: A small number have become pregnant (11 or  $\approx 1\%$ ) or have become engaged (10 or  $\approx 1\%$ ).

This sets the backdrop for our findings about the ROWE innovation. All kinds of changes may be going on at work, but most employees are simultaneously dealing with a variety of other transformations in their lives, some of which they choose, while others seem to come out of nowhere.

"My mother has requested more time of me. I will need to care for her as she deals with the end stages of her life. ROWE will give me access to spending this time and will release some of the added work stress."

-38-year-old married man,  
individual contributor in ROWE group

## Changes in the Past Year





“My wife & I just had our 1st baby  
2.5 weeks ago, so everything  
is a big transition now.”

-Married 35-year-old father, manager in ROWE

# Does ROWE Affect Employees' Schedule Control Over the Time and Timing of Their Work?

The ROWE innovation emphasizes results as the key aim of work. It deemphasizes the importance of face time or judging productivity and commitment on the basis of the time an employee spends on campus. Accordingly, we have investigated whether employees undergoing the ROWE migration experience a shift in their degree of schedule control and/or their actual work patterns, and whether any change is statistically significant for the ROWE employees versus the comparison group sample.

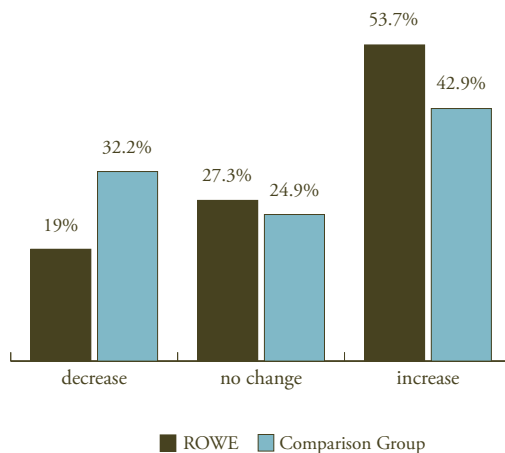
## Schedule Control

Schedule control means the ability to control when you work, where you work, and how many hours you work. The schedule control scale used in this survey is from Thomas and Ganster (1995) and has categories ranging from 1 to 5, where 1 indicates low control and 5 indicates high control. Typical items in this scale include, “How much choice do you have over when you can take a few hours off?” and “How much choice do you have over when you begin and end each workday?”

We find that, in the six months between surveys (Wave 1 and Wave 2), more ROWE employees have an increase in schedule control (53.7%), compared to those employees not undergoing the ROWE migration (42.9%). Note also that fewer of those undergoing ROWE report any decrease in their level of schedule control (19%), while almost a third of those in the comparison group have less schedule control by the second survey than they had at the first survey (32.2%). Both of these are statistically significant differences

between groups. In the figures, the level of statistical significance is marked with asterisks. For example,  $p < .01$  means that there is less than a 1% chance that the differences seen here are due to random variation rather than a real difference between these groups.

More ROWE employees report an increase in schedule control\*\*



\*\* $p < .01$

Research has shown that employees who have greater control over their working time seem to do better at home and at work. The ability to arrange the timing and place of work to fit the employee's life are at the heart of ROWE, and we have shown (previous paragraphs) that Best Buy employees undergoing the ROWE migration do feel in more control of their schedules.

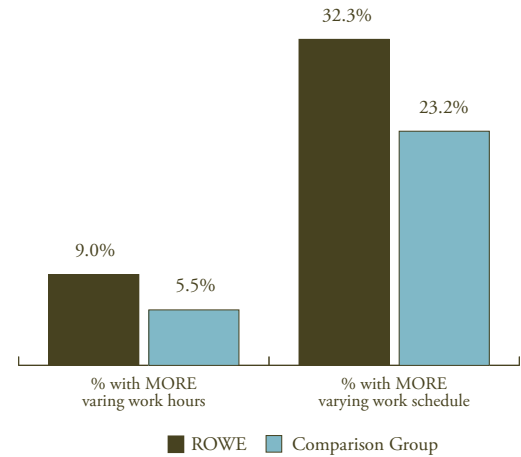
But do they also change their actual time schedules and locations? We investigated potential shifts in time arrangement.

## Working More Flexibly

We asked in the survey, “Does the number of *hours* you work each week vary a lot, not vary much or never change?” ROWE workers report more varying work hours by the second wave (9%) than the comparison group (5.5%). This is a statistically significant difference between groups.

We also asked if their work *schedule* varies a lot, some, does not vary much or never changes. We find a statistically

More ROWE employees report more varying work hours\* and schedules\*\*\*



\*p<.05  
\*\*\*p<.001

significant difference between groups in changes between waves in responses to this question, with 32.3% of ROWE employees reporting a more varying work schedule while only 23.2% of the comparison group do.

## Working at Home or Off Campus

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To measure the amount of time employees spend working off campus we asked employees taking our survey, “Do you ever choose to work at home or at another location? (Do not include business travel or off-site meetings.)” We find that more employees who participated in ROWE (in contrast to those in the comparison group) changed their answer to this question (in the six months between surveys and after undergoing the ROWE migration) to now say they are more likely to chose to work at home or other off campus locations.

“I hate my commute into  
work. I would take a 10-20%  
pay cut if I could work from  
home more frequently.”

- Married 27-year-old man, individual  
contributor in comparison group

## Actual Hours on the Job

We do not find any significant differences between ROWE and non-ROWE employees in the actual hours employees work in their Best Buy jobs, regardless of where the work is done. Both the ROWE employees and the comparison group employees report working similar hours at both waves of the survey, with no difference in hours by having gone through the ROWE migration. Employees scheduled to go through the ROWE migration reported working 47.3 hours per week on the Wave 1 survey. After these employees went through the migration they report working 47.8 hours per week at the Wave 2 survey. This is not a significant difference. Comparison employees reported working 47.4 hours per week at Wave 1 and 48.4 hours at Wave 2, also not a statistically significant difference.

Neither are there any changes by ROWE status in the number of days each week employees do any work for Best Buy. At Wave 1, non-ROWE comparison employees reported not working for Best

Buy about one and a half days per week and at Wave 2 they reported not doing any work for Best Buy about 1.4 days per week. ROWE employees reported not working for Best Buy about 1.4 days per week at Wave 1 and 1.2 days per week at Wave 2. None of these differences are statistically significant.





"I am single mother, so it's important that I have flexibility in my work schedule and I believe I have that today. My concerns are that to stay on top of things, I need to work all of the time or results are difficult to obtain."

-38-year-old mother of a five-year-old, manager in ROWE

# Does ROWE Affect Employees' Work-Family Interface?

There is a clear scholarly consensus that employees' work and family/personal lives "spill over" into and affect one another in both positive and negative ways. What is *not* clear is what can be done to reduce any negative impacts and promote any positive ones, in both directions.

We theorized that ROWE could be a way of decreasing work-related conflicts

with employees' family obligations and their personal lives, given the greater latitude it offers as to where and when they can accomplish their jobs. We anticipated *work*-to-family effects, but did not expect ROWE to produce any positive or negative *family*-to-work effects, given ROWE's emphasis on changing *work* habits and behaviors. And we had no idea as to whether ROWE would bring with it additional positive spillover from employees' work to the family dimensions of their lives, except to possibly promote a greater sense of time adequacy and work schedule "fit."

We included a wide variety of measures to assess the work-family impacts of the ROWE intervention by looking at changes in them between the two survey waves (six months apart). Are any changes in the work-family interface significantly different for members of our sample working in a ROWE environment, compared to members of our comparison group who had not yet undergone the ROWE migration?

## Spillover Scales

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Four scales are included in the survey that measure four aspects of spillover; positive work-to-family spillover, positive family-to-work spillover, negative work-to-family spillover and negative family-to-work spillover. All four subscale scores range from 1 (never) to 5 (all the time).

The negative work-to-family spillover scale measures ways in which experiences at work spill over into an employee's family or personal life in a detrimental way. This scale includes items such as, "Has your job made you feel too tired to do the things that need attention at home?" and "Has stress at work made you irritable at home?"

We took everyone's post-test (Wave 2) score on this scale and subtracted it from their pre-test (Wave 1) score to capture any changes between survey waves. We then compared the change scores of those who participated in the ROWE migration and those who did not. We find, as hypothesized, that those now working in a ROWE environment have experienced a statistically significant

decrease in their feelings of negative spillover from work to their family lives. Almost half -- 46.9% -- of ROWE employees report a decrease in negative work spillover, compared to 36.3% of employees in the comparison group.

## Work-Family Conflict

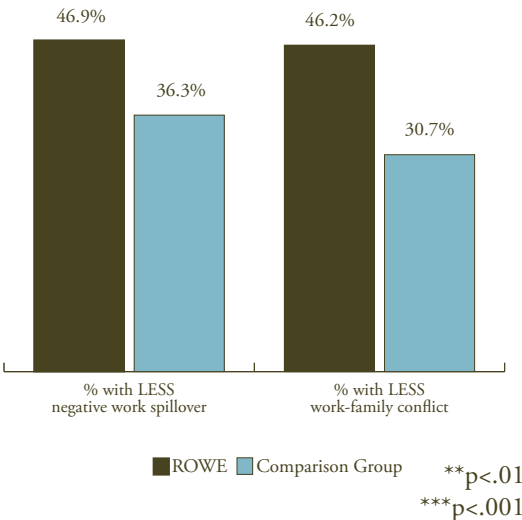
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We also included in both survey waves a similar measure gauging work-family conflict, developed by Netemeyer, Boles and McMurrian (1996). It is a 5-item scale with scores ranging from 1 (strongly disagree) to 5 (strongly agree), a higher score indicating greater feelings of conflict from work to family life. Items included in this scale are, "Things I want to do at home do not get done because of the demands my job puts on me" and "The amount of time my job takes up makes it difficult to fulfill my family/personal responsibilities."

We find a significant difference in changes in feelings of work-family conflict between

the ROWE and comparison groups using this scale. More ROWE employees (46.2%) report less work-family conflict after having gone through the ROWE

More ROWE employees have a decrease in negative work-to-family spillover\*\* and work-family conflict\*\*\*



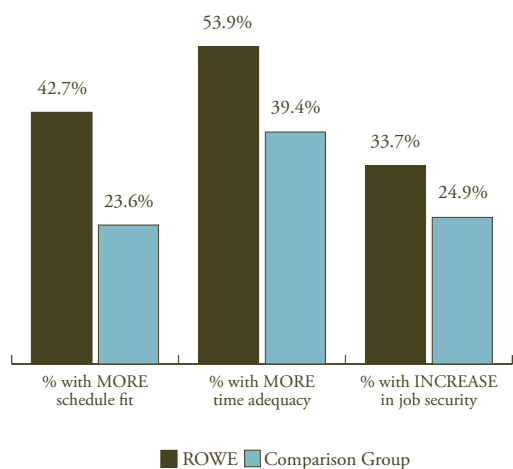
migration than those in the comparison group (30.7%). Finding similar results on both of the negative work-to-family spillover and the work-family conflict measures provides even greater confidence that the ROWE innovation has real impact, reducing the negative effects of jobs on employees' family and personal lives.

## Work Schedule Fit

We also measure the amount of “fit” employees assess between their work schedules and their personal and family lives. We measure this through a two-item scale developed by Barnett, Gareis & Brennan (1999) with answer categories ranging from 1 (extremely poorly) to 7 (extremely well) where a higher score indicates greater “fit” between the two spheres. The items in this scale are, “Taking into account your current work hours and schedule, how well is your work arrangement working for your *family or personal life*?” and “Taking into account your current work hours and schedule, how well is your work arrangement working *for you*?”

We find a statistically significant difference in the change scores between the ROWE group and the comparison group. Nearly double the percentage of ROWE employees (42.7%) report better “fit” between their work and family/personal life schedules by the second wave of surveys than do the comparison group (23.6%).

More ROWE employees have an increase in job security\*, work-schedule fit\*\*\*, and time adequacy\*\*



\*p<.05,  
\*\*p<.01,  
\*\*\*p<.001

## Time Adequacy

Americans are increasingly characterized as having a *time deficit*: working long hours, undergoing long commutes, stressed out by long “to do” lists. There are many things in life requiring time or attention from employees, and their jobs are just one part of the panoply of activities they spend time on each day.

We theorized that those working in time-flexible ROWE environments would feel fewer time pressures and correspondingly a greater sense of time “adequacy,” of having “enough” time. To assess whether this is in fact the case, we included a Time Adequacy Scale at both waves to investigate any changes between pre- and post-test surveys. The scale has 12 items and asks questions such as, “To what extent is there time to -- get enough sleep/ rest, keep in shape, prepare or eat healthy meals, for your family to be together?” Response possibilities range from 0 to 10, with 0 being “not at all adequate” to 10 being “almost always adequate.”

We find statistically significant changes in time adequacy between groups. ROWE employees are much more likely to report an increase in time adequacy by Wave 2 than are employees in the comparison group (53.9% vs. 39.4% respectively).

## Job Security

We also included a two-item scale on both surveys to measure any changes in job security. We theorized that employees

who work at non-traditional times and places (ROWE employees) might feel less secure about their jobs, compared with those on more traditional schedules (and more face time). The job security scale includes two items, “I have experienced or I expect to experience an undesirable change in my work situation.” and “My job security is poor.” They are reverse-coded so a higher score indicates greater job security. Surprisingly, we find that more of those in ROWE environments feel *increased* job security by Wave 2, possibly due to their emphasis on results and not simply “being there.”

## Other Measures

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We do not detect meaningful differences between ROWE and comparison respondents on any *family*-to-work spillover measures or on the scale of positive spillover from work to family. Neither do we find differences between groups in any changes in measures of income adequacy, family engagement, family involvement, relationship quality, or other family measures, including

satisfaction with the division of labor in the household, eating dinner with the family, and time spent caring for children. Previous studies show that mothers always find time to spend with their children even when they have to forgo sleep. As we report next, time with children doesn’t necessarily mean less sleep for ROWE employees.





[You now have] “flexibility to work when you are able to work. Taking time off to spend with my family without feeling guilty.”

-30-year-old mother of a two-year-old, manager in ROWE

# Does ROWE Affect Employees' Health and Health- Promoting Behaviors?

Given the high costs of health care and growing public concern with the quality of the nation's health, employers are

increasingly focusing on workforce health and health-promoting behaviors (such as exercise and getting enough sleep) as well as harmful health behaviors (such as smoking).

We did not expect the ROWE innovation to produce major changes in employees' depressive symptoms or their overall health, especially in only six months. And, in fact, we did not find any significant differences by ROWE status. Nor did we hypothesize or find that employees' alcohol use or smoking behavior would change given the short time duration we are investigating. However, we did hypothesize that undergoing the ROWE migration might result in possible changes in more proximate health outcomes, such as having more energy, as well as increases in regular exercise and other health-promoting behaviors.

"People underestimate the importance of happiness. It's a difficult aspect to measure, so it is often overlooked. But, it is one of the most important aspects of a productive workforce. ROWE addresses that."

-Single 30-year-old father,  
in ROWE group

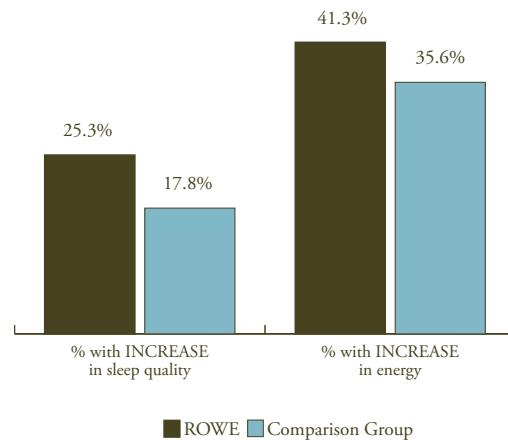


## Sleep Quality, Energy and Vitality

Recent medical studies indicate that the quality of sleep is a barometer of good health. Those experiencing anxiety and other stress-related emotions and/or pain and other physical symptoms are unlikely to sleep well. To investigate whether ROWE might change sleep quality we asked respondents on both waves of the survey, “During the past 4 weeks, how would you rate your sleep quality overall?” The respondent then selected an answer on a four-point scale with one being “Very Bad” and four representing “Very Good.” A greater percentage of employees in the ROWE sample report improved sleep quality over the six months between surveys than do those in the comparison sample -- 25.3% of the ROWE sample and 17.8% of the comparison sample slept better by Wave 2, a statistically significant difference between groups.

To capture any changes in another marker of health, employees’ energy and vitality, we incorporated an established scale into each wave of the survey.

More ROWE employees have an increase in sleep quality\* and increase in energy\*\*



\*p<.05  
\*\*p<.01

The scale contains questions such as, “How much of the time during the past 4 weeks did you have a lot of energy?” and “How much of the time during the past 4 weeks did you feel worn out?”

Answers to the questions include “All of the time,” “Most of the time,” “A good bit of the time,” “A little bit of the time,” and “None of the time.” Afterwards the answers were combined (with some items reversed) to form a single variable with a higher score representing greater energy over the past four weeks. We then analyzed changes in reported energy between Wave 1 and Wave 2 of the survey, and assessed whether this differs by respondents’ ROWE status. We find employees in our study who underwent the ROWE migration have a significant increase in energy levels between survey waves, more so than do those in the comparison group (41.3 % to 35.6%). Also, those in the ROWE group are less likely to report a loss of energy than those in the non-ROWE comparison group.

“I know my job is stressful and I am exhausted when I leave here. I can usually get my mind off work until bedtime and then I start rehashing what needs to be done the next day or that I didn’t complete today. I absolutely don’t get enough sleep thinking about the job.”

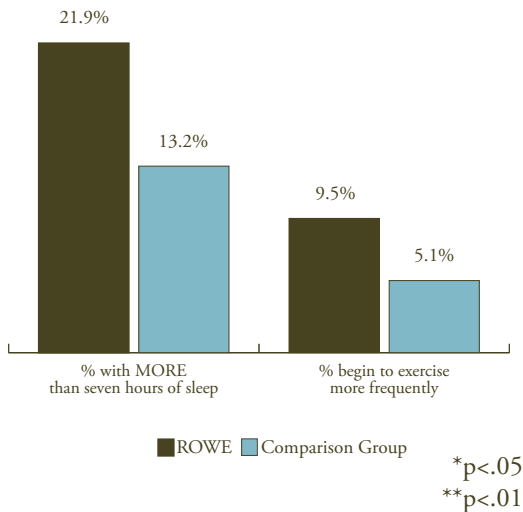
—Single 27-year-old woman in the comparison group

## Health-Related Behaviors: Exercise and Sleep Quantity

Exercise is an important component of a healthy lifestyle. We included measures about exercise behavior in both waves of the survey in order to assess whether ROWE changes the proportion of employees exercising regularly. We hypothesized that ROWE would affect exercise behavior given the greater schedule flexibility of employees on ROWE. In order to assess exercise behavior, we created a variable dividing employees into two groups, those who exercise 3 or more days a week versus those who exercise less or irregularly. We then compare changes in the scores on this variable, finding that significantly more ROWE employees began to exercise 3 or more days a week by the second survey compared to those in the comparison sample (9.5% to 5.1%).

In addition to sleep quality (discussed above), the actual *quantity* of sleep has been shown to have far reaching effects on health. Accordingly, we also asked respondents about the amount of sleep

More ROWE employees sleep more than 7 hours a night\*\*  
and tend to exercise more frequently\*



they typically get “before work days” in the two waves of the survey. We then created a variable dividing people into two groups, those who reported getting 7 hours of sleep or less before a workday and those who reported getting more than 7 hours of sleep before a workday. (The

National Institutes of Health recommends eight hours of sleep per night for adults in order to avoid performance issues at work. [http://www.nhlbi.nih.gov/health/public/sleep/pslp\\_fs.pdf](http://www.nhlbi.nih.gov/health/public/sleep/pslp_fs.pdf)) Analyzing changes between waves, we find a statistically significant difference between the ROWE and comparison samples in the proportions getting more sleep by Wave 2 of the survey. Over one in five ROWE employees (21.9%) moved from the “less” to the “more” sleep category, far more than the percentage of comparison group employees (13.2%) who did so.

## Health-Related Behaviors: Coming into Work Sick and Going to the Doctor

We know that coming to work sick helps no one; the ill worker is usually less productive and may infect other people. Our interviews and observations of health behaviors at Best Buy indicated that some employees felt obligated to come into work even when sick. We

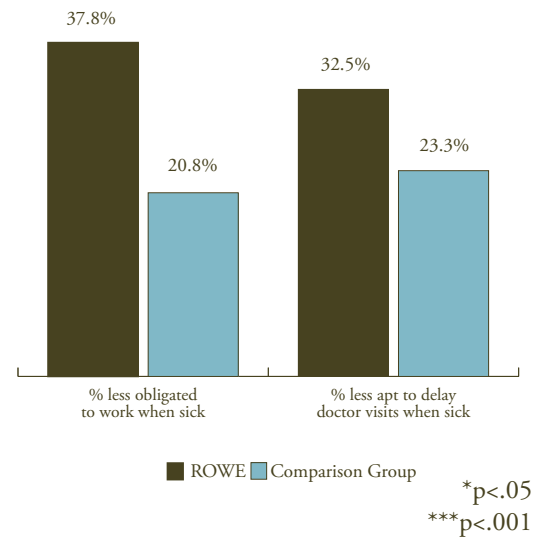
theorized that the flexibility available in ROWE might change that behavior, and accordingly asked respondents at both survey waves to respond to the following statement: “When I am sick, I still feel obligated to come in to work.” Responses were on a one to four scale, ranging from 1=Strongly disagree to 4=Strongly agree.

In analyzing the data, we find a significant difference between ROWE and other comparison employees in terms of changes in their responses to this statement. Almost four in ten ROWE respondents (37.8%) change their answers from agree or strongly agree to disagree or strongly disagree after undergoing the ROWE migration, compared to one in five of the comparison respondents (20.8%). Note that ROWE employees have nearly double the shift occurring among those in the comparison group.

Another issue that we observed in our early informal discussions with Best Buy employees was the tendency of some to not take the time to go to the doctor when sick. We tracked changes across surveys in employees’ response to the following statement: “Sometimes I’m so busy that I don’t go to the doctor

even when I should.” We find another statistically significant shift, with 32.5% of employees in the ROWE group moving from agree or strongly agree to disagree or strongly disagree, while only 23.3% of those in the comparison group do so.

More ROWE employees now report feeling less obligated to work when sick\*\*\* or delay doctor visits\*



## Other Measures

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We do not detect statistically significant differences between ROWE and comparison samples on changes in other health measures in the six months spanning the period before and after ROWE. We find no differences between ROWE and comparison group respondents in any changes in self-reported health, psychological well-being, depressive symptoms, emotional exhaustion, physical symptoms, and personal mastery. Neither do we find any meaningful distinctions between ROWE and comparison groups in changes in more “set” behaviors, such as smoking, excessive alcohol use, or body mass index.

“I don’t feel overwhelmed or stressed  
when I need to take the kids to the doctor  
or have other appointments”.

- 31-year-old married mother of a four-year-old,  
individual contributor in ROWE

# Does ROWE Affect Employees' Working Conditions, Commitment, or Effectiveness?

ROWE aims to produce a win/win working environment, improving the quality of employees' day-to-day lives while simultaneously reducing costs

and improving performance. We have shown thus far that employees working in ROWE environments are more apt than those in traditional environments to have more control over their schedules, to work off campus, to vary the hours they work, to sleep more and better, to exercise regularly and to report better schedule fit, greater time adequacy, and less work-family conflict and negative spillover from work to their personal lives.

But does ROWE matter for more job-related outcomes? We consider a number of measures that might affect the quality of the work accomplished: pressure to work overtime, being constantly interrupted, engagement, and commitment to Best Buy. We also assess factors that might affect turnover: job satisfaction, viewing the Best Buy environment as “family friendly,” and actual plans to leave Best Buy.

## Feeling Pressured to Work Overtime

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In each wave of the survey we asked Best Buy employees if they often feel

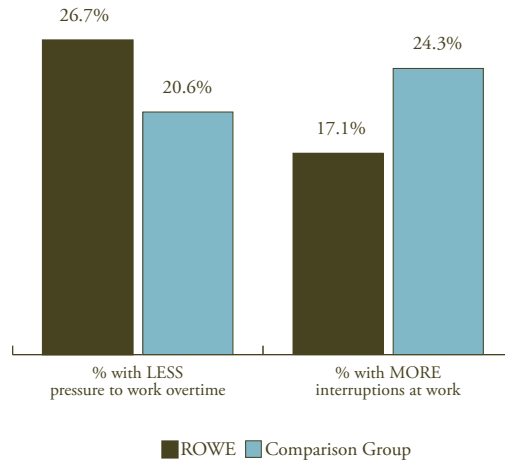
pressured to work overtime, and then combined surveys to capture any changes pre- and post- ROWE transition. We find statistically significant differences in changes in this measure between ROWE and comparison respondents. A greater percentage of employees undergoing the ROWE migration now report less pressure to work overtime than is the case for members of the comparison group (26.7% to 20.6%).

## Interruptions at Work

Employees at Best Buy (as well as employees at other organizations we have studied in the past) often feel stressed when they are trying to meet deadlines and people stop by their cubes with questions or just to chat. We measure this job stressor by asking employees to respond to the degree they agree with the statement, “I have many interruptions and disturbances in my job.” Employees at Best Buy tend to report an increase in such interruptions in the six months between surveys – in fact 21% say they now have more interruptions than they did previously. However, fewer employees

in the ROWE migration have an increase in interruptions compared to those in the comparison group (17.1% to 24.3%).

More ROWE employees feel less pressure at work overtime\*\* and are less apt to report an increase in interruptions at work\*



\*p<.05  
\*\*p<.01

## Turnover Intentions: Planning to Leave Best Buy

Having employees “turn over” is invariably costly to organizations, given the expenses of recruitment and

training. Moreover, planning to leave an organization is another (negative) measure of employee commitment and satisfaction. Accordingly, we asked employees in our two surveys about whether they plan to leave Best Buy, using a scale consisting of 3 items with scores ranging from 1=strongly disagree to 7=strongly agree (a sample item is “I am actively searching for an alternative to Best Buy.”) Almost a third of ROWE employees (32.5%) lower their plans to leave Best Buy. By contrast, turnover intentions decrease for only one in five (20.7%) among employees in the comparison group.

“The flexibility is amazing and leads to more productive employees because they can focus on work when and how they do it best. This is also going to increase employee retention, in my opinion.”

-Married 34-year-old women,  
Manager in ROWE

## Job Satisfaction

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Does ROWE matter for job satisfaction? Most surveys of employees ask, ‘How satisfied are you with your job?’ and we did as well, with scores ranging from 1=Very unsatisfied to 5=Very satisfied. We find a statistically significant difference between the ROWE and non-ROWE groups. Although there are shifts in job satisfaction in both directions, a greater percentage of ROWE employees (23.5%) increase in job satisfaction by the second wave of the survey (after ROWE migration) while only 13.7% of the employees in the comparison group report an increase in job satisfaction.

## Commitment to Best Buy

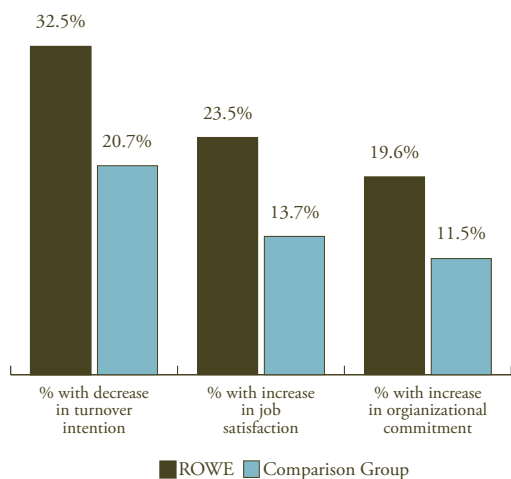
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We also assess any changes in employees’ degree of commitment to Best Buy in the six months between surveys. To do so, we included an Organizational Commitment Scale with scores ranging from 1 to 4 (greater score indicating greater commitment). Typical items in



this scale are, “I feel very little loyalty to Best Buy.” (reverse coded), “I would take almost any job to keep working for Best Buy.” and “I would turn down another job for more pay in order to stay with Best Buy.” After having gone through the ROWE migration and working in a ROWE environment for 6 months, more employees report an increase in their level of commitment to Best Buy than the comparison group employees over the same time period (19.6% to 11.5%), a statistically significant difference.

More ROWE employees plan to stay with Best Buy,\*\* have higher job satisfaction,\*\* and have more commitment to Best Buy\*\*



\*\*p<.01

## Low-Value Work

Employees working for all kinds of organizations often complain of “low-value” work, things that may not be necessary or useful to the goals of the organization but that continue to be done as a result of organizational inertia or because “we always do it this way.” We asked about low-value work in our surveys (“I do things that really aren’t necessary to get my job done but are required anyway.”), and find some decline over this six month period. More of those undergoing the ROWE migration report a decline than those in the comparison group (26.5% to 18.8%).

## Family Supportive Culture

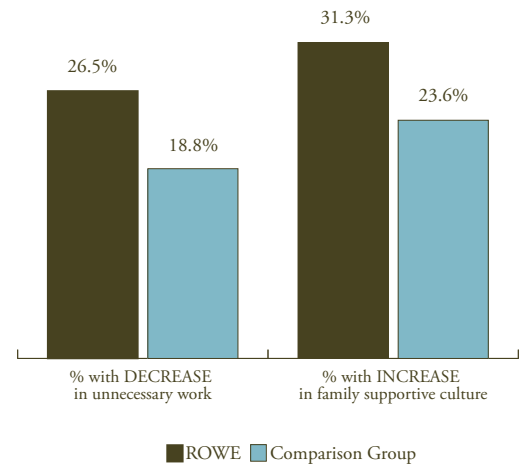
We also included a scale in each survey to measure how employees view the overall culture of Best Buy in terms of its “family supportiveness.” We asked employees to answer the questions thinking about what they believe is the philosophy of Best Buy. This scale consists of nine

items, such as, “Employees who take time off to attend to personal matters are not committed to their work,” “It is assumed that the most productive employees are those who put their work before their family life,” and “The way to advance is to keep nonwork matters out of the workplace.” We hypothesized that employees undergoing the ROWE migration would report a greater increase in the family friendliness of the Best Buy cultural environment between the two surveys. We find that indeed, the ROWE respondents’ change in their assessment of the culture is (statistically) significantly different from the change experienced by respondents in the comparison group. Over three in ten (31.3%) ROWE employees see Best Buy as more family-supportive, while fewer employees (23.6%) in the comparison group do so.

“ROWE is great. It is one of the major things keeping me at BBY.”

—Married 23-year-old man,  
individual contributor in ROWE

More ROWE employees report a decrease in unnecessary work\* and increase in family-supportive culture\*\*



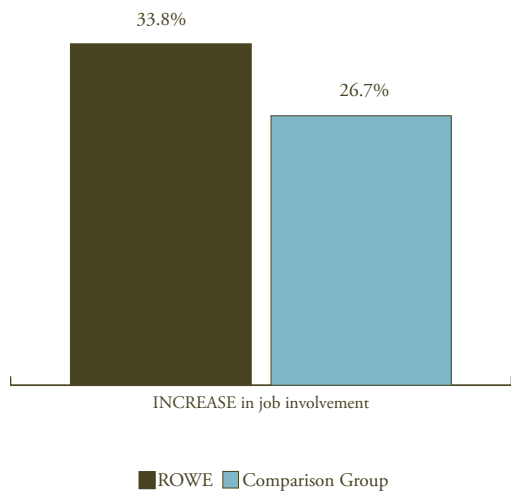
\*p<.01

\*\*p<.05

## Job Involvement

Does undergoing the ROWE migration matter for employees’ sense of involvement with their jobs? Some argue that ROWE might increase employees’ involvement, in that they must take on greater personal responsibility for meeting objectives. Others suggest that not having to be at work on campus might reduce employees’ involvement. We find that many

More ROWE employees report an increase in job involvement\*



\* $p < .05$

employees at Best Buy report increased involvement in their jobs in this period, using a scale consisting of 3 items with scores ranging from 1=strongly disagree to 4=strongly agree. A sample question is, “Most of my interests are centered around my job.” Those undergoing ROWE have a greater increase in feeling involved in their jobs. One in three, or 33.8% of ROWE employees report an increase in job involvement, while only 26.7% of non-ROWE (comparison) employees do.

“I think this will be a passing fad. There are many top execs that I have heard that do not support it. In addition, there are too many people who look at those who keep different hours now and look at them like they are not working as hard as they are. It’s very ingrained in this culture. . . . That being said, I think it would be great for this company if ROWE were available to everyone and stayed as a part of the culture.”

—Married 35-year-old manager,  
in the comparison group

## Other Measures

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Not everything changes with migration to ROWE! We found no statistically significant difference between ROWE and comparison group employees in terms of changes in their level of psychological job demands, the skill that is needed for their jobs, the authority they have to make key decisions about their work, or the time they have to reflect on work. Neither do ROWE and the comparison group employees differ in changes in their ratings of their own and their teams' job performance or in their degree of satisfaction with their coworkers or their managers. And we find no statistically significant differences in employees' levels of work engagement or in the actual hours they work.



“ROWE is going to be the way all corporations work in the future. Once people start to understand that it is all about results and not about time, employees will be much happier and companies will be more efficient. My team REALLY needs to convert to ROWE as soon as possible. We are very time-oriented and it is hurting us.”

-28-year-old man, in comparison group

# APPENDIX

The Flexible Work and Well-Being Center is part of a national network, the Work, Family & Health Network, sponsored by the National Institutes of Health (NIH) and the National Institutes of Occupational Safety and Health (NIOSH). The goals of this initiative are to “conduct interdisciplinary evidence-based research on work and family programs and policies in multiple workplace settings.” The Flexible Work and Well-Being Center in particular investigates how organizations can adapt their policies and practices in ways that promote the health of employees and their families. The *Flexible Work and Well-Being Study* is a multi-method research study. The research design includes conducting in-depth interviews, observations of teams, observations of the change process, focus groups and surveys. This report contains information from the survey component of the study. All quotes found in this

report came from open-ended questions in the survey such as, “Is there anything else you would like to add about your health and well-being or your personal life?” All demographics were modified to help mask the identity of respondents.

## Eligibility Criteria

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Eligibility for being in the study consists of employment at the company headquarters. People were excluded if they had already gone through the ROWE initiative or were contingent workers rather than Best Buy employees.

## Recruitment

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The Flexible Work and Well-Being Center, at the University of Minnesota sent out emails inviting respondents to complete a web-based survey. Each employee had a unique code and password so we could ensure that each person completed only one survey and so we can send reminders and gift cards to the appropriate people. It was explained that survey responses

were confidential, that the survey would take about 45 minutes to complete, and that a \$25.00 gift card would be given to those who completed the survey. The Wave 1 survey was opened to both the ROWE group and the comparison group approximately one month before the ROWE group was scheduled to begin the ROWE migration. This occurred in February and September 2006 (as two different groups were scheduled to go through ROWE). The Wave 2 survey was opened six months after Wave 1 closed, in September 2006 and April 2007. Respondents were given about 4 weeks to complete the survey.

## Sample

1026 employees were invited to participate in the Wave 1 survey. 825 began it and 774 completed it 100% of the way through, for a total response rate of 80%. 506 of those invited were in teams that would start the ROWE initiative in the next year. 405 of them completed the survey, for an 80% response rate of the ROWE (treatment) employees.

We invited 520 employees to participate in the survey as a comparison group. They were from “traditional” teams that were not scheduled for ROWE. A total of 420 completed the survey, for a 81% response rate among the comparison (control) group. Over nine in ten (93%) of the employees who completed the Wave 1 survey completed the Wave 2 survey for a total sample of 658 employees.

## Research Design

Both ROWE and comparison groups were surveyed. The ROWE groups were surveyed approximately 3-4 weeks before they began the ROWE migration and a comparison group was surveyed at the same time. The groups were surveyed again (Wave 2) approximately 6-7 months later. The analysis reported here is based on employees who participated in both Waves 1 and 2 of the *Flexible Work and Well-Being Study* survey.



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