ATTITUDES TOWARDS DAYS WORKED, WEEKEND DAYS, AND PREFERENCES FOR DAYS WORKED

James E. Martin
Wayne State University
School of Business Administration,
Department of Management and Information Systems
Prentis Building
5201 Cass Ave
Detroit, MI 48202
James.Martin@wayne.edu

&

Ariel M. Lelchook
Gettysburg College
300 North Washington St
Box 395
Gettysburg, PA 17325
alelchook@gmail.com

Nonstandard work days, preferences, and attitudes towards days worked

ATTITUDES TOWARDS DAYS WORKED, WEEKEND DAYS, AND PREFERENCES FOR DAYS WORKED

ABSTRACT

The amount of weekend days worked in both Europe and North America has been steadily increasing. The current study examines attitudes towards days worked where many employees worked on the weekends. We analyze retail employee data collected from two times. We use Person Environment Fit Theory to develop hypotheses associated with attitudes towards days worked concerning 1) changes in the weekend days worked over time, 2) work on weekend days, and 3) the congruence between preferences for working weekend days and actual work schedules. We found support for our hypotheses, as those who worked on fewer weekend days and had their preferences for Saturday work met, had more positive attitudes. Greater preferences for working weekends was associated with more positive attitudes, a finding we believe may be related to both employee self-selection and adjustment to working nonstandard schedules. We discuss the practical implications in relation to work schedule management.
Holtom, Lee and Tidd (2002) note that employment in North America, Europe, and the industrialized market economies of Asia is changing to compete successfully in the global economy. This change is leading progressively more businesses to operate on 24 hour schedules, seven days a week, with an increase in the number of employees working nonstandard schedules outside of the traditional 9-5 Monday-Friday work week (Barling & Gallagher, 1996; Kalleberg, 2009; Presser, 2003). Nonstandard schedules are becoming increasingly common in multiple industries (e.g., healthcare, manufacturing, retail etc.) for at least a good proportion of their work force (Beers, 2000) and in multiple countries (Presser, 2003; Deery & Mahony, 1994). Presser and Gornick (2005) reported that up to 35% of employees in some European countries work weekend schedules, with many such countries experiencing a large increase in weekend work in the last several years. Twenty-three percent of the workforce in the United States usually works on Saturdays and 14% usually work on Sundays (Presser & Gornick, 2005). Presser found that 63% of workers on nonstandard schedules reported that they worked such a schedule for job constraining reasons (Presser, 2003). Thus, many employees on weekend schedules would likely choose not to do so if given a choice.

Nonstandard schedules are often considered undesirable because employees work during hours or days that may conflict with time usually devoted to family or other social activities (Deery & Mahony, 1994; Presser, 2003). While nonstandard schedules may conflict with other activities, organizations need employees to cover nonstandard hours and days. Shift work has also been associated with negative outcomes such as more injuries during night shifts (Smith, Folkard, & Poole, 1994; 1997) and with night shift workers reporting worse health, less job satisfaction, and higher absenteeism rates (Burch et al., 2009).
Nonstandard work days, preferences, and attitudes towards days worked

Nonstandard work schedules are more common in certain industries, such as retail. Some of the busiest shopping hours are in the evenings or weekends as consumers shop when they are not working after standard work hours. The retail sector has responded to the increased demand from consumers by extending its hours to 24-7 store operation, in which the United States has led the way (Carré & Tilly, 2009), which has changed the work schedules of employees (Bryson & Forth, 2007). Even if a retail store is not open, there is usually a night crew employed in re-stocking. Carré, Tilly, van Klaveren and Voss-Dahm (2008) argue there is a complete lack of government regulation of operational hours and a nearly total absence of worker schedule regulation in the United States as compared to Europe. The only significant regulation on work schedules comes from The Fair Labor Standards Act of 1938, which establishes the overtime premium for weekly hours over 40. This act really has the effect on limiting most retail employee work schedules to 40 hours a week or less because employers do not want to pay overtime if it can be avoided (Carré & Tilly, 2009).

Across the United States, Saturdays and Sundays are among the highest volume days of the week for sales in retail food establishments (Bureau of Labor Statistics, 2008). The need for employees to work nonstandard schedules creates staffing and scheduling challenges for employers (Bryson & Forth, 2007; Sierbert & Zubanov, 2009). As society often expects community and family affairs to take place on the weekends and in the evenings, this causes problems for employees who may have to be at work during these times due to their schedules (Monk, Folkard, & Wedderburn, 1996).

Our study will build on several assumptions in the work scheduling literature. First is the assumption in the literature that nonstandard schedules, both with night shifts and/or weekend days, are less desirable with a number of detriments, challenges or difficulties compared to
Nonstandard work days, preferences, and attitudes towards days worked

standard schedules (e.g. Deery & Mahony, 1994; Presser, 2003). We also incorporate another key assumption/finding from the scheduling literature, that scheduling preferences relate to relevant outcomes. Morrow, McElroy, and Elliott (1994), suggest that it is working one’s preferred schedule that relates to positive attitudes, rather than working a specific shift or weekend. Havlovic, Lau, and Pinfield (2002) found that registered nurses who worked both their preferred shifts and their preferred work weeks had more positive work outcomes. Holtom et al. (2002) found that employees who had their work schedule preferences met had better work outcomes. In this study, we will develop hypotheses that employees who work less on the weekends are more likely to have more positive attitudes towards their days worked. However, since the literature suggests that scheduling preferences matter, we will also develop hypotheses about the match between scheduling preferences to actual schedules.

The current study examines scheduling using retail employee data collected from two time periods three years apart. This data offers an opportunity to study the relationships of change in the weekend days worked over the three year time period. Thus, our study focuses on work on weekend days, changes in the weekend days worked over time, preferences to work on weekend days, and the congruence between employees’ preferences for working (separately) Saturdays and Sundays and their reported work schedules for those two nonstandard work days. Similar to Holtom et al. (2002), we believe that we have adequately controlled for other factors identified by Barling and Gallagher (1996) that may have caused the wide divergence of previous findings in studies of workers with nonstandard schedules. The content of the jobs was generally the same for both those who worked on standard days and those who did not. Second, there did not appear to be different preferences for different types of employees. Third, we also have major demographic controls related to both the schedules worked and, obtaining one’s
Nonstandard work days, preferences, and attitudes towards days worked

preferred schedule. Last, our dependent variable has been used in previous research examining weekend days worked (Martin, Wittmer, and Lelchook (2011).

Theory and Hypotheses

In their literature review of nonstandard work Ashford, George, and Batt (2007) discuss how the nature of work and organizational structure has changed with the advent of new technology (Schilling & Steensma, 2001) and new types of workers (e.g., contingent workers, flexible workers, temporary, and nonstandard). They discuss how there are different groups of workers, how these different workers have different requirements and needs, and that our theories need to change to incorporate the nontraditional workers (workers who work outside the Monday-Friday 9-5 standard work week or work on locations other than the business setting).

Examining the attitudes of these employees is needed to continue to understand and apply workplace theories. In heeding this call to examine nontraditional work forms we are examining employees with work schedules that include weekend work. Discussion similar to those surrounding the change in types of workers can be had about the work schedules of retail employees.

Carré and Tilly (2009) note that in the United States, both full-time and part-time retail employees are generally expected to work on at least one weekend day each week as there is a large amount of weekend work in the industry. Given that weekend working is generally not preferred by those employees who have the choice of when to schedule their hours, and following the arguments of Bryson and Forth (2006) as discussed above, certain workers may self-select into weekend work, even though it is typically thought of as less desirable. Other researchers have found that there is a negative effect of nonstandard schedules even if “self-
Nonstandard work days, preferences, and attitudes towards days worked

selection” processes into nonstandard schedules exist (Demerouti, Geurts, Bakker, and Euwema, 2004; Fitzpatrick et al., 1999; Shamir, 1983).

We take a perceived person-environment fit perspective in our examination of weekend work. Much of the nonstandard work literature examines standard work schedules compared to nonstandard work schedules, but few studies take into account employee preferences (for exceptions see Burke & Greenglass, 2000; Holtom et al., 2007; Morrow et al., 1994). This theory is able to accommodate differences in type of work and work schedules as it does not assume everyone desires or has the same work experiences and desires.

We believe that a “fit” framework is particularly useful in examining the relationships of schedules outside the traditional 9-5 Monday-Friday work week on employee attitudes. Researchers have used the general concept of “fit” in their research on scheduling. Moen, Kelly and Huang (2008) developed the concept of fit as an umbrella for a range of cognitive assessments by workers of the quality of their work and family/personal lives. Work–family variables capture employees’ cognitive appraisals of fit in terms of the work–family boundary, while other concepts, including schedule fit assess workers’ fit with “their time, income and schedule needs/demands and their available time, income, and schedule arrangements (Moen et al., 2008: 413).”

Several sets of researchers have used Person-Environment Fit (PE fit) theory in relation to work schedules (Baltes et al., 1999; Havlovic et al., 2002). Using a PE fit theoretical framework, Havlovic et al. (2002) suggested that both the employer and the employee can benefit when there is matching of employer and employee needs in work scheduling (work schedule congruence). Havlovic et al. (2002) argued that workers seek employment that fits their needs and abilities, and employers seek workers who accept and are compatible with
organizational requirements. Havlovic et al. (2002) further stated that the effects of working a particular schedule are also related to the characteristics of the work experience as well as the ‘fit’ between the demands of work and nonwork on particular workers and their personal situation.

Applying PE fit theory, they found that employees working their preferred work schedule might contribute to improving both personal and work outcomes beyond the effects of working on a standard schedule alone. PE fit has become a central concept in psychology (Meyer, Hecht, Gill, & Toplonytsky, 2010). People adjust best when there is good PE fit (Meyer et al., 2010: 458, citing Schneider, 2001), and ‘the belief that it relates positively to adjustment at work has become “almost axiomatic”’ (Meyer et al., 2010: 458, citing Kristof-Brown, Zimmerman, & Johnson, 2005: 283). Research on PE fit supports the concept that congruence between the individual and the job environment leads to more positive outcomes (Caldwell & O'Reilly, 1990).

We are not directly testing PE fit theory. Instead, we thus employ the principles of fit theory (or lack thereof) to scheduling as it can explain employees’ attitudes toward their work schedules. Demerouti et al. (2004) argued that employees who work outside the standard workweek have a schedule that interferes with the rhythms of social life, and thus may not have a good fit with the environment external to work. Likewise, Jamal (2004) argued that the majority of problems associated with nonstandard work schedules may be because employees on such schedules do not fit with society’s established physiological and social rhythms.

Since most of the literature discussed above supports the concept that a better fit with the environment external to work can come from having a schedule with fewer weekend days, we present the following two hypotheses:
Nonstandard work days, preferences, and attitudes towards days worked

Hypothesis 1a: Employees who change over time to not working on either or both weekend days, will have more positive attitudes towards their days worked than employees who work on both Saturdays and Sundays.

Hypothesis 1b: Employees who work on fewer weekend days will have more positive attitudes towards their days worked than other employees.

PE fit would also predict that employees will have more positive attitudes towards their days worked when their work schedules fit their needs or desires. Unlike some prior assumptions in the work scheduling literature, this approach does not assume that nonstandard work schedules are inherently undesirable. Some prior research suggests that there is often a mismatch between schedules employees prefer and their actual schedules (see Jamal, 2004). However, there has been mixed results from the limited literature that examines this. Morrow, and colleagues (1994) defined congruence as a match between actual and desired full vs. part-time work and found partial support for the effects of a mismatch on job related attitudes and commitments. Work status congruence (full vs. part-time match) showed no difference on the attitude and commitment measures, shift congruence was related to pay and scheduling satisfaction, and weekly hours congruence was related to professional commitment, organizational commitment, intent to stay, and scheduling satisfaction (Morrow et al., 1994). In another study, where congruence was examined as a combined measure of work status (full vs. part-time match) and scheduling match, congruence was found to be positively related to job satisfaction, organizational commitment, employee retention, and extra-role performance (Holton, et al., 2002). Work status congruence (full vs. part-time) has also been associated with higher psychological well-being (Burke & Greenglass, 2000).
Nonstandard work days, preferences, and attitudes towards days worked

Little research has examined days of the week worked (Jamal, 2004; Staines and Pleck, 1984) and we are unaware of studies that have focused on preferences for weekend work beyond an overall examination of preferred total schedules (Havlovic et al., 2002; Holtom et al., 2002; Morrow et al., 1994). While there has been some recent research focusing just on Sunday work (Martin et al., 2011; Wirtz, Nachreiner, & Rolfes, 2011), more research has focused on shifts or the time of the day worked (Barton, 1994; Nabe-Nielsen, Garde, Albertsen & Diderichsen, 2011; Sallinen & Kecklund, 2010) and full- or part-time work status (Martin & Sinclair, 2007; Thorsteinson, 2003). While nonstandard schedules have been associated with negative outcomes, not every employee may need or desire a standard schedule, leading them to self-select into weekend or nonday shift work. While weekend work may generally not be preferred because work on the weekend is seen as conflicting with leisure time that could be spent with others (Bryson & Forth, 2007), there may be other reasons why employees prefer nonstandard schedules. Nonstandard schedules may allow some employees to better accommodate their nonwork activities (e.g., attending college or accommodating child or elder care) or may offer premiums for undesirable hours (Bryson & Forth, 2007; Hamermesh, 1999). Other researchers (Deery & Mahony 1994; Hamermesh 1999; Presser & Gornick 2005) have argued that pay premiums for nonstandard work times make them attractive, make employees more willing to work them, and that with such premiums employees would most likely compete for weekend days. Alternatively, even if nonstandard schedules do not provide direct benefits to employees, by allowing them to accommodate nonwork activities, there may be employees for whom nonstandard work schedules do not greatly interfere with their nonwork activities, and therefore they may not have a strong preference for a standard schedule.
Hypothesis 2: Employees who have their preferences for Saturdays and Sundays worked met will have more positive attitudes towards their days worked than employees whose preferences are not met.

Method

Setting and sample

All union members at a retail food chain in the United States Great Lakes Region were given two surveys sponsored by their union to help prepare for bargaining new contracts in both 2007 and 2010. Due to the large amount of nonstandard hours they worked, scheduling was an important issue of concern to the union in both years. We mailed 9,432 surveys in January 2007, with 2,000 returned. Another 12,253 surveys were mailed in January 2010, with 2,457 returned. As both surveys were linked to union records, we were able to match 866 surveys from both years, but with missing data, the effective sample ranged between 810 and 847.

Because the employees in the sample worked for a retail employer open seven days a week in the United States, many (566) worked on Saturdays and Sundays in both years. For 2010 we also collected information about their preferences. Table 1 shows the cross tabulation of those working Saturdays and their preferences for working Saturdays for 2010, trichotomized into “Never,” “Sometimes,” and “Always/almost always.” Table 2 displays a similar cross tabulation for Sunday work. In line with what we would expect if many employees had self-selected into weekend work, only 15% reported never working on Saturdays and 73% reported always/almost always working on Saturdays. For Sunday work 14% reported never working on Sundays and 66% reported always/almost always working on Sundays. Also in line with a “self-selection” into weekend work, the preferences show that only about one quarter of employees preferred never to work on Saturdays (23.6%) or on Sundays (24.5%) and the largest group of employees
Nonstandard work days, preferences, and attitudes towards days worked

preferred working “Always/almost always” on Saturdays (34.8%) or on Sundays (41.5%). Thus, some employees preferred to work on the weekend while others did not.

Bryson and Forth (2007) note that some employees self select into weekend work to obtain greater pay where premiums are involved. This is relevant in our sample as all employees working Sundays received premiums, depending on their seniority or hire date. Forty percent of the respondents had enough seniority to receive a 50% hourly pay premium for Sunday work, with the remainder receiving low ($1 to $2) hourly premiums depending on their seniority. The American Fair Labor Standards Act requires the payment of a 50% overtime pay premium for any hours worked in a week over 40 hours. Thus, the workers who receive a 50% premium can work up to 48 hours a week without it costing the employer anymore than if they were paying an overtime premium. Those who desired, 27% of the sample, worked more than 40 hours a week and received the 50% premium for Sunday work. With a 50% premium and a 48 hour work week, a worker receiving $10 an hour could receive $520 weekly ((40 hours $10) + (8 $15) = $520), or 24% more than if no premium were paid. A worker with a $2 premium receiving $10 an hour, would not be scheduled for more than 40 weekly hours, and could only receive $416 weekly ((32 hours $10) + (8 $12) = $416), or 4% more. Thus, the group receiving the 50% premium for Sunday work received substantial earnings that few other employees received whether or not they worked more than 40 weekly hours.

Measures

Dependent variable. The dependent variable was employees’ attitudes towards days worked assessed in 2010. The scale consisted of three internally consistent items (alpha = .73) covering attitudes towards the respondent’s days worked. We provide detailed validity evidence of this measure in Martin et al. (2011). The other independent scheduling-related items used here
Nonstandard work days, preferences, and attitudes towards days worked

were pretested prior to giving the survey, along with any other items that we had never used before.

**Controls.** We had several sets of variables as controls. First, we controlled for our dependent variable, attitudes towards days worked, as measured in 2007. Finkel (1995) noted that adjusting for the criterion variable at time 1 in the analyses helps eliminate regression to the mean effects.

We had a number of background variables which past research has found to be related either to the schedules worked or schedules desired. Controlling for these would allow us to determine the incremental effects of working weekend days above and beyond financial variables (pay and premiums), demographic differences (age, gender, and marital status [e.g., Doran, Stone, Brief & George, 1991, Holtom et al., 2008, Lee & Maurer, 1999, Presser, 1995; Totterdell, 2005]), which might influence the nature of the relationship between a work schedule and an outcome of interest. Specifically, with a self-report of hourly pay rate, we controlled for the possibility that pay may be related to attitudes towards days worked. We also controlled for the demographic variables of age, sex and marital status from the union records in 2010. These variables relate to family needs (Staines and Pleck, 1984) and to work-family conflict (e.g., Fenwick & Tausig, 2001). Because the employer used employees’ seniority by full- or part-time status, job classification and store to assign employees their work schedules, we also controlled for relative seniority. We used data from the union records to compute the relative seniority by work status, job, and store. Then, we added it to the survey data base. Finally, because there was a large premium (50% of base pay) offered for Sunday work for employees hired before August 8, 1987, we created a dummy variable to control for that.
A third set of controls used change data both from the union records and from the two sets of surveys. Since we were assessing the differences and similarities in the weekend days worked across the two times, we wanted to control for other work-related and schedule changes. The records indicated if a respondent had changed jobs, work status, or stores between 2007 and 2010. Thus, we created one dummy variable for each change. Studies have also found that employees regularly working nonstandard shifts have a variety of negative reactions or outcomes, such as higher absenteeism, lower intrinsic motivation, lower skill utilization (Jamal & Baba, 1997) and less task enrichment (Blau & Lunz, 1999). Further, research has found that working one form of a nonstandard schedule (i.e., shift worked) is often related to working other forms of nonstandard schedules (i.e., days worked) (Jamal, 2004; Staines & Pleck, 1984). Thus we believed we should control for changes in the shifts worked.

The survey data indicated if a respondent changed shifts worked between 2007 and 2010. To measure the changes in the shifts worked between 2007 and 2010, in each survey we asked employees to select the shifts worked in the prior four weeks. Respondents had a choice of six shift options, and were asked to mark as many shifts as they worked. Employees who selected only the day shift were classified as day shift employees. All other employees, who checked working the afternoon or night shifts and/or an overlapping shift or shifts were classified in the nonday shift group, as they did not entirely work on the day shift. This included those who might have checked working the day shift and another shift. Because we were interested in comparing employees on standard and nonstandard work schedules, we focused on respondents working only day shifts or not working completely on the day shift. We created four shift groups with similarities and differences between the two years. The first and largest group was for those who reported working nonday shifts in both years (n = 422). A second group was for respondents who
Nonstandard work days, preferences, and attitudes towards days worked

only worked the day shift in both years (n = 200). The third group was for those who moved from working only the day shift in 2007 to working nonday shifts (n = 118). The last group was those who moved from working nonday shifts in 2007 to working only the day shift in 2010 (n = 112).

To represent these four groups in the regression equations, we constructed three orthogonal categorical dummy variables following recommended procedures (Aiken & West, 1991). The presence of a respondent in each of the groups was set to a value of ‘1’; the others were set to ‘0’. Our reference or comparison category consisted of those who worked nonstandard shifts in both years, i.e., those who reported working nonday shifts in both years (group 1).

**Predictor variables.** The first predictor variable assessed differences and similarities in the weekend days worked in both years. Through several steps, we created five groups of weekend days worked in 2007 and 2010 in the prior four weeks to receiving each survey. For each year, we dichotomized the frequencies of working each weekend day into those who did not work on any Saturdays, and separately, Sundays, from those who reported working on some or all Saturdays, and separately Sundays. To create five groups, we cross tabulated the four different schedules of working or not working on Saturdays with the four different schedules of working or not working on Sundays for the two different years. These schedules were; worked no Saturdays in 2007, worked no Saturdays in 2010, worked on Saturdays in 2007, and worked on Saturdays in 2010, and the similar schedules for working or not working on Sundays. This cross tabulation resulted in 16 different cells. Because some of the cell sizes would have been 16 or less employees, we combined respondents with similar changes or no changes on the weekend days they worked into adequately-sized groups. These groups are shown in Table 1.
We had three adequately-sized groups whose respondents reported working on the same number of weekend days in both years. Group 1 consisted of those working on both Saturdays and Sundays in both years (n = 566). Group 2 consisted of those in the four cells who worked only on one weekend day in both years (n = 95). Some worked either only on Saturdays or Sundays in both years, and others worked on Saturdays in 2007 and only worked on Sundays in 2010, and vice versa. Group 3 consisted of those who did not work either on Saturdays or on Sundays in either year (n = 25).

The remaining two groups consisted of those who changed the number of weekend days they worked between 2007 and 2010. Group 4 consisted of the 69 employees who reporting working less weekend days in 2010 than they worked on in 2007. Table 1 shows the three subgroups in this group. Group 4a consisted of those in the two cells who worked both on Saturdays and Sundays in 2007 and who reported working either on Saturday or on Sunday in 2010, but not on both (n = 49). Group 4b consisted of those who worked on both Saturdays and Sundays in 2007 and who reported working on neither day in 2010 (n = 12). Group 4c consisted of those who worked on either Saturdays or Sundays in 2007 and worked on neither day in 2010 (n = 8). Group 5, consisted of the 92 respondents who worked on more weekend days in 2010 than 2007; it also had three subgroups. Group 5a consisted of those in the two cells who reported working on neither Saturdays nor Sundays in 2007 and working on either Saturdays or Sundays in 2010, but not both (n = 11). Group 5b were those who reported working on neither Saturdays nor on Sundays in 2007 and reported working on both Saturdays and Sundays in 2010 (n = 4). Group 5c consisted of those in the two cells who reported working only on either Saturday or Sunday in 2007 (but not both) and working on both weekend days in 2010 (n = 77).
Nonstandard work days, preferences, and attitudes towards days worked

Similar to the procedure we used with the shifts, we constructed four orthogonal categorical dummy variables to represent these five groups. Parallel conceptually to the set of shift dummy variables where our reference or comparison category consisted of those who worked nonstandard shifts in both years, the reference category was Group 1, those who reported working nonstandard days, on both Saturdays and Sundays, in both years.

The next set of two variables consisted of self reports of working Saturdays and Sundays which we also used to help determine the similarities and differences in the weekend days worked in 2007 and 2010. Respondents answered the following question in 2010: “In the last 4 weeks, I . . .” “Worked on Saturday”, and “Worked on Sunday.” The anchors were 1 “Never”, 2 “Sometimes”, and 3 “Always or almost always”. These questions were followed by two parallel items assessing the preferences for working on Saturdays and Sundays. Respondents answered the following question: “I would prefer to be scheduled to . . .” for “Work on Saturdays” and “Work on Sundays.” The same anchors of 1 “Never”, 2 “Sometimes”, and 3 “Always or almost always” were used.

The last set of two predictors used the interactions of the 2010 self reports of working on Saturdays and Sundays with the separate preferences for working on Saturdays and Sundays. Each of the four variables was centered, and then the two centered variables related to each day work were multiplied together (Aiken & West, 1991).

Analyses. Due to the nature of the employment structure, we believed that every employee who wanted to work on Saturday or Sunday could work those days, and this was supported by our data as we had almost nobody who wanted to work on the weekends but did not. Thus, we eliminated the very few individuals who wanted to work on a nonstandard weekend day and did not work on those days from our analyses. Then, we tested our hypotheses in several steps, and
examined the change in $R^2$. As noted above, we entered the dependent variable as assessed in 2007 in the regression equations first. Next we entered our controls as assessed in 2010. On the third step we entered the variables assessing change from 2007 to 2010, including the dummy variables representing the similarities and differences of shift worked in the two years.

In the fourth step, we entered as a block, the dummy variables representing the similarities and differences in weekend days worked in both 2007 and 2010. Examination of the signs of the significant regression beta weights would also determine support for Hypotheses 1a and 1b.

In the fifth step, we entered the reports of the frequency of working Saturday and Sunday in the previous four weeks in the 2010. Here examination of the signs of the significant regression beta weights would also determine support for Hypothesis 1b. In the sixth step, we entered the preferences for working on Saturday and Sunday. Then in the seventh step, we added the two interactions of the self reports of working on Saturdays and Sundays with the separate preferences for working on Saturdays and Sundays. A significant beta for the interaction terms would determine support for Hypothesis 2. Prior to running the analyses, we assessed the potential of multicollinearity by regressing each predictor on the remaining predictors. We did that without the sets of dummy variables or the two interaction terms. None of these multiple Rs exceeded .80, the point identified by Kim and Kohurt (1975) where multicollinearity becomes a problem.

**Results**

Table 4 shows the correlations, means and standard deviations for the variables of interest, excluding both the dummy variable sets for the similarities and differences in shifts and weekend days worked and the interaction terms. Table 5 shows the regression results testing the hypotheses. At each of the first three steps with the various controls, the $R^2$ change was
Nonstandard work days, preferences, and attitudes towards days worked

Attitudes towards days worked in 2007 explained 24% of the variance in attitudes towards days worked in 2010. Our demographic controls explained an additional 3% of the variance, and the change variables also explained an additional 2% of the variance. After the third step, the attitudes towards days worked in 2007 and having enough seniority to receive a 50% premium for Sunday work were significant predictors. The only change variables which were significant were the dummy variables representing the contrasts of those who worked nonday shifts in both 2007 and 2010 with: 1) those who moved from working nonday shifts in 2007 to working only on the day shift in 2010, and 2) those who remained working only on the day shift in both years. In these dummy variable contrasts, working on a standard schedule, or changing to a more standard schedule, was related to more positive attitudes towards days worked.

The next step tested Hypotheses 1a and 1b though the addition of the dummy variables contrasting differences and similarities in the weekend days worked in 2007 and 2010 with those who worked on both Saturdays and Sundays in both 2007 and 2010. These variables explained an additional 2% of the variance. Three of the four dummy variable contrasts were significant and in the predicted direction. First, supporting Hypothesis 1a, those who reported working less weekend days in 2010 than 2007 had more positive attitudes towards days worked (p < .01) than employees who worked on both Saturdays and Sundays in both 2007 and 2010. This contrast compared the Group 4 employees in Table 3 (those who worked on either Saturday or Sunday in 2007 and worked on neither weekend day in 2010, or who reported working on both Saturdays and Sundays in 2007 and either Saturday or Sunday [but not both] in 2010) with the Group 1 employees working both weekend days in both years. Second, supporting Hypothesis 1b, Group 3 in Table 3 who neither worked on Saturday nor Sunday in either year had more positive
Nonstandard work days, preferences, and attitudes towards days worked

attitudes towards days worked (p < .05) than employees who worked on both Saturdays and Sundays in both years. Third, also supporting Hypothesis 1b, the employees in Group 2 (working one weekend day in each year, either on Saturday or Sunday in both 2007 and 2010) had more positive attitudes towards days worked (p < .01) than employees who worked on both Saturdays and Sundays in both 2007 and 2010.

The fifth step, shown in Table 3, added the frequencies of working Saturdays, and separately, of working Sundays, to the regression equation, and also tested Hypothesis 1b. These variables explained an additional 2% of the variance. Supporting Hypothesis 1b, the more employees worked on Saturdays, and separately, the more they worked Sundays, the less positive were their attitudes toward days worked (p < .01). The sixth step added the preferences for working Saturdays, and separately, Sundays, and explained an additional 5% of the variance in attitudes towards days worked, with both these preferences significant predictors (p < .05). Thus, even though we made no hypothesis about the preferences, the more employees preferred to work Saturdays, and separately, Sundays, the more positive were their attitudes towards days worked (p < .05).

The seventh step added the interaction of working Saturdays with the preference for working Saturdays, and separately, the interaction for working Sundays. Adding the two interaction terms increased the variance explained by 1% (p < .05). Only the interaction term of working Saturdays with preferring to work Saturdays was significant. Because we eliminated the few individuals who claimed they wanted to work on Saturdays (and Sundays) and did not, an important cell did not exist for the plotting of a normal interaction effect. Thus, to interpret this interaction, we examined the mean scores and the differences among them for three groups in Table 2; the two groups with the greatest degree of congruence, and the group with the greatest
Nonstandard work days, preferences, and attitudes towards days worked
degree of incongruence. These mean scores were generated by an ANCOVA of working
Saturdays by prefer to work Saturdays, controlling for all the variables entered in the regression
prior to entering our interaction terms.

The score of the attitude toward days worked was 4.114 for the group that never wanted to
work Saturdays and reported never working Saturdays in the prior four weeks. This score did not
differ from the score of 3.854 for those who always or almost always wanted to work Saturdays
and reported always or almost always working Saturdays in the prior four weeks. However, both
scores of the groups with the greatest degree of congruence were significantly more positive ( p
< .001) than the score of 2.924 of employees in the group with the greatest degree of
incongruence who never wanted to work Saturdays and reported always or almost always
working Saturdays in the prior four weeks, These scores support that there was a stronger
negative relationship between attitudes towards days worked and actual Saturdays worked for
employees that never wanted to work Saturdays than for employees that always or almost always
preferred to work Saturdays. Attitudes towards days worked is lowest for employees who never
wanted to work Saturdays and did work Saturdays. The attitudes of employees who had their
preferences met were more positive than those who did not have them met.

Discussion

In support of Hypothesis 1a, those employees who reported a change in their weekend days
worked from 2007 to 2010 to working less weekend days had more positive attitudes towards
days worked than those who worked both Saturdays and Sundays in 2007 and 2010. This finding
can be combined with the results concerning the shift changes, where moving from a nonday
shift to a standard day shift was associated with more favorable attitudes towards days worked.
This suggests that changing to a more standard schedule over time is related to more favorable attitudes.

There was also strong support for Hypothesis 1b, that working fewer weekend days was related to more positive attitudes toward days worked. Employees who reported working only on one weekend day, or on no weekend days in both 2007 and 2010, had more positive attitudes toward their days worked than employees who worked on both weekend days in both years. Again, this finding can be combined with the results concerning shifts, where those who remained on only the day shift in both 2007 and 2010 had more positive attitudes towards days worked than those who worked on nonday shifts in both 2007 and 2010. These results suggest that being on a standard schedule is associated with more favorable attitudes. This was further supported by the negative regression weights of the frequencies of separate Saturday and Sunday work. The more Saturdays and Sundays a respondent worked the less positive were their attitudes towards days worked.

The partial support for Hypothesis 2, the significant moderation effect with Saturdays, but not Sundays, is interesting. As expected, preferences moderated the relationship between working on Saturdays and attitudes towards days worked. While working Saturdays had a strong negative relationship to attitudes towards days worked, employees who received their preference in relation to working on Saturdays had more favorable attitudes towards days worked than those who did not receive their preferences. The fact that there was no significant interaction of working Sundays with preferring to work Sundays is likely related to the pay premiums for Sunday work. Pay premiums for Sundays make them desirable, and make workers more willing to work them (Deery & Mahony, 1994; Hamermesh, 1999; Presser & Gornick, 2005). Indeed,
our regression results showed a strong effect for the eligibility of a 50% Sunday premium and attitudes towards days worked.

Other researchers have suggested that work schedule preference congruence has as much of an effect on work outcomes as the actual schedule worked (Havlovic et al., 2002). In the sample as a whole, many employees worked almost every Saturday and Sunday. While we did not measure self-selection to weekend work or adjustment to one’s work schedule, research has suggested that many employees likely self-select or adapt to working on nonstandard schedules (e.g., Demerouti et al., 2004; Fitzpatrick et al., 1999; Moen et al., 2008; Shamir, 1983; Zedeck, Jackson, & Summers, 1983). In discussing shift work, a form of nonstandard schedule, Fullick et al. (2009) argued those employees who continue to work nonstandard shifts (i.e., who have more experience with working nonstandard shifts) have adapted their lifestyles to work on nonstandard shifts. They argued that long term shift workers have accepted the disruptions associated with shift work as opposed to newer workers who must go through the acclimatization process and find suitable strategies to help them cope with shift work. If they cannot tolerate or cope with shift work, they may leave.

We believe that a similar process takes place with weekend work, and that most of the workers in our study had both self-selected to work on weekends days and adapted to working them. Since most had to work on those days, and likely had adapted to working them, they would likely prefer to work those days at this employer, as opposed to leaving the employer. Thus it is not surprising that we also found that the more employees preferred to work on either Saturdays or, Sundays, the more positive were their attitudes towards days worked. Thus, their positive attitudes could be related to their adaptation. Others have linked schedule adaptation to self-selection (Moen et al., 2008: 425). They argue that workers may select into certain jobs.
Nonstandard work days, preferences, and attitudes towards days worked

“precisely because of issues of fit or misfit” and that employees “in demanding home and/or job situations may be envisioning how to strategically adapt to best to achieve and maintain resources and reduce strains.” We believe that even though the self-selection and adaption processes likely played a role in restricting our sample to those who had more favorable attitudes toward days worked and greater preferences toward weekend work, most of our hypothesized results were still supported. Similar to Shamir’s arguments (1983), even if self-selection and adaption processes existed, these processes clearly were not perfect, because we still found significant effects on attitudes for working on Saturdays and Sundays, and significant effects on attitudes with the lack of congruence of Saturday work and preferences.

This study offers general support for PE fit theory. First, as predicted, changing to working fewer weekend days in 2010 than in 2007, compared to those who worked on both Saturdays and Sundays in both years, had more positive attitudes towards days worked. In this context, changing to a more standard schedule makes it easier to meet family, domestic, social, and leisure activities and obligations. Thus, employees moved toward a better PE fit with society as a whole. Similarly, the finding that the less they worked the nonstandard days of Saturdays and Sundays, the better were their attitudes towards days worked is consistent with PE fit theory, as these schedules fit better with the environment external to work. Our findings are supportive of the arguments by Havlovic et al. (2002) that the results increase our comprehension about P–E fit and implies that meeting employee work schedule preferences should contribute to enhancing both work and personal outcomes beyond the effects of the schedule itself. The findings with preferences augments our understanding about P–E fit and implies that meeting employee scheduling preferences might lead to better personal and work outcomes beyond the primary schedule effects. Indeed, Moen et al. (2008) argue that “there is a latent construct of fit based on
employees’ appraisals of their situations,” and they include work-schedule fit as an important overall part of the “fit” construct. Further, even if employees adjusted their preferences over time to fit their schedules, actual congruence for Saturdays worked led to more positive attitudes, providing support for our hypothesis and for the concept of fit.

**Implications and Conclusions**

Retailers in North America and, increasingly, in other parts of the world, operate on the weekend, with workers generally not desiring to work on those days (Demerouti et al., 2004; International Labour Organization, 1995). Thus, our findings have implications for employers needing to schedule weekend work. We believe our most relevant findings can be summarized as follows. First, the days worked are important, including both the actual days worked, and the change over time in days worked. In both cases, working less nonstandard weekend days was associated with better attitudes towards days worked. Second, matching actual days worked with the preferences for the days worked is also important in relation to better attitudes, at least for the days (Saturdays in this study) where other incentives, such as premiums, may not exist.

Ideally, increasing the number of employees who want weekend work would be desirable for the employer and would make the assignment of weekend work less difficult. While scheduling less Saturday and Sunday work may also help, given the needs of employers this is unlikely to happen. Thus, if employers want to improve employees’ attitudes towards their days worked, and likely have other positive work and personal outcomes, they should take into account employee preferences for their days worked. When employees who worked on Saturdays wanted to work on Saturdays they had more positive attitudes. Another method of increasing the preferences for nonstandard schedules may be by offering pay incentives. Preference for Sunday work in our sample was likely affected by the pay premiums earned,
Nonstandard work days, preferences, and attitudes towards days worked

which increased the desirability of working on Sundays (e.g., Deery & Mahony, 1994; Martin et al., 2011). While incentives may increase the desirability of weekend work, this may not be financially feasible for an organization. Depending on an organization’s resources, accounting for employee preferences may be an alternative to other incentives, or alternatively offering incentives for weekend work may increase employees’ desire to work those days. This may help explain why there is a stronger negative relationship between working Saturdays and attitude towards days worked than working Sundays and attitudes towards days. The premiums offered for Sunday work could have offset some, but not all negative effects. Even with pay premiums working on Sunday may still cut into time employees may otherwise have spent with friends and family.

Limitations and Future Research

There are several limitations in the current study that should be noted. First our sample was not completely representative of the retail population under study, as we were only able to analyze those who had been employed in both 2007 and 2010. Thus, all respondents had seniority of three years or more. While perhaps the employees who could not adapt to the weekend schedules had left the employer over the three years, supplemental analyses just using the 2007 data set with both the total sample and those with three years or less seniority showed no relation between turnover and the separate frequencies of Saturdays and Sundays worked. A further limitation is that due to the interest in scheduling among those respondents working on the weekend, employees working on the weekend could have been over represented. When that is combined with their likely self-selection into weekend work, research with a different sample might have found different results. We suspect if fewer employees had not self-selected into weekend work, we likely would have still found strong support for our hypotheses, as most
research has found negative reactions to working nonstandard schedules (e.g., Deery & Mahony, 1994; Presser, 2003) and to a lack of congruence between preferences and schedules worked (Havlovic et al., 2002; Holtom et al. 2002, Morrow et al., 1994). In addition, we did not specifically assess attitudes towards weekend work, but rather assessed a more general attitude towards days worked. Further, we did not assess any measures of self-selection or mechanisms of adaptation to weekend work.

In addition, the members of our sample have many distinct characteristics, such as being unionized, working many Saturdays and Sundays, having at least three years of seniority, and having a premium pay structure for Sunday work. Unionized employers generally use seniority to assign work schedules, while other employers may use different algorithms. Even though we controlled for these in our study, they still may have affected our results. Given the low amount of research on weekend work, more research is needed. Measures of self-selection and adaptation, as well as a more explicit assessment of “fit,” need to be included in such studies. Increased research has the potential to help those who are affected by the necessity to work on the weekends. In our worldwide economy, it is essential that employers make strategic decisions regarding work schedules. As many employers attempt to make weekend work more appealing to their workers and potential workers, to fit their personnel and work-lives better, our study and future research should aid employers in making these decisions.
Nonstandard work days, preferences, and attitudes towards days worked

References


Nonstandard work days, preferences, and attitudes towards days worked


Nonstandard work days, preferences, and attitudes towards days worked and schedule control. *American Behavioral Scientist, 44*(7), 1179-1198.


Jamal, M. & Baba, V. V. (1992). Shiftwork and department-type related job stress, work
Nonstandard work days, preferences, and attitudes towards days worked:


Nonstandard work days, preferences, and attitudes towards days worked


Nonstandard work days, preferences, and attitudes towards days worked


Nonstandard work days, preferences, and attitudes towards days worked

Table 1

*Groups working on similar and different weekend days in 2007 and 2010*

<table>
<thead>
<tr>
<th>GROUP</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Working on two weekend days each year</td>
<td>Work on both Saturdays &amp; on Sundays</td>
<td>Work on both Saturdays &amp; on Sundays</td>
</tr>
<tr>
<td>2 Working on one weekend day each year</td>
<td>Work on Saturdays or on Sundays</td>
<td>Work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>3 Working on no weekend days each year</td>
<td>Never work on Saturdays or on Sundays</td>
<td>Never work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>4 Working on less weekend days in 2010 than 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>Work on both Saturdays &amp; on Sundays</td>
<td>Work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>4b</td>
<td>Work on both Saturdays &amp; on Sundays</td>
<td>Never work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>4c</td>
<td>Work on Saturdays or on Sundays</td>
<td>Never work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>5 Working on more weekend days in 2010 than 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>Never work on Saturdays or on Sundays</td>
<td>Work on Saturdays or on Sundays</td>
</tr>
<tr>
<td>5b</td>
<td>Never work on Saturdays or on Sundays</td>
<td>Work on both Saturdays &amp; on Sundays</td>
</tr>
<tr>
<td>5c</td>
<td>Work on Saturdays or on Sundays</td>
<td>Work on both Saturdays &amp; on Sundays</td>
</tr>
</tbody>
</table>
Table 4

Means, standard deviations, and correlations across all employees (listwise N = 805)\(^a\)

|                                | Mean | SD  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   |
|--------------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Attitudes towards Days (2010)| 3.67 | .90 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. Attitudes towards Days (2007)| 3.69 | .93 | .48  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Pay Rate                     | 15.86| 2.41| .12  | .11  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4. Age (2010)                   | 51.60| 10.18| .09  | .08  | .17  |      |      |      |      |      |      |      |      |      |      |      |      |
| 5. Gender (0=Male, 1=Female)    | .62  | .49 | .02  | .02  | -.14 | .02  |      |      |      |      |      |      |      |      |      |      |      |
| 6. Married (0=Yes, 1=No)        | .39  | .49 | -.05 | -.05 | -.20 | -.11 | .02  |      |      |      |      |      |      |      |      |      |      |
| 7. Relative Seniority           | 70.20| 27.13| .12  | .11  | .12  | .13  | .02  | -.01 |      |      |      |      |      |      |      |      |      |
| 8. Eligible for 50\% Sunday Premium 2010 (1=Yes, 2=No) | 1.60 | .49 | -.26 | -.24 | -.47 | -.25 | .25  | .17  | -.20 |      |      |      |      |      |      |      |      |
| 9. Store change from 2007 to 2010 (0=Yes, 1=No) | .13  | .33 | -.03 | -.11 | .07  | -.11 | -.01 | .05  | .01  | .03  |      |      |      |      |      |      |      |
| 10. Job change from 2007 to 2010 (0=Yes, 1=No) | .23  | .42 | .01  | -.07 | .02  | -.08 | .02  | .00  | .01  | -.01 | .17  |      |      |      |      |      |      |
| 11. Work status change from 2007 to 2010 (0=Yes, 1=No) | .10  | .30 | -.10 | -.13 | -.26 | -.16 | .00  | .02  | -.36 | .25  | .08  | .10  |      |      |      |      |      |
| 12. Work Saturdays              | 2.59 | .73 | -.29 | -.20 | .02  | -.07 | -.04 | -.00 | -.10 | .13  | .06  | .01  | .03  |      |      |      |      |
| 13. Work Sundays                | 2.55 | .71 | -.18 | -.11 | .12  | -.09 | -.09 | .00  | -.03 | -.01 | .03  | -.01 | .02  | .25  |      |      |      |
| 14. Prefer to Work Saturdays    | 2.10 | .76 | .06  | .03  | .04  | -.00 | -.06 | .06  | .00  | .04  | .01  | .06  | -.02 | .63  | .15  |      |      |
| 15. Prefer to Work Sundays      | 2.18 | .79 | .07  | .05  | .10  | -.03 | -.15 | .03  | .01  | -.12 | -.01 | .01  | -.01 | .10  | .67  | .31  |      |

*Correlations above |.07| are significant at P < .05.*
Table 5
Regression and standardized beta coefficients on attitudes towards days worked

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards days worked (2007)</td>
<td>.48 ***</td>
<td>.44 ***</td>
<td>.43 ***</td>
<td>.41 ***</td>
<td>.40 ***</td>
<td>.34 ***</td>
<td>.34 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay Rate</td>
<td>-.01</td>
<td>.00</td>
<td>.02</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>-.01</td>
<td>-.02</td>
<td>-.02</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (0=Male, 1=Female)</td>
<td>.05</td>
<td>.03</td>
<td>.02</td>
<td>.02</td>
<td>.04</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married (0=Yes, 1=No)</td>
<td>-.00</td>
<td>.00</td>
<td>.01</td>
<td>-.00</td>
<td>-.03</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Seniority</td>
<td>.03</td>
<td>.02</td>
<td>.02</td>
<td>.01</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday Premium</td>
<td>-.16 ***</td>
<td>-.10 **</td>
<td>-.09 *</td>
<td>-.09 *</td>
<td>-.09 *</td>
<td>-.08 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store Change</td>
<td>.01</td>
<td>.01</td>
<td>.02</td>
<td>.02</td>
<td>.03</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Change</td>
<td>.04</td>
<td>.04</td>
<td>.03</td>
<td>.01</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work status Change</td>
<td>.00</td>
<td>.01</td>
<td>-.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved from nonday to day shift</td>
<td>.10 **</td>
<td>.09 **</td>
<td>.09 **</td>
<td>.08 **</td>
<td>.08 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stayed day shift</td>
<td>.15 ***</td>
<td>.12 ***</td>
<td>.12 **</td>
<td>.11 **</td>
<td>.10 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved from day to nonday shift</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01</td>
<td>-.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stayed working on only 1 weekend day</td>
<td>.10 ***</td>
<td>-.02</td>
<td>.00</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stayed working no weekend days</td>
<td>.06 *</td>
<td>-.06</td>
<td>-.03</td>
<td>-.10 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved to working on less weekend days</td>
<td>.09 **</td>
<td>-.04</td>
<td>-.02</td>
<td>-.09 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved to working on more weekend days</td>
<td>.01</td>
<td>-.03</td>
<td>.01</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Saturdays</td>
<td>-.19 ***</td>
<td>-.34 ***</td>
<td>-.22 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Sundays</td>
<td>-.11 *</td>
<td>-.17 ***</td>
<td>-.17 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer to Work Saturdays</td>
<td>.25 ***</td>
<td>.19 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer to Work Sundays</td>
<td>.11 *</td>
<td>.09 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction: Work Saturdays x Prefer to Work Saturdays</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction: Work Sundays x Prefer to Work Sundays</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>∆ F</td>
<td>242.80 ***</td>
<td>4.61 ***</td>
<td>4.37 ***</td>
<td>4.67 ***</td>
<td>11.23 ***</td>
<td>32.17 ***</td>
<td>3.09 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>.48</td>
<td>.51</td>
<td>.53</td>
<td>.55</td>
<td>.56</td>
<td>.61</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.23</td>
<td>.26</td>
<td>.27</td>
<td>.28</td>
<td>.30</td>
<td>.35</td>
<td>.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>∆ R²</td>
<td>.23 **</td>
<td>.03 ***</td>
<td>.02 ***</td>
<td>.02 ***</td>
<td>.05 ***</td>
<td>.01 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p< .05 ** p <.01 *** p < .001
Figure 1: The moderating effect of preferences to work on Saturdays on the relationship between attitudes towards days worked and working on Saturdays