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FOUR

Temporal Patterns in Social Responsibility

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In this chapter we discuss the temporal aspects of social responsibility by examining patterns of giving behaviors within the domains of family and community and at different stages of the adult life course. We believe that the experiences of individuals fluctuate on a day-to-day and seasonal basis. John Nesselroade (1991, 94) calls this intra-individual variation the "hum" of life. Intraindividual *variation* refers to short-term reversible changes from occasion to occasion in a given phenomenon, such as fluctuating moods and emotions. Intraindividual *covariation* occurs when two or more phenomena fluctuate in sync from occasion to occasion (Almeida and McDonald 1998). Such intra-individual variation and covariation should not be identified as nuisance or error variance but rather as a "coherent interpretable steady state hum that describes the condition of the individual" (Nesselroade and Featherman 1991, 61). When this hum is patterned over time, it becomes a rhythm. The question we pose is: To what extent is the hum of varied giving behaviors patterned across the days of the week and the seasons of the year?

Although episodes of life are often treated as discrete and unique in time and space, they are rather frequently part of a continually fluctuating systematic structure, a rhythm (Zerubavel 1979). Rhythm is the measured repetition of recurring events happening in a regular, sequential, and predictive pattern over time (Fraenkel 1994). In music, rhythm is the organizing and energizing structure through which tone and pitch find expression. Notes in measured time and space, buttressed by beat and tempo, and arranged within an infrastructure of measures, phrases, and movements result in music. Likewise, temporal

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rhythms of days, weeks, months, seasons, and years provide the score for the performance of daily life.

While the concepts of months and seasons were derived from the patterned movements of the sun and moon, the notion of the weekly cycle appears to be a creation of humankind having no association with the natural world (Zerubavel 1985). Nearly all cultures throughout history have grouped varying numbers of days into segments for religious, economic, or philosophical reasons. For instance, the Romans had an eight-day week, with each day named for a planetary deity (Sorokin and Merton 1937). In West Africa a four-day market week still exists concurrently with the ubiquitous seven-day week (Zerubavel 1985). Although socially constructed temporal rhythm is quantifiable in its calendrical regularity, it is the qualitative character of its periodicity, derived through the collective activities and customs of groups, that lends meaning to the otherwise arbitrary divisions of days, weeks, and months (James 1890; Sorokin and Merton 1937). Conceptualizing time as circular with recurring patterns provides us the cognitive convenience to organize our lives in a way that is somewhat predictable (Zerubavel 1985), and thereby, temporal rhythms may play the reciprocal role of determining when activities and customs are carried out. John Havens and Paul Schervish (1996) show that individual giving habits are often entrained by the cycle of social seasons, such that volunteering and contributing money to organizations follows a pattern consistent with religious holidays and traditional periods of family vacations. In this chapter we examine how the temporal rhythms of the week and the calendar seasons play vital roles in how often and how much people give both time and money to their family and their community.

One's own life calendar may also play an important role in giving behavior. Theoretical formulations as well as empirical research suggest that during midlife people more often engage in socially responsible behavior than at any other time in life. That it is "better to give than to receive" is engrained in our social being through prayers, poems, and platitudes and is expressed through our daily interactions with others (Havens and Schervish 1996). Erik Erikson (1959) proposes that this virtue is the major theme of psychosocial development during middle adulthood, that one of the developmental goals of this stage of the adult life cycle is to achieve a balance between generativity and stagnation. The desire to assure one's own destiny by providing for the welfare of others, especially future generations, evolves over time and apparently

peaks at midlife (see chapter 3, this volume). An outward focus characterizes this generative behavior, which may be demonstrated through socially responsible actions such as making monetary contributions to organizations or individuals, providing practical help or assistance to others, or giving emotional support to family, friends, co-workers, or neighbors. Examining the temporal rhythms of such giving enables us to view the fluctuating nature of our philanthropic behaviors at different points across adulthood.

Data and Methodology

Sample and Procedure

Data for the analyses are from the National Study of Daily Experiences (NSDE), one of the in-depth studies conducted under the auspices of the Midlife research network. The NSDE sample consists of two groups of adults: 1,031 randomly selected respondents from the MIDUS survey and 452 twins from a special survey of twins. Respondents in the two subsamples had completed both the telephone interview and the self-administered questionnaires of the MIDUS instruments. The 452 twins we selected had a high self-reported certainty of zygosity, including 116 identical twin pairs and 110 fraternal twin pairs.

Respondents in the NSDE completed short telephone interviews about their daily experiences on each of eight consecutive evenings. On the final evening of interviewing, respondents also answered several questions about their previous week. Data collection spanned an entire year (March 1996 to March 1997) and consisted of forty separate "flights" of interviews, with each flight representing the eight-day sequence of interviews for approximately 38 respondents. Of the 1,843 MIDUS respondents we attempted to contact, 1,483 agreed to participate, yielding a response rate of 81%. Respondents completed an average of 7 of the 8 interviews, resulting in a total of 10,389 daily interviews.

The analyses we report in this chapter used the 571 respondents (244 men, 327 women) in the random digit dialed MIDUS subsample who completed interviews on at least 7 consecutive days. If the respondents completed all 8 days, we averaged their first and last interview day (which would always be the same day of the week). Thus our analyses involved 3,997 days (571 respondents over 7 days). For many of the analyses discussed here, we used the week as the unit of aggregation by summing variables across the 7 days.

Table 4.1 compares characteristics of the total and restricted NSDE

TABLE 4.1 Demographic Comparison of the MIDUS Sample and the NSDE Subsamples

Demographic Variable	Breakdown	MIDUS[a] (%)	NSDE[b] (%)	Restricted NSDE[c] (%)
Age	Young adults, 25–39	33.2	33.5	26.7
	Midlife adults, 40–59	46.0	45.0	44.6
	Older adults, 60–74	20.8	21.5	28.7
Sex	Male	48.5	45.5	42.8
	Female	51.5	54.5	57.2
Education	12 years or less	39.2	37.7	35.8
	13 years or more	60.8	62.3	64.2
Marital status	Married	64.1	65.4	68.6
	All others	35.9	34.6	31.4
Children in household[d]	Yes	39.0	37.8	32.0
	No	61.0	62.2	68.0
Race	Caucasian	87.8	90.3	93.5
	African American	6.8	5.9	3.6
	All other races	4.4	3.8	2.9

[a]Respondents in the MIDUS survey who participated in the initial telephone interview and returned the two self-administered questionnaire booklets following the interview ($N = 3,032$).

[b]Respondents in the NSDE study, all of whom had previously participated in the MIDUS initial telephone interview and returned the two self-administered questionnaire booklets following the interview ($N = 1,031$).

[c]Respondents in the NSDE study who completed at least seven days of interviews in a row ($N = 571$).

[d]At least one child, age eighteen or younger, living in the house.

subsamples with the MIDUS sample from which they were drawn. The three samples have very similar distributions for age, marital status, and parenting status. The NSDE has slightly more women, as well as better educated and fewer minority respondents than the MIDUS sample. These differences are greater for the restricted sample we used for the analyses reported here. At the time of the study, respondents were on average forty-seven years old. Seventy-seven percent of the women and 85% of the men were married. Forty-seven percent of the respondents reported having at least one child in the household. The average family income was between $50,000 and $55,000. Men were slightly older than women and had similar levels of education.

Measures

The daily telephone interview included questions about experiences within the previous twenty-four hours concerning time use, daily giving (i.e., financial and time contributions), mood, physical symptoms,

TABLE 4.2 Domains and Dimensions Tapped by Daily Giving Measures

Domain	Dimension	Descriptive Detail
Family/individual	Emotional support	Summated score of days per week and hours per week providing emotional support such as comforting, listening to, or advising family members, friends, neighbors, and co-workers.
	Informal assistance	Summated score of days per week and hours per week providing unpaid assistance such as free babysitting or help with shopping for family members, friends, neighbors, and co-workers.
	Financial assistance	Summated score of days per week and dollars per week of money or goods donated to family members, friends, neighbors, and co-workers.
Community	Volunteer service	Summated score of days per week and hours per week doing formal volunteer work at a church, hospital, senior center, or any other organization.
	Financial contribution	Summated score of days per week and dollars per week of money or goods donated to charities, religious organizations, or political groups.

productivity, cutbacks, and daily stressors. Table 4.2 describes the measures of daily giving behaviors. We tried to match the dimensions as much as possible to those determined for the family and community domains in the MIDUS analyses (see table 3.1). Our focus on daily giving allowed us to extend the MIDUS analyses by not only measuring how much people gave but also assessing how often people gave. For each dimension of daily giving, we estimated the weekly *frequency* of giving and the weekly *quantity* of giving. The frequency of giving was assessed by summing the number of days per week respondents gave any money or time in each of the dimensions. The actual quantity of giving was estimated by summing the total amount of either time or money each respondent gave each day across the entire week.

The correlations among the daily giving variables are shown in table 4.3. The upper triangle shows the correlations for the quantity mea-

TABLE 4.3 Correlation of Coefficients among Daily Giving Measures

Domain	Dimension	1	2	3	4	5
Family/individual	1. Emotional support	**.53****	.06	.09*	−.01	.04
	2. Informal assistance	.15**	**.62****	.09*	.02	.02
	3. Financial contribution	.18**	.16**	**.36****	.07	.12**
Community	4. Volunteer service	.06	.01	.02	**.84****	.18**
	5. Financial contribution	.20**	.06	.08	.17**	**.45****

Note: The upper triangle provides the correlations among the quantity of daily giving variables. The lower triangle provides the correlations among the frequency of daily giving variables. The diagonal elements (in bold) are the correlations between the frequency and quantity for each dimension of daily giving. $N = 571$.

$^{*}p < .05$. $^{**}p < .01$.

sures of daily giving. Quantity of financial contributions to family members and friends is associated with quantity of time spent giving emotional support and informal assistance to family members and friends as well as quantity of financial contributions to community. Respondents who spent more time in volunteer service also gave more money to the community. The lower triangle shows the correlations between the frequency measures of daily giving. Measures of frequency of giving are slightly associated within each domain. Although the pattern of correlations suggests some overlap across the variables, particularly within each of the domains, the size of the correlations are quite small (e.g., the largest $r = .20$). Thus, as was the case in the MIDUS analysis (see chapter 3), these correlations provide evidence for separate dimensions for quantity of daily giving as well as frequency of daily giving.

Not surprisingly, the degree of association is much greater between the frequency and quantity measures for each dimension of daily giving. These correlations are shown in bold along the diagonal of table 4.3. Respondents who gave more frequently tended to give more in absolute terms. For example, individuals who more often contributed financially to their community also gave more money across the week, compared to those who contributed less frequently. Frequency and quantity of *giving time* are more related than frequency and quantity of *giving money.*

Age and Sex Differences

In chapter 3, Alice Rossi shows that many dimensions of social responsibility, particularly socially responsible *behavior,* vary according

to age and sex. Older adults are more inclined to provide financial support and volunteer time than are younger adults. Men contribute more in absolute terms to family and community than do women, yet the proportion of income contributed is higher for women than for men. Rossi based her findings on respondent recall of giving for the previous month. We extended this research by examining daily reports of giving behaviors aggregated over the week.

Table 4.4 describes daily giving of time in the family domain (emotional support and informal assistance) and in the community domain (volunteer service). In this table we show differences in age and sex, including: (1) the percentage of participants who made any contribution of time during the week; (2) the average number of days per week participants gave time; and (3) the average number of hours per week given to family or community organizations. Over 80% of the total sample gave emotional support to a family member, friend, or coworker at some point during the week. The average frequency of providing this emotional care was slightly over two days per week, with an average time spent of two hours and twenty minutes. Forty-three percent of the sample provided informal assistance to friends or family at least once a week, with an average duration of three hours per week. Approximately one-quarter of the respondents in this sample volun-

TABLE 4.4 Time Given in the Family and Community Domains, by Age and Sex

Dimensions	Total Sample	Men			Women		
		25–39	40–59	60–74	25–39	40–59	60–74
Family domain							
Emotional support							
Percentage giving any	83.4	83.6	73.9	72.1	85.7	87.9	89.5
Average days per week	2.21	1.85	1.93	1.76	2.17	2.69	2.47
Average hours per week	2.38	1.31	1.86	1.69	3.40	3.09	2.36
Informal assistance							
Percentage giving any	43.8	38.2	33.0	47.1	48.8	42.1	57.9
Average days per week	0.80	0.53	0.49	0.96	0.88	0.95	1.03
Average hours per week	3.00	1.42	1.02	2.81	5.73	3.48	3.79
Community domain							
Volunteer work service							
Percentage giving any	26.8	30.1	24.4	35.3	21.4	21.8	32.6
Average days per week	0.49	0.58	0.32	0.71	0.34	0.46	0.66
Average hours per week	1.02	1.33	0.50	1.33	0.55	1.06	1.59

Note: Calculations for days and hours per week are based on the total sample rather than just those who gave or volunteered. $N = 571$.

teered an average of one hour per week, with a likelihood of recurrence once every two weeks.

Table 4.5 presents information regarding financial contributions in the family and community domains made by anyone in the respondent's household. For questions concerning monetary contributions, respondents were asked if they or *anyone in their household* contributed to an individual or organization. For this reason we first divided our sample into categories of married or single and then subdivided the single group by sex. Almost one-quarter of the sample donated money or goods within the family domain, averaging approximately $20 per week with a likelihood of occurring about one day out of each month. Approximately half of the respondents made financial contributions within the community domain, for an average contribution of $37.40 per week. Contributions of this type occurred less than once per week. Table 4.6 provides a summary of results from a set of 3 × 2 ANOVAs that tested the differences among age and sex categories by domain and dimension of social responsibility.

Age Differences

Age is positively related to the frequency of providing informal assistance to family members and financial contributions to community organizations. Older adults are more apt to provide assistance to family and friends or donate money to organizations than middle and young adults, but do not differ significantly from those groups in regard to the total quantity given. Age is also positively related to the number of hours per week participants reported serving as volunteers in the community. Older adults show a greater propensity to participate in volunteer activities than do younger age groups, perhaps because they are no longer constrained by the demands of raising children or full-time employment. Whereas Rossi (see chapter 3) found a negative association between caregiving hours and age, we found that the frequency of informal assistance increases with age. Older adults lend a hand more often, but not necessarily for a longer duration of time. Interestingly, our results do not support the theoretical formulations predicting a peak in generativity at midlife. On the contrary, we found that in all of the significant age effects, the older adult age group exceeds the young and middle age groups. One possible explanation for this is the age limitation of our sample. Had our sample included participants beyond age seventy-four, we may have observed a fall-off in the frequency and quantity of giving.

TABLE 4.5 Financial Contributions in the Family and Community Domains, by Marital Status and Age

Dimensions	Total Sample	Married			Single Male			Single Female		
		25–39	40–59	60–74	25–39	40–59	60–74	25–39	40–59	60–74
Family domain										
Financial contribution										
Percentage giving any	23.8	14.7	22.4	26.1	11.8	19.2	33.3	32.0	37.7	34.9
Average days per week	.28	.17	.25	.36	.15	.23	.25	.50	.38	.40
Average dollars per week	20.3	17.2	13.6	38.6	4.7	4.5	8.8	26.3	29.8	13.3
Community domain										
Financial contribution										
Percentage giving any	45.7	47.7	42.5	52.3	41.2	34.6	33.3	28.0	51.0	53.5
Average days per week	.62	.58	.57	.82	.47	.48	.67	.30	.63	.73
Average dollars per week	37.4	28.2	49.3	55.9	12.4	26.2	21.8	9.3	24.8	20.4

Note: Calculations for days and dollars per week are based on the total sample rather than just those who contributed. $N = 571$.

TABLE 4.6 Age and Sex Differences in the Frequency and Quantity of Daily Giving

Dimension	Age	Sex
Family/individual domain		
Emotional support		
Frequency	—	15.5** (women > men)
Hours	—	8.9** (women > men)
Informal assistance		
Frequency	4.3* (older > young and middle)	8.7** (women > men)
Hours	—	9.0** (women > men)
Financial contribution		
Frequency	—	3.25** (SF > married and SM)
Dollars	—	—
Community domain		
Volunteer service		
Frequency	4.2* (older > young and middle)	—
Hours	3.7* (older > young and middle)	—
Financial contribution		
Frequency	4.8** (older > middle > young)	—
Dollars	—	2.9* (married > SM and SF)

Note: SM = single male. SF = single female.
*$p < .05$. **$p < .01$.

Sex Differences

Consistent with Rossi's findings (chapter 3) that women provide more hours of social support and caregiving than do men, we found a distinguishable difference between men and women concerning the frequency and duration of giving in the family domain. Women comfort, advise, or otherwise instrumentally help family and friends more often and for longer periods of time than do men. In terms of financial contributions, single women provide goods and money to family, friends, neighbors, and co-workers more frequently than do married couples or single men. On the other hand, the quantity contributed to community organizations is higher for married couples than for either single males or single females. This finding reflects the higher total

household income of married couples. More disposable income may enable dual wage–earning couples to contribute more in quantity than their single counterparts.

Temporal Factors of Giving

Daily Variation

In the next series of analyses we examined temporal factors associated with giving. First we investigated if the day of the week plays any role in whether and how much individuals give of their time and money to family, friends, and community. The day of the week can powerfully influence how we structure our time and activities. According to Randy Larsen and Margaret Kasimatis, "[t]he day of the week tells us much about what will happen in our immediate future. The week thus serves as a temporal map and tells us what to expect" (1990, 165). These authors show how college students' moods are entrained by a seven-day cycle. The day of the week is also associated with the amount of discretionary time available. John Robinson and Geoffrey Godbey's national studies of time use (1997) show that Americans report marked increases in their free time on weekend days compared to weekdays. Although weekends are associated with more housework and shopping, they also are associated with fewer hours of child care (e.g., helping with homework). The largest increase in the way time is spent on the weekend involves religious activities, which occur eight times more often on Sunday than on any other day of the week. Giving behaviors may also be linked to the weekly calendar when giving involves family, work, school, or religious activities.

The goal of the next analysis was to compare frequency and quantity of giving on weekdays with that on weekend days. In addition we tested whether daily patterns of giving differ according to age and sex. The results of a series of 2 × 3 × 2 (day of week × age category × sex) mixed-model ANOVAs appear in table 4.7, and show evidence for day-of-week effects on time spent giving emotional support to family and friends, volunteering, and contributing money to community organizations.

Figure 4.1 shows the average amount of time per day that respondents gave emotional support to friends and family on weekdays and weekend days for each of the age categories. Overall, our respondents spent more time giving emotional support on weekdays. This result is concentrated among the young adults in the sample, who spent an average of nine minutes more on weekdays than weekend days listening

TABLE 4.7 Day of Week Differences in the Frequency and Quantity of Daily Giving

Dimension	Day of Week	Age × Day of Week	Sex × Day of Week
Family/individual domain			
Emotional support			
Frequency	27.2* (weekday > weekend)	2.9* (young and weekday)	—
Hours	11.8* (weekday > weekend)	2.8* (young and weekday)	—
Informal assistance			
Frequency	—	—	—
Hours	—	—	—
Financial contribution			
Frequency	—	—	—
Dollars	—	—	—
Community domain			
Volunteer service			
Frequency	—	3.6* (young and weekend)	6.4 (men and weekday)
Hours	—	4.9** (young and weekend)	—
Financial contribution			
Frequency	34.9** (weekend > weekday)	—	—
Dollars	3.83* (weekend > weekday)	3.0* (older and weekend)	—

Note: $N = 571$.
$^{*}p < .05$. $^{**}p < .01$.

to and giving advice to others. An examination of who is getting the support provides some clues for this difference. Respondents in each age category most often give emotional support to their children (27% of the total time they gave support) and friends (30% of the total time they gave support). Younger adults were more likely to give support to spouses and co-workers and less likely to give support to neighbors than were older adults. To the extent that spouses and co-workers are seeking support for problems experienced at work, younger adults' support-giving may be more often tied to work schedules than is support given by older adults.

The day-of-week pattern for engaging in volunteer work is shown in figure 4.2. Although there was no overall main effect for day of week across the entire sample, there was a significant day of week × age interaction. Older adults are more likely to volunteer on the weekdays

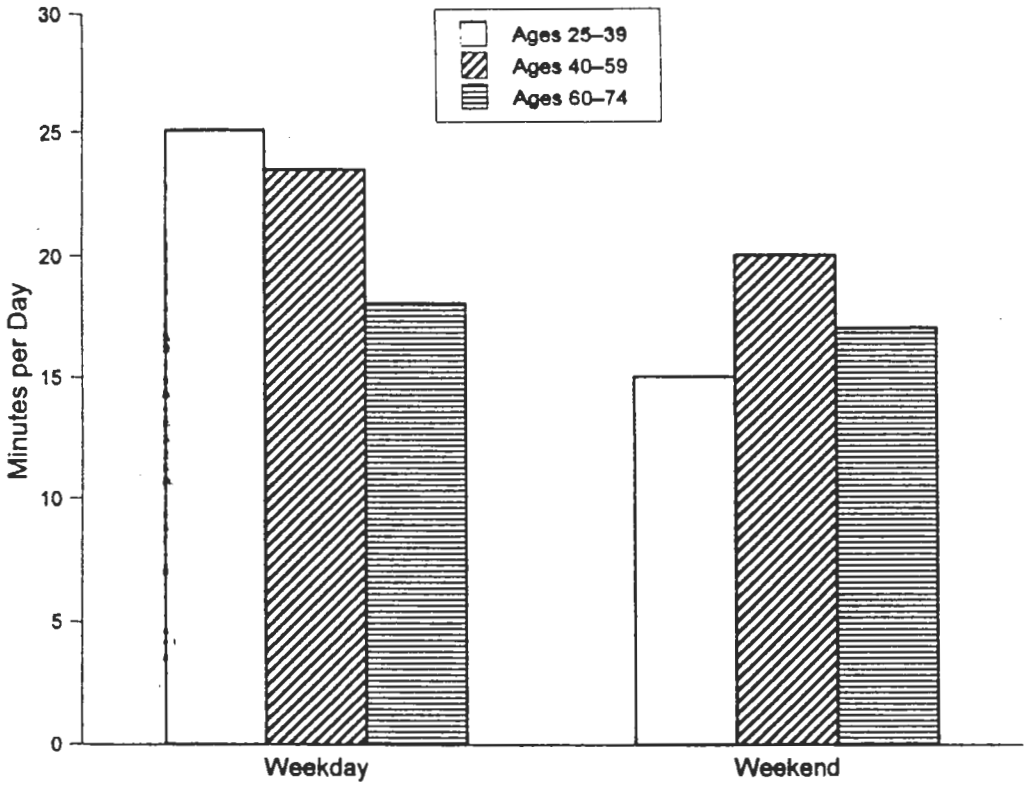

FIGURE 4.1. Time spent giving emotional support to family and friends, by day of week and age.

while younger adults are more likely to volunteer on the weekend. Again the influence of paid work schedules may be playing an important role as to when individuals have time to give. Seventy percent of respondents in the older age category reported spending no time in paid employment activities, compared to only 20% of the younger age group.

The other type of giving related to day of week is financial contribution to the community, as shown in figure 4.3. Respondents in each age category gave more on the weekend days than on weekdays. Although there is no age-related pattern in the *frequency* of giving on the weekend, there is a difference in the *quantity* of giving (see table 4.7). This daily pattern is magnified for the older adults, who gave an average of $7.71 more on weekend days. The age-related difference on weekends is primarily due to increased contributions to religious organizations on the part of older individuals. Older adults contributed an average of $11.50 to religious organizations, compared to $5.75 and $5.44 for middle and younger adults, respectively. Thus it appears that older

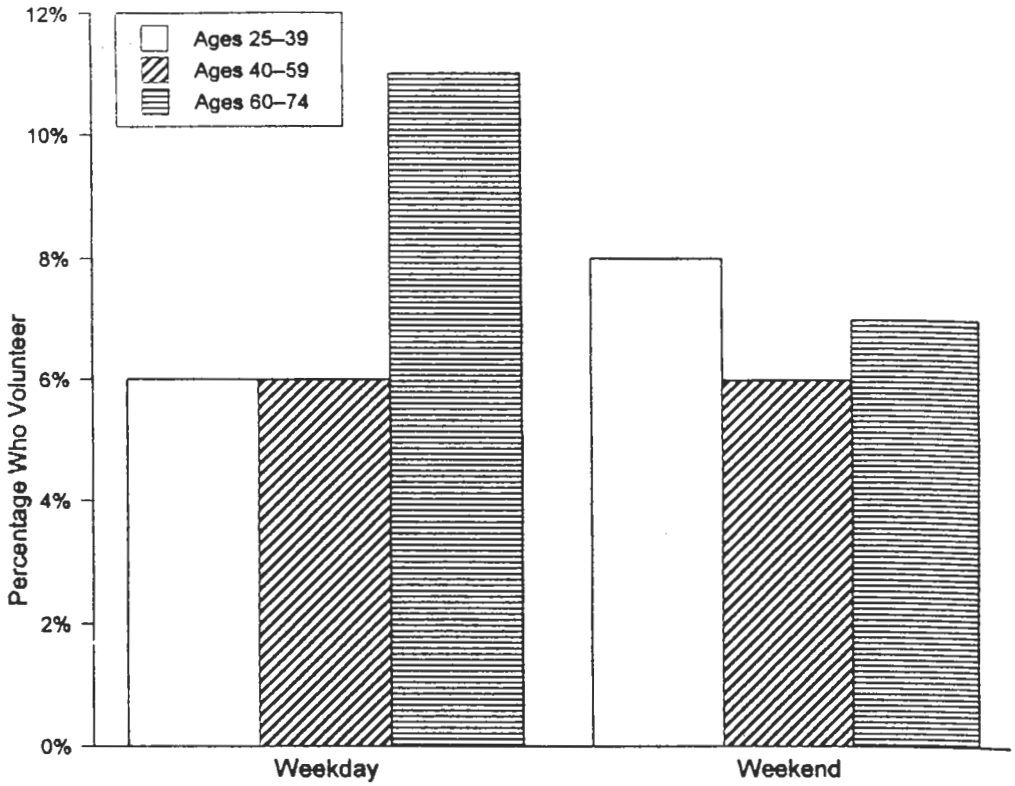

FIGURE 4.2. Percentage of respondents who engaged in volunteer service, by day of week and age.

adults do not contribute more frequently on the weekend, but they do contribute more.

Evidence demonstrating weekly rhythms has been shown in previous research on mood (Larsen and Kasimatis 1990), leisure-time activities and household chores (Robinson and Godbey 1997), and work-family linkages (Almeida and McDonald 1998). Our findings show that day of week, in conjunction with sex and age, plays an important role in the manifestation of socially responsible actions as well. Older adults have a greater tendency to give informal assistance to friends and family, make larger contributions on weekends, and are more likely to volunteer during weekdays than are younger adults. Not surprisingly, women spend more time providing social support and caregiving than do men, while those in married households make larger financial contributions to community organizations. Interestingly, our sample provided more emotional support on weekdays than weekends, which seems contrary to what the long distance telephone service marketing slogan "five-cents-a-minute Sundays" might suggest. Perhaps the epi-

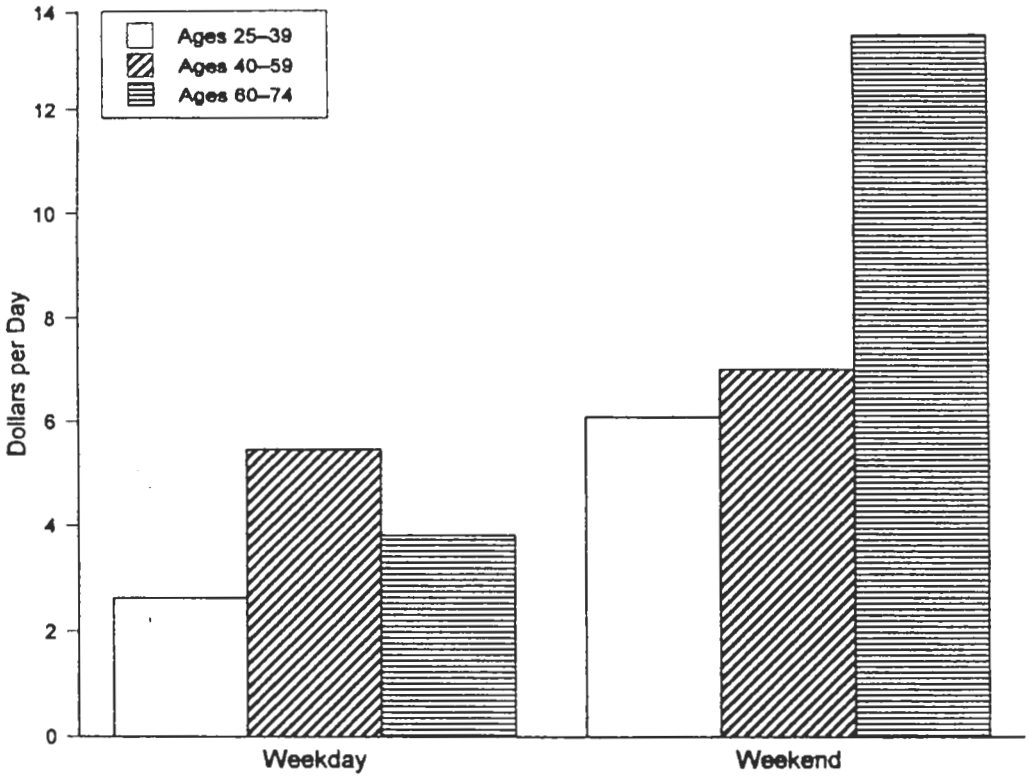

FIGURE 4.3. Financial contribution to the community, by day of week and age.

sodes of providing emotional support are tied more closely to the work and school schedules of spouses and children than to weekend socializing and connecting with family.

Seasonal Variation

The frequency and quantity of giving are also likely to fluctuate across the calendar year. Evidence for this contention is apparent in the Boston Area Diary Study (BADS), which charted the giving and caring behavior of participants from a sample of fifty households in the Boston area on a weekly basis during 1995 (Havens and Schervish 1996). The temporal patterns of giving behavior for families and individuals in the BADS exhibit specific cycles and rhythms throughout the year, guided by factors idiosyncratic to each family or individual as well as by factors common to most or all participants in the study. At times families drew inward, impelled by family needs such as injuries and illnesses. Families also joined with others to solve common problems (e.g., carpooling to drive kids to and from school and after-school ac-

tivities) or to support local social networks (e.g., volunteering to assist with church-sponsored activities). At a number of times during the year, family members would assist others who were not part of their own social network. These activities were concentrated during the year-end holiday season, when the families' outreach activities focused on the needy through financial contributions, volunteer efforts, and informal assistance.

In this section we explore and identify patterns in giving behavior associated with temporal cycles during the twelve-month NSDE data-collection period. As for the analyses reported above, we examined five areas of giving behavior: emotional support, informal assistance, volunteer service, financial contribution to individuals, and financial contribution to community and national organizations. The NSDE permits us a weekly glimpse of the giving behavior of a group of respondents mixed by geographic location, economic condition, and social circumstance. We averaged the daily reports of respondents who were interviewed during the same month and pieced the monthly averages together to explore and identify national seasonal patterns in giving.

This methodology necessarily reduces the influence of factors other than seasonal ones, which affect our groups relatively uniformly, such as holidays, school calendar, and weather patterns. The end of the year (the end of the federal tax period) prompts giving among those seeking tax deductions for charitable contributions. Many charitable organizations launch fund drives in late spring and again in late fall. One would expect peaks of contributions during these times as well. Organizations also seek volunteer help to prepare for these drives several weeks before they launch them. One might expect, therefore, to discover mini-peaks in volunteering activity at these times.

Figure 4.4 presents the seasonal patterns for the prevalence of giving behavior as measured by the percentage of respondents engaged in each realm of giving. Emotional support and financial contributions to individuals are the only measures that evidence statistically significant seasonal patterns [$F(11,561) = 2.09$, $p < .01$; $F(11,561) = 2.10$, $p < .01$, respectively]. Nevertheless, the seasonal patterns for all five areas of giving behavior are roughly similar. During middle and late winter, especially the month of February, respondents reported little giving behavior on any of our measures. Whether this was because of dank and dreary weather, lack of personal reserves of energy, lack of financial resources after the holiday season and post-holiday bills, or just lack of

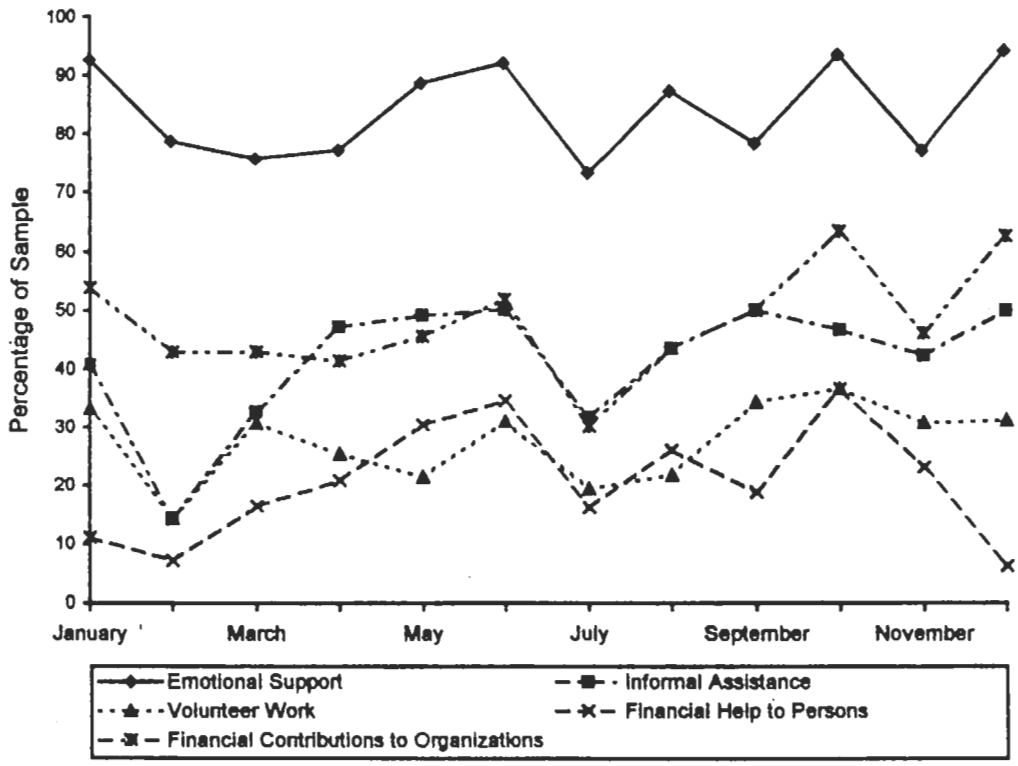

FIGURE 4.4. Percentage of sample engaged in giving activities, by month.

opportunities is a matter of speculation. However, there is no mistaking this low point in giving. On the other hand, the advent of summer in May/June, coinciding with the end of the school year, prompted high levels of giving. While not consistent for all measures of giving, the fall generally showed some resurgence in giving behavior, with October as the season's high point. Finally, as previously mentioned, the year-end holiday season produced another spike in giving.

We note that for all seasons of the year, the prevalence of emotional support exceeded informal assistance to others as well as contributions to charitable organizations. These giving behaviors, in turn, surpassed the prevalence of volunteering and financial help extended directly to individuals and families. Thus there was a rough hierarchy in the proportion of the sample involved in each of these types of giving activity, and this hierarchy was maintained throughout the calendar year.

We measured the quantity of giving by calculating the average number of hours per week devoted to emotional support, informal assistance, and volunteering (figure 4.5). The peak levels of informal assistance occur in May and in August. It is interesting to note that these

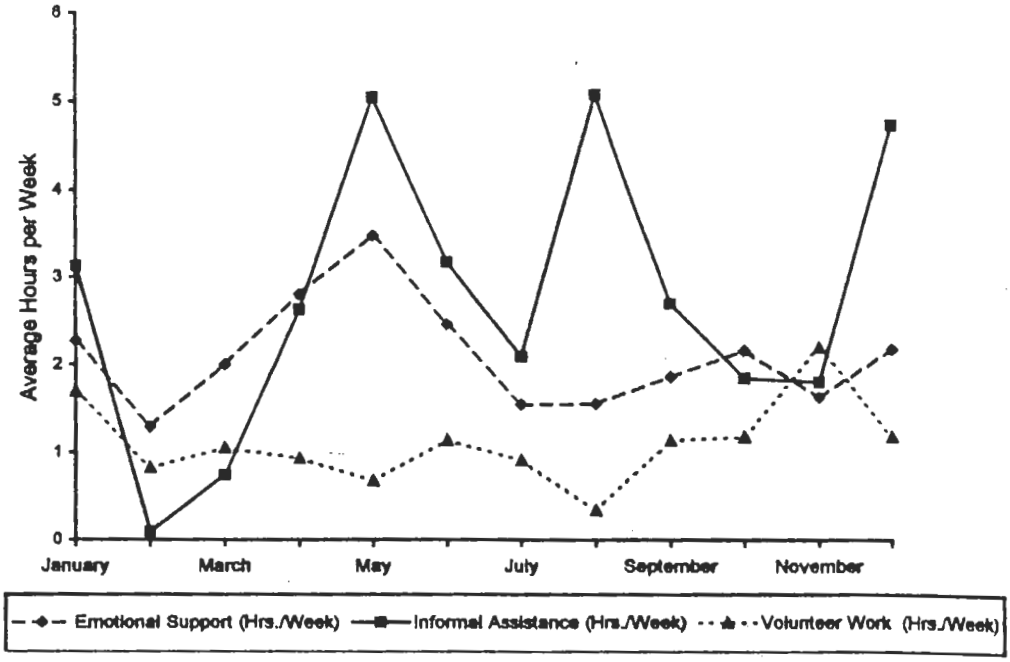

FIGURE 4.5. Average number of hours spent per week helping others.

months coincide with periods during which many individuals and families reorganize their activities in accord with the school calendar. Just as with prevalence of giving, February and July are months of relatively low amounts of time spent giving emotional support and informal assistance, though August rather than July is the summer nadir for time volunteered.

The seasonal variations in the quantity of financial contributions to charitable organizations and, less formally, directly to individuals are different from the general pattern apparent in the other realms of social responsibility and from each other (see figure 4.6). During February, when other forms of giving are at their nadir, the average amount of contributions are at a very high level. In May, when other forms of giving are relatively high, the amount of contributions to charitable organizations is low. Moreover, the quantity contributed to charitable organizations exhibited changes that are almost the reverse of those for family contributions to persons for many months of the year. This suggests a type of compensatory model of how people express their support for other individuals and for social organizations. When giving is unable to be expressed in one dimension, it is expressed in another. A model that combines seasonal variation with compensatory modes of giving may be an appropriate theoretical construct allowing us to un-

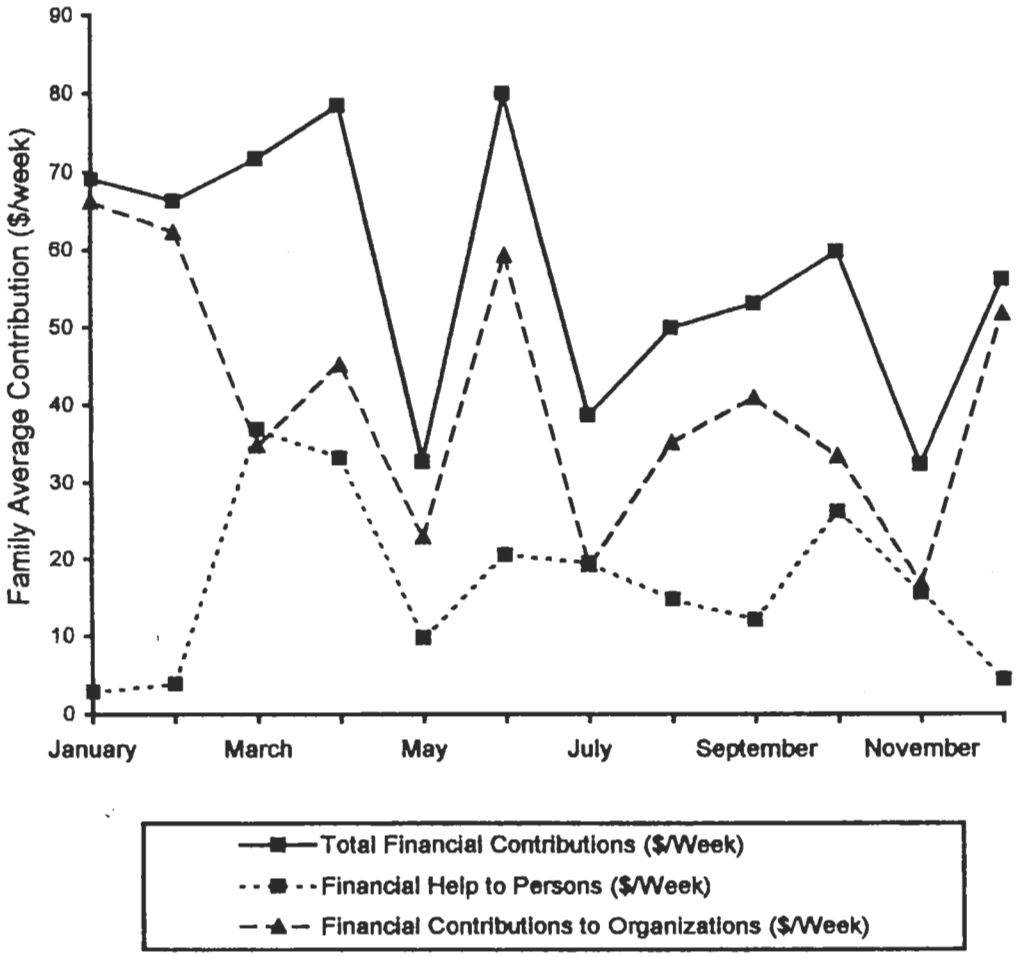

FIGURE 4.6. Family average financial contribution per week.

derstand and analyze how longer cycles affect an individual's giving behavior.

CONCLUSION

The exploration of temporal cycles of socially responsible activity is a relatively neglected area of research. In this chapter we have begun to explore and identify short cycle and long cycle rhythms in this behavior. For the sample as a whole, the evidence in support of the existence of such cycles is statistically weak, except for the relationship between weekday/weekend cycles and the amount of family financial resources given to charitable (including religious) organizations. From this we conclude that time itself and the societal rhythms entailed in the passage of time generally do not affect all persons and individuals in the same way. In this exploratory research we have indeed shown that age

and gender are two such factors affecting weekday/weekend cycles. As for seasonal variation, only the very largest societal rhythms affect people in a fairly uniform way. The shift from spring to summer, the December/January holiday season, and the post-holiday period in February are the only major periods that were linked to all five areas of socially responsible behavior examined in this chapter.

The findings presented in this chapter are mostly descriptive in nature. They set the stage for more detailed exploration of how the passage of time interacts with daily experiences to facilitate or inhibit socially responsible behavior. We believe it is necessary to chart daily intersections of individuals' multiple giving behaviors with other aspects of their day-to-day lives in order to understand the rhythmic nature of these synchronous experiences.

To appreciate how social responsibility is embedded in daily life, it is useful to examine the descriptions of giving experiences provided by NSDE participants. Through the Daily Inventory of Stressful Events (Almeida 1998), we acquired short narratives of particular stressful events that occurred during the day. Often these events either coincided with or were about giving or providing care to others. By examining these qualitative data in conjunction with the reports of giving behaviors, we develop a clearer picture of the interconnecting rhythms of the dimensions of social responsibility.

One illustration comes from a fifty-six-year-old woman who described a stressful incident occurring midweek in the month of August, which involved her adult stepson: "[I needed] to help him out with his electric bill. I was concerned because he said they cut the electricity off." This participant reported that assisting her stepson interrupted her volunteer work at her church. In addition to volunteering and providing financial assistance to her stepson, she also provided unpaid assistance to a friend and emotional support to her stepson and to a friend within the same twenty-four-hour period.

Other examples of intersecting giving behaviors include a thirty-seven-year-old man who provided emotional support to his father: "I felt I needed to give my father support. . . . He was emotionally, well, he wasn't really sad, but he had a hard time speaking. . . . I felt I had to give him a hand and support him." On that Sunday in May, this participant also volunteered at a community organization and donated money to a local charity. A forty-seven-year-old mother described providing emotional support and financial assistance to her adult daughter

on a weekend day in the summer after her daughter had a miscarriage: "We went over there for emotional support. They're both pretty devastated about it. [We're trying] to be emotionally supportive. We help pay for some of the bills." On that day she also reported volunteering her services at a local organization. On a weekday in April, a fifty-three-year-old man provided informal assistance to a friend within the same twenty-four-hour period in which his aunt had died. He described his response to the needs of his family in the following excerpt: "A death in the family is somewhat stressful, an aunt . . . There are problems in the family, and I'm kind of the in-between man. I had to make phone calls, and I volunteered to be of any help."

These descriptions illustrate the multiple ways in which people give and care that are part of their daily lives. The findings in this chapter suggest that such activities are structured and accentuated partly by the metered ebb and flow of social temporal rhythms. However it is important to mention that individuals often need to improvise when others are in need or when they themselves require help, regardless of temporal constraints. Our challenge and that of other researchers is to place giving and caring activities in the context of individuals' everyday lives. In the next step of our analysis we will begin to meet this challenge by examining how day-to-day giving and receiving are related to other daily experiences such as work stressors, family demands, and physical health problems.

References

Almeida, D. M. 1998. Daily inventory of stressful events: Interview and coding manual. Typescript.

Almeida, D. M., and D. A. McDonald. 1998. Weekly rhythms of parents' work stress, home stress, and parent-adolescent tension. In *Rhythms in adolescent development: New directions in child development,* ed. R. Larson and A. Crouter, 53–67. San Francisco: Jossey-Bass.

Erikson, E. H. 1980. *Identity and the life cycle.* New York: W. W. Norton.

Fraenkel, P. 1994. Time and rhythm in couples. *Family Process* 33:37–51.

Havens, J. J., and P. G. Schervish. 1996. *Daily bread: Findings from the first diary study on giving and volunteering.* Boston: Social Welfare Research Institute.

James, W. J. [1890] 1950. *The principles of psychology.* Reprint, New York: Dover.

Larsen, R. J., and M. Kasimatis. 1990. Individual differences in entrainment of mood to the weekly calendar. *Journal of Personality and Social Psychology* 58: 164–71.

Nesselroade, J. R. 1991. Interindividual differences in intraindividual change. In *Best methods for the analysis of change: Recent advances, unanswered questions,*

future directions, ed. L. M. Collins and J. L. Horn, 92–105. Washington, DC: American Psychological Association.

Nesselroade, J. R., and D. L. Featherman. 1991. Intraindividual variability in older adults' depression scores: Some implications for developmental theory and longitudinal research. In *Problems and methods in longitudinal research: Stability and change*, ed. D. Magnusson, L. Bergman, and B. Torestad, 46–66. London: Cambridge University Press.

Robinson, J. P., and G. Godbey, eds. 1997. *Time for life: The surprising ways Americans use their time*. University Park: Pennsylvania State University Press.

Sorokin, P. A., and R. K. Merton. 1937. Social time: A methodological and functional analysis. *American Journal of Sociology* 42:615–29.

Zerubavel, E. 1979. *Patterns of time in hospital life*. Chicago: University of Chicago Press.

———. 1985. *The seven-day cycle*. New York: Free Press.