MORNING AND NIGHT COUPLES:
THE EFFECT OF WAKE AND SLEEP PATTERNS ON
MARITAL ADJUSTMENT*

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This study explored the effects of spouses’ wake and sleep patterns on marital adjustment. A total of 150 couples from three states completed questions on wake/sleep patterns, marital interaction, marital adjustment, and problem solving. Couples whose wake and sleep patterns were mismatched (e.g., an evening person married to a morning person) reported significantly less marital adjustment, more marital conflict, less time spent in serious conversation, less time spent in shared activities and less frequent sexual intercourse than matched couples. Contrary to expectations for matched couples, night couples did not report more involvement in extra-familial social activities than morning couples. Morning couples engaged in sexual intercourse more frequently in the morning than night couples; night couples had sex more often in the evening than morning couples. There were no significant differences in the intercourse rates for morning couples and night couples. Compared to matched couples, mismatched couples with high marital adjustment reported more flexibility and adaptability in their marital problem solving. The implications of these findings for premarital counseling and marital therapy are discussed.

INTRODUCTION


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Monroe presented evidence for circadian rhythms by demonstrating that body temperature persistently rises and falls one or two degrees each 24 hours with a person's favorite hours of the day coinciding with the high point of body temperature (Still, 1972). Individuals whose highest body temperature occurs later in the day or in the evening are labelled, "night" people; those whose highest body temperature occurs earlier in the day or in the morning are called "morning" people (Cromwell et al., 1976; Kleitman, 1963).

Adams and Cromwell (1978) determined that a spouse can distinguish between orientations of morningness, nightness, or ambiguity for self and partner and can identify how the resulting match or mismatch affects the couple's marital interaction. The purpose of the present study was to extend the limited research on circadian rhythms and couple interaction by empirically studying the relationship between sleep and wake patterns and marital interaction and adjustment. It was believed that the results of this study would provide direction for marital therapists and premarital counselors as they include circadian rhythms in their assessment and treatment of couples.

THEORETICAL CONTEXT

The concept of time in marital and family relations was first formally described by Kantor and Lehr (1975) in their classic study, Inside the Family. In their theory of family interaction they describe two key dimensions of family interaction: A target dimension and an access dimension. Targets are goals which the family seeks. These goals include affect, power, and meaning. Affect refers to the family members' efforts to experience intimacy and nurturance. Power refers to family members' efforts to make their own decisions and the ability to get what one wants—whether it be money, goods, or skills. Meaning refers to the family members' philosophical framework which provides them with explanations of reality and helps them define their identity.

The second dimension—the access dimension—consists of space, time, and energy. The basic thesis of Kantor and Lehr's model is that "members of families gain access to targets of affect, power, and meaning through the way in which they and their families regulate the media of space, time, and energy" (1975, p. 37).

Kantor and Lehr (1975) noted that movements in time and space are quantifiable—they can be measured in minutes or feet or in whatever temporal or spatial scale of measurement is deemed appropriate. However, only recently have marital and family therapists begun to study the dimensions of time (Adams & Cromwell, 1978) and space in the family (Constantine, 1986; Crane, Dollahite, Griffin, & Taylor, 1987).

Based on Kantor and Lehr's theory, several important questions may be asked about how couples utilize time: How is time utilized in the family as spouses seek their goals of affect, power, and meaning? How can time be more efficiently utilized? What are the consequences of being "in phase" or "out of phase" with each other? If people are out of phase with each other, they may not even be able to be home together at the same time, much less make love or fight with each other (Kantor & Lehr, 1975).

Young and Ziman (1976) proposed that "individual cycles need to be synchronized or harmonized, brought into agreement, changed in phase or period, so that significant events may always occur simultaneously" (p. 91). They emphasized that there will be undesirable consequences when family members' cycles do not mesh.

The present study sought to determine the relationship between one dimension of time—circadian rhythms—and married couple interaction and adjustment.

REVIEW OF THE LITERATURE

The bulk of the research on circadian rhythms is biological and deals almost entirely with individual rhythmic patterns (Garzino, 1982). Little research has been done on the

Carol Hoskins (1979) was one of the first to study circadian rhythms and marital conflict. Her research focused on hour-to-hour changes in the body temperature of spouses and their relationship to marital conflict. A study of 16 married couples showed no significant relationship between dysynchrony of the partners' body temperature rhythms and levels of activation and marital conflict (Hoskins, 1979; Hoskins et al., 1979). A later study (Hoskins & Halberg, 1983) of one couple who monitored their levels of activation and conflict six times per day for 35 days showed that for this mismatched couple there was a relationship between general activation level and interpersonal conflict. For the husband (a morning person), as his activation level decreased during the day, there was a decrease in interpersonal conflict. For the wife (a night person), as she became more awake during the day, there was an increase in interpersonal conflict. Although these results are somewhat unclear and limited by their lack of generalizability, they suggest that there may be a relationship between morningness and nightness and marital conflict.

Not only may hourly mismatches in circadian rhythms lead to conflict but the problem of not seeing each other very often due to mismatched rhythms (e.g., one spouse retires in the evening several hours before the other spouse) may lead to a lack of intimate conversation, shared activities, and sexual relations. The absence of such interaction may lead to resentment and marital dissatisfaction. In fact, such differences in when spouses retire and wake may have more significant effects on marital satisfaction and conflict than hour-to-hour changes in body temperature or activation levels.

One of the most relevant studies of circadian rhythms and marital interaction and adjustment is a study by Adams and Cromwell (1978). They developed four factors which can be used to distinguish between morningness and nightness for an individual:

1. Arising early versus staying up late.
2. Timing of energy and efficiency peaks.
3. Type and time for preferred shared activities.
4. Personal values.

A morning person tends to arise easily early in the morning; the night person does so with difficulty. The morning person has difficulty staying up late whereas the night person easily stays up late. Efficiency and energy usually peak early in the day for the morning person; for the night person these peaks usually come later at night. The relationships among overall energy level, efficiency, and morningness/nightness were not well established in their study. Morning people seem to value physical, outdoor activities compared to night people who often prefer quiet, night-life activities. Morning people seem to value beginnings, sunrises, and breakfast (e.g., “The day looks better in the morning.” “Everything looks fresher.” “I love sunrises—my favorite meal is breakfast” (Adams & Cromwell, 1978, p. 8). No such straightforward statements were made by night people to express their positive orientations toward nighttime hours. Adams and Cromwell concluded that the characterization of morning people appears to be somewhat more definitive than that of night people. They also emphasized that: (a) there is a continuum of morningness and nightness, not simply a dichotomy; (b) it is possible to distinguish a forced role (e.g., a night watchman) from a personality preference; and (c) these tendencies for morningness/nightness may be either innate or socially learned.

Their open-ended interviews with 28 student couples suggested there may be an absence of conflict among matched couples. Conversely, mismatched couples appeared to have more frequent and severe dyadic adjustment problems than matched couples. Open conflict, criticism, and arguments were referred to by several mismatched couples.
As a result of their interviews, Adams and Cromwell (1978) developed several hypotheses concerning matched and mismatched couples. These hypotheses were empirically tested in this study:

1. For matched couples (i.e., both spouses are morning or night people), night couples are more involved in extra-familial social activities than morning couples.

2. For matched couples, morning couples engage in sexual intercourse more frequently in the morning than night couples.

3. For matched couples, night couples engage in sexual intercourse more frequently in the evening than morning couples.

4. For matched couples, morning couples have sexual intercourse less frequently than night couples.

5. Mismatched couples (e.g., a morning person married to a night person) have less marital adjustment than matched couples.

6. Mismatched couples experience more marital conflict than matched couples.

7. Mismatched couples spend less time in serious conversation than matched couples.

8. Mismatched couples spend less time in shared activities than matched couples.

9. Mismatched couples have less frequent sexual intercourse than matched couples.

10. Mismatched couples with high marital adjustment are more flexible and adaptable in their marital problem-solving than matched couples.

METHOD

Sample

Data from a total of three nonprobability samples were available for analysis. A description of the demographic characteristics of each sample and the total sample are shown in Table 1. The couples in the study came from the states of Montana, Utah, and Alabama (see Table 1). A total of 150 couples (N = 300) participated in the study. The total sample may be characterized as young (mean age = 29.97 years) married couples who had been married about six years and had about two children. Most of the individuals were Protestant (57%), Latter-Day Saint (31%) or Catholic (9%). The disproportionately high number of Latter-Day Saints is due to one of the samples being collected in Utah. Most individuals reported some college education (36%) or a college degree (21%). Most of the participants (77%) were nonstudents who earned about $25,000 per year.

Although the sample was one of convenience, there is no evidence that it is not typical of the average marital dyad that would respond to a study of this type. Of course, a broader-based, probability sample would be preferable.

Each spouse separately completed a demographic questionnaire, questions about their sleep/wake patterns, and questions about how often they usually socialize with other couples each week, the average number of times per week they have sexual intercourse, when during the day or evening they usually have intercourse, the average number of minutes per day they spend in serious conversation, the average number of minutes per week they spend in shared activities (e.g., playing a game together or having dinner out together), and the average number of arguments (i.e., intense disagreements that result in negative feelings) they have each week. They also completed two instruments: The 15-item Marital Adjustment Test (MAT) (Locke & Wallace, 1959) and the 10-item Conflict Resolution Scale of the Waring Intimacy Questionnaire (WIQ) (Waring, 1984). The questionnaires were given directly to the participants rather than mailed to them.
Table 1
Demographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Montana (n = 60)*</th>
<th>Utah (n = 46)</th>
<th>Alabama (n = 44)</th>
<th>Total (n = 159)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husbands</td>
<td>32.48</td>
<td>29.60</td>
<td>29.79</td>
<td>30.79</td>
</tr>
<tr>
<td>Wives</td>
<td>36.18</td>
<td>28.81</td>
<td>28.77</td>
<td>29.16</td>
</tr>
<tr>
<td>Mean Years Married</td>
<td>7.25</td>
<td>5.44</td>
<td>6.57</td>
<td>6.42</td>
</tr>
<tr>
<td>Mean Number of Children</td>
<td>1.91</td>
<td>2.52</td>
<td>1.67</td>
<td>1.96</td>
</tr>
<tr>
<td>Mean Family Income</td>
<td>$22,752</td>
<td>$20,690</td>
<td>$31,187</td>
<td>$24,876</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>67%**</td>
<td>10%</td>
<td>90%</td>
<td>57%</td>
</tr>
<tr>
<td>Catholic</td>
<td>15%</td>
<td>1%</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Latter-Day Saint</td>
<td>5%</td>
<td>89%</td>
<td>3%</td>
<td>31%</td>
</tr>
<tr>
<td>Jewish</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Other (including no religion)</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or less</td>
<td>25%**</td>
<td>14%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Some College</td>
<td>43%</td>
<td>26%</td>
<td>26%</td>
<td>36%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>19%</td>
<td>18%</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Some Graduate School</td>
<td>3%</td>
<td>23%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>10%</td>
<td>19%</td>
<td>28%</td>
<td>17%</td>
</tr>
<tr>
<td>Occupation Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonstudent</td>
<td>75%**</td>
<td>64%</td>
<td>93%</td>
<td>77%</td>
</tr>
<tr>
<td>Student</td>
<td>25%</td>
<td>36%</td>
<td>7%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Number of couples

**For individuals

Instruments

Morningness/Nightness Measure. Morningness/nightness was measured using an adaptation of Adams and Cromwell's (1978) method. Each spouse was asked to respond to the following four questions:

1. In general, is getting up in the morning usually easy for you or difficult for you?
2. In general, is staying up late at night usually easy for you or difficult for you?
3. Are you usually most energetic and efficient early in the day or late in the evening?
4. If you had to choose to do one of the following activities, which would you usually prefer: (a) a physical, outdoor activity during the day or (b) an evening activity at home with friends or a quiet evening at home?

An individual was categorized as a morning person or a night person based on the factors listed in Table 2.

There appears to be a continuum of morning/nightness, not simply a dichotomy (Adams & Cromwell, 1978). Hence, night people were defined as those who marked three or more of the four items in the direction of a night person (see Table 2). Morning people were defined as those who marked three or more of the four items in the direction of a morning person (see Table 2). Some people simply described themselves as “flexible” (Adams & Cromwell, 1978). Such individuals who could not be clearly categorized as a morning person or a night person as a result of marking half of the items in the night person direction and half of the items in the morning person direction were labelled “undifferentiated.”
Table 2
Characteristics of Morning and Night People
(Adams & Cromwell, 1978)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Morning People</th>
<th>Night People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arising early</td>
<td>Easily</td>
<td>With difficulty</td>
</tr>
<tr>
<td>Staying up late</td>
<td>With difficulty</td>
<td>Easily</td>
</tr>
<tr>
<td>Efficiency/energy peak</td>
<td>Peaks early in day</td>
<td>Peaks late in evening</td>
</tr>
<tr>
<td>Activities</td>
<td>Physical; outdoor</td>
<td>Night life or quiet</td>
</tr>
</tbody>
</table>

As a result of using this method, the participants in this study were categorized as follows:

1. Husbands: 48 night people (32%), 71 morning people (47%), and 31 undifferentiated people (21%) (n = 150).
2. Wives: 48 night people (32%), 63 morning people (42%), 39 undifferentiated people (26%) (n = 150).
3. For the total sample: 96 night people (32%), 134 morning people (44%), and 70 undifferentiated people (24%) (N = 300).

Husbands and wives were compared and matched and mismatches of morningness/nightness/indifferentiation were determined. This process resulted in a total of 68 matched couples (45%) and 82 mismatched couples (55%).

Marital Adjustment. Marital adjustment was measured by the 15-item Marital Adjustment Test (MAT) (Locke & Wallace, 1959). The MAT is one of the most widely used measures of marital satisfaction in the marital literature. It has consistently demonstrated high split-half reliability (r = .90) and content and concurrent validity (Locke & Wallace, 1959).

Marital Interaction. Selected marital interaction variables were measured by a separate questionnaire. Specifically, each spouse was asked the following questions:

1. On the average, how often per week do you and your spouse socialize together with another couple(s) or friends?
2. On the average, how often per week do you and your spouse have sexual intercourse?
3. On the average, how often per week do you and your spouse have sexual intercourse during the daytime or in the evening?
4. Please estimate the average number of minutes per day you and your spouse spend in serious conversation.
5. Please estimate the average number of minutes per week you and your partner spend in shared activities (for example, playing a game together, working on a project together, sharing a sporting activity, or going out to dinner together).
6. Please estimate the average number of arguments you and your spouse have per week.

Flexibility in Problem Solving. Flexibility in marital problem-solving was measured by the 10-item Conflict Resolution Scale of the Waring Intimacy Questionnaire (WIQ) (Waring, 1984). This scale measures flexibility and the ease with which differences of opinion are resolved in marriage. This scale has demonstrated high internal consistency reliability (r = .78) and test-retest reliability (r = .88) (Waring, 1984). Waring (1984) reports convergent and discriminant validity for the WIQ.

Procedure. Volunteer couples were identified by each of the researchers for participation in the study. The couples were recruited from college classes and church groups.
Each spouse was hand-delivered a set of the instruments to complete. The spouses were told to complete the instruments alone in private. They were asked not to compare or discuss the results with each other. The researchers collected the completed questionnaires after approximately 3-5 days.

RESULTS

**Matched Couples**

The hypothesis that for matched couples, night couples are more involved in extra-familial social activities than morning couples was not supported. Although night couples reported more extra-familial social activities ($\bar{X} = 1.17$) (using couple mean scores) per week than morning couples ($\bar{X} = 1.69$), the difference was slight and not significant ($t = .49$, $p < .89$).

As hypothesized, morning couples engaged in sexual intercourse significantly more often in the morning (35% of the time) than night couples (14% of the time) while night couples engaged in sexual intercourse significantly more often in the evening (86% of the time) than morning couples (65% of the time) ($X^2 = 51.69$, $p < .0001$) (using couple mean scores). It is important to note that although these hypotheses were supported, still the majority of both night couples (86%) and morning couples (65%) engaged in intercourse in the evening.

The hypothesis that morning couples have sexual intercourse less frequently than night couples was not supported. The mean intercourse rate per week for morning couples was 2.33 times per week (using couple mean scores); for night couples the rate was 1.96 times per week ($t = 1.12$, $p < .15$).

**Mismatched Couples**

As hypothesized, mismatched couples reported significantly less marital adjustment ($p < .04$) as measured by the MAT (Locke & Wallace, 1959) than matched couples (see Table 3). As a measure of marital conflict, spouses reported the average number of arguments they have with their partner each week. Results showed that, as hypothesized, mismatched couples reported significantly more arguments per week than matched couples (see Table 3).

As hypothesized, mismatched couples spent significantly less time in serious conversation each day than matched couples (see Table 3). Mismatched couples also reported spending significantly less time in shared activities each week than matched couples. As hypothesized, mismatched couples reported significantly less frequent intercourse per week than matched couples although the difference was small (see Table 3).

Mismatched couples with high marital adjustment (defined as those with mean couple MAT scores $\geq 120$) ($n = 30$ couples) were compared with the matched couples ($n = 68$ couples) on the WIQ Conflict Resolution to test the hypothesis that mismatched couples with high marital adjustment are more flexible and adaptable in their marital problem solving than matched couples. As hypothesized, mismatched but happy couples reported significantly higher conflict resolution scores ($\bar{X} = 8.45$) than matched couples ($\bar{X} = 6.62$ ($t = 3.01$, $p < .000$).

DISCUSSION

The hypotheses tested in this study provide a partial test of Kantor and Lehr's (1975) theory and support Adams and Cromwell's (1978) research on the negative consequences of dysynchrony of sleep/wake patterns on marital adjustment. The results of this study support their view that dysynchrony of circadian rhythms leads to lower marital adjustment and satisfaction; more specifically, dysynchrony was related to
Table 3
Dependent Variable Mean Scores*, Standard Deviations, and t Scores for Matched and Mismatched Couples

<table>
<thead>
<tr>
<th>Dependent Measures</th>
<th>Match of Circadian Rhythms</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Matched Couples (n = 68)</td>
<td>Mismatched Couples (n = 82)</td>
<td>t</td>
</tr>
<tr>
<td>Marital Adjustment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean score</td>
<td>116.02</td>
<td>106.94</td>
<td>1.76*</td>
</tr>
<tr>
<td>S.D.</td>
<td>34.28</td>
<td>28.70</td>
<td></td>
</tr>
<tr>
<td>Weekly number of arguments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.60</td>
<td>2.13</td>
<td>1.83*</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.51</td>
<td>1.48</td>
<td></td>
</tr>
<tr>
<td>Daily number of minutes of serious</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conversation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>58.33</td>
<td>45.64</td>
<td>1.66*</td>
</tr>
<tr>
<td>S.D.</td>
<td>38.40</td>
<td>27.31</td>
<td></td>
</tr>
<tr>
<td>Weekly number of minutes spent in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shared activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>381.46</td>
<td>178.87</td>
<td>3.85***</td>
</tr>
<tr>
<td>S.D.</td>
<td>339.00</td>
<td>229.11</td>
<td></td>
</tr>
<tr>
<td>Weekly frequency of sexual intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.81</td>
<td>2.46</td>
<td>2.06**</td>
</tr>
<tr>
<td>S.D.</td>
<td>.97</td>
<td>1.04</td>
<td></td>
</tr>
</tbody>
</table>

* a Couple scores
*  p<.05
** p<.01
*** p<.001

Marital conflict as measured by low marital adjustment test scores and a high reported number of arguments per week. Mismatched couples also reported less time spent together in serious conversation, less time spent in shared activities, and less frequent sexual intercourse. Thus, in terms of Kantor and Lehr's (1975) theory, it appears that mismatched circadian rhythms inhibited the couples from meeting their affectional needs (e.g., sexual intercourse, serious conversation and shared activities), their power needs (e.g., cooperation and functional decision making), and their meaning needs (i.e., low marital adjustment, high conflict, less time in serious conversation and shared activities, and less frequent sexual intercourse may erode an individual's self worth, meaningfulness, and optimism about the future).

Contrary to expectations, for matched couples, night couples were not significantly more involved in extra-familial social activities than morning couples as measured by the average number of times per week a couple socializes together with other couples or friends. It was believed that night couples have more energy in the evening and prefer evening activities compared to morning couples. However, morning couples may value socializing with other couples as highly as night couples. Since evenings are usually the most convenient and socially acceptable times to socialize with other couples or friends, morning couples appear to do so with the same regularity as night couples. However, it is possible that morning couples may not stay out as late as night couples, instead choosing to begin their evenings of socializing earlier in the evening or ending earlier. Alternatively, morning couples may choose to socialize with others more often.
during the daytime (e.g., breakfast or lunch dates), particularly on weekend days. More research is needed to confirm these possible explanations.

For matched couples, morning couples reported they engaged in sexual intercourse more often in the morning than night couples while night couples engaged in sexual intercourse more often in the evening than morning couples. These findings may reflect the peaks in efficiency and energy levels that each type of couple experiences in a 24-hour period. Morning couples are more likely to have more energy for sex in the morning while night couples should have more energy later in the evening. However, the majority of both kinds of couples reported having sexual relations in the evening. This may be a reflection of the powerful social norm that sexual intercourse is an evening activity or the lack of privacy in the morning due to the presence of early-waking children. More research is needed to determine if morning couples do, indeed, believe that “sex is an evening activity” even though their circadian rhythms afford them more energy in the morning.

Contrary to expectations, morning couples did not report less frequent sexual intercourse than night couples. Since morning couples reported sexual intercourse more often in the morning than night couples, they may have developed ways of securing privacy in the morning by arising earlier than the children or keeping the bedroom door locked. Further research is needed to test these explanations.

Mismatched couples reported less marital adjustment than matched couples. This result is similar to Araoz’s (1977) finding that couples whose biorhythms are out-of-phase have more marital conflict. As Adams and Cromwell (1978) emphasize, matched couples have a greater opportunity for togetherness and a lesser opportunity for separateness than mismatched couples. Since there is a general bias among middle-class couples—of which the couples in this study are an example—toward togetherness in marriage (i.e., the expectation of shared activity and communication), being matched and hence, spending more time together, increases marital adjustment and satisfaction. Important questions still to be answered are: (a) How do matched couples who spend considerable time together create interpersonal distance? and (b) How do mismatched couples create togetherness? (Adams & Cromwell, 1978).

Mismatched couples reported significantly more marital conflict than matched couples. These mismatched couples are “out-of-phase” (Adams & Cromwell, 1978), experiencing efficiency and energy peaks at different times during the day. The possibilities of frustration and resentment are high among these couples as they may argue about bedtime, how much sleep each partner needs, and preferences for day or nighttime activities. The morning spouse may resent the night spouse for sleeping-in; the night spouse may be frustrated when his/her partner wants to retire “just as the evening is getting a good start.” It is common for mismatched couples to present complaints that neither spouse is meeting the other’s needs in terms of affection, mutual sensitivity, and general thoughtfulness (Araoz, 1977). For example, Araoz (1977) describes a case in which the wife complained that the husband was always busy when she needed him to share her feelings, to talk about the things that bothered her, and that in general, he was aloof, cold, and undemonstrative. The husband, on the other hand, reported feeling lonely because his wife would never time her comments and criticisms correctly, always demanding things from him when he was “in the wrong mood” or busy with other things.

For mismatched couples, both spouses commonly complain of feeling lonely. The morning person who retires earlier in the evening misses relating to the other spouse at bedtime; the evening person often reports watching television or working on hobbies or projects alone in the evening without the benefit of conversation with the morning person who retired earlier in the evening. Being out-of-phase with each other may also
lead to decreased opportunities for sex. This is because one person goes to bed for the purpose of sleep while his/her partner may be there for sex or to talk.

The thesis of this paper is that a mismatch of circadian rhythms leads to marital difficulties, i.e., a lack of serious conversation, less time spent in shared activities, less frequent sexual intercourse, more marital conflict, and less marital adjustment. However, it is important to note that a mismatch may only be a reflection of a more basic mismatch between two individuals. For example, a low frequency of sexual intercourse also may be caused by differences in sexual desire or appetite (Kaplan, 1979). Little time spent in serious conversation may reflect differences in values, priorities, or common life experiences.

The concept of matching circadian rhythms has important implications for courtship and mate selection. For example, is getting to know each other’s wake and sleep patterns a function of courtship? How do individuals come to recognize each other’s preferred rhythm? Can this only occur as a result of cohabitation? Is a mismatch of circadian rhythms related to basic mismatches in personality traits, interpersonal needs, values, and marital role expectations? Finally, if a mismatch of rhythms is symptomatic of a much more basic mismatch, does this reflect a failure in the courtship process?

Mismatched couples with high marital adjustment scores reported more flexibility in problem solving than matched couples. Perhaps only very committed and otherwise well-matched couples with good problem solving skills can handle the problems their mismatched rhythms cause in the marriage. Research is needed to determine how mismatched but happily married couples cope. Several possibilities exist. Partners may alter the demands made on each other (Araoz, 1977). They may find other support systems outside of the marital relationship itself. Some individuals may be able to modify their sleep/wake pattern to make it more similar to their partner’s pattern.

Darnley (1981) notes that circadian variabilities may be modified by environmental factors such as light, temperature, and social interaction patterns. Social interaction appears to be the most powerful variable of the three in determining the patterning of human rhythmicity. “The search for the perfect complement to one’s rhythm is difficult but is made somewhat easier by the fact that there is usually a degree of accommodation” (Darnley, 1981, p. 33). Kantor and Lehr (1977) refer to such accommodating as “synchronizing.”

It is possible that morningness/nightness is neither innate nor developmentally acquired, but a role assumed in order to cope with certain relationship problems (Adams & Cromwell, 1978). For example, a wife may assume a night orientation in order to avoid sleeping with her morning husband in an effort to cope with a sexual problem. Or, a husband may stay out late at work until he knows his wife is asleep to avoid having sex with her. In these cases the spouse has, in essence, erected a temporal boundary similar to a spatial boundary. Thus, for some couples morningness/nightness may be a result of a marital problem rather than the cause of the problem. Longitudinal research with couples is needed to discover if some individuals, as a result of marital dysfunction, consciously alter their sleep/wake pattern in order to create physical and emotional distance from their spouses and hence, reduce the potential for conflict.

Implications for Premarital Counseling

There are several implications of the results for premarital counseling. First, “the goodness of fit” of sleep/wake patterns for a couple needs to be addressed in premarital counseling much the same way that fit with values and role expectations is determined. The questions developed by Adams and Cromwell (1977) (and utilized in this study) can be asked in order to determine each individual’s preferred sleep/wake pattern. It is also important to determine whether an individual’s circadian rhythm is the result of a forced role (e.g., the person has a job that forces him/her to work at night) or a personality
preference. Other questions to ask include: Have you ever successfully changed your sleep/wake pattern? How did you do it?

In the case of a severe mismatch (i.e., a morning person dating a night person) in which problems between the day person and the night person are already evident, counseling should be directed toward exploring how the mismatch is affecting the couple’s relationship and what accommodation methods, if any, they have tried. Such mismatched couples are usually good candidates for communication and conflict management skills training. Finally, it is important to probe further into the couple’s values and marital role expectations to determine if the mismatch of circadian rhythms is only the “tip of the iceberg” of dissimilarity.

Implications for Marital Therapy

Marital therapists also should be aware of the pervasive influence of circadian rhythms on couple interaction and satisfaction (Darnley, 1981). These marital problems may be symptoms of a mismatch of circadian rhythms: (a) Complaints of loneliness when one spouse goes to bed or stays up without the other; (b) complaints that one spouse is busy or energetic when the other is trying to relax and/or is sleepy; (c) reports that “there never seems to be a good time for us to have a serious conversation”; (d) a low frequency of sexual intercourse without other symptoms of low sexual desire or sexual dysfunction; (e) complaints of moodiness in one or both partners especially in the late evening or early morning; (f) open criticism or resentfulness toward the other person’s sleep/wake pattern (e.g., “He stays up too late instead of going to bed with his wife like a good husband should.”); (g) reports of few shared activities even though the couple enjoys such activities when they occur.

In the therapy process it is important to determine if a mismatch is causing marital problems or is the result of marital problems. This requires including the sleep/wake patterns of both spouses in the relationship history. More specifically, the following questions need to be answered:

1. What was each individual’s sleep/wake pattern prior to the courtship?
2. How did the rhythms change over the period of the courtship (including cohabitation if applicable)?
3. What accommodations should the couple have made or did they make in the early years of marriage? Were they successful?
4. How was the couple’s marital satisfaction related to changes in a sleep/wake pattern? That is, did sleep/wake patterns change as a result of marital dissatisfaction? Alternatively, did a mismatch of rhythms and failure to accommodate result in marital problems?

It is recognized that marital dissatisfaction and sleep/wake patterns may be related in a reciprocal way. Thus, it may sometimes be difficult to determine cause and effect. Including a developmental history of sleep/wake patterns in the relationship history appears to be one good method of determining if an unresolved mismatch of rhythms is causing marital dissatisfaction or spouses are using different patterns as a solution to marital problems, i.e., avoiding each other through temporal distancing. Depending upon the case, marital therapy should focus on either helping the couple understand that mismatched rhythms is a problem that can be resolved in several different ways (Perry & Dawson, 1988) or showing the couple the disadvantages of using this distance regulation strategy as a solution to marital problems. For example, by using this method the couple is not only avoiding their problems by refusing to communicate about them directly, but also causing damage to their sexual relationship.

Marital therapy can focus on helping mismatched couples develop more understanding and sensitivity to each other’s sleep/wake patterns and communicate about them.
more openly. For example, a morning wife should be helped to understand that her night husband is not “lazy” because he sleeps later than she on Saturday morning. Alternately, she is not “boring” because she feels fatigued earlier in the evening than he. There especially may be a need to teach effective communication and problem solving skills for such mismatched couples.

Some mismatched couples may choose to develop support systems outside of the marital relationship itself to help cope with mismatched rhythms. For example, a morning person married to a night person may elect to jog in the early morning with a neighbor or friend rather than asking the night spouse to drag himself/herself out of bed to go.

Perry and Dawson (1988) suggest that a mismatched couple embark on nights out together at an earlier hour so they can enjoy a full evening before the morning spouse becomes too tired. Or, spouses may set aside time to talk with each other during the afternoon or early evening when neither spouse is feeling too sleepy or grumpy.

Couples can also make the best of a mismatch by treating it like any other complementary need. For example, the night person can elect to do the driving in the late evening on trips when the morning person is tired. The same person may be the best choice to stay up late with a newborn, whereas the morning person can more easily get up early with him/her.

In summary, a discussion of circadian rhythms is an important and essential part of assessment in premarital counseling and marital therapy. If there is a mismatch, a determination should be made as best as possible if the mismatch is causing the marital problems or is a result of marital problems. The acknowledgment of circadian rhythms should not make people think that human events are inevitable (Araoz, 1977). On the contrary, it can help a couple understand that intentional sensitivity, understanding, problem solving, and energy are required to “make a marriage work.” Although the evidence is not complete, it appears that many individuals may be able successfully to make minor modifications in their sleep/wake patterns (Adams & Cromwell, 1978; Darnley, 1981; Perry & Dawson, 1988). Therapy goals should center on testing the couple’s ability to yield in their demands, to accommodate to the other’s patterns and to try new behavioral patterns (Araoz, 1977; Perry & Dawson, 1988).

1. One of Adams and Cromwell’s (1978) hypotheses was not tested in this study: For matched couples, morning couples have greater job satisfaction if their occupation(s) demand a regular daytime schedule as opposed to night shift work. Since this hypothesis deals with work satisfaction rather than marriage, it will be tested in a separate study.

2. In addition to the four factors listed in Table 2, Adams and Cromwell (1978) tentatively believed that morning people may differ from night people on two additional factors: (1) overall energy level and (2) values (e.g., morning people may value sunrise and breakfast whereas night people may value sunset and dinner). However, the results of their pilot study showed that the relationships between overall energy level and values and morningness/nightness are not well established. Hence, these two factors were not considered when categorizing individuals in this study.

REFERENCES


