Visions in Leisure and Business

Leisure Behavior of Recent Retirees: Implications for Pre-retirement Planning

Barbara Wilhite
Southern Illinois University

Follow this and additional works at: https://scholarworks.bgsu.edu/visions

Recommended Citation
Available at: https://scholarworks.bgsu.edu/visions/vol4/iss4/8

This Article is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in Visions in Leisure and Business by an authorized editor of ScholarWorks@BGSU.
LEISURE BEHAVIOR OF RECENT RETIREES: IMPLICATIONS FOR PRE-RETIREMENT PLANNING

BY

DR. BARBARA WILHITE, ASSISTANT PROFESSOR

DEPARTMENT OF RECREATION
SOUTHERN ILLINOIS UNIVERSITY
CARBONDALE, ILLINOIS 62901

ABSTRACT

Changes in leisure behavior after retirement were examined using present and retrospective reports of participation. Seventy-five retirees responded to a three part questionnaire. Analysis revealed considerable continuity in leisure behavior from before to after retirement with overall low frequency of participation. Changes occurring in activities and patterns were interrelated. Significant changes were related to health, population, transportation, income, and life satisfaction. Implications for pre-retirement planning are discussed.

LEISURE BEHAVIOR OF RECENT RETIREES: IMPLICATIONS FOR PRE-RETIREMENT PLANNING

INTRODUCTION

Change occurs throughout one's life, but change may be especially prevalent during the later years. Children leave home; retirement from work occurs; income changes; spouse dies; friends die or move away; living arrangements or place of residence may change, health changes, independence may be lost, and so forth. These changes may be interrelated and involuntary. Many hours previously committed to fulfilling obligatory roles now become free for purely personal use. The central focus of life changes from one of work or obligation, to one of leisure.

Today's retiree is a pioneer in the use of leisure after retirement. In addition, while there continue to be many disadvantaged elderly, especially among the very old, today's retiree appears to be better off than ever before. He/she joins the youngest, least impoverished, healthiest, best educated, and perhaps the most satisfied generation of retirees America has ever produced (7). The leisure behavior of this emerging population is an important area of study.
The present research examined leisure behavior of individuals before and after retirement, with particular emphasis on describing change or continuity. Answers to these questions were sought:

1) What types of changes occur in leisure after retirement?
2) If change occurs, is one individual change related to another? (i.e. random change or interrelated change)
3) If change occurs, is it related to other variables, including life satisfaction?

The research has theoretical implications. The literature abounds with theories regarding the aging process, both controversial and contradictory in regard to determinants of successful aging. Three theories, disengagement, activity, and continuity, contain differing perspectives regarding leisure behavior and retirement.

In disengagement theory (6), the aging process was described as a mutual disengaging of the individual and society. Cumming and Henry asserted that withdrawal from the functions and responsibilities of society was necessary, desirable, and inevitable. The well adjusted older person was one who had reached a new equilibrium with society characterized by less activity in both social and nonsocial areas of life.

Havighurst, Neugarten, and Tobin (9) suggested that the older person who aged optimally was the person who stayed active and who managed to resist the shrinkage of his/her social world due to withdrawal by society from the aging person. Activity theorists believed satisfaction was more likely among those elderly who were socially and physically active. In this view, it "is desirable for the older person to maintain the activities of middle age as long as possible and then find substitutes for those activities he or she is forced to relinquish" (9, p. 161).

Proponents of the continuity theory of aging maintain that people will continue to pursue activity patterns consistent with their life experiences. This theory emphasizes the importance of a relatively stable pattern of previously established role behaviors in terms of maintaining life satisfaction (1). "Succinctly stated, what one does for leisure or personal gratification in early adulthood will be pursued without significant variance into old age" (27, p. 212).

Retirement from work may, at the least, present challenges to the use of leisure time. Importance attached to the idea of leisure planning is appearing. Studying changes in the use of leisure from before to after retirement could aid in developing the leisure component of pre-retirement education/preparation programs. Organizations could
then help employees prepare for leisure in retirement and thus contribute to satisfaction during this period of life.

METHOD

Instrumentation

The survey instrument was developed by the researcher. An extensive review of related literature as well as consultations preceded its development. After initial development, the questionnaire was reviewed by a jury of nine experts from across the United States to help ensure validity.

The sample consisted of 75 retirees from the nine state southern region of a large company. Selection of the sample from a population of 439 retirees was accomplished by using a table of random numbers. Each of the subjects was asked to respond to a three part questionnaire.

The first part of the instrument included demographic items pertaining to age, sex, health, marital status, living arrangements, education, income, job classification upon retirement, nature of retirement (voluntary or involuntary), etc.

The second part of the instrument consisted of a number of individually oriented components of life satisfaction. The items included feeling positive about oneself, feeling successful in achieving goals and aims in life, maintaining a positive outlook concerning retirement, receiving the same amount of satisfaction from leisure activity as from work, and feeling life in general is satisfying. Subjects were asked to indicate how often they felt positive, successful, satisfied, etc.

The third part of the questionnaire was designed to determine the pre- and post-retirement:

1) Leisure preferences of the subject.
2) Patterns of leisure activity (i.e. alone, with others, at home, etc.).
3) Constraints affecting leisure activity.

The subjects were asked to answer the questions in the third portion of the instrument once according to how they recalled their use of leisure time before retirement, and again according to their present use of leisure time.
A pilot study was conducted to further improve the instrument and to determine its reliability. The instrument was administered to 10 individuals representative of the sample. Each respondent completed the questionnaire on two different days. The test-retest reliability for the instrument was estimated for responses in the third portion of the instrument. The before and after retirement responses of an individual on the first administration of the questionnaire were compared with the before and after retirement responses on the second administration and the degree of change was noted. The minimum amount of change possible was zero and the maximum amount of change possible was four. Thus, there were 350 change scores for both before and after retirement (35 questions times 10 individuals).

The first calculation used in estimating the test-retest reliability was the percentage of individual responses for which there was a change of two or more, higher or lower, between the first and second administration of the instrument. Only 10 responses, 2.9 percent, changed two or more from the first to the second administration of the instrument for before retirement. For after retirement, only 9 responses, 2.6 percent, changed two or more from the first to the second administration of the instrument.

The second calculation was the mean change between the first and second administration of the instrument. This was determined by summing the 350 change scores and dividing by 350. The mean change was .39 for before retirement and .44 for after retirement.

Overall, the test-retest reliability for the third portion of the instrument was considered to be good. A few minor revisions were made in questions as a result of the pilot study. Additional reliability findings are reported in the results section of the article.

Sample Description

The sample members were retirees from a subsidiary company of a large communications corporation. Job categories within this company ranged from operative and craft positions (entry level; hourly and unionized) to professional and supervision/management positions (salaried and non-unionized).

An employee must have had at least 10 years of service before retirement. It was possible to retire as early as age 50 if the employee had 25 years of service or at age 60 with 15 years of service. Retirement was compulsory at age 70. The company reported the average age of retirement was 62. This region of the company had been providing pre-retirement education programs for less than two years.

Data Analysis
A profile of survey respondents was formulated using frequencies and percentages for each question. The activities, patterns, constraints, and life satisfaction scales were investigated using intercorrelations and reliability information.

Using a paired t-test, the significance of difference between the recall and present responses for the activities, patterns, and constraints scales were determined. Individual questions within each scale were also examined to determine significance of difference.

Further insight into the nature of change occurring in leisure behavior after retirement was sought. The before retirement (recall) mean, the after retirement (present) mean, and the mean change between the two was calculated for the activities, patterns, and constraints scales. Mean changes were then observed to determine the percentage of respondents reporting no change, an increase, or a decrease in leisure behavior from before to after retirement. In addition, mean changes for the scales were analyzed using the Pearson product-moment correlation to determine the relationship between individual changes. Finally, life satisfaction and other selected factors were correlated with the mean changes to examine their relationship.

RESULTS

Sample Results

One hundred and fifty retirees were selected from the population of which 78 (50 percent) responded. Three of the 78 sample members who had taken a full-time job or part-time job involving at least 30 hours per week were eliminated from the study.

The mean age of retirees was 68; the age range was 47 to 88 years. Forty-three percent of the respondents were between the ages of 57 and 68; 47 percent of the respondents were over 69 years old.

The sample was very homogeneous with respect to the demographic variables. Ninety-five percent of the respondents were males and 99 percent were white. Almost all of the respondents were married (91.7 percent), in good to excellent health (76 percent), lived in their own home (97.3 percent), and drove their own car as the primary method of transportation (86.7 percent). Fifty-five percent of the respondents lived in cities of more than 75,000 in population; 19 percent lived in cities of less than 10,000.

The most frequent response (46.7 percent) to pre-retirement
occupation fell in the category of management. Each of the other five categories, ranging from craft to supervision, however, was represented. Variation existed in the highest level of education achieved by the respondents. However, twenty-five percent of the respondents had completed a high school education and 25.3 percent had completed some college education.

The mean pre-retirement income fell in the $20,000-24,000 category. Sixty-nine percent of respondents reported annual pre-retirement incomes over $15,000. Twenty-one percent of respondents reported annual pre-retirement incomes of less than $15,000. Fifty-seven percent of retirees maintained an annual income level of over $15,000 after retirement. The mean post-retirement income, however, dropped to the $17,999-20,000 category.

The major reason for retirement, listed by 58.7 percent of retirees, was "because I wanted to retire". Mandatory retirement age was listed as the major reason for retirement by 21.3 percent of the retirees and health was listed by 17.3 percent.

The mean response for the life satisfaction scale was 2.72 (.5-1.5=seldom satisfied, 1.5-2.5=sometimes satisfied, 2.5-3.5=often satisfied). Fifteen percent of responses were equal to the mean, 27 percent of responses fell below the mean, and 59 percent of responses were above the mean. A majority of respondents indicated an overall feeling of satisfaction with the way they were spending their lives; 77 percent checked the "often satisfied" category.

Scale Results

The activities, patterns, and life satisfaction scales were slightly reduced from the number of original items as a result of reviewing intercorrelation and reliability information. Reliability coefficients for the activities, patterns, and life satisfaction scales were .588, .621, and .788, respectively. Two subscales were formed for the constraints scale. Constraints defining the first subscale related to limitations in opportunities and resources for leisure involvement. This scale was referred to as "resources" and had a reliability coefficient of .680. The second subscale was defined by two types of constraints. The first type of constraint included descriptive items relating to an individual's level of independence. The second type of constraint was defined by items relating to preparedness for leisure. This scale was referred to as "self-sufficiency" and had a reliability coefficient of .659. Abbreviated scale items are listed in Figure 1.

Changes in Leisure Behavior

Analysis of data elucidated several significant findings related to
changes in leisure behavior following retirement. Listed in Table 1 are the mean ratings, standard deviations, mean differences between present and recall responses, t-values, and level of significance for each scale.

Tabulated frequencies for individual items within each scale were utilized to calculate scale means. Mean change was determined by subtracting before retirement means from after retirement means. Mean changes are listed in Table 2.

An increase from before (recall) to after (present) retirement was indicated by a negative mean difference value. An overall increase in the mean rating for each scale is thus indicated. The average frequency with which the respondents participated in leisure activities and experiences, however was relatively low, never exceeding a "sometimes" response. While the mean difference for the activities scale was not statistically significant, examination of individual items within the scale revealed some significance. Differences for the activities of looking at paintings, music, or plays, and taking vacations or traveling were significant at the .05 level. Differences for spending time alone, participating in around-the-house projects, dancing or drinking, watching television, and reading were statistically significant at the .01 level. Of all the activities measured, only vacations/travel and dancing/drinking were less frequently engaged in after retirement.

There was very little change noted in participation patterns from before to after retirement. There were no statistically significant mean differences for any of the patterns.

The mean differences for the two constraints scales were statistically significant at the .01 level. Ratings for the resources scale fell in the "sometimes" category before retirement and the "often" category after retirement. However, due to the wording of the questions contained in this scale, the increase in mean was interpreted as a beneficial change. (Refer to the questions listed in Figure 1). The greatest amount of change from before to after retirement occurred in the self-sufficiency scale. It should be noted however, that average ratings for this scale were in the "seldom" response category. The two constraints scales represented the area of greatest change.

By again observing the mean change ratings, the percentage of individual change was determined. Percentage of individual change in activities, patterns, and constraints from before to after retirement is listed in Table 3.

Slightly over half, 56.4 percent, of the respondents reported either no change or a decrease in leisure activities from before to after retirement; 43.6 percent reported an increase. This tendency was also observed in the participation patterns. Fifty-seven percent of the
respondents indicated no change or a decrease in leisure patterns from before to after retirement; 41.9 percent indicated an increase.

A large majority of individuals reported no change, 46.7 percent, or an increase, 37.8 percent, in resource constraints from before to after retirement. In self-sufficiency constraints, 26.7 percent of respondents reported no change, while 68.7 percent reported an increase from before to after retirement.

The final step in the data analysis was to examine the relationship between individual changes and the relationship of individual changes to other factors. This was accomplished by computing Pearson product-moment correlation coefficients. The correlation coefficients between the change scores for activities, patterns, and constraints are listed in Table 4.

Correlation coefficients for activities indicated a significant positive correlation with participation patterns \((r = .672)\) and resource constraints \((r = .331)\). Increased involvement in leisure activity was associated with an increase in participation patterns and increase in resource constraints. An increase in the resources scale indicated that these constraints had lessened. Thus, it appeared that as time, opportunity, knowledge of community resources, and money became less of a constraint, leisure activity increased. A significant negative correlation \((r = .316)\) was observed between leisure activities and self-sufficiency constraints. Higher frequencies of involvement in leisure activities were associated with lower frequencies of constraints in self-sufficiency.

A similar trend was observed for participation patterns. The coefficient size for patterns indicated significant positive correlation with resource constraints \((r = .438)\), and significant negative correlation \((r = .323)\) with self-sufficiency constraints. Therefore, as participation patterns were more frequent, constraints in resources and self-sufficiency were less frequent.

The resource and self-sufficiency constraints scales did not correlate significantly with one another.

Correlation coefficients between the change scores for leisure activities, patterns, and constraints and other selected variables were examined next and are listed in Table 5.

Leisure activity preferences correlated significantly with health \((r = .544)\), population \((r = .238)\), transportation \((r = .552)\), income \((r = .234)\), and life satisfaction \((r = .475)\). These correlation coefficients indicated that the frequency of leisure activity was higher when the respondent was in better health, lived in a larger city, was less
dependent on others for transportation, and had higher income. Also, increase in life satisfaction was related to increase in leisure activity.

Leisure participation patterns correlated significantly with health ($r=.394$), transportation ($r=.455$), and life satisfaction ($r=.357$). Thus, better health, less transportation dependency, and increased life satisfaction were related to increased frequency in participation patterns.

Constraints defining the resource scale correlated significantly with health ($r=.276$), transportation dependency ($r=.296$), and life satisfaction ($r=.250$). Individuals who were less constrained by resource factors tended to be in better health, more independent regarding transportation, and more satisfied with life.

Constraints defining the self-sufficiency scale correlated significantly with health ($r=.289$), population ($r=.340$), and transportation dependency ($r=.336$). Individuals constrained by self-sufficiency factors tended to be in poorer health, living in cities with smaller populations, and more dependent regarding transportation.

The variables of age, education, and occupation did not correlate significantly with change scores in any of the selected scales. Also, income was not as significant a factor as one might presume. The variables of health, population, transportation, and life satisfaction were most often represented in significant relationships.

**SUMMARY**

Aging optimally has been described as either a desired process of change or a maintenance of continuity. The concepts of change versus continuity may be evidenced in leisure behavior.

Millions of individuals retire from work each year and can look forward to many years in retirement. Changes in leisure behavior of individuals from before to after retirement was the topic of this investigation. The goal was to ascertain the types of changes that occur, the interrelatedness of these changes, and the relationship of other factors to these changes. Information gained in this study can be utilized to assist retirees in planning for the use of leisure in retirement. This information can be incorporated into the leisure component of pre-retirement educational/preparation programs, with particular emphasis on developing educational or therapeutic approaches to meeting identified needs.

The majority of respondents were white males, married, in
good-excellent health, living in their own homes, and independent in terms of transportation. Education and income levels were relatively high. Overall life satisfaction of the sample was high.

Very little change in leisure activities or participation patterns was observed when comparing recall (before retirement) and present (after retirement) means for these scales. Greater change was noted, however, when observing the percentage of individual change. In both instances, tendency toward an increase from before to after retirement was observed.

Changes in activities and patterns appeared to be interrelated as observed in the correlation analysis. There were significant relationships between changes in these two areas and the factors of health, transportation, and life satisfaction. Activities also correlated significantly with population and income.

Significant changes from before to after retirement were observed for both constraints scales. The increase from before to after retirement in the resource constraints scale was interpreted as beneficial, indicating that interests, opportunities, community resource knowledge, and personal income of respondents was adequate after retirement. While the greatest amount of change was a decrease in self-sufficiency from before to after retirement, the frequency with which respondents felt constrained by factors in this scale never exceeded "seldom". Little correlation was present between changes in resource constraints and changes in self-sufficiency constraints. There was, however, significant relationships between the two constraints scales, and the factors of health and transportation. In addition, self-sufficiency constraints were significantly correlated with population and resource constraints were significantly correlated with life satisfaction.

DISCUSSION

Since conclusions are drawn within the limitations of the study, the characteristics of the sample should be reemphasized. Respondents were higher in physical, social, and economic status than individuals selected in a random sample of older Americans would be. However, better health, higher education, higher income, etc. is expected of the emerging older population. Thus, this sample may have more predictive value for the future. Also, the findings are based on measures of central tendency. Individual experience may be different from the average with some perceiving substantial increases in leisure behavior and others substantial decreases.

With changing from work to retirement, one might expect that retirees would perceive themselves to be more involved in leisure activities. The results of this study, however, are in accord with the
findings of other researchers who report little change through the years in leisure behavior (24, 14, 20, 28, 17, 30) and a core of activities that exist and persist throughout the life course (15).

The mean frequency with which respondents participated in leisure activities was low. This finding, when coupled with the findings of continuity, might suggest a problem area. That is, as an increase in the amount of free time is provided through retirement, one's leisure interests or activities might not be adequate to enjoy fully such discretionary time. In this research, there was no real evidence of a trend toward an increased frequency of leisure activities after retirement despite the fact that, in general, circumstances were favorable. Relatively low frequency of involvement in leisure activity before retirement did not appear to be compensated for after retirement. Some researchers suspect that increased nonwork time may not lead to an increase in ideal leisure, but rather may become swallowed up in "maintenance" activities (12). It may be that people in retirement extend the time it takes to do things. "What was previously regarded as schedulebound, instrumental maintenance (cooking a meal, for example) may be extended over longer periods and treated more leisurely" (16, p. 11). Rather than rushing through everyday activities, the individual may refer to set a more comfortable, pleasurable pace (5, Chapter 9).

Results from this research indicated changes in leisure behavior were significantly related to life satisfaction, thus confirming the findings of other researchers (26, 18, 27, 13, 19, 26). Activity does appear important, yet it does not appear to be random activity; perhaps the kind of activity that is meaningful to the individual. The frequency or pattern of participation in activity does not appear to be as important to life satisfaction as one might expect. Perceptions of satisfaction with leisure may positively influence life satisfaction.

The findings regarding continuity in leisure behavior and life satisfaction lend considerable support to the continuity theory of aging. In comparison, there is less support for the activity theory and no discernible support for the disengagement theory. In regard to leisure, congruence seems to be a more important contributor to leisure satisfaction than activity level. Spending time as one wishes appears to be paramount.

When incongruencies did exist in leisure behavior, decreases were most often related to constraints in health, socioeconomic status, transportation problems, population of city of residence, and deficits of self-sufficiency, such as lack of skills and failure to plan how to spend free time. These constraints have also been reported in other studies (18, 20, 31, 13, 8, 22). Since there were no "overriding" barriers observed, decreased participation appears to be a function of a combination of factors.

When increases occurred, these were related to adequacy of
interests, available opportunities, and knowledge about community resources. These findings have been cited by other researchers (29, 32, 11).

Implications for Pre-retirement Planning

Since continuity of leisure behavior is evidenced, the chief benefit of pre-retirement planning, as suggested by Bosse' and Ekerdt (2), would be to enhance pre-retirement experience rather than post-retirement outcomes. The emphasis should be on further developing long-standing leisure inclinations; individuals must be prepared over a lifetime. One might presume that if an individual did not initiate leisure activity during his/her working years, it would be difficult to change this leisure behavior at retirement. Also, it may be fruitless to initiate new activities that do not relate to past experience. Meaningful and satisfying activities and opportunities should be introduced in pre-retirement that can be continued throughout the lifespan.

Another important implication regards activity. It has been suggested that the value of an activity is not only determined by the frequency of engagement in it, but by its meaning and quality; (10, 26) satisfaction obtained may be more important than frequency. Findings of the resent study lend support to that premise. Therefore, traditional ideas about what should constitute appropriate leisure activities, patterns, or frequency should not limit the pre-retirement educational process.

Activity is shaped both by personal preference and opportunity (21, 4). Obstacles limiting leisure opportunities exist, even among a more "advantaged" sample of older adults. Changes occur as people pass through life and these changes may be undesirable. Teaching a kind of flexibility in which individuals reorder and realign their leisure behavior to accommodate these changes may be an important goal of pre-retirement education/preparation programs. As surmised through this study, planning and management strategies designed to relax the effects of obstacles may need to be directed toward more disadvantaged elderly.

Implications for Future Research

Replication and extension of this study is encouraged to provide a more in depth examination of the topic. This study investigated changes in leisure behavior among an "elite" older sample. Similar research studies are needed to confirm these findings and thus provide additional information regarding what is considered to be the emerging retiree. Future research should also be directed toward sub-populations for whom more change has occurred.
A need to study satisfaction in leisure as opposed to leisure behavior is established. Quality and meaningfulness of activity may be more important in predicting life satisfaction than frequency or pattern. Life satisfaction also appears to be multidimensional. Activity is an important factor to life satisfaction, but it is not the exclusive key.

REFERENCES


**FOOTNOTE**

The accuracy of retrospective reports of participation in an activity has received attention from researchers. The presence of a degree of stability in the response patterns suggests that respondents are capable of recalling past participation or nonparticipation (3, 17).
Table 5
Correlations of Change Scores for Activities, Patterns, and Constraints Scales and Other Selected Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Preferences</th>
<th>Patterns</th>
<th>Constraints 1</th>
<th>Constraints 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.051</td>
<td>-.142</td>
<td>.151</td>
<td>.156</td>
</tr>
<tr>
<td>Health</td>
<td>.544**</td>
<td>.394**</td>
<td>.276**</td>
<td>-.289**</td>
</tr>
<tr>
<td>Population of City of Residence</td>
<td>.238*</td>
<td>-.019</td>
<td>-.029</td>
<td>-.340**</td>
</tr>
<tr>
<td>Transportation Dependency</td>
<td>-.552**</td>
<td>-.455**</td>
<td>-.296**</td>
<td>.336**</td>
</tr>
<tr>
<td>Education</td>
<td>.007</td>
<td>-.0385</td>
<td>-.090</td>
<td>-.037</td>
</tr>
<tr>
<td>Occupation</td>
<td>.091</td>
<td>-.043</td>
<td>.105</td>
<td>.142</td>
</tr>
<tr>
<td>Income</td>
<td>.234*</td>
<td>.026</td>
<td>.022</td>
<td>-.118</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>.475**</td>
<td>.357**</td>
<td>.250*</td>
<td>-.106</td>
</tr>
</tbody>
</table>

* Significant at .05 level
** Significant at .01 level
Figure 1. Abbreviated Scale Items

LEISURE ACTIVITY PREFERENCES

1. Look at paintings, music, plays
2. Out-of-door activities
3. Volunteer activities
4. Vigorous exercise
5. Vacations/travel
6. Self-improvement/ educational activities
7. Time alone
8. Around-the-house projects
9. Dance or drink
10. Sing, draw, paint
11. Needlepoint, sewing, knitting
12. Television
13. Reading

PARTICIPATION PATTERNS

1. Group outings
2. Participate with clubs or organizations
3. Pay for facility use
4. Do not pay for facility use
5. Participate at home
6. Participate alone
7. Participate with others
8. Activities require planning

CONSTRAINTS 1
(Resources)

1. Have enough interests/ activities
2. Community provides opportunities
3. Knowledge about available resources is a constraint
4. Have enough money/ personal resources

CONSTRAINTS 2
(Self-Sufficiency)

1. Transportation is a constraint
2. Age is a constraint
3. Sex is a constraint
4. Health is a constraint
5. Have enough free time
6. Previously learned skills or knowledges are constraints
7. Lack of planning is a constraint