Temporal Adaptation: Application with Short-term Psychiatric Patients

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This paper begins with a literature review to investigate temporal dysfunction and its relationship to psychopathology and to adaptation. A specific program begun in a short-term hospital with psychiatric patients is then described. This program uses temporal adaptation as a framework for assessing patients' use of time and for developing methods to increase productive use of time.

Activity histories provide the occupational therapist with important information about patients—their work, their interests, their education, and their use of time. In assessments of psychiatric patients in a short-term hospital, the patients' use of time attracted this author's attention.

Kielhofner, in his article on temporal adaptation (1), provides a conceptual framework for looking at time. Learning, culture, homeostasis, social roles, and habits are discussed by Kielhofner as important in how patterns of activity and time are integrated for successful adaptation. This framework provides a useful basis upon which to devise an evaluation and treatment program for patients.

This paper begins with a literature review to further investigate temporal dysfunction and its relationship to psychopathology and to adaptation. A specific program started in a short-term psychiatric hospital using temporal adaptation as a framework for assessing patients' use of time and developing methods to increase their productive use of time is described.

Two types of problems presented by psychiatric patients appear in the review of the literature. One relates directly to their psychopathology, which may be organic in origin, and the second relates to problems in development that result in poor socialization and an inability to solve problems, set goals, and implement these goals. It is important for the occupational therapist to recognize the difference between these two types of problems. The former will diminish as psychopathology is reduced, whereas the latter problems are areas in which occupational therapy can provide assistance (Kielhofner, G, personal communication).

Psychopathology and Time Distortions
Distortions in the experience of time occur in many types of psychiatric disorders. Some distortions clearly have an organic basis such as memory difficulties related to ECT (electric shock therapy), and alcohol and drug reactions. These disorders may show marked impairment on the mental status examination (a test of cognitive functions—attention, ability to abstract, and comprehension) in orientation to time, place, and person.

Other distortions may be experienced more subjectively; stress and anxiety may contribute to this type of distortion. A striking account of a distorted time experience is reported by a patient in her diary:

Julia lives in a strange time world. Everyday is a thousand years, yet the days behind me all collapse into...
nothing, like a pack of cards. Everyday is so long that a normal human being can't imagine it. Every moment is the same way—long. Nothing within this time world has any meaning for me, which is why the time is so long. ............... (2)

Time perception shows no direct sensory basis (3). However, the perception of time is connected with exteroceptive sensory organs (sight) as well as proprioceptive organs (sensitivity to alternating rhythms of expectation) (4). Lesions in the brain, primarily in the temporal and occipital region, produce disturbances in perceptual skills that interfere with experiencing time. Sequencing, visual and spatial relations, position in space, and movement in space are perceptual skills relevant to time (5).

Many studies of time perception in schizophrenic patients have been reported (6-8). The results are inconsistent because of problems in terminology, a lack of uniform definitions for terms such as time sense, time orientation, and time perception, and because of differences in experimental methods.

A recent study (9) excluded schizophrenic patients with organic signs. The results showed little or no difference between the schizophrenic population and the normal population in time estimation. Thus, time distortions may have an organic component.

Time distortions and their relation to perceptual motor skills is an area for further study. Sensory integration evaluation and treatment may be a beneficial first step in treatment of time dysfunction. Lorna Jean King, in her recent symposium on "Sensory Integration as a Broad Spectrum Treatment Approach," (10) does not see sensory integration in conflict with other frames of reference but as a beginning in the treatment of schizophrenia. This, however, is only a hypothesis that needs testing and verification.

Future Time Perspective and Adaptation

The studies above that emphasize the microstructure of time (time estimation and time duration) have inconclusive results. They are related directly to the symptoms of the psychopathology. In addition, they fail to emphasize the meaningful events that define a person's past, present, and future. These events, called macro-events (1), provide persons with a sense of continuity when viewing their past, present, and future. A distortion in this time sense of macro-events can significantly affect ways of coping and adapting to the environment. The importance of these macro-events has been overlooked by the psychiatrist who traditionally has confined the evaluation of time to the mental status examination.

The ability to project into the future is the temporal mode most deficient within a number of different categories of psychiatric diagnoses (12). Several studies have related future time perspective to schizophrenia, depressive states, suicidal potential, and degree of thought disturbance: for instance, in one study of schizophrenia (13), future time perspective is defined and rated on concepts of "coherence" and "extension." Coherence is the degree to which subjects are able to organize events in the future. Extension is the length of time subjects are able to project themselves into the future. The authors reported significant differences in coherence and extension between schizophrenic and normal people (13).

These methods were also used in a study to measure future time perspective in depressed as well as schizophrenic persons (14). In addition to supporting the previous findings of differences between schizophrenic and normal persons, on measures of extension the authors found depressed persons were less able to project themselves into the future than schizophrenic persons. Schizophrenic persons, on the other hand, showed more difficulty in coherence—organizing their life events logically. However, those with psychotic depressions showed more disturbance in this area than neurotic depressions. From these studies schizophrenic and depressed persons appear less oriented toward the future than normal persons.

Suicidal potential and its relationship to future time perspective has also been investigated (15). Yufit and others found that persons with serious suicidal intent were less able to establish plans and have hope for the future and were extremely limited in their future time perspective.

Fink's study (16) shows a relationship between future time perspective and activity in elderly subjects. Half of the subjects were institutionalized, and half were residents in the community. Activity was measured by the hours subjects spent working (occupation), engaging in a hobby, or participating in an activity related to the organization of the institution. A positive corre-
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reading their comments on the 
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therapy. Patients frequently left 
use of time became apparent after 
the group's purposes—to look at 
how they spend their time outside 
the hospital and to identify what 
they would like to change, and how 
they would implement these changes. 
Responsibility for identifying 
problems with time management 
was placed upon the patient. Moti- 
vation is also important if change is 
to occur. Patients who were in the 
group the first week were requested 
to instruct new members about the 
group. Continual restatement of 
the goals was helpful, not only for 
the old members to refocus their 
goals, but also for the new members 
by providing a rationale for the 
process of examining their use of 
time.

After the introduction to the 
group patients were given a folder 
with a series of activities to complete. 
The "pie of life" (17) activity consists 
of a circle divided into 24 equal 
sections corresponding to 24 hours. 
The patients were instructed to fill 
in each section with how they spent 
their time before they were hospital- 
ized; to color each area with a coded 
color; to count and record the 
number of hours spent in each 
activity; and, after having a look at 
their previous use of time, they were 
asked if they were satisfied with 
how they are spending their time 
and what they would like to see 
changed. This activity is graphically 
useful in revealing the areas of 
dysfunction.

The second activity emphasizes 
goal setting and is a simplification 
of Alan Lakein's steps to time 
management (18).

Further assessment of time use is 
individualized and is based on the 
patient's awareness of problems 
and need for change. For example, 
some patients have worked on voca- 
tional tests, work evaluations, and 
activities related to leisure interests. 
Some have explored various com- 
munity agencies or programs to 
achieve a goal.

Outcome or Results. Initially, 
some patients responded negatively 
to the group and walked out of the 
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Implementation 
A short-term inpatient unit at Payne 
Whitney Psychiatric Clinic provided 
the setting for the implementation 
of the time management program. 
The need to further assess patients' 
use of time became apparent after 
reading their comments on the 
activity history, a part of the initial 
evaluation given in occupational 
therapy. Patients frequently left 
blank, crossed out, or responded 
"no way, too personal," or "this is 
my problem," to the section where 
they were asked to complete a sched- 
ule of a typical weekday and weekend 
day before being hospitalized.

A group was organized with a 
focus on leisure time skills as a first 
tempt attempt to respond to the need for 
productive use of time. Patients 
participated in a planned activity 
that was followed by a discussion. 
Although active participation en- 
sued, the group did not help individ- 
als with their personal time 
management problems. A more 
thorough evaluation of this area of 
the patient's life seemed necessary 
together with restructuring the 
occupational therapy program to 
emphasize the temporal dimension.

The time management group 
was organized for patients who, 
according to the occupational ther- 

apy intake information, had problems 
managing their leisure and 
work time outside the hospital. It 
met for 1 hour once a week until the 
author left the setting, a period of 
about 8 months. It was based upon a 
two-part time-oriented evaluation 
and implementation.

The group's goals (terminal 
behaviors) were for the patient to be 
able to: 1. indicate how time was 
spent outside the hospital; 2. classify 
activities in relation to work, play, 
and self-care (patients have a difficult 
time identifying what is work, play, 
or self-care); 3. identify a need for 
change; 4. formulate goals for one's 
self; 5. organize these goals into 
priorities; 6. formulate specific 
activities to accomplish these goals; 
and 7. begin working on these 
activities.

Group Format. At the beginning 
session, the patients were told about 
the group's purposes—to look at 
how they spend their time outside 
the hospital and to identify what 
they would like to change, and how 
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Outcome or Results. Initially, 
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for them to examine their use of time publicly. For those who stayed and followed the time-management evaluation, problems were identified faster and intervention could occur more quickly. The first step in making a change is being aware of the problem. Because it is difficult to deny a problem with time management when it is so clearly defined by the time schedule of the patient, the evaluation format revealed temporal adaptation problems in one session. For example, a young patient who spent his day at home watching TV revealed his low self-concept resulting from his appearance. In the group discussion (which occurred in each session) another patient suggested he contact Over-Eaters Anonymous to help him achieve his goal of losing weight. The patient looked up the telephone number of this organization in the phonebook but became resistant when it was time to make the call because he had never used the telephone. The patient role-played the situation and was able to follow through on the call. Through identifying a problem with use of time, other problems were identified—a weight problem, poor self-image, and lack of communication skills via the telephone. As Kielhofner states (1), the temporal adaptation frame of reference focuses on an important dimension of one's life, a dimension that encompasses all areas of occupational therapy.

However, a time management program cannot be handled effectively in just a one-hour weekly session, for it must encompass all areas of a person's life. Patients should make some decisions and have responsibility for using their time more productively. Time management could become the central theme around which to structure the entire occupational therapy program.

Plans are to use this time evaluation with all patients as part of the initial occupational therapy evaluation upon admission. In addition, many of the methods used in the future time perspective studies such as time questionnaires, story completions, and future autobiographies could be incorporated into the program. The remainder of the program could be divided into work, leisure, and self-care modules with patients attending one, two, or all three areas. These areas would be divided into activities such as recreational therapy, dance therapy, and crafts, with referrals based on individualized needs, rather than on the traditional group approach. It appears that an individualized program, not group-oriented activities, may be more appropriate for patients in a short-term hospital setting.

Summary

Future time perspective, defined as an ability to project into the future and to logically organize future events, is deficient in a number of people. Understanding the future time perspective of patients may help improve their ability to engage in purposeful activity in their everyday schedules. Development of programs emphasizing work, play, and self-care in relation to future orientation seems indicated, especially where length of hospital stay is short.

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REFERENCES