Temporal Adaptation: Application with Short-term Psychiatric Patients

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. Every-
day 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 dis-
turbances 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 schizo-
phrenic patients with organic
signs. The results showed little or
no difference between the schizo-
phrenic 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 signifi-
cantly affect ways of coping and
adapting to the environment. The
importance of these macro-events
has been overlooked by the psychia-
trist 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 schiz-
ophrenia, 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 exten-
sion between schizophrenic and
normal people (13).

These methods were also used in
a study to measure future time
perspective in depressed as well as in
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 rela-
tionship 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 rela-
tionship between future time per-
spective 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), engag-
ing in a hobby, or participating in
an activity related to the organization
of the institution. A positive corre-

The American Journal of Occupational Therapy 329
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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.
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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
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 indi-
viduals 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 prob-
lems 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
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-
community agencies or programs to
achieve a goal.

Outcome or Results. Initially,
some patients responded negatively
to the group and walked out of the
room. It was apparently threatening
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-image was caused by his weight problem; the patient would not go out because of 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 phone book 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.

Acknowledgments
The author wishes to acknowledge Sharon Coleman, Ph.D., for her editorial assistance, and Susan B. Fine, M.A., OTR, FAOTA, and Gary Kielhofner, M.A., OTR, for their support and encouragement. This article is based on a presentation given at the AOTA 58th Annual Conference, San Diego, California.

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