At Columbia, George Draper stimulated Murray’s interests in psychological factors affecting illness, and he stayed on at Columbia to earn an M.A. in biology in 1920. Returning to Harvard, Murray went to work with L.J. Henderson, applying the Henderson-Hasselbach equation to the acidity of the blood. Between 1919 and 1923, Murray published 10 papers on his physiological research.

Following two years as a surgical intern at Presbyterian Hospital in New York, Murray was awarded a research fellowship at the Rockefeller Institute for Medical Research in New York. He studied the development of chicken embryos, publishing 10 papers in that field, while simultaneously working towards his Ph.D. in biochemistry from Cambridge University in England.

**Discovers psychoanalysis and “depth psychology”**

In 1925, Murray first met the Swiss psychiatrist Carl Jung, and the two became lifelong friends. With his discovery of the writings of Herman Melville, the author of *Moby Dick*, Murray began to develop his theory of personality, using Melville as a case study. Although never published, Murray’s biography of Melville had a major influence on the scholarship of the day, and Murray’s published articles and book chapters introduced the application of Jung’s “depth psychology” to literary criticism. At about this time, Murray began his relationship with Christiana Morgan, who remained his lover and coworker until her suicide in 1967.

After earning his Ph.D. in 1927, Murray became an instructor at Harvard under Morton Prince, a psychopathologist who had founded the Harvard Psychological Clinic. Following Prince’s death in 1929, Murray became director of the clinic, despite the fact that he had never taken a psychology course. Together with the neuropsychiatrist Stanley Cobb, Murray moved the focus of the clinic from experimental research in hypnosis and multiple personality to Freudian and Jungian psychoanalysis. He also introduced these subjects into the Harvard curriculum. Murray pursued his study of personality or “personology.” At a time when American experimental psychologists studied rat behavior, Murray and his interdisciplinary research team studied single individuals on a variety of levels. With his staff, Murray published *Explorations in Personality: A Clinical Study of Fifty Men of College Age* in 1938. For decades, this remained the principle text for personality theory. With Morgan, Murray developed the **Thematic Apperception Test**, in which the subject is asked to tell stories about a series of pictures. This test remains an important tool in clinical psychology. Murray became an assistant professor at Harvard in 1929, associate professor in 1937, and professor of clinical psychology in 1948.

Murray served in the Army from 1943 until 1948, selecting personnel for the Office of Strategic Services (which later became the Central Intelligence Agency) and training agents in the United States and abroad. He was awarded the Legion of Merit by the War Department in 1946.

**Further develops his theory of “personology”**

After his discharge from the Army as a lieutenant colonel, Murray joined Gordon Allport in the new Department of Social Relations at Harvard. There his research interests broadened further. With Clyde Kluckhohn, he began studying personality in society and investigated personality from the viewpoint of the dyadic interaction—the idea that a relationship between two people could be viewed as a single system with equal input from both partners. He also studied the role of mythology in personality and in society. Murray was best known, however, for his development of a human motivational system of social needs. He described behavior as a function of the interaction of individual needs, such as a need for achievement or a need for affiliation, and the “press” of the environment.

Interestingly, Ted Kaczynski, the serial bomber who killed and injured several people with mail bombs, was a participant in one of Murray’s psychological experiments when he was a Harvard undergraduate. The study had to do with identifying men who would not break under pressure.

Murray held numerous honorary doctorates and was a member of the American Academy of Arts and Sciences. He retired in 1962 as a professor emeritus, the same year that his wife died. In 1969 he married Caroline Chandler Fish and became step-father to her five children. Murray died in Cambridge, Massachusetts, in 1988, at the age of 95. In his memory, Radcliffe College established the Henry A. Murray Research Center for the Study of Lives.

Margaret Alic

**Further Reading**


Music therapy

A technique of complementary medicine that uses music prescribed in a skilled manner by trained therapists.

General effects of music therapy

Music has been used throughout human history to express and affect human emotion. The health benefits of music to patients in Veterans Administration hospitals following World War II became apparent, leading to its use as a complementary healing practice. Musicians were hired to work in hospitals. Degrees in music therapy became available in the late 1940s, and in 1950, the first professional association of music therapists was formed in the United States. The National Association of Music Therapy merged with the American Association of Music Therapy in 1998 to become the American Music Therapy Association.

Music can be beneficial for anyone. Although it can be used therapeutically for people who have physical, emotional, social, or cognitive deficits, even those who are healthy can use music to relax, reduce stress, improve mood, or to accompany exercise. There are no potentially harmful or toxic effects. Music therapists help their patients achieve a number of goals through music, including improvement of communication, academic strengths, attention span, and motor skills. They may also assist with behavioral therapy and pain management.

Depending on the type and style of sound, music can either sharpen mental acuity or assist in relaxation. Memory and learning can be enhanced, and this used with good results in children with learning disabilities. This effect may also be partially due to increased concentration that many people have while listening to music. Better productivity is another outcome of an improved ability to concentrate. The term “Mozart effect” was coined after a study showed that college students performed better on math problems when listening to classical music.

How music therapy is used

Music is used to form a relationship with the patient. The music therapist sets goals on an individual basis, depending on the reasons for treatment, and selects specific activities and exercises to help the patient progress. Objectives may include development of communication, cognitive, motor, emotional, and social skills. Some of the techniques used to achieve this are singing, listening, instrumental music, composition, creative movement, guided imagery, and other methods as appropriate. Other disciplines may be integrated as well, such as dance, art, and psychology. Patients may develop musical abilities as a result of therapy, but this is not a major concern. The primary aim is to improve the patient’s ability to function.

Learning to play an instrument is an excellent musical activity to develop motor skills in individuals with developmental delays, brain injuries, or other motor impairment. It is also an exercise in impulse control and group cooperation. Creative movement is another activity that can help to improve coordination, as well as strength, balance, and gait. Improvisation facilitates the nonverbal expression of emotion. It encourages socialization and communication about feelings as well. Singing develops articulation, rhythm, and breath control. Remembering lyrics and melody is an exercise in sequencing for stroke victims and others who may be intellectually impaired. Composition of words and music is one avenue available to assist the patient in working through fears and negative feelings. Listening is an excellent way to practice attending and remembering. It may also make the patient aware of memories and emotions that need to be acknowledged and perhaps talked about. Singing and discussion is a similar method, which is used with some patient populations to encourage dialogue. Guided Imagery and Music (GIM) is a very popular technique developed by music therapist Helen Bonny. Listening to music is used as a path to invoke emotions, pictures, and symbols from the patient. This is a bridge to the exploration and expression of feelings.

Music therapy is particularly effective with children. The sensory stimulation and playful nature of music can help to develop a child’s ability to express emotion, communicate, and develop rhythmic movement. There is also some evidence to show that speech and language skills can be improved through the stimulation of both hemispheres of the brain. Just as with adults, appropriately selected music can decrease stress, anxiety, and pain. Music therapy in a hospital environment with those who are sick, preparing for surgery, or recovering postoperatively is appropriate and beneficial. Children can also experience improved self-esteem through musical activities that allow them to succeed.

The geriatric population can be particularly prone to anxiety and depression, particularly in nursing home residents. Chronic diseases causing pain are also not uncommon in this setting. Music is an excellent outlet to provide enjoyment, relaxation, relief from pain, and an opportunity to socialize and reminisce about music that