The Psychology of Dreams

Sigmund Freud

Introduction

During different times in history, dreams have been approached from many different angles, including from a psychological view. There is no question that people dream. The questions lie with how and why. Different psychologists have attempted to explain its role within the context of human functioning. The psychological approach to dreaming has led to various theories as to why people dream based on the different psychological approaches to human functioning, and it has also led to the development of different opinions as to how people dream.

Psychological Approaches to Dreams

There are many approaches to why people dream. The different theories are directly related to the five major approaches to psychology. Psychodynamic, humanistic, behavioral, cognitive, and the newest approach, neuroscience, have each offered their own contribution to the explanation of dreaming. Some approaches over-lap and others offer new insights as to why humans dream.

Psychodynamic Approach

Psychologists that take the psychodynamic approach support the idea that behavior is a result of unconscious forces in which there is little control (Feldman, R. p. 19). With this view comes the idea that dreams and slips of the tongue are the result of actual feelings within an individual. Through dreams, these unconscious wishes or desires are exposed.

Sigmund Freud was one of the first psychologists to really study dreams. His psychodynamic approach to dreaming led to his theory of unconscious wish fulfillment. The idea behind this theory is that dreams represent wishes that the dreamer subconsciously wants to be fulfilled (Feldman, R., p. 146). According to Freud, a person's dreams contain a latent and manifest meaning. The manifest meaning is the obvious meaning behind a dream and the latent meaning is the hidden meaning. Freud believed that in order to truly understand a dream, the manifest meaning has to be analyzed and picked apart.

Freud, and those that believed as he did, felt that a person's dreams were so unpleasant that the mind covered the true meaning by creating less threatening, or manifest meanings, of them. Picking apart the manifest meaning would lead to a better understanding of the latent content of the dream (Alperin, 2004). It is believed that a

person's thoughts, feelings, and memories are represented by concrete objects and symbols in a person's dreams.

For example, Freud and others believed that if a person dreamt about things such as climbing a stairway, flying, or walking down a hallway, the latent meaning is about that of sexual intercourse (Feldman, R, p. 146). Many books have been published that try to help people figure out the meaning of a dream by listing the meanings that certain objects hold. The psychodynamic approach opened up the door for further study of the topic. It led to the creation of different theories by those that agreed with certain aspects of the psychodynamic approach. It also led to different theories that completely rejected the psychodynamic approach.

Humanistic Approach

Psychologists that take the humanistic approach feel that humans are continually trying to better themselves to reach their full potential (Feldman, R. p. 20). This approach lies in the fact that one has free will and the ability to make his or her own decisions about his or her life. There is a relationship between the psychodynamic and humanistic approach to dreaming.

The humanistic approach is very similar to the psychodynamic approach. Both approaches focus on the internal thought process of the mind to explain dreaming. According to both approaches, dreaming is about the self and always has to do with the individual having them. The individual will be present in the dream in some way or form (Alperin, focusesR., 2004). However, where the psychodynamic approaches focus on the unconscious wish, the humanistic approach leans towards the self and how the self deals with external environments and stimuli.

“In self-state dreams, the self is depicted as being at the threshold of disorganization or in a state of disequilibrium. The portrayal is of an internal loss of balance due to over stimulation, a drop in self-esteem, or the threat of a breakdown of the self, and the self’s reaction ranging from fragmentation and panic to mild shifts in mood. Kohut thought that these dreams were attempts by a healthier aspect of the self to regain a sense of balance through visual imagery” (Alperin, R., 2004). In other words, dreams are a way for the mind to regain a sense of self-balance.

B.F. Skinner

Behavioral Approach

Those that take the behavioral approach agree to the idea that it is best to concentrate on behavior that can be observed (Feldman, R. p. 19). The common idea is the behavior can be modified by modifying the environment. This approach rejects the inner workings of the mind and focuses on the behavior that can visually be observed by another. If one can alter the environment that is causing the behavior, then one could alter the behavior.

Most research that is done on dreaming is done on the “unconscious wish” or the “biological process,” however, those that take a behavioral approach to dreaming focus on the whole human organism and the behavior that is produced while dreaming. According to B. F. Skinner, dreaming is neither a biological process nor a hidden wish or memory (Dixon, M. & L. Hayes, 1999). Instead, he theorizes the dreams are seeing things in the absence of seen things. Rapid eye movement that takes place during the REM stage of sleep is the result of “seeing” something and does not conclude that mental processes are taking place. Skinner uses his operant and conditioning theories to describe dreaming.

Behavioral psychologists that focus on dreaming, emphasize the fact that behavior needs to be observed while awake and sleeping. This will allow for a gradual reflection of how human behavior influences human dreams (Dixon, M. & L. Hayes, 1999). Behavioral psychologists support the idea that dreams are not memories, but instead a reaction the the external environment of the individual.

Cognitive Approach

The cognitive approach focuses on how individuals think, understand, and know about the things that happen around them (Feldman, R. p. 20). They emphasize the fact that internal mental processes affect the way that people behave in their environments. Psychologists that take the cognitive approach to psychology use their knowledge to explain the cognitive process and function of dreams.

Those that take the cognitive approach to dreaming believe that the mind is the center of all dreams. They agree that dreaming is not an unconscious wish of the individual, but a response of the brain while it is resting. Certain areas of the brain shut down while a person goes through the stages of sleep. During REM sleep, which is the most common time for dreaming, areas of the brain shut down that are essential to waking human functioning (Krippner, S. & Combs, A., 2002). Areas of the brain may also go into overdrive.

The dreams-for-survival theory is the idea that dreaming allows a person to process information from the day and this is how a person learns and develops memories (Feldman, R., p. 147). This may be the way in which the brain stores, processes, and learns information. This makes sense since many of the dreams that people have often relate to parts of their everyday lives.

There have been many experiments that show how important sleep and dreaming is when considering learning and memory. In one particular experiment, three laboratories asked volunteers to perform three different tasks. The tasks were a visual texture test, a motor sequence test, and a motor adaptation test. The tests were explained to each volunteer and then they went to sleep. Some people were woken during the night, and some were not. The volunteers that were not woken during the night and who were able to complete full sleep cycles, including REM sleep and dreaming, performed better than those people that were woken every so often through the night (Stickgold, R., 2005). Researchers believe that this evidence shows a great connection between, learning,

memory, sleeping, and dreaming. The cognitive approach to dreaming focuses on how important dreaming is to human function.

Neuroscience Approach

The neuroscientific approach is all about the biological process of humans (Feldman, R. p. 19). The focus is on how neurons fire within the body and the brain. This is a relatively new approach to psychology, but not necessary to dreaming. Some experts believe the Freud's psychodynamic approach to dreaming was based on the available information about the brain during his time.

The theory is the idea of activation-synthesis. This theory holds the idea that REM sleep triggers memories that are lodged somewhere in the brain. Random electrical impulses and firing during sleep, trigger the brain to remember certain memories (Feldman, p. 147). This theory was developed by psychiatrist J. Allan Hobson, and he theorized that the human brain needs to make sense of the world, even during sleep, and uses random memories to create a logical storyline.

According to Hobson and his original model, dreams are not unconscious wishes but instead a part of biology and the neurons that fire in the brain stem during sleep (van den Daele, L., 1996). In Hobson's view, dreams are meaningless and are only present because the brain and body are still functioning while a person is sleeping. Many other researchers and psychologists have built and expanded Hobson's original theory. However, it still is the basis for the neurological explanation of dreams.

The Sleep Cycle

Psychological Processes of Dreams

There are many theories as to why people dream and the functions that they serve. However, there seems to be only a couple of explanations as to the exact psychological process of dreams. The biological process of dreams was greatly enhanced with the finding that sleep involves a REM stage. It was discovered in 1953 by Nathaniel Kleitman (van den Daele, L., 1996). The REM stage of sleep is the considered one of the most fundamental parts of sleep and dreaming. Each psychological approach to dreaming has its own explanation as to the exact process of dreaming.

It is known that the sleep cycle consists of 4 stages plus the REM stage. Each stage can be recorded using and EEG, or an electroencephalogram. This device records electrical activity is the brain (Feldman, R., p. 79). Each stage is different than the next and produces different brain waves on the EEG.

When a person first falls asleep, they enter stage 1. During stage 1 of sleep, brain waves are rapid and of low-amplitude. People may see still images, but this is not dreaming (Feldman, R., p, 142). Dreaming really begins with the onset of stage 2 and becomes more apparent as a person falls into the deeper sleep cycles. Each stage of sleep may experience some form of dreaming, although vivid dreams are more likely in REM sleep.

As the sleep cycle moves into stage 2, brain waves begin to slow down. As stage 2 progress, it becomes harder and harder to rouse a person from sleep. Dreaming can begin during stage 2 sleep, however emotions and auditory stimuli are more common than visual images (Pagel, J., 2000). Sleep stages differ greatly. Everything from the depth of sleep, intensity of dreaming, eye movements, muscle tone, brain activation, and communication between memory systems will change with each stage that progresses.

Stage 3 and 4 are the hardest times to try to rouse a person from slumber. Both stages show slow brain waves (Feldman, R., p. 142). Like stage 2, stages 3 and 4 will be accompanied by dreaming, however, the dreams will be more emotional and auditory than visual. The four stages of sleep are not considered as important as REM sleep. Many psychological approaches emphasize the importance of REM sleep.

REM sleep is also known as rapid eye movement sleep. This final stage of the sleep cycle is accompanied by an irregular heart rate, an increase in blood pressure, and breathing rate increases (Feldman, R., p. 143). The fact that they eyes move back and forth like reading a book, give the name to this type of sleep. The muscles seem to be paralyzed,however in some people this does not happen leading to abnormal sleep.

REM sleep is the major time for dreaming. Dreams can happen any time during the sleep cycle, however dreams are more vivid and more easily remembered when they occur in the REM stage (Feldman, R., p. 144). Since the discovery of REM sleep in 1953, REM sleep has been the main focus for the study of dreams.

There has been research done to support the theory that REM sleep may be the most important part of the sleep cycle. In experiments, those that were allowed to sleep, however not allowed to enter the REM stage, performed more poorly on tasks the following day. Those that were allowed to complete all sleep cycles, including REM faired significantly better on tasks the following day (Dixon, M. & Hayes, L. 1999). The importance of REM sleep varies depending on which psychological approach is describing it.

The cognitive approach to dreams focuses on the psychological process of memory and learning during sleep and the REM cycle. Cognitive research on dreams suggests that memory formation may begin in stage 2 and reach full peak by stages 3 and 4 (Stickgold, R., 2005). The process is finalized in REM sleep. If REM sleep is deprived, the memory and learning process will not be finalized.

The neuroscience approach to dreams relies on the idea the dreaming is a neurological process. Experts emphasize the fact that certain areas of the brain turn on and off during sleep, especially in the REM stage of sleep. The prefrontal cortex becomes disengaged during sleep (Krippner, S. & Combs, A., 2002). This area of the brain is responsible for working memory and the ability to keep important facts in mind as tasks are completed. With this area of the brain disengaged during sleep, it is not surprising to researchers that dreams often quickly change plot and older memories find their way into current dreams.

Not all areas of the brain shut down. There is research to suggest that certain areas turn on and may become heightened during sleep. For example, the limbic system in the body almost seems to go into overdrive during sleep. The limbic system is responsible for emotion. Some researchers suggest that this is one reason dreams are very high in emotion (Krippner, S. & Combs, A., 2002). Since many dreams are accompanied by high levels of emotion, the idea is not beyond acceptable.

The behavioral approach to dreaming describes the psychological process of dreaming as a result of the environment and stimuli that a person experiences. Research has been done to suggest that their content can be influenced by introducing certain stimuli prior to a person going to sleep

(Dixon, M. & Hayes, L. 1999). In many experiments, participants dreamed about certain objects and auditory and visual stimuli that were introduced just prior to the onset of sleep.

The humanistic and psychodynamic approach to dreams does not focus too much on their psychological process. Some say the if Freud had been aware of REM sleep and sleep cycles during his research on dreams, his theory would be different than the one that he proposed (van den Daele, L., 1996). These approaches focus on the unconscious mind and the self. Very little of the concepts deal with how a person dreams.

How a person dreams and why remains to be a topic of study by psychologists and research alike. While there is some disagreement about the main functions of dreams, many psychologists agree that there are some cases where dreaming becomes out of the ordinary, even abnormal in nature. These disorders may indicate an underlying psychological condition, or a problem with processing in the brain.

Dreams can be abnormal and cause a significant amount of stress for the dreamer.

Normal and Abnormal Dreaming

According to Robert Feldman, author of Understanding Psychology 9thedition, there has been a struggle to define the word abnormal (Feldman, R., p. 511). The normal psychology of dreams is that everyone does it, whether they are remembered or not. Some will be vivid and easily remembered, others will be vague and easily forgotten upon waking. There are some dreaming disorders that would be considered abnormal by some experts.

For most people, dreams are nothing out of the ordinary. On average, a person will dream about 150,000 times if they live to be 70 years old (Feldman, R., p. 145). Most of them will be about everyday events, many will not even be remembered. Certain objects may be present in many dreams, while others will have strange plots and take place in out of the ordinary places.

About 25 times a year, on average, a person will experience what is known as a nightmare. These dreams cause fear and anxiety in the dreamer (Feldman, R. p. 145).

They are not out of the ordinary and are experienced by almost everyone at some point or another. Nightmares are not the product of a psychological problem in the brain.

Night terrors are worse than nightmares and are usually experienced by children after stress or trauma (American Academy of Family Physicians, 2005). Night terrors will cause a very rapid heart rate and sweating. A child may also scream, have their eyes open, but be unable to answer or remember what happened. They lessen as children get older. Psychological therapy has been proven successful to aid children that suffer from night terrors. To some, they are considered an abnormal pattern to sleep and dreaming.

“REM behavior disorder is characterized by vivid, action-filled, violent dreams that the dreamer acts out, sometimes resulting in injury to the dreamer or the sleeping partner” (Pagel, J., 2000). This disorder is common among Parkinson's Disease patients and males that are in middle-age. Testing done on patients that suffer from REM behavior disorder show abnormalities on the brain stem and lesions on the brain.

There are many things that can interfere with sleep and dreaming. Many things can influence dreams and people can even learn to control their content. The more research that is done on this topic, the more information will be discovered about the human brain. This will lead to more information about the entire process of sleep and dreaming. Researchers will no doubt develop more theories and approaches to as more information becomes available.

Conclusion

There will probably never be an agreement among psychologists as to why and how people dream. One's opinion will be based upon what approach one has the strongest pull towards. What is for certain is that people dream. Strange, vivid, colorful, or scary dreams, whether they serve a purpose or not, are a part of life. Psychologists and researchers will continue to try to explain dreaming and dreaming processes; however, it may take a greater understanding of the human brain in order to do so.