Placebo effect

In research, a scientifically significant response that cannot be explained by physiological variables and is assumed to be psychological in origin.

Placebos are substances with no known pharmacological value that are given to members of a control group in an experiment. In studies determining the effectiveness of a particular drug, for example, the experimental group is given the drug being studied and the control group is given a placebo, which is made to look exactly like the actual drug. Neither group, nor the researchers, knows which received the drug and which the placebo. If the members of each group show similar responses, the placebo effect has been produced. For reasons not completely understood, the patients given the placebo have experienced the effects of the drug without actually taking it. In such cases, the drug itself is considered ineffective.

The placebo effect has been noted since ancient times, when animal parts or other naturally occurring substances were given as treatment for various human diseases and ailments. Throughout medical history, patients have recovered from illnesses after healers employed substances or methods that scientifically should have no effect. It is believed that patients' expectations that their condition will improve plays a major role in producing the placebo effect.

The use of placebos in psychotherapy is controversial, with some critics contending that it links therapists with “quack” treatments rather than legitimate, scientifically measurable methods. However, most researchers agree that the placebo effect, while not completely understood, plays a major and beneficial role in both physiological and psychological treatment.

Further Reading


Play

Activity that is not required, but is enjoyed.

While the term “play” may refer to an extremely varied range of activities, certain broad, defining characteristics have been noted. Perhaps the most basic one is that play is something that is not required. Although the enjoyment derived from it may be needed emotionally, no single play activity itself is necessary for survival. Thus, play is referred to as “autotelic”—it is engaged in for its own sake, with the reward inherent in the activity itself. Nevertheless, in spite of its detachment from survival and financial gain, play is engaged in wholeheartedly. During the time allotted to play, it commands a person’s entire attention.

Play takes place in a realm divorced from ordinary reality and governed by its own rules, which may be more complex and absolute than those of many “serious” activities. It is also bound in terms of both time and space. The period during which one engages in play has time limits: it begins, proceeds, and inevitably ends when one returns to “real life.” Play is also set apart in space—a person generally goes somewhere special (even if it is only the “play room” or the “playground”) to engage in play. The relationship between play and tension has also been noted. While tension is not absent from play itself, the ultimate result is the reduction of tension and conflict. Based on this feature, play has often been viewed as a “safety valve” for the harmless discharge of tensions and conflicts.

In children, play is a necessary vehicle for normal physical, social, and cognitive development. The well-known early 20th-century American psychologist G. Stanley Hall (1844-1924) viewed the evolution of children’s play as recapitulating the evolution of the human species. Individually, play develops in stages that correspond to a child’s social and cognitive development. Initially, a child’s play is solitary in nature. Next comes parallel play, where children are in each others’ company but playing independently. Socially, the final stage is cooperative play, which consists of organized activities characterized by social roles.

Jean Piaget formulated a series of developmental stages of play that corresponded to the successive stages in his influential theory of cognitive development in children. The sensorimotor stage (birth to approximately two years old), when children are focused on gaining mastery of their own bodies and external objects, is characterized by “practice play” consisting of repeated patterns of movement or sound, such as sucking, shaking, banging, babbling, and, eventually, “peekaboo” games in which objects are made to repeatedly disappear and reappear. As children learn more about the properties of objects and learn how to manipulate them, they begin to monitor the effects of play on their environment, and their relationship with that environment becomes increasingly systematic.

The preoperational stage (ages 2-7 years) is marked by the ability to master symbolic functions, including the association of objects with words, and the transition from an egocentric focus to an awareness that events have causes outside themselves. At this stage, children begin to engage in make-believe games marked by the use of objects for purposes other than their intended function. Between the ages of 4 and 7, when their thinking is still dominated by intuition rather than logic, children first become interested in games characterized by rules, structure, and social interaction. As they move through the concrete operational stage (ages 7-11), during which categorizing activities and the earliest logical operations occur, the types of rules governing their play and the reasons for following them change. At first, rules are centered on the sensorimotor aspects of play and largely provide structure and repetition. Gradually, they become more focused on the social aspects of play and are connected with acceptance by the group. By the fourth, or formal operations stage (ages 12 and higher), with the gradual emergence of a mature ability to reason, competitive games and games with codes of rules begin to predominate.

While other psychologists have proposed schemes that vary from this one theory, there is general agreement on its broad outlines. Some additional categorizations of children’s play that have been proposed include diversive play, composed of aimless activities that serve as a diversion when a child is bored; mimetic play, which is repetitive, structured, and symbolic; and cathartic play, which is therapeutic in nature.

One of the first to use play in therapy with children was Hermine Hug-Hellmuth in 1921, following Freud’s work with “Little Hans,” a five-year-old boy with a phobia. British psychoanalyst Melanie Klein used play as a source to a child’s unconscious from which she could make interpretations, starting in 1919. Just as adults used free association to communicate about their unconscious and talk to communicate about their feelings, theorists reasoned that children communicate through their natural play what they cannot yet verbalize. Play therapy was used by Anna Freud to help children develop a closer connection to the therapist. A more structured approach came about in the 1930s with David Levy using play therapy to help children work through and re-enact stressful situations to release them. In keeping with Carl Rogers’ non-directive play work in the 1940s, Virginia...