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Suggestion, Suggestibility, and the Placebo Effect

Lars-Gunnar Lundh

■ The purpose of the present chapter is to discuss the relation between suggestion, suggestibility, and placebo effects. The first part of the chapter specifically focuses on the nature of placebo effects. In the second part of the chapter, the concepts of suggestion and suggestibility are analyzed, and a theoretical approach to suggestive processes of influence is described. Finally, the third part of the chapter contains a discussion of the relationship between suggestive processes and placebo effects.

The nature of placebo effects

A placebo effect, by definition, is (1) a positive effect on the person's well-being which occurs (2) as the result of some kind of treatment, but which (3) cannot be accounted for by the specific, or characteristic ingredients of the treatment (Grünbaum, 1981, 1984; Lundh, 1987, 1992). It has become increasingly clear that there are non-specific effects of this kind involved in all kinds of medical and psychological treatments. Researchers both in medicine and psychotherapy try to control these non-specific effects in order to find out about the more specific effects of various treatment methods. In pharmacological research this is routinely done by comparing new drugs with pharmacologically inert placebos under double-blind conditions. In this case, all kinds of effects that are not due to the biochemical properties of the drug are lumped together as "placebo effects". During later years, however, researchers have also become increasingly interested in the nature of placebo effects as such (e.g., Critelli & Neuman, 1984; Kirsch & Rosadino, 1993; Harrington, 1997).

A Definition

It is generally assumed that placebo effects are due to various kinds of psychological processes, like the patient's belief in the efficacy of the treatment, response expectancies, or various aspects of the doctor-patient relationship. Some researchers (e.g., Kirsch, 1997; Wagstaff, 1981) tend to define placebo effects exclusively in terms of the patient beliefs or expectancies. But although these kinds of beliefs and expectancies

may well be responsible for at least an important part of the placebo effect, it seems unwise to define placebos in this way, since it cannot be excluded a priori that, for example, pharmacologically inert substances can have effects also through other means (e.g., through certain kinds of anxiety-reducing aspects of the doctor-patient relationship, which are not mediated by the patient's belief in the efficacy of the treatment). In an earlier paper (Lundh, 1987), placebo effects in medical treatment were therefore defined as *psychologically mediated effects that are due either to the patient's belief in the efficacy of the treatment, or to other aspects of the therapeutic relationship*. If placebo effects are defined in this manner, a number of consequences can be deduced:

Placebo Effects are Part of All Kinds of Treatment

First, it is important to note that if placebo effects are defined in this way, then it follows that placebo effects can be part of all kinds of medical treatment, since (1) patients always believe more or less in the efficacy of a given treatment, and (2) the doctor-patient relationship is always present in all kinds of treatment. That is, even pharmacological, surgical and other medical treatments which have a demonstrable effect also tend to produce placebo effects, in addition to the specific medical effect. Although such treatments are not pure placebos, they involve important placebo components. Among other things, this means that research on placebo effects need not rely on a deceptive administration of pure placebos, like sugar pills, to patients, but could be carried out by systematically adding various psychological aspects to the medical treatment. The effects of a more personal relationship between doctor and patient, for example, can be studied by using this kind of relationship with half the patients, while treating the other half "as usual".

Disentangling the Components of the Placebo Effect

As used in medicine, the placebo concept is merely a way of lumping together all kinds of psychologically mediated effects of the treatment. These effects are not of immediate interest to the traditional medical researcher, who is primarily interested in the strictly medical effects of the treatment, and from this perspective it may be sufficient to view placebo effects as a kind of error variance. From a psychological perspective, on the other hand, it is of great interest to focus on the placebo effect and disentangle its various components.

This, of course, becomes even more obvious when we consider the various attempts that have been made to carry over the placebo concept into psychotherapy research. When used in psychotherapy research, the concept of placebo effects - or non-specific effects, which is often the preferred expression - is most often a way of lumping together all kinds of suggestion effects, response expectancies and effects of the therapeutic relationship, in contrast to the specific therapy techniques that are used. What is needed here is a theoretical and empirical separation of these various factors, and an analysis of their respective role in the therapeutic process.

Placebo Effects and Positive Emotional Change

Placebo effects represent merely one example among many of how psychological processes can affect a person's health. A considerable amount of research indicates that stress, anxiety, anger and depression, at least in their more chronic forms, can have adverse effects on people's health (e.g., Cohen & Herbert, 1996; Littman, 1993; Miller, Smith, Turner, Gujjarro, & Hallett, 1996). Emotional processes may affect physiological processes involving the autonomic nervous system, the endocrine system, and the immunological system, and may thereby influence various aspects of a person's health. Placebo effects are part of the positive aspect of this psychosomatic relationship.

Spontaneous Remission and Placebo Effects

Just like chronic forms of negative emotion may have deleterious effects on people's health, it can be assumed that positive emotional changes of a more persistent kind can promote a person's health. Developing a new important relationship to a loved person may, for example, lead to a significant positive emotional change that may potentially affect a person's health. Getting a new meaningful and stimulating job may similarly lead to positive emotional changes that are conducive to good health. If improvements in health occur as a result of these kinds of events, we do not speak about placebo effects (since they do not take place as the result of medical or psychological treatment) but instead we label this spontaneous remission. It is possible, however, that the psychological mechanisms here are very similar to those involved in placebo effects. When a person's health improves as a result of positive emotional changes that are due to real life events, we categorize this as spontaneous remission; when health improves as a result of positive emotional changes that are due to being in treatment, we categorize this as placebo effects - the processes whereby emotional changes produce changes in health may be of the same kind in both cases.

Emotional Effects of Being in Treatment

With regard to placebo effects, the question that should be asked is this: What kinds of positive emotional change can occur as a result of being in treatment? An actual improvement of health, of course, may affect a person's emotional state, and hence produce psychological effects on health in addition to the medically based improvements. This means that the curative process may involve an interaction between medical and psychological processes.

Emotional change may affect physiological processes in different ways, either acting directly on the physiological level, or by having indirect effects on physiological processes by serving to motivate the patient to new health-promoting behaviours. The new hope that is generated by the patient's coming to believe in the efficacy of the treatment, for example, might have a direct physiological effect, but it might also serve to motivate the patient to follow the therapist's prescriptions, or to undertake the kind of therapeutic work that is required. An increased self-esteem that is generated by the therapist's empathic response may likewise act via different paths: it may produce a

direct reduction of the patient's stress, anxiety, depression, and frustration, but it may also make the patient more self-assertive and self-confident in his interactions with others, which indirectly affects his or her health.

The potential for placebo effects as a result of various kinds of positive emotional change, of course, presupposes that the patient is in a more or less negative emotional state, or what Frank (1974) has called a state of "demoralization" as the result of his or her illness. The present theory implies that the potential for placebo effects increases as a function of the degree of negative emotion experienced by the patient. This is consistent with empirical evidence that placebo effects are reported more frequently in patients who experience anxiety and depression (Gallimore & Turner, 1977). A patient who manages to keep a genuinely positive emotional attitude despite his or her illness will probably be helped by this attitude, but will be less susceptible to placebo effects.

Suggestion and Suggestibility

The concept of suggestion, which played an important role in early psychological theory and research, fell largely into oblivion during the second part of the 20th century. The concept has, however, recently reappeared in critical discussions of psychotherapy and psychoanalysis (Grünbaum, 1984; Wachtel, 1993), and in research on leading questions in forensic psychology (Gudjonsson, 1989), and it has also been the subject of a special volume (Gheorghiu, Netter, Eysenck, & Rosenthal, 1989) which summarizes historical, theoretical, and empirical aspects of this area of research. Several writers have pointed out the ubiquity of suggestive forms of influence in human interpersonal processes. As argued by Gheorghiu et al. (1989, p. x), "depending on the specific situation and habitual factors, every person turns out to be susceptible to suggestive modes of influence", and "no field of application dealing with interpersonal relationships can seriously do without considering the mechanisms of suggestive factors". Schwanenber (1993) similarly argues that all individuals who are influencing others in any way (e.g., psychologists, doctors, teachers, parents, partners, friends, trainers, colleagues, politicians, etc.) make more or less use of suggestion.

One possible reason for the relative neglect of suggestion and suggestibility in present-day psychology is a lack of conceptual clarity and theoretical analysis in this area. In order to facilitate analysis and discussion, Lundh (1998) introduced some new terms: the person who does the influencing was called the *suggestor*, whereas the person who is being influenced was called the *suggestant*. In this terminology, suggestion may be defined as a form of communication, or interpersonal priming, whereby (a) one person (the "suggestor") intentionally or unintentionally influences another person (the "suggestant") by means of verbal communication, non-verbal behaviours, and/or other contextual factors, (b) in such a way that the suggestant takes over intentions, feelings, beliefs, or desires from the suggestor, and (c) where this process of influencing relies on the automatic activation of meaning structures in the suggestant, in such a way that he or she is not aware of the influencing that is taking place.

This means that, although suggestion rests on unintentional, non-rational processes in the suggestant, it may involve both intentional or unintentional processes in the suggestor. Unintentional forms of suggestive influencing may be expected to occur inevitably in all interpersonal functioning: i.e., even without being aware of it we are constantly engaged in processes of suggestive influence on each other. Intentional forms of suggestion may be used both to manipulate others in the service of the suggestor (for example, in commercial contexts), or to facilitate processes that are in the interest of the suggestant (as, for example, in medicine and psychotherapy).

Common to these forms of suggestive influence is that they do not rely on verbal arguments. They thereby differ from genuine persuasion, which basically involves the use of arguments. They also differ from reciprocal forms of communication, where there is an intention that the person who is communicated to should grasp the communicative intention of the person who does the communicating. Suggestive forms of influence rather have the character of interpersonal "priming".

Levels of Suggestive Influence

By means of these processes the suggestor may influence the suggestant at various levels in his or her psychological functioning; suggestion, for example, may affect a person's perception, behaviour, cognition, emotion, or motivation.

First, suggestion may influence the person's overt behaviour, as in so-called ideomotor responses; the most well-known example of this is the body-sway test.

Second, it may influence his or her sensory-perceptual processes, for example by modifying a certain kind of sensory or somatic perception, like pain.

Third, suggestive influencing may take place on the cognitive level, as when a certain belief or expectation is induced in the suggestant. So-called interrogative suggestibility (Gudjonsson, 1989), where the suggestant is influenced by means of leading questions, is an example of cognitive suggestion. Interrogative suggestibility seems to be a separate kind of suggestibility, which does not correlate with the motor and sensory kinds of suggestibility (Gudjonsson, 1986).

Fourth, suggestions may influence a person's emotional state. This may take the form of "emotional contagion", where one person by expressing his emotional state influences another person to enter the same kind of emotional state, and which may cause a whole crowd of people to enter similar emotional states. It is possible, for example, that a psychotherapist who expresses hope and optimism in a positive emotional manner may thereby influence his patient's emotional state in the same direction.

Fifth, suggestions may also influence a person's motivation, as when the suggestor succeeds in instilling a certain desire or motive in the suggestant. A parent who shows a great deal of enthusiasm about a certain kind of activity, for example, may cause a child to develop a desire to take part in the same kind of activity.

Since perception, behaviour, cognition, emotion and motivation are inextricably linked in a person's psychological functioning, suggestive influences on one level may, of course, have effects also on other levels. For example, suggestion may act on the emo-

tional level via the induction of cognitive "response expectancies", i.e., expectancies about one's own way of responding emotionally. An interesting thing about "response expectancies", as Kirsch (1985) has demonstrated, is that they tend to be self-fulfilling: when we expect to respond with anxiety, relaxation, joy, or depression, our very expectations tend to produce these feelings. This means that a suggestion which induces this kind of expectation is thereby operating also on the emotional level.

Suggestion, Persuasion, and Communication

Most writers on suggestion have stressed the relative absence of rational judgment as one of its essential characteristics. McDougall (1908, p. 100), for example, defined suggestion as "a process of communication resulting in the acceptance with conviction of the communicated proposition in the absence of logically adequate grounds for its acceptance". Suggestion in a way is similar to association. In an associative process, one item suggests another without the mediation of critical-reflective thinking. The same seems to apply to suggestion; in suggestion, one person (the suggestor) influences another (the suggestant) without the mediation of rational thinking on the part of the suggestant.

If suggestions occur on different levels (perceptual, behavioural, cognitive, emotional, and motivational), however, it follows that suggestion does not only involve what McDougall calls "the acceptance with conviction of the communicated proposition" - what is communicated can also be a feeling, an intention, or a desire. The important thing, however, is that in suggestion there is always some kind of mental content that is communicated. There are other forms of social interaction, where one person influences another to behave, perceive, think, or feel in a certain way, but where this influence does not take the form of a communication of a certain kind of mental content, and is therefore not a case of suggestion. For example, one person may behave sympathetically towards another person and thereby influence the other person to like him, but this does not involve the communication of a mental content and is not to be categorized as a suggestive kind of influence. A person who behaves cruelly towards another person may similarly cause that person to hate him, but this would not count as suggestion. What is lacking in these two cases is the communication of a certain kind of mental content that can be identified in both persons.

Suggestion, then, is a communicative process. At the same time, however, suggestion does not involve any communicative intention in Grice's (1957) sense. A communicative intention, according to Grice's analysis, involves an intention to communicate a certain mental content to another person by getting him or her to understand the intention of bringing this about. What is lacking in suggestion is precisely this latter part. In suggestion, the suggestor communicates a certain mental content to the suggestant, either unintentionally or intentionally, but even if it is a matter of intentional suggestion the suggestor has no intention that the suggestant should understand this intention.

Suggestion is not synonymous with persuasion, where a person is persuaded to

change his beliefs or attitudes by means of arguments, and where the persuader's communicative intention is generally transparent. The concept of "persuasion" refers to a communicative process which makes use of verbal arguments, with a clear communicative intention, whereas the concept of "suggestion" refers to a communicative process which does not rely on arguments or communicative intentions in Grice's (1957) sense. This does not, however, mean that persuasion and suggestion are entirely separate processes; on the contrary, suggestion may play a potentially important role for the acceptance of the arguments that are used in one person's attempt to persuade another. For examples, a person's verbal argumentation may be accompanied by non-verbal behaviours which have a highly suggestive impact, and without which the verbal arguments would remain ineffectual.

Suggestion and rational argumentation can combine in various ways. Suppose one person wants another person to engage in a critical discussion on a certain topic. How is this done most efficiently? By means of rational arguments ("I think we should discuss this topic, because...") or by means of suggestive forms of influence (non-verbal expressions of interest, enthusiasm, etc.)? In the latter case, we would have an example of a suggestion on the motivational level, that is designed to instill a desire to engage in such a discussion in the suggestant.

According to the definition above, we may speak of suggestion on the motivational level if the suggestor instills a desire in the suggestant without the mediation of rational deliberation. In the above-mentioned case, it could even be said that suggestion is used to further the rational exploration of a certain idea. This means that, even though suggestion basically involves a non-rational, uncritical way of responding, it may combine with rational thinking, and even facilitate such thinking. Human communication probably very often involves various combinations of suggestion and rational thinking. It may even be questioned whether pure rationality is possible. Rational discussion probably always takes place against a background of suggestibility.

Suggestion as Interpersonal Priming

In suggestion, the suggestor communicates a certain mental content to the suggestant, either unintentionally or intentionally, but even if it is a matter of intentional suggestion on the suggestor has no intention that the suggestant should understand this intention. In this sense, suggestion has the character of an interpersonal priming process.

The concept of priming is of central importance in a variety of research areas in psychology, e.g., research on implicit memory (e.g., Roediger, 1990; Schachter, 1987) and social cognition (e.g., Fiske & Taylor, 1991). "Priming" refers to the influence that stimulus information presented to a person at one time will have on this person's way of interpreting new information at a later time, without his or her being aware of this. As pointed out by Fiske and Taylor (1991), "it is crucial in priming studies that subjects do not think that the primed interpretation comes to mind because it was previously provided to them...., but instead that subjects think the primed construct comes to mind because of the stimulus itself" (p.258). In suggestion, also, certain beliefs, feelings,

desires or intentions are primed in the suggestant, without his or her being aware that they have been implanted there by the suggestor.

Priming is an automatic, non-conscious process, which remains intact even in patients where higher mental functions are severely disturbed. Amnesic patients, for example, who are unable to remember a list of words consciously, still are primed by these words in the sense that these words will influence how they respond to ambiguous word stems later on (e.g., Roediger, 1990). Much social information is also inherently ambiguous, and social perception is therefore heavily influenced by the accessibility of various categories, i.e., which categories are primed at the moment. For example, exposing people to positive or negative trait terms causes people soon afterward to interpret ambiguous behaviour as correspondingly positive or negative because of the meaning that had been primed (e.g., Higgins, 1989).

Since we are subject to a constant stream of incoming stimuli in our normal waking states, we are in a state of being continuously primed by our everyday environment. Suggestion may be seen as a subcategory of these priming processes, namely where the priming is done by another person as part of social interaction. Some ideas, intentions, feelings, etc., will be primed more frequently than others, which means that each person's social environment will implicate a certain "suggestive climate".

Suggestion and the Activation of Meaning Structures

A basic assumption of the cognitive paradigm in psychology is the positing of some kind of internal meaning structures (variously labeled as "schemata", "mental models", "mental codes", "semantic networks", etc.), whereby each person makes sense of the objects and events in his/her world. At the most basic level (Lundh, 1983; 1995), meaning structures may be defined as structures in the human mind/brain which (1) develop as the combined result of genetic predispositions and individual experience, and (2) result in relatively stable patterns of perception, cognition, emotion and motivation, i.e., relatively stable patterns of assigning meaning to objects, events, actions, etc.

In these terms, suggestion may be defined as a kind of social influence which relies on the automatic activation of meaning structures, to the exclusion of more critical-rational ways of thinking. When a suggestion activates a person's meaning structures, this activation may be assumed to spread in his or her network of meaning structures. Depending on the nature of the network involved, this process may involve (1) more or less of elaboration of the external information that is received, and (2) different kinds of elaboration. One kind of elaboration takes the form of critical-reflective, systematic-analytic processes, in which the person critically considers the suggestive message, and weighs the pro's and con's of the various arguments involved. This is what Chaiken (1980) refers to as "systematic information processing". It is carried out with a certain degree of effort and control, it involves the activation of self-structures of a meta-cognitive kind, and it makes the person less susceptible to suggestion.

However, there is also another kind of elaboration which takes the form of a more spontaneous unfolding of associative and imaginal processes, without effort or cons-

cious control. This kind of effortless, non-critical elaboration probably has the opposite effect of making the person more suggestible. Empirical evidence indicates that this kind of spontaneous elaboration is more common in individuals who are high in hypnotic responsiveness (e.g., Crawford, 1989). It may be hypothesized that suggestibility is higher in people who either (a) tend to elaborate less, or (b) tend to engage in spontaneous-imaginative elaboration more than a critical-reflective elaboration.

It is possible that the tendency to engage in one of these two different kinds of elaboration, rather than the other, depends on the nature of the associative links in the person's network of meaning structures. Simonton (1989), for example, argues that people differ in their distribution of associative strengths. At one extreme are persons who are so cognitively constituted that the overwhelming majority of their associations are quite strong and firm, and at the other extreme are persons in whom the majority of associations are far weaker, but still prominent enough to have behavioural and emotional effects. An analytical person, according to Simonton, has a network with a limited number of quite strong and firm associations, whereas an intuitive person has much more numerous but weaker associative links. The latter, he assumes, may lead to an impulsive openness to experience which makes the person more able to detect uncommon features of an occurrence. Such openness to experience might also imply a greater suggestibility.

It also seems that a person's self-structures may play an important role for his degree of suggestibility. Gudjonsson's (1983, 1988; Gudjonsson & Lister, 1984) research on interrogative suggestibility, for example, shows that this kind of suggestibility correlates with lack of self-esteem, external locus of control, low assertiveness, and fear of negative evaluation.

Suggestibility as a Function of Meaning Structures

From this perspective, the question to what extent suggestibility is a stable trait takes on a new meaning. A person's suggestibility might be conceived as a suggestibility profile, which depends both on the form and the content of the specific meaning structures that he/she has acquired as the result of genetic equipment and past experience, and on the suggestive climate that characterizes the situation he/she is in. This is in line with Mischel and Shoda's (1995) cognitive-affective system theory of personality, according to which individual differences in the organization of social behaviour are characterized by distinctive and meaningful profiles of situation-behaviour relations. As has been made abundantly clear in research on personality, individuals are characterized not only by stable individual differences in their overall level of behaviour, but also by distinctive and stable patterns of variability across situations. Mischel and Shoda (1995) refer to these patterns of variability across situations as situation-behaviour profiles, and see these as essential expressions of the underlying personality system. What is referred to here as a person's "suggestibility profile" may be regarded as one example of such a situation-behaviour profile.

Some meaning structures may be strongly biologically determined. Of these, some

may be common to human beings in general, and could thus form the basis for a kind of general human suggestibility. It is possible, for example, that certain kinds of non-verbal signals (facial expressions, tone of voice, etc.) may be commonly categorized as signs of trustworthiness, due to some kind of genetically fixed meaning structures which have proved adaptive during evolution. Verbal messages accompanied by these non-verbal signals would, then, automatically activate these meaning structures in such a way that the person immediately tends to accept the verbal contents of the message.

Other meaning structures may be strongly culturally determined, and hence form the basis for a kind of suggestibility which is shared by most members of a given culture. Culturally based beliefs in magic and witchcraft, for example, would make members of this culture ready to accept suggestions from a sorcerer or medicine-man.

But, at least in non-homogeneous individual-centered Western cultures, a large part of people's suggestibility is probably rather idiosyncratic, since it is based on meaning structures that may differ from one person to another. Since people's belief systems and values may differ considerably, they may also be expected to show rather different suggestibility profiles. Whereas homeopathic prescriptions may be strongly suggestive to one person, scientifically-sounding prescriptions from a doctor of established medicine may be much more suggestive to another person.

Intentional and Unintentional Suggestion

In the prototypical case of suggestion, the suggestor has an intention to influence the suggestant in some respect. He or she may want the suggestant to behave, perceive, think, or feel in a certain way. This kind of intentional suggestion, therefore, rests on a certain degree of communicative skill, general psychological knowledge, and empathy in the suggestor. However, as argued by Lundh (1998), suggestion may also be unintentional, in the sense that one person may influence another to adopt his or her own beliefs, feelings, desires, etc., without any explicit intention of doing this. In both cases, there is a process of interpersonal priming, but in the latter case this process occurs rather as a by-product of the interaction of two individuals and their particular meaning structures.

Intentional suggestion requires a certain degree of skill. Consider, for example, a naive suggestor who wants the suggestant to adopt a certain belief, but tries to achieve this in such a crude way that the suggestant perceives this as an attempt from the suggestor to control and manipulate him, with the result that the suggestant becomes rather more opposed to the suggestor's belief. This would be an example of what Brehm (1966) has called "reactance". Although there is an intended suggestion in this case, there is no real suggestion taking place. This illustrates that suggestion is a social-psychological process which takes place between people, and that requires some degree of skill if it is to be used intentionally. That is, in order for intentional suggestion to occur, it is not sufficient that the suggestor acts with the intention to produce a suggestive influence. The suggestor must also possess a certain degree of skill, which includes at least a tacit knowledge (Polanyi, 1958) of some basic parts of human psychological

functioning. A knowledge of (or at least an implicit acquaintance with) the phenomenon of reactance, for example, may make the suggestor less directly intrusive.

A skilful use of non-verbal behaviour is another aspect of intentional suggestion; there is evidence, for example, that both loudness and speed of speech affect the perceived credibility of the speaker, and this kind of knowledge may be used by a skilful suggestor (Wallbott, 1992). Similarly, since degree of uncertainty in the suggestant is known to lead to an increased suggestibility, a skilful suggestor may use techniques for intensifying the subject's uncertainty in order to increase his or her responsiveness to suggestion. These kinds of effects were demonstrated by Binet (1900), and are regularly used in Ericksonian psychotherapy (Rossi, 1976).

Must suggestion be intentional and deliberate, or can we speak of suggestion taking place even without the suggestor being aware of it? It seems obvious that a person may respond in the same way to the communicative behaviour of another person, whether the other person has any intention of causing such an effect or not. Leading questions, for example, may suggest the same answer, whether the suggestor has any intention to lead the suggestant in a certain direction or not. If we admit that this is a kind of "unintentional suggestion", then it seems reasonable to argue that suggestion is ubiquitous in human interaction. Without being aware of it, we are constantly engaged in processes of suggestive influence on each other.

What requires skill, in the sense that was discussed above, is intentional suggestion. Intentional suggestion is used to achieve a certain goal. Unintentional suggestion, on the other hand, is not used as a means to an end and requires no skill. This also means that unintentional suggestion which takes place need not be in the interests of the suggestor. It is a possibility that is worth exploring, however, that a large part of human interpersonal influencing takes place by means of such unintentional interpersonal priming processes.

Suggestion, Empathy, and the "Tuning" of Meaning Structures

In the present theoretical perspective, skilful, intentional suggestion is based both on (1) a good (tacit or explicit) knowledge of common human meaning structures, and (2) the suggestor's empathic capacity, i.e. his ability to understand the suggestant's more idiosyncratic meaning structures.

According to a common meaning structure, for example, behaviours categorized by the perceiver as signs of conviction are seen as signs also of accuracy. Tacit knowledge of this meaning structure makes it possible for a suggestor to influence a person's beliefs and behaviour by speaking with conviction and authority. On the other hand, unintentional suggestion may take place by the same route, if one person speaks with conviction on a given matter, although without any intention of influencing the other person by his way of speaking.

In order to make maximal positive use of suggestion, the skilful suggestor also needs an empathic knowledge of the suggestant's more idiosyncratic ways of experiencing things, as they are formed by his or her more specific meaning structures. Such a know-

wedge would make it possible for the suggestor to tailor-make his suggestions to the suggestant's specific suggestibility profile. In unintentional processes of suggestion, a similar kind of tailor-made interpersonal priming may be expected to occur to the extent that the suggestor's and the suggestant's meaning structures are similar, or "tuned", in such a way that the suggestor's natural way of thinking, feeling, and communicating "fits" with the suggestant's suggestibility profile.

Kohut (1959, 1984) has defined empathy as "a value-neutral tool for observation", which makes use of personal experiences as well as theoretical concepts for the purpose of understanding another person's experiences. By labeling it a "value-neutral tool", Kohut wants to emphasize that empathic understanding can be used for various kinds of purposes. Both a therapist and a salesman may have use for a good empathic capacity. It may be added that empathic understanding can occur either (1) effortlessly, simply as a function of the relative similarity, or "tuning", of meaning structures, or (2) with conscious effort, for the purpose of understanding a person with relatively different meaning structures from one's own.

If empathy is seen as a value-neutral tool for observing others, suggestion may be seen as a value-neutral tool for influencing others. Suggestion can be used for the patient's best interests by a skilled psychotherapist or doctor, but it can also be used to manipulate people for purposes that go against their real interests, as for example when it is used by a salesman for the purpose of selling some more or less worthless merchandise to a customer. The former may be referred to as benevolent suggestion, and the latter as manipulative suggestion. Two obvious examples of benevolent suggestion are placebo effects in medicine and suggestive influences in psychotherapy. Here it is important to note that even when there is no intentional suggestion taking place, both therapists and salesmen always rely more or less on naturally occurring processes of unintentional suggestion.

The role of suggestion in placebo effects

The concepts of "suggestion" and "placebo effects" are often used in a rather loose way to refer to non-specific aspects of psychological and medical treatment. Moreover, an often made assumption is that placebo effects are due to suggestion. From this perspective, it may come as a surprise that empirical research has failed to show any clear relation between suggestibility and placebo effects (Evans, 1989). This lack of correlation, however, becomes a little less surprising in view of the relative lack of correlation even between different kinds of suggestibility (Eysenck & Furneaux, 1945; Gudjonsson, 1989). In fact, there seems to be no empirical support for a unitary trait of suggestibility. Similarly, research on placebo effects has failed to find any stable trait of placebo reactivity. This raises the question whether there are any stable personality traits involved here, or whether both suggestibility and placebo effects are very much the products of temporary situational factors and temporary mental states.

The present section will, first, distinguish between placebo effects which are due to

suggestion and placebo effects that are not due to suggestion. Then a short discussion will follow of how suggestion at various levels of psychological functioning can contribute to the generation of placebo effects.

Placebo Effects that are Due to Suggestion and Placebo Effects that are Not Due to Suggestion

As discussed above, the concept of placebo effects in medicine can be seen as a way of lumping together all kinds of psychological processes which occur as part of medical treatment and which have a positive effect on the patient's well-being. These effects may be due to the communication of the doctor's belief in the efficacy of the treatment to the patient, or to other aspects of the doctor-patient relationship which produce some kind of positive emotional change in the patient (Lundh, 1987, 1992). Among the therapeutic factors that may be conducive to placebo effects are empathic attitudes, sympathy, enthusiasm, and optimism, but also the doctor's way of presenting himself as a competent and trustworthy person, and as an expert in the field. The ability to communicate in a persuasive way, and to be sensitive to the patient's emotional state, are probably also important factors. A subcategory - but only a subcategory - of these processes may be referred to as suggestion. Empathic responding, coaching, supportive and caring behaviour, etc., are other aspects of a positive therapeutic relationship that may contribute to so-called placebo effects, but that differ from suggestion in the sense that they do not involve an interpersonal priming process whereby beliefs, feelings, or desires are transferred from the suggestor to the suggestant.

For example, the experience that one's complaints are being taken seriously, and the experience of being cared for and understood by a competent doctor may well be expected to produce positive emotional responses that could potentially lead to placebo effects. To feel that one's problems are being taken seriously, that one is understood in an empathic sense, that the doctor really cares, etc., may have important soothing effects, and may even increase self-esteem at least temporarily. None of this represents a suggestive process, since the effect does not depend on a mental content (belief, desire, emotion, etc.) being transferred from one person to another.

To the extent that placebo effects depend on the ability of a doctor's verbal or non-verbal communications to prime a belief in the treatment, a desire to engage in the treatment, or some kind of positive emotion in the patient, they depend on suggestion. The latter would occur, for example, if the doctor radiates hope and optimism in such a way that this induces similar emotions in the patient. When positive emotions are produced in the patient through caring, sympathetic or empathetic behaviour, on the other hand, there is no process of priming emotions; to the extent that a placebo effect depends on such processes, therefore, it does not depend on suggestion.

Suggestion at the Cognitive Level

Suggestion at the cognitive level involves the induction of some kind of beliefs or expectations in the suggestant. People are not, however, equally susceptible to the sug-

gestion of any kinds of beliefs or expectations. According to the present approach, each person is assumed to have a certain "suggestibility profile", as a function of his or her particular meaning structures. This suggestibility profile is regarded as a relatively stable individual characteristic, and in order to be optimally helpful a doctor or psychotherapist should have some knowledge about each patient's suggestibility profile and take this into account when implementing the treatment.

To take a simple example, the belief that "experts are usually right" is a common part of people's meaning structures. To the extent that a person possesses this kind of meaning structure, and perceives a certain speaker to be an expert, he will also tend to believe what the speaker says. A doctor's prescription for a cure may, for example, produce strong positive expectations in the patient if it activates a meaning structure which defines doctors as experts that can be trusted in the field of medicine.

A large number of meaning structures may be involved in this kind of situation. The verbal content of the message, the speaker's exact wordings, his intention, tone of voice, posture, facial expression and other bodily signals, as well as all other contextual factors that are part of the situation, are all interpreted in terms of the person's various meaning structures. If the person, for example, has meaning structures which (1) categorize certain kinds of bodily signals as signs of insecurity on the part of the doctor, and (2) equate such signs of insecurity with a lack of trustworthiness, then this may radically decrease the person's suggestibility in this particular situation. Similarly, if the person has an elaborated network of meaning structures which connects various kinds of behavioural expressions with deceptive intent, that person will tend to be critically suspicious towards others and less susceptible to suggestive influences.

Suggestion at the Sensory Level

Some placebo effects may be due to the fact that suggestion produces effects on the sensory-somatic level via the cognitive level. When a doctor or therapist causes a patient to believe that a certain treatment is going to help, this is a matter of cognitive suggestion to the extent that it induces positive expectations in the patient. But if the suggestion induces a specific expectation of pain relief, it may act on sensory-somatic processes via the cognitive level. Although the suggestion in this case operates primarily on the cognitive level, it seems that sensory suggestibility plays a major role in the process. Although it has been difficult to find correlations between placebo effects and suggestibility in general, there are results which show a correlation specifically between sensory suggestibility and placebo effects in the treatment of pain (Classen, Feingold & Netter, 1983).

Suggestion at the Emotional Level

A clear-cut example of suggestion on the emotional level is when a doctor or therapist expresses hope and optimism in a positive emotional manner and thereby influences his patient's emotional state in the same direction. According to Frank (1974), the creation of hope is an essential ingredient in all forms of successful psychotherapy and in

the generation of placebo effects. However, it should be noted that pessimistic feelings and attitudes in the therapist may also exert a suggestive influence on the patient's mood and lead to feelings of pessimism and hopelessness in the patient. That is, suggestive influences may work in both directions - positive and negative.

Such cases of "emotional contagion" need not involve much of cognitive processing. In other cases, however, effects on the emotional level may be produced via suggestions at the cognitive level. One example is the action of so-called "response expectancies" (Kirsch, 1985); if a doctor suggests that the patient will respond in a certain way as the result of taking a certain drug (e.g., becoming calm and relaxed), this may produce an expectation in the patient of responding in exactly this way which, acting like a self-fulfilling prophecy, will tend to produce exactly this response.

Similarly, if a doctor or therapist induces the patient to believe in the efficacy of a certain treatment, this may increase the patient's hope and confidence, reduce his or her degree of stress, anxiety, and depression, and produce an increased sense of calm and relaxation. There is evidence which indicates that these effects may sometimes be very strong. One example is the extraordinarily strong placebo effects that have been observed when new medical treatments have been introduced with great enthusiasm by doctors who have been strongly convinced of their effectiveness.

The placebo effects found in ordinary double-blind studies often amount to about 30-35% improvement, but in these studies there are no attempts to maximize the placebo effect. On the other hand, it seems that much stronger placebo effects can be produced under more optimal conditions. Benson and McCallie (1979), for example, reviewed a number of new treatments for angina pectoris that were originally introduced with great enthusiasm. For all of these new treatments, initial uncontrolled trials, carried out by researchers who showed strong enthusiasm and belief in their effectiveness, showed each method to have about 70-90% effectiveness. When later, controlled studies appeared, performed by more skeptical investigators, however, the real effectiveness was reported to be only 30-40%, or no better than ordinary placebo. What was probably operating here was a very strong placebo effect that was due to the verbal and non-verbal expressions of enthusiasm and strong positive expectations on the part of the doctor.

In a later, more systematic study of a similar kind, Roberts, Kewman, Mercier and Hovell (1993) searched out a number of treatment methods for asthma, herpes, and ulcer that showed the same pattern: at first very promising results in uncontrolled studies, and then no-better-than-placebo results in double-blind studies. Roberts and his associates conclude that the placebo effects which are produced in everyday clinical work, where both doctor and patient generally have a considerable faith in the treatment probably are considerable stronger than the relatively moderate placebo effects (about 30% improved) that are found in controlled double-blind studies.

Even within the context of ordinary double-blind studies, the magnitude of placebo effects are known to vary as a function of expectations. Evans (1974) reviewed a num-

ber of double-blind studies of clinical pain, and found that about 35-36% of patients with severe pain achieved at least 50% pain relief after being given placebos. Moreover, he found that the effectiveness of the placebo seemed to be directly proportional to the efficacy of the drug that doctor and patient believed they were using. For example, in studies of mild analgesics like aspirin, placebos were found to be about 50% as effective as aspirin, and in studies of strong analgesics like morphine, placebos were also found to be about 50% as effective as morphine. That is, the analgesic effects of placebos were considerable stronger in studies where the subjects knew that they were taking part in a study where morphine was compared with placebo, than in studies where aspirin was compared with placebo. Here a contextual factor, rather than the verbal or non-verbal behaviour of the doctor, seems to form the basis for the suggestive influence - an influence which seems to produce its effects on the emotional level via cognitive processes.

Suggestion at the Motivational Level

Suggestion on the motivational level has been the subject of very little empirical research. At the same time, suggestion on this level probably plays an important role in both medical and psychological treatment. Motivational suggestion is likely to be an important element in all kinds of psychotherapy, and the best therapists probably are those who are able to canalize their suggestive influence in accordance with the therapeutic goals. All kinds of psychotherapy, for example, require that the patient is motivated to work along certain lines, and an important therapeutic task is to facilitate this kind of motivation.

Examples of this can be seen already in Freud's writings. In psychoanalysis, according to Freud, suggestibility enters in the form of so-called "positive transference", which clothes the analyst "with authority" and "is transformed into belief in his communications and explanations", and without which "the patient would never even give a hearing to the doctor and his arguments" (Freud, 1916, p. 445). Freud explicitly admits that "in our technique we have abandoned hypnosis only to rediscover suggestion in the shape of transference" (Freud, 1916, p. 446). The basic difference, according to Freud, is that the therapist does not use this increased suggestibility to suggest to the patient that his symptoms are going to disappear, but to help him to "overcome his resistances" (Freud, 1922, p. 126) against the analytic work - i.e. to increase the patient's motivation.

The ability to use skilful suggestion (verbal and non-verbal) to motivate a patient to engage in therapy is probably a valuable asset for all psychotherapists, whether they are psychodynamic-psychoanalytical or cognitive-behavioural in their orientation. As Wachtel (1993) describes it, suggestion is used, either implicitly or explicitly, in modern psychotherapies in a wide range of ways to motivate the patient to confront the conflictual issues in his life. By means of suggestion, for example, the patient can be helped temporarily to gain the confidence to face what he has fearfully avoided, as done in various kinds of exposure treatment, or to take the steps necessary to change a

troubling life pattern.

In medical treatment, suggestive influences on the motivational level may increase compliance with a certain medical regime. This is not, however, to be categorized as a placebo effect if it produces its effects merely by increasing the patient's motivation to follow medical prescriptions, since the effects may then largely be explained as a result of the specific effects of that type of medical treatment.

Conclusion

In the present paper, the nature of placebo effects, suggestion, and suggestibility has been discussed and analysed. Placebo effects were defined as psychologically mediated effects of being in treatment, which are due either to the patient's belief in the efficacy of the treatment, or to other aspects of the therapeutic relationship. Suggestion was defined as an interpersonal priming process, whereby one person (the "suggestor") influences another person (the "suggestant"), by means of verbal communication, non-verbal behaviours, and other contextual factors, to take over beliefs, intentions, desires, or feelings, etc., from the suggestor, without the suggestant being aware of this. This occurs in the relative absence of critical-reflective thinking on the part of the suggestant; instead, suggestion relies on an automatic activation of cognitive-affective meaning structures, which may be partly genetically, partly culturally, and partly individually determined. These meaning structures were said to define the person's "suggestibility profile".

Another major assumption of the present approach is that suggestion can be both intentional and unintentional. Suggestion may be used deliberately for various purposes, either in the service of the suggestant (benevolent suggestion), as in medicine or psychotherapy, or in the service of the suggestor (manipulative suggestion), as in various kinds of political and commercial contexts. Intentional suggestion requires a certain degree of skill, which includes at least a tacit knowledge of basic aspects of human psychological functioning and a skilful use of non-verbal behaviour, but also relies on an empathic knowledge of the meaning structures through which the other person perceives the world. Suggestive forms of influence need not, however, be intentional. With or without being aware of it, we are constantly engaged in processes of suggestive influence on each other. Suggestion is ubiquitous, and may be expected to be present in all kinds of human interaction.

A further assumption in the present approach is that suggestion may operate on different levels: it may affect overt behaviour, sensory processes, cognition, emotion, or motivation. Experimental research has focused mainly on the three first-mentioned levels of influence, but suggestive influences on the motivational level probably represent a most important kind of suggestion in clinical psychology and psychotherapy, and deserves more interest from researchers.

Finally, two new concepts have been introduced: the "suggestive climate" which characterizes a social situation (e.g., a certain form of psychotherapy) and the person's

"suggestibility profile". It is assumed that each person has his or her suggestibility profile, which is a function of the specific meaning structures that he/she has acquired as the result of genetic equipment and past experience. It is also assumed that each kind of social situation is characterized by a particular suggestive climate, which leads to certain ideas, feelings and desires being relatively more primed than others. Processes of suggestive influencing are supposed to occur as the result of an interaction between the suggestive climate of the actual situation and the suggestibility profile of the particular person involved.

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Friendliness and Suggestibility: An Ecosystemic Perspective

David P. Fourie

■ The concept of suggestibility is often treated as if it refers to some semiconcrete and measurable entity which exists inside an individual. The assumption is that it is relatively stable and relatively independent of the interpersonal context in which the individual operates. This reflects a realist or objectivist view of the world. In this chapter the realist epistemology of science is contrasted with the emerging constructivist perspective. It is shown how a constructivist view, as specified in an ecosystemic stance, brings to the fore a completely different picture of suggestion and suggestibility.

There is the story about the alien spaceship which landed next to a gas station which was closed for the night. Two alien astronauts got out and walked up to the nearest pair of gas pumps. In a courteous way in their alien language they requested the pumps to take them to their leader. No reaction. The aliens then tried some kind of sign language, but again got no reaction. Whereupon they returned to their spaceship and reported to their commander: "Sir, these locals show no friendliness. They refused to talk or even to listen to us; they just stood there with their fingers in their ears."

This story shows that friendliness is a meaning given by a perceiver to perceived behaviour, or to a person enacting such behaviour. Friendliness does not exist objectively inside of the behaviour viewed as friendly, nor inside of the person doing the behaving. However, like the aliens we also often treat the meanings we attribute to behaviour as if they denote entities lurking inside people. This habit flows from an adherence to an epistemology of objectivity or realism. It is the purpose of this chapter to examine this epistemology or way of thinking, and to show that the way we go about examining the concept of suggestibility often reflects our own adherence to such an epistemology. A different, ecosystemic epistemology can bring to the fore a completely different picture of suggestion and suggestibility.

The Epistemology of Realism

Realism is the belief that there is an objective and absolute reality "out there", independent of the observer (Guba & Lincoln, 1988). According to Casti (1989, p.24) this view holds that: "This reality exists solely by virtue of how the world is, and it is in