CAN MEMETICS SOLVE THE "DODO BIRD VERDICT"? GUIDELINES FOR ANALYZING THE EVOLUTION OF THE MEMETIC CODE IN PSYCHOTHERAPISTS

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El debate acerca de la eficacia diferencial de los distintos modelos de psicoterapia y el conocido como "veredicto del pájaro Dodo", el hecho de que se haya encontrado una eficacia equivalente entre diferentes enfoques terapéuticos, es analizado en ese trabajo desde una nueva óptica cultural: la memética. Un meme es una unidad de información cultural que se replica y evoluciona por mecanismos de selección. La memética es el campo que se ocupa del estudio de los memes y de cómo se distribuyen y evolucionan. En este artículo nos proponemos analizar conceptos importantes de la psicoterapia y la psicología clínica desde el enfoque de la memética. Consideramos que esta perspectiva tiene importantes implicaciones en la conceptualización, estudio y mejora de la psicoterapia, arrojando luz sobre aspectos estancados y ofreciendo nuevas posibilidades investigadoras.
Palabras Clave: Veredicto del pájaro Dodo, Psicoterapia, Factores comunes, Memética, Cultura.

The debate about the differential effectiveness of the different models of psychotherapy and what is known as the "Dodo Bird Verdict", the fact that equivalent efficacy has been found between different therapeutic approaches, is analyzed in this work from a new perspective: memetics. A meme is a unit of cultural information that is replicated and evolved by selection mechanisms. Memetics is the field that deals with the study of memes and how they are distributed and evolved. The aim of this article is to analyze important issues of psychotherapy and clinical psychology based on the memetics approach. We consider this perspective to have important implications in the conceptualization, research, and improvement of psychotherapy, shedding light on stagnant issues and offering new research possibilities.
Key words: Dodo Bird Veredict, Psychoterapy, Common factors, Memetics, Culture.

Psychotherapy is a procedure in which a trained professional, using their knowledge of psychological principles, individually helps a person who has a disorder, problem or complaint to deal with it (Wampold, 2015a). Psychotherapy has shown utility and efficacy in multiple problems and disorders, becoming the treatment of choice in various conditions (American Psychological Association [APA], 2013).

There are several approaches and models that explain differently the way of proceeding with psychotherapy, which implies that the psychological principles on which they are based vary enormously from one another. Despite multiple attempts to find the supposed superiority of one theoretical orientation over the others, several studies have shown that there is no model that, overall, obtains better results than the others (APA, 2013), although it is true that, with regards to the treatment of specific disorders, some models have shown to be more effective than their competitors (e.g., González-Blanch & Carral-Fernández, 2017).

This debate between the different ways of understanding psychological therapy has resulted in presenting the different orientations as closed products, with more or less static characteristics, which undergo a process of exhaustive scientific-technical elaboration before introducing a modification. This ideal vision seems to ignore the dynamic and cultural aspect of psychotherapy.

We hypothesize that the addition of a cultural approach to the study of this field may lead to the understanding of aspects that have not been contemplated and the overcoming of debates that cause the discipline to stagnate.

In this article we propose to analyze the current situation of psychotherapy in broad strokes, presenting a cultural theory (*memetics*) that allows us to approach the issue from a new perspective that has not been explored and to suggest the implications that may arise in the study and analysis of psychotherapy, starting with a proposal to understand the "Dodo bird verdict".

PSYCHOTHERAPY IN THE DAYS OF THE DODO BIRD

In a classic article, Rosenzweig (1936) used the term "Dodo bird verdict" to refer to the seemingly similar efficacy of the different approaches, alluding to the phrase pronounced by the Dodo bird in the novel *Alice in Wonderland* (L. Carroll, 2003): "*Everybody has won and we all must receive prizes.*"(p.25). This work highlighted the importance of what we know today

as the common factors in psychotherapy, to which the success of the different theoretical orientations was attributed.

Despite this knowledge, the constant proliferation of different models of therapy has produced, as an inevitable consequence, the interest in comparing their results, sometimes with the aim of demonstrating the superiority of one or several of the models over the others. In this crazy race, following the simile of Carroll's novel, in which different models of psychotherapy are compared as static entities, Eysenck (1952) was one of the first to try to demonstrate that behavioral therapy gave better results than psychoanalysis, the hegemonic approach at that time. This competition, at present, is represented by what are known as the "empirically supported therapies" (Chambless & Hollon, 1998), an important part of evidence based practice in psychology (APA Presidential Task Force on Evidence-Based Practice, 2006) that has resulted in the assumption of cognitive-behavioral therapy as the winner (Pérez-Álvarez, 2013; Pérez-Álvarez, Fernández-Rodríguez, Amigo-Vázquez, & Fernández-Hermida, 2003).

However, as research has been developed based on other theoretical orientations that meet the quality standards in this type of studies, the verdict of the Dodo bird has been confirmed again in different meta-analyses (Lambert, 1992; Luborsky et al., 2002; Stiles, 2008; Wampold, 2007, 2015b; Wampold et al., 1997). The conclusion of these studies is that all "bona fide" therapy is effective and none is significantly superior to the others.

This equivalence of the psychotherapies, however, has been questioned by various authors (Budd & Hughes, 2009; Carroll & Rounsaville, 2010; Marcus, O'Connell, Norris, & Sawaqdeh, 2014; Shadish & Sweeney, 1991), who explain that the supposed equality has to do with methodological factors. González-Blanch and Carral-Fernández (2017) conclude that:

> [...] only a few therapeutic models, of the hundreds that exist, have been put to the test. In addition the studies that support the efficacy of the psychotherapies are subject to significant limitations, they have biases and methodological weaknesses and are exposed to questionable research practices that inflate the chances of finding positive results and, with this, the impression that everything is effective. (p.102)

Given the existence of multiple psychotherapies, several options have been postulated to advance in the field, such as their integration (Lazarus, 1989; Ryle & Kerr, 2006; Wachtel, 1977), or the creation of new intervention alternatives that adapt elements contained in other treatments (Kohlenberg et al., 2005; Linehan, 2003; Young, Kloslo, & Weishaar, 2003). Miró (2017) explains that 25 years ago it was reasonable to expect that there would be an integration of the psychotherapies by scientific means, which has not been the case. One possible explanation is that the integration does not "unify" two therapies but creates a new one that competes with the previous ones, only with the adjective "integrator" in its name. The result is a multiplicity of approaches, sometimes differentiated

by irrelevant aspects, which are replicated based on the appeal of these aspects, with the psychotherapies sometimes acquiring the format of a fashion (Fuentes Ortega & Quiroga Romero, 2009). Thus, the theorical orientations are diversifying, recombining, integrating and looking for differences between them to strengthen their copyright or trademark and present themselves as new fashion trends (Fuentes Ortega, Muñoz, & Quiroga Romero, 2007; Gimeno-Peón, Barrio-Nespereira, & Álvarez-Casariego, 2018). The result is a great paradox: the appearance of new models that are entering the same competition.

Evidence demonstrating the effectiveness of techniques and interventions from different models has led some authors to focus their interest on the study of common factors. The one that has received the most attention is the therapeutic alliance, one of the elements that explains the most proportion of the variance of the results in psychotherapy explains (Norcross, 2011; Norcross & Goldfried, 2005; Wampold & Imel, 2015). But there is also talk about common factors typical of particular orientations, such as "mentalization" (Bateman, Campbell, Luyten, & Fonagy, 2017), "mindfulness" (Miró, 2017) or "reinforcements and punishments" (Kohlenberg et al., 2005).

Another way of addressing the issue of the efficacy of different types of psychotherapy is that which emphasizes improving the particular effectiveness of each clinician (Hubble, Duncan, & Miller, 1999; Miller, Hubble, & Duncan, 2007; Okiishi, Lambert, Nielsen, & Ogles, 2003; Prado-Abril, Sánchez-Reales, & Inchausti, 2017), increasing their expertise through the development of specific skills such as the successful management of countertransference (Hayes, Gelso, & Hummel, 2011), the use of routine outcome monitoring and feedback in psychotherapy (Gimeno-Peón, Barrio-Nespereira, & Prado-Abril, 2018; Miller, Hubble, Chow, & Seidel, 2015), the use of deliberate practice (Miller et al., 2015; Prado-Abril et al., 2017), or empathy (Elliott, Bohart, Watson, & Greenberg, 2011), among others.

All the options presented are logical and interesting. As Marino Pérez points out: "Alternatives are not lacking, the problem is their abundance" (Infocop, 2013). This multiplicity of perspectives and continuous reformulation of ideas runs the risk of giving the discipline an appearance of incoherence, in which the different positions are irreconcilable in an epistemological sense. With the aim of ordering and reconciling the myriad of proposals described (and those that have yet to be described), we set out to emulate Jerome and Julia Frank (1961) in their study of healing practices, analyzing the field of psychotherapy based on a cultural approach. In order to do this, we will review a cultural theory that affords us its technical approach: memes.

A NEW FRAMEWORK OF CULTURAL ANALYSIS: FROM GENES TO MEMES

In the mid-70s, Richard Dawkins (1976) surprised the scientific community with a new vision of genetics and evolution theories by proposing a type of natural selection which, instead of

being based on the species or the individual was based on the gene. The gene is a piece of information that is self-replicating. In this replication process, more or less successful mutations are produced, of which the most adapted ones are selected. The organisms are the containers of these replicators, the context where these genes are self-replicated and selected.

Dawkins' theory makes a quantum leap and proposes the existence of another type of information different from the gene, but with the same ability to self-replicate. Since human beings are able to imitate information from the environment, these contents can be replicated by imitation, mutation, and selection. Thus, the replicating organisms of this information, instead of chains of amino acids, are the higher mental processes, usually expressed in the form of language. This imitable information, equivalent to the gene, is the meme. Just as, in genetics, we talk about the "gene pool", all the propagated information that we have just referred to, is known as "culture".

The speed of propagation of memes is dramatically higher than that of genes. Therefore, the evolution of the cultural ecosystem is much greater and more malleable than that of the biological ecosystem. This implies that the *memetic code* is constantly changing and evolving, producing large transformations and mutations in a short time.

THE RISE AND FALL OF MEMETICS

With the appearance of memes, a new discipline was inaugurated: memetics. Memetics is dedicated to studying how memes spread in social systems and how they affect us as individual agents (Vada, 2015). In 1997 the *Journal of Memetics - Evolutionary Models of Information Transmission* (JoM -EMIT) began to be published, in which the editors affirm:

> The first contributions come from very different disciplines. We were pleasantly surprised to find evolutionary perspectives increasingly present not only in biology, but also in economics, linguistics, anthropology, and organizational science, although conceptual overlap is sometimes obscured by different terminologies. (Best et al., 1997, p.2).

This initial conceptual overlap prevented clarification of what exactly a "meme" is. Dawkins, who first defined it as a "*unit of imitation*" (1976), went on to define it later as "*the unit of information that resides in the brain*" (1982). Langrish (1999) states that memes are not units, if not patterns, and proposes different types that could be applied to technology: *recipemes* (instructions), *explanemes* (explanations of why it works) and *selectemes* (considerations on which memes are better). Some people define memes as mental experiences or mental representations (Gabora, 1997; Preti & Miotto, 1997), while others necessarily link them to imitation (Blackmore, 1998). Other proposals include that of Denett (1991), which defines them as instructions, or that of Gartherer (1998), which limits them to observable cultural phenomena. Wilkins (1998) stated that:
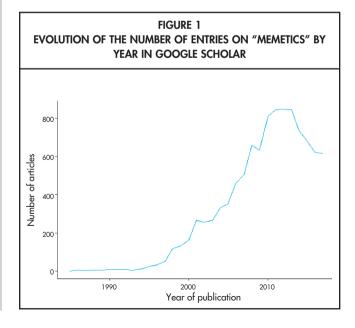
> The term gets applied to all levels of social and cultural structure, from minimal semantic entities like phonemes,

through more molecular entities like phrases and snatches of music, to entire traditions and world views. In this blooming buzzing confusion, the usefulness of memes as a category is being lost or degraded. (p. 5)

Although the interest in memetics has decreased (see Figure 1), it cannot be said that it has become extinct. An analysis of recent publications shows that memetics is still alive, but in new formats: it is used in the analysis of "viral" phenomena in social networks, mass media, fashions, music, series, movies or video games (e.g.: Bao, 2017; Jan, 2017; Stephens, 2018). It has also had an impact on linguistics and serves as a framework for the analysis of the propagation of expressions or the evolution of loans between languages (e.g., Xia, 2017; Yang, 2017). Computer science, on the other hand, has also generated *memetic algorithms* inspired by this theory (e.g.: Hart, Krasnogor, & Smith, 2004).

A MEMETICS FOR PSYCHOTHERAPY

We dare to conceptualize the field minimally, despite the controversies, in order to be operational in the issues to be addressed. We will use the definition of a meme by Wilkins (1998): "the units of information transmitted, subject to selection biases at a given level of the hierarchical organization of culture" (p.29). This definition avoids the need for an organic support, and it is also not positioned with respect to imitation as the only transmission process; we leave for future debates the question of whether what is explicitly transmitted by shaping or other psychological processes should or should not receive a theoretical treatment different from that of the imitated information (Blackmore, 1998). When defining units, since information is a continuous and multi-channel flow, we must consider them as the subjective units of description that emerge in the explanations of therapeutic acts by professionals and

FIGURE 1
EVOLUTION OF THE NUMBER OF ENTRIES ON "MEMETICS" BY YEAR IN GOOGLE SCHOLAR

fromEwhich their presence or absence can be noted. Thus, a meme can be a phrase such as "What evidence do you have of that?", a gesture of empathy, or a complex therapeutic procedure such as, for example, systematic desensitization. Memes may also have a different degree of concretion, following the Pragmatics of Human Communication (Watzlawick, Bavelas, & Jackson, 2009): the more *digital* memes will be more easily categorizable and studied, while the more analog memes will be more difficult to explain and investigate.

It is possible for psychotherapy to use memes to advance its own development. As an example, the common factors proposed by Frank and Frank (1961) are: a) a relationship of trust, b) a place of healing, c) a mythology, and d) a ritual. We can understand that religions, psychotherapies and magical practices all have "myths" or explanations of why they work (Pérez-Álvarez, 2013). If we categorize these myths as memes, we will observe how some explanations will work better than others (they will have greater acceptance, they will be more useful, they will be more understandable, etc.), and these successful explanations will be selected and repeated (they will be published, they will be exhibited in congresses, etc.) The application of memetics in the field of psychotherapy allows us to propose a cultural explanation that gives an answer to the reason why certain myths, in the sense presented by Jerome and Julia Frank (1961), propagate and remain within the discipline, while others are extinguished and disappear, regardless of whether their nature can be considered "erroneous" or "true".

Psychotherapeutic memes that are simpler, more comprehensible, more versatile, that provide status, security, gains, self-defense from criticism, even those that are more therapeutic, will be memes that are more likely to spread than those that lack the necessary properties to adapt to the cultural medium of psychotherapy. Therefore, every psychotherapist will have a memetic code that will have acquired by imitation, direct instruction, shaping, feedback, reading, supervision, etc.

THE VERDICT OF THE DODO BIRD IN THE LIGHT OF MEMETICS

The debate surrounding the verdict of the Dodo bird is a hot topic in our environment (Galán Rodríguez, 2018; González-Blanch & Carral-Fernández, 2017; Pérez-Álvarez, 2018; Prado-Abril et al., 2017). The memetic perspective allows us to give a tentative explanation of the reasons that may be influencing the existence of this verdict, that is, the similar efficacy of the different "bona fide" psychotherapies.

Starting from the assumption that the memetic code of a psychotherapist is propagated to the memetic code of therapists of the same orientation through the different information flows that are provided by the schools, we understand that there are two processes in the evolution of psychotherapies.

In the first place, we must contemplate, inspired by evolution, that similar responses may be reached from different paths. For example, the similarity in shape and size of a shark and a dolphin is evident, although that does not mean there is genetic closeness. If two people are presented with the same attainable

mathematics problem, it would be logical to expect them to reach the same result, either from the same or different approaches. In other words, the memetic evolution would have selected in the different orientations the essential steps necessary in the solution of similar problems, albeit in different ways.

Second, we must contemplate the contact between different theoretical orientations. Imagine a practitioner of an ineffective psychotherapy who observes another professional from another school performing a therapeutic action that seems to work. Immediately, the observer will translate the act into their own model (they will mutate the received meme), becoming a more effective therapist. Therapists of the model itself will copy that meme without the awareness that the psychotherapeutic model has changed by adding a meme to become more effective on this point, that is, assuming that this meme was always part of the model or that it is a conclusion of it. This transfer of memes between psychotherapies could occur unconsciously (in the crypto-amnesic style), explicitly consciously (recognizing the authorship of others) or implicitly consciously (without recognizing this authorship).

According to this perspective, it would not be true that there are "pure psychotherapies" or "differences in psychotherapies"; a psychotherapy would be better defined by its networks of information flows than by its specific characteristics. The very process underlying memetics would ensure that in the major psychotherapeutic orientations (with many users and information flows) the presence of the therapeutic memes necessary to show their efficacy is guaranteed. Therefore, we are facing the possibility that the verdict of the Dodo bird is not only true, but that it is truer today than in the past and that it will be even more true in the future.

A NOT SO IDYLLIC FUTURE MEMETIC

The selection of memes is not produced by criteria of goodness. Memes simply are. There is no will that guides them in their expansion or disappearance. We do not deny that there may be Lamarckian mechanisms in the evolution of memes, but better adapted memes do not necessarily have to be better (in terms of efficacy and effectiveness). There is an ethical fallacy that presupposes that what is natural is "good", while evolution conditioned by other factors could be seen as a "malignant" disturbance of the natural evolution of memes. This fallacy is known as the Naturalist Fallacy (Moore, 1903).

It is possible that we might find memes that are adapted in a spectacular way, but that are far from the primordial objective of psychotherapy: the solution of the problem, disorder or complaint. The "effectiveness" of a meme is only one of the reasons that explains its spread, but other dimensions should be taken into account: profitability, stability, market, simplicity, the professional self-esteem it provides, etc. (Olives Alonso, 2017). Imagine a meme that guarantees the market share of a therapist. This meme will surely be selected and imitated independently (or even in spite of) its therapeutic result. That is, it could be the case that a therapy model is chosen more in comparison

to the others, but that this would not have as much to do with scientific results as with other cultural, ideological or even economic factors.

Psychotherapy does not cease to influence society, whether through the presence of professionals in the media, in social networks, or through the publication of self-help books; but mainly through the patients for whom the received therapy was (or was not) useful and who will distribute those memes among the people with whom they have contact. In this psychotherapy-society interaction, society also chooses the memes that it decides to propagate; one only has to see the impact that attention deficit hyperactivity disorder (ADHD) has had, to give us an idea (García de Vinuesa, González, & Pérez-Álvarez, 2014). In short, memetics gives us a framework that allows us to take responsibility for our impact on society.

THE WAYS OF IMPROVING PSYCHOTHERAPY IN MEMETICS

If we talk about "improving" psychotherapy it means that we start from an arbitrary value judgment of good and bad memes, and that we must select memes based on this arbitrary judgment. We would be pointing to a psychotherapeutic *eumemesia*. Memetic theory does not contemplate that this eumemesic selection is deliberate, since it is the information that is self-perpetuating through the therapists; it is not the subject who chooses their cultural memes, but it is the memes themselves that are propagated or not, depending on their characteristics. Then, the only viable eumemesia would have more to do with the promotion of adequate environments for positive memetic influence to take place.

The princeps criterion of this eumemesic promotion could be efficacy (understood as the intentional selection and propagation of memes that allow us to obtain better results in psychotherapy), but it is not the only selection criterion of memes to be taken into account. For example, there are qualitative methodologies that can allow us to know the experience of the person treated, the acceptability of the interventions, their satisfaction, their obstacles, etc., and to guide us in key aspects to be taken into account in order to develop interventions of higher quality. These memes that select memes are, in the opinion of Langrish (1999), a type of special memes called *selectememes*.

Clinical case studies do not have excessive prestige as a scientific activity at present, but if they are conceptualized making the case formulation explicit (Johnstone, 2018; Johnstone & Dallos, 2013), they can become an essential element in the long term. This type of publication could make the memes used explicit to the scientific community, subjecting them to debate and exposing them to criticism. An example of a scientific journal that could be in accordance with this philosophy is that of *Pragmatic Case Studies in Psychotherapy* (PCSP).

The adequate environments for transmitting memes have frameworks that allow their acquisition and modeling such as role playing, observations, systematic monitoring, supervised practice and other possible training options, as long as these

memes contribute to the well-being of those who come to psychotherapy, and not to satisfying the particular interests of certain individuals or groups.

In line with the above, we find works focused on expertise, clinical excellence, "empirically validated therapists" or deliberate practice (Gimeno-Peón et al., 2018; Prado-Abril et al., 2017). The so-called supershrinks (supertherapists that are able to solve a problem with good results in a short period of time) could be training references. The work of psychotherapy theorists would be to make sure that the norms and environments are marked so that the memes of successful therapists spread to the next generations of psychologists.

TAKING MEMES FURTHER: THE STUDY OF PSYCHOTHERAPIST POPULATIONS

Despite the coexistence of multiple therapeutic approaches, it is possible for someone to continue the effort to find "the" psychotherapy, as if there were a sole true version of it, with the hope of declaring a winner that would finally be confirmed by the research. But in the same way that genetics has not derived in "the" species, but rather in an abundance of species and characteristics, it is possible that the plurality of psychotherapies is not just a conjunctural situation on the way towards "the" psychotherapy, but rather part of the plurality of the memetic ecosystem in which we move. Pérez-Álvarez (in press), in a sample of "irreverence" encouraged by Rodríguez-Galán (2018), compares the variety of research by processes, with the evolutionary varieties of finch beaks. We cannot find a better example for the diversification of psychotherapies that we propose.

In this regard, what was proposed by Dawkins (1976), who developed computational models that showed how populations evolve based on the presence of genes that interact between individuals (e.g., altruistic, spiteful and cheating) is evocative. That is, we can consider that a society can have a certain population of psychotherapists, with different approaches and uses, and that one could predict how the different populations of psychotherapists will evolve and the parameters that predict that evolution. We could be debating whether a directive therapist is better than one that provides magical explanations, when everything may be part of an ecosystem of psychotherapists in harmonious equilibrium.

DISCUSSION

We suggested a vision of psychotherapy that is far from the scientific project of static psychotherapy which we portrayed at the beginning of the article. Pérez-Álvarez (in press) talks about the difference between "natural sciences" and "human sciences": the former being mechanistic or formalistic, more typical of academic psychology, while the human sciences would be more contextual and organicist, psychotherapy being among the latter.

Our memetic perspective for analyzing psychotherapy could be framed as a natural science of an organismic type but foresees that in the memetic code of each therapist there may be

memes of a multitude of philosophical positions and approaches, and they may even be incoherent with each other, with the nuance that they have to be adaptive in some way.

This allows us to unify the different alternatives that we presented at the beginning. Each of the options present memes in competition to be integrated into the memetic codes of the therapists. The memetic perspective also allows us to affirm that "not everything works"; only interventions that put into effect efficacious psychotherapeutic memes will be worthwhile. This new vision may cause some of the aforementioned research lines to be redefined, but empirical research in accordance with this paradigm will be necessary in order to elucidate to what degree it may be valid.

CONCLUSIONS: THE DODO BIRD IS A MEME

The "Dodo verdict" is a successful meme that has allowed us to contextualize the debate on the similarity of the efficacy of psychotherapies. As a meme, it was born with *Alice in Wonderland* (L. Carroll, 2003), it was introduced into the world of psychotherapy when cited by Rosenzweig (1936), and it has mutated according to the intentions of the authors who named it (Galán Rodríguez, 2018). We may ask ourselves whether the Dodo bird is a phoenix that does not cease to be reborn from its ashes or is rather an "*urban legend*" (Hunsley & Di Giulio, 2002). There are those who propose to do the same as with the mocking bird: kill it (Hofmann & Lohr, 2010); or who are distressed because it should be extinct (Carroll & Rounsaville, 2010) or "*in danger of extinction*" (Marcus et al., 2014). There are those who take revenge by killing it after death (Tolin, 2014). Shadish and Sweeney (1991) do not consider the Dodo bird to be very intelligent, so they do not want to allow him to be the one to give the prizes. Some wonder if we can give him wings (Mansell, 2011); others desperately cry for someone to cage him (González-Blanch & Carral-Fernández, 2017); and still others say that he is alive and well and in good health (Luborsky et al., 2002). For us, undoubtedly the Dodo bird is a meme, and a successful one too.

Like the Dodo bird, each therapeutic act is copied, modeled, adapted, and propagated. The memetic perspective tells us that, rather than a unified and efficacious psychotherapy, we have therapists with their own memetic code that can be modeled. The unit of selection is not the model, it is the meme.

As a recipient of memes, the therapist is faced with an enormous responsibility, ensuring that the memes he or she uses are psychotherapeutic and not selected and propagated by other adaptive advantages.

CONFLICT OF INTEREST

There is not conflict of interests

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