The Placebo Effect and Learning: Implications for Counsellors

Brad Hagen
Thelma Gunn
University of Lethbridge

ABSTRACT

The placebo effect is a fascinating and complex phenomenon, and may well account for much of the effectiveness of many medical therapies, such as pain medications and antidepressants. While health professionals have long debated the role that placebos may play in health care, the counselling profession has devoted less attention to the placebo effect in counselling, despite claims that it may account for much of the effectiveness of counselling. The authors offer a brief overview of the placebo effect, review theoretical and learning perspectives on the placebo effect, summarize the arguments for and against the existence of a placebo effect in counselling, and conclude with implications for counsellors.

RÉSUMÉ

L'effet placebo est un phénomène fascinant et complexe qui pourrait bien expliquer en grande partie l'efficacité de plusieurs thérapies médicales, telles les analgésiques et les antidépresseurs. Si les professionnels de santé discutent depuis longtemps du rôle que les placebos peuvent jouer dans les soins de santé, les conseillers professionnels ont porté moins d'attention à leur présence dans le counseling, en dépit des prétentions voulant que l'effet placebo explique en grande partie l'efficacité du counseling. Les auteurs offrent une brève vue d'ensemble de l'effet placebo, en survolent les perspectives aux plans de la théorie et de l'apprentissage, résument les arguments pour et contre l'existence de l'effet placebo en counseling, et présentent en conclusion des conséquences pour les conseillers.

The placebo effect, an often mysterious combination of expectations, beliefs, hopes, and learned associations, is one of the most fascinating and complex human experiences (Fisher & Greenberg, 1997). The placebo effect helps to account for the apparent effectiveness of antidepressants and many other medications, helps us to understand how someone's condition can improve after a sham or fake surgery, and can explain how a shaman in a tribal society has the power to bring healing or death by casting spells on fellow tribespersons.

The placebo effect also has profound implications for the practice of counselling, and some critics have claimed that counselling is no more than an elaborate placebo effect and that the placebo effect is largely responsible for any positive benefits received from counselling (Frank & Rosenthal, 1956). If these charges are in fact true (i.e., counselling is beneficial only to the extent that it produces a placebo effect in clients), then counsellors are left with some awkward ethical and practical questions. Should counsellors, for example, tell clients that improvement

in therapy may be due in part to a placebo effect? Will insurance companies be expected to pay for counselling services that might be the therapy equivalent of a sugar pill? Are counsellors ethically bound to instill hope and positive expectations in their clients?

To answer these questions, the purpose of this article is to examine some of the literature pertaining to the placebo effect, and how the placebo effect might be operating in the context of counselling. This article will first review the placebo effect and theoretical perspectives on how the placebo effect might be learned outside of the context of counselling. Subsequently, the article will review arguments for and against the existence of a placebo effect in counselling, examples of how the placebo effect may occur in counselling, and implications of the placebo effect for counsellors.

PLACEBOS DEFINED

The actual word *placebo* is derived from the Latin meaning "to please," and the term has been used since since the 14th century to describe a substance, given in place of an actual or "real" medicine (or treatment), for the purposes of pleasing or humouring the patient into experiencing an improvement in health (Senger, 1987). The placebo has traditionally been regarded as an inactive or "inert" medication or treatment, such as a sugar pill, although it is now recognized that such placebos are far from inert. In fact, placebos can have very powerful effects, even if they do not possess the same pharmacological or physiological qualities as real medications and treatments (Hunt, 2002; Senger). Keeping these considerations in mind, Stewart-Williams and Podd (2004a) have offered a succinct definition of a placebo as "a substance or procedure that has no inherent power to produce an effect that is sought or expected" (p. 326).

As healers have known for hundreds of years, the administration of a placebo often results in a *placebo effect,* which is a positive change in a person's health or condition. However, certain placebos known as nocebos, which comes from the Latin "to harm," can also result in a worsening of a person's condition. To complicate the matter further, a substance or procedure that can serve as a placebo for one person or circumstance can serve as a nocebo for another person or in another circumstance. The majority of the placebo literature, however, is concerned with how to maximize the possibility of a substance or procedure producing a beneficial placebo effect (Fisher & Greenberg, 1997). For the purposes of this article, therefore, we will align with parsimonious definitions of the placebo effect such as offered by Stewart-Williams and Podd (2004a), which call the placebo effect "a genuine psychological or physiological effect, in a human or another animal, which is attributable to receiving a substance or undergoing a procedure, but is not due to the inherent powers of that substance or procedure" (p. 326). Therefore, at the heart of the placebo effect lies a fascinating paradox: although placebos are inert and have no inherent powers, they have tremendous power to change a person's health and well-being, either positively or negatively.

EXAMPLES OF PLACEBOS OUTSIDE OF THE COUNSELLING CONTEXT

A number of intriguing demonstrations of the power of placebos exist. Starting with a series of medical studies conducted in the late 1940s, Wolf (1950) and his colleagues were able to demonstrate that by simply telling patients they were going to receive either a drug that would cause vomiting (ipecac) or a drug that would soothe their stomach (atropine), patients would go on to subsequently have the corresponding subjective and physiological reactions after being administered an inert placebo. Even more startling, however, was the discovery that not only could placebos cause a powerful effect, but they could also *counteract* the effects of other powerful drugs and cause negative effects. That is, when patients were actually given a drug that would normally cause vomiting (ipecac), but were also told that they were receiving a strong medicine to soothe their stomach (atropine), or vice versa, the patients would actually have the subjective and physiological experience that matched what they were told, not what they were actually given. In a similar study conducted by Japanese researchers in the 1960s (Ikemi & Nakagawa, 1962), it was found that students who were told they were having leaves from an irritating plant (similar to poison ivy) rubbed on their arms would proceed to have red itchy rashes appear on their arms, even though in fact the leaves were from a harmless chestnut tree.

Notable examples exist from research on placebo surgery as well. In a surgical study conducted by a team of anesthesiologists in the 1960s, it was found that patients who received a very simple verbal message prior to their surgery ("the doctors have ordered a very strong pain medicine for you … Don't hesitate to ask for it when you need it") ended up using only half of the pain medication and were discharged two days earlier, as compared to identical surgical patients who received no such verbal message (Egbert, Battit, Welch, & Bartlett, 1964). Even more dramatic, however, was a study on arthroscopic knee surgery (which removes cartilage) conducted in the late 1990s. Patients consented to participate and were randomly divided into one of three groups: (a) full knee surgery, where cartilage was exposed and scraped away; (b) partial surgery, where an arthroscope was inserted, but no cartilage was removed; and (c) no surgery at all, where only simple surgical-type cuts were made on the skin. Remarkably, no significant differences in outcomes existed between the three groups, which led the researchers to assert that the main benefit of knee surgery (or at least this kind of knee surgery) may well be entirely due to the placebo effect (Moseley, Wrap, Kuykendall, Willis, & Landon, 1996).

Overall, a large body of literature now documents the widespread and powerful placebo effect that exists in the field of health and medicine. For example, research suggests that the primary mechanism by which pain medications and antidepressants work is through the placebo effect (Kirsch & Sapirstein, 1999; Stewart-Williams & Podd, 2004a). Furthermore, research has demonstrated that not all placebos are the same, as strong-tasting placebos work better than tasteless placebos, and injections of a stinging salt water solution are stronger placebos than

injections of plain sterile water (Brody & Brody, 2000; Senger, 1987). Yet with all these dramatic and interesting examples of the power of placebo, the question remains: how exactly do placebos work?

LEARNING THEORY AND THE PLACEBO EFFECT

Learning theories are the primary source of theories on how placebos might work, and there are three main learning theories on the placebo effect: (a) expectancy theory, (b) conditioning theory, and (c) meaning theory. Although some authors argue the superiority of one theory over another, it is likely that all three theories are important to help us understand the complex phenomena of the placebo effect (Brody & Brody, 2000; Hunt, 2002; Stewart-Williams & Podd, 2004a, 2004b).

Expectancy Theory

According to expectancy theory, placebo effects are simply explained by conscious expectancies. In other words, a placebo produces a placebo effect in a given recipient because that person *expects* a certain effect due to receiving what they believe is a genuine medicine or treatment (Stewart-Williams & Podd, 2004a, 2004b). As Brody and Brody (2000) have explained,

> Expectancy theory simply proposes that if you count on improving after you receive a medicine, there is a good chance that you will, even if the improvement cannot be explained by any of the chemical components of a medication. Put more simply, the mental state of expectancy, by itself, can have an impact on the state of the body's health or illness. (p. 217)

According to expectancy theory, a person's expectation can produce a bodily or subjective change to not only a medication, but to nearly *anything*, be it a treatment, procedure, statement, or any number of things. As we will see in the case of counselling, even something as innocuous as a small comment made by the counsellor to a client, or the client seeing a neatly framed diploma hanging on the wall of a counsellor's office, can produce a powerful expectation within a person.

Expectancy is one of the primary factors in most social learning theories (e.g., Bandura, 1986; Rotter, 1982). Although based on a behavioural approach to learning, social learning theory incorporates cognitive processes such as thoughts, beliefs, and expectations. Through personal experiences and observations of others, individuals learn to expect certain outcomes. In most therapeutic instances, expectations lead to *positive* changes in a client's well-being or subjective state. However, they can also produce *negative* changes, similar to the patient who begins to feel side effects from a medication shortly after being informed of their possibility, or the individual whose condition takes a turn for the worse after receiving a poor prognosis from a physician or counsellor (Stewart-Williams & Podd, 2004a). Importantly, the more credible a potential healer is deemed to be in the eyes of the patient, the more powerful are both the positive and negative effects of expectations (Hunt, 2002; Senger, 1987; Wampold, 2001).

Expectancy theory is currently one of the more popular placebo theories (Stewart-Williams & Podd, 2004a), although it has difficulty accounting for all aspects of the placebo effect. In particular, expectancy theory has some difficulty explaining the documented placebo effect that can occur in animals (Stewart-Williams & Podd, 2004a), or instances where the learning involved in the placebo effect appears to be at a non-conscious level. To help explain some of these phenomena, researchers have turned to related conditioning theories of the placebo effect.

Conditioning Theory

The most familiar example of classical conditioning is the famous case of Pavlov's dogs, who learned to salivate (conditioned response) at the sound of a bell (conditioned stimulus) alone, after the bell had been repeatedly paired with the actual offering of food (unconditioned stimulus). A similar process appears to be involved in certain examples of the placebo effect, particularly in animal models. In one fascinating example, Ader and Cohen (1975) paired a sweet-tasting (saccharine) liquid with a powerful immunosuppressant drug that was administered to rats. After just a few pairings, the researchers were actually able to produce powerful immunosuppression in the rats by simply administering the saccharine liquid alone. In this case, the saccharine liquid had become a placebo, and a *learned* placebo effect, or a conditioned response, followed ingestion of the liquid. Similarly, numerous other animal experiments have shown that pairings of otherwise inert substances can have powerful healing effects when injected into animals that have been conditioned with actual medications. Thus, it would appear that animals can somehow learn how to heal themselves at a physiological level, as opposed to a more cognitive level (Hunt, 2002).

There is also good evidence, however, that the placebo effect can be conditioned or learned in humans as well. Castes, Palenquie, Canelones, Hagel, and Lynch (1998), for example, conducted experiments in which asthmatic children, who had their normal asthma medication paired with a vanilla aroma, later experienced significant lung improvement with just the vanilla aroma alone. Similarly, most adults have had experiences where they have paired a treatment or procedure, such as taking a pill, with an experience of feeling better. This chain of events can then lead to a future conditioned response of feeling better, which can be elicited by simply taking a pill (conditioned stimulus), even if the pill is only a sugar pill (Brody & Brody, 2000; Hunt, 2002). Similarly, Brody and Brody have outlined a process that most of us can relate to from childhood. The process is as follows: (a) something starts to hurt, (b) a parent shows love and concern, and (c) the hurting stops. In this way, we grow up to be powerfully conditioned that whenever someone expresses care and concern, an unconscious response of feeling relief of pain (or unpleasant symptoms) can occur.

Meaning Theory

Finally, meaning theory considers how the meaning a person gives to any particular treatment or procedure contributes to the development of an overall

placebo response (Brody & Brody, 2000). In other words, an encounter with a healer of some kind is most likely to produce a placebo response when the encounter somehow alters the meaning of the illness (Brody & Brody). In the context of counselling, this might occur when the client tells his/her story, experiences the therapist's receptiveness, and the therapist and client create a new symbolic system that the client believes and perceives as being ultimately responsible for positive changes (DeMarco, 1998). Obviously, the meanings that people have around illness and healing are usually very culturally bound and ritualistic (DeMarco), and Hunt (2002) has referred to the placebo effect as a culturally determined "self-healing" ritual. These healing rituals, such as the ritual of demonstrating care and concern for someone who is suffering, can be created not only within the context of an individual patient and a healer, but also in groups, and even in larger communities (Hunt).

With respect to learning, meaning theory suggests that clients may be imbued with a sense of mastery and control (Brody & Brody, 2000), motivational constructs that are embedded in most learning theories (e.g., Bruner, 1986; Maslow, 1968, 1970; Weiner, 1986). In other words, regardless of the effectiveness of the therapeutic experience or treatment, the client may believe that he or she is capable of controlling and mastering the healing process; not only because the client initiated the therapy, but also because he or she "is listened to and receives a meaningful explanation for the illness that makes sense" (Brody & Brody, p. 224). The client then experiences the care and concern expressed by the healer, which may lead to an enhanced sense of mastery or control of the situation. By getting glimpses of being in control and mastering the therapeutic experience and treatment, clients may learn how to positively respond to treatment, thus creating the potential for the placebo effect (Brody & Brody).

THE PLACEBO EFFECT IN COUNSELLING

So far, the authors have reviewed definitions and examples of the placebo effect and possible theoretical explanations for its existence. At this point, the authors will now turn to the possible role that the placebo effect may play in counselling.

Counselling: Embarrassing Research Findings and Non-Specific Factors

Central to the charge that much of the effectiveness of counselling may be largely due to a placebo effect is the thorny issue that many counsellors cannot fully articulate just how it is that counselling actually works (Hunt, 2002). To complicate the matter, there are over 400 different named approaches to therapy and counselling (Karasu, 1986), and counselling outcomes research has generally shown them all to be equally effective (DeMarco, 1998; Drisko, 2004; Luborsky et al., 2002; Wampold, 2001). That is, when one reviews the numerous meta-analyses of studies that have compared the relative efficacy of different forms of counselling, one finds that all forms of therapy are generally equal in efficacy, despite considerable variation in theoretical orientation and specific techniques

(Ahn & Wampold, 2001; Lambert & Bergin, 1994; Luborsky et al., 2002; Messer & Wampold, 2002; Seligman, 1995). This finding that all counselling approaches appear to be equally effective is known as the "tie score" effect (Senger, 1987) and the "Dodo bird's verdict" (Luborsky et al., 2002), after the Dodo bird in *Alice in Wonderland* who declared, after judging a race, that "everybody has won, so all shall have prizes." What may be particularly discouraging to the average counsellor, however, is not only the fact that no theoretical counselling approach appears to be any more effective than another, but also that some researchers have suggested that even inexperienced, untrained non-professional therapists can produce counselling outcomes comparable to professional, highly trained therapists (Berman & Norton, 1985; Durlak, 1979).

This is not to say that counselling is necessarily ineffective, however, as a considerable body of counselling outcomes research suggests counselling is highly effective (Grissom, 1996; Lambert & Bergin, 1994, Seligman, 1995; Wampold, 2001). What appears to make counselling effective, however, is not so much the *specific factors* found in any one particular therapy, such as cognitive distortion correction by a cognitive therapist or mythical dream analysis by a Jungian analyst, but rather the *nonspecific factors* that are found in all forms of therapy and counselling (Lampropoulos, 2000; Luborsky et al., 2002). These nonspecific factors, also known as "common factors," include such things as the therapeutic alliance, warmth, empathy, encouragement, support, emotional catharsis, and the overall quality of the relationship between therapist and client (DeMarco, 1998; Grencavage & Norcross, 1990; Senger, 1987; Wampold). It is these nonspecific factors that not only appear to be responsible for the majority of the client satisfaction and benefit obtained from counselling (Eugster & Wampold, 1996), but are also the factors that some critics contend create a powerful placebo effect in counselling through a combination of client expectations and conditioning, a criticism to which we now turn.

Nonspecific Aspects of Counselling: A Placebo Effect?

The argument that the effectiveness of counselling is largely due to a placebo effect is essentially as follows: (a) the principal benefits from counselling are due to nonspecific factors such as listening, concern, support, and encouragement; (b) these nonspecific factors can generally be easily found in ordinary, non-professional interactions with non-professional persons such as friends and family; (c) therefore, since these nonspecific factors are probably inert, as opposed to actual therapeutic techniques that only trained professionals can offer, it follows that counselling is nothing more than an exercise in the placebo effect (DeMarco, 1998). In other words, the counselling client merely experiences nonspecific and inert "counselling placebos" such as therapist listening, warmth, attention, and encouragement, and through a process of creating expectancies and/or learning through conditioning, may experience a placebo effect whereby the client begins his or her own process of self-healing. For example, a counsellor may demonstrate certain skills during a counselling session that he or she believes will be therapeutic, such as genuineness and empathic reflections of feelings, but any change that occurs in the client

may be entirely due to the client *expecting* such counsellor actions to be helpful, which in turn invokes a placebo effect. Certain specific counselling factors, such as the counsellor using a "two-chair technique"—or a nonspecific factor such as the appearance of the counsellor or the counsellor's office—may set up certain expectancies within the client to improve, and hence create a placebo effect that engenders actual improvement. Therefore, to varying degrees, it may not matter so much what a particular counsellor says or does, as long as the counsellor is somehow able to facilitate the client *expecting*, or learning to expect, to get better as a result of whatever it is the counsellor is saying or doing.

Understandably, the idea that much of the effectiveness of the counselling process is due to a placebo effect does not sit entirely comfortably with some members of the counselling profession, who have rallied to offer counter-arguments against the "counselling as placebo" argument. DeMarco (1998), for example, has argued that the nonspecific aspects of counselling should not be considered merely inert psychological placebos, for the simple reason that the nonspecific aspects of counselling, such as the working alliance, *are* powerful psychological interventions that produce change by their very psychological nature. Kirsch (2004) has also argued that some counselling procedures might be considered placebos if effective only due to client expectancies, whereas other counselling procedures might actually be inherently effective, although he notes it is difficult to prove what is actually the case in any given context.

Other authors have pointed to the many studies that suggest that certain therapies and techniques are in fact more effective for a wide variety of conditions and disorders than other therapies and techniques, hence refuting both the "common factors" and "counselling as placebo" arguments. For example, popular books such as *What Works for Whom* (Roth & Fonagy, 2006), the American Psychological Association's task force on "empirically validated therapies" (Task Force on Promotion and Dissemination of Psychological Procedures, 1995), and a literature review by DeRubeis and Crits-Christoph (1998) all give the impression that specific therapies are highly effective for very specific conditions. However, as Reisner (2005) points out, it has also been strongly argued that experimenter allegiance to their forms of therapy may well account for many of the research findings that suggest certain therapies are more effective for certain conditions than others (Luborsky, 1995; Luborsky et al., 1999; Messer & Wampold, 2002; Silverman, 1996). As an example of this, Seligman (1995) points to the major *Consumer Reports* survey, conducted by persons considered neutral to any particular form of therapy, which found that all forms of therapy were essentially equal in terms of effectiveness across a wide range of conditions.

Another line of argument against the existence of the placebo effect in counselling points to studies that have tried comparing traditional psychotherapies against "placebo" psychotherapies that emphasize the so-called common factors, such as attention, warmth, and expectations for change. Several large meta-analyses of these kinds of studies have concluded that traditional theoretically based psychotherapy treatments are in fact slightly more effective than placebo psychotherapies (Gris-

som, 1996; Horvath, 1988; Lambert & Ogles, 2004; Lipsey & Wilson, 1993). However, these same meta-analyses also showed that placebo psychotherapy was considerably more effective than no treatment at all. Furthermore, it has been noted that counselling, unlike medications, cannot be easily tested with a placebo control, as it is difficult to include in a "placebo treatment" (within a research study) all the possible common factors that exist in most therapies (Horvath; Wampold, 2001). Furthermore, there is no neat and tidy method to replace the so-called "active" components of counselling with the "inert" components, as is done in the case of placebo medications (Lambert, 2005; Stewart-Williams & Podd, 2004a, 2004b; Wampold).

Implications of the Possible Placebo Effect in Counselling

Although the debate over the existence of a placebo effect in counselling may never be completely resolved, the overall debate raises a number of important potential implications for counsellors and the counselling profession. These implications include the need for more research on counselling effectiveness, the ethical and practical implications of the placebo effect, and the actual need for counselling services in our current society.

Research on Counselling Effectiveness

First, there is a need for more research on the actual effectiveness of counselling, particularly bias-free research on the factors or counselling techniques that seem to be particularly effective for certain conditions and populations, clients' perceptions of trained professional counsellors versus lay forms of therapy, and the effectiveness of longer-term treatments (Luborsky et al., 2002; Reisner, 2005; Seligman, 1995). Many of the original studies on the specific versus nonspecific aspects of counselling, and professional versus non-professional forms of therapy, were conducted in the 1970s and 1980s. As such, there is a need for more research to replicate or refute these findings in current contexts, and to better understand the overall effectiveness of contemporary counselling, particularly in comparison to more lay forms of support and therapy. In addition, more sophisticated research designs are needed that create better comparative conditions of placebo counselling (as with the case of placebo surgery), and to better distinguish between the inert and active components of professional counselling (Horvath, 1988). Finally, cognitive and behavioural therapies are heavily overrepresented in the counselling outcomes research literature, so a greater representation of other therapies in comparative effectiveness studies and placebo studies may help to better understand common factors in counselling, and the extent to which these common factors may or may not contribute to a placebo effect (Reisner).

Ethical and Practice Implications of the Placebo Effect

The placebo effect *is* a real effect, and it is entirely possible that a large placebo effect is operating within counselling, as occurs with many other helping and

healing interventions in health and mental health care today. This raises a number of interesting ethical and practice implications for counsellors. First, counsellors may be professionally and ethically bound to consider ways in which they can maximize the possible positive placebo effects that might influence counselling, and minimize possible negative placebo effects. For instance, a counsellor may need to consider his/her ethical obligation to choose and adopt some kind of theoretical perspective of counselling that he/she firmly believes in; perhaps not so much for the actual therapeutic benefit provided by such a theory, but more to maximize the placebo effect conferred by therapists who firmly believe in the kind of counselling they offer (Hunt, 2002). Similarly, counsellors may need to be even more careful about pessimistic and nihilistic views they might hold toward the treatment of certain clients, such as those that have been diagnosed as having "personality disorder." That is, such negative therapist opinions may easily feed into negative perceptions of treatment among these clients, which in turn can lead to the development of a *nocebo*, or negative placebo, effect.

Second, counsellors might be ethically bound to pepper their interventions with as many positive comments and tales of good prognosis as possible, if for no other reason than to raise the positive expectations and therefore the chance of positive outcomes within their clients (DeMarco, 1998; Seligman, Steen, Park, & Peterson, 2005). Unfortunately, a dearth of research currently exists that would help guide counsellors to determine which kinds of statements are best suited for raising the positive expectations of certain clients in specific situations. Knowing more about what kinds of interventions might boost clients' expectations of their therapy raises the exciting possibility of being able to better tap into clients' own power of healing, a point that has been raised in discussions about the powerful role that the placebo effect plays in the effectiveness of antidepressants (Kirsch & Sapirstein, 1999).

Finally, counsellors may need to consider whether they are ethically required to inform clients that a significant portion of the benefit they may receive from therapy may be due to the placebo effect. Similarly, counsellors and clients may wish to discuss the placebo effect in the context of the clients' own powerful ability to heal themselves, and the power of positive client expectations of therapy and themselves (Seligman et al., 2005).

The Need for Counselling Services in Society

DeMarco (1998) has suggested that while counselling interventions may mimic a placebo effect, in that they may seem indistinguishable from the kinds of inert interventions normal caring friends and family members might be able to provide, there continues to be a large demand for counselling services. Therefore, it may well be that friends and family are often unable and/or unwilling to provide such services, that clients do not have ready access to friends and family, or that clients feel uneasy about approaching them with their troubles. As DeMarco states:

> [I]t is wrong to imply that something which is no more effective than a placebo is also placebogenic. The [counselling] techniques act like placebos only if people have ready access, outside of

professional therapies, to relationships that involve the common factors and share the pertinent symbols. (p. 226)

Therefore, the issue of whether counselling is largely a placebo effect may be ultimately irresolvable. In the final analysis, perhaps the most important point is that many clients find the experience of counselling to be a valuable, effective, accessible, and safe process for them to harness their own power of self-healing, a process that many people are not able to obtain elsewhere.

References

Ader, R., & Cohen, N. (1975). Behaviorally conditioned immunosuppression. *Psychosomatic Medicine, 37*, 333–340.

Ahn, H., & Wampold, B. E. (2001). Where oh where are the specific ingredients? A meta-analysis of component studies in counseling and psychotherapy. *Journal of Counseling Psychology, 48*, 251–257.

Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall.

Berman, J. S., & Norton, N. C. (1985). Does professional training make a therapist more effective? *Psychological Bulletin, 98*, 401–407.

Brody, H., & Brody, D. (2000). Three perspectives on the placebo response: Expectancy, conditioning, and meaning. *Advances in Mind-Body Medicine, 16*(3), 216–232.

Bruner, J. S. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Castes, M., Palenquie, M., Canelones, P., Hagel, L., & Lynch, N. (1998, April). *Classic conditioning and placebo effects in the bronchodilator response of asthmatic children*. Paper presented at Research Perspectives in Psychoneuroimmunology VIII, Bristol, England.

DeMarco, C. W. (1998). On the impossibility of placebo effects in psychotherapy. *Philosophical Psychology, 11*(2), 207–227.

DeRubeis, R. J., & Crits-Christoph, P. (1998). Empirically supported individual and group psychological treatments for adult mental disorders. *Journal of Clinical Psychology, 66*(1), 37–52.

Drisko, J. W. (2004). Common factors in psychotherapy outcome: Meta-analytic findings and their implications for practice and research. *Families in Society: The Journal of Contemporary Social Services, 85*(1), 81–90.

Durlak, J. A. (1979). Comparative effectiveness of paraprofessional and professional helpers. *Psychological Bulletin, 86*, 80–92.

Egbert, L. D., Battit, G. E., Welch, C. E., & Bartlett, M. K. (1964). Reduction of post-operative pain by encouragement and instruction of patients. *New England Journal of Medicine, 270*, 825–827.

Eugster, S. L., & Wampold, B. E. (1996). Systematic effects of participant role on the evaluation of the psychotherapy session. *Journal of Consulting and Clinical Psychology, 64*, 1020–1028.

Fisher, S., & Greenberg, R. P. (1997). The curse of the placebo: Fanciful pursuit of a pure biological therapy. In S. Fisher & R. P. Greenberg (Eds.), *From placebo to panacea: Putting psychiatric drugs to the test* (pp. 3–56). New York: Wiley.

Frank, J. D., & Rosenthal, D. (1956). Psychotherapy and the placebo effect. *Psychological Bulletin, 53*, 294–302.

Grencavage, K. M., & Norcross, J. C. (1990). Where are the commonalities among the therapeutic common factors? *Professional Psychology: Research and Practice, 21*, 372–378.

Grissom, R. J. (1996). The magic number .7 + -.2: Meta-meta-analysis of the probability of superior outcome in comparisons involving therapy, placebo, and control. *Journal of Consulting and Clinical Psychology, 64*, 973–982.

Horvath, P. (1988). Placebos and common factors in two decades of psychotherapy research. *Psychological Bulletin, 104*(2), 214–225.

Hunt, S. M. (2002). An outline explanation of how therapy heals. *European Journal of Psychotherapy, Counselling and Health, 5*(1), 55–69.

Ikemi, Y., & Nakagawa, S. (1962). A psychosomatic study of contagious dermatitis. *Kyoshu Journal of Medical Science, 15*, 335–350.

Karasu, T. B. (1986). The specificity against nonspecificity dilemma: Towards identifying therapeutic change agents. *American Journal of Psychiatry, 143*, 687–695.

Kirsch, I. (2004). Conditioning, expectancy, and the placebo effect: Comment on Stewart-Williams and Podd (2004). *Psychological Bulletin, 130*(2), 341–343.

Kirsch, I., & Sapirstein, G. (1999). Listening to Prozac but hearing placebo: A meta-analysis of anti-depressant medications. In I. Kirsch (Ed.), *How expectancies shape experience* (pp. 303–320). Washington, DC: American Psychological Association.

Lambert, M. J. (2005). Early response in psychotherapy: Further evidence for the importance of common factors rather than "placebo effects." *Journal of Clinical Psychology, 61*(7), 855–869.

Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 143–189). New York: Wiley.

Lambert, M. J., & Ogles, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 139–193). New York: Wiley.

Lampropoulos, G. (2000). Evolving psychotherapy integration: Eclectic selection and prescriptive applications of common factors in therapy. *Psychotherapy: Theory, Research, Training, 37*(4), 285–297.

Lipsey, M. W., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist, 38*, 1181–1209.

Luborsky, L. (1995). Are common factors across different psychotherapies the main explanation for the dodo bird verdict that "Everyone has won and all must have prizes"? *Clinical Psychology: Science and Practice, 2*(1), 106–109.

Luborsky, L., Diguer, L., Seligman, D. A., Rosenthal, R., Krause, E. D., Johnson, S., et al. (1999). The researcher's own therapy allegiances: A "wild card" in comparisons of treatment efficacy. *Clinical Psychology: Science and Practice, 6*(1), 95–106.

Luborsky, L., Rosenthal, R., Diguer, L., Andrysyna, T., Berman, J., Levitt, J., et al. (2002). The dodo bird verdict is alive and well—mostly. *Clinical Psychology: Science and Practice, 9*, 2–12.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper and Row.

Messer, S. B., & Wampold, B. E. (2002). Let's face facts: Common factors are more potent than specific therapy ingredients. *Clinical Psychology: Science & Practice, 9*(1), 21–25.

Moseley, J. B., Wrap, N. P., Kuykendall, D., Willis, K., & Landon, G. (1996). Arthroscopic treatment of osteoarthritis of the knee: A prospective, randomized, placebo-controlled trial. *American Journal of Sports Medicine, 24*(1), 28–34.

Reisner, A. D. (2005). The common factors, empirically validated treatments, and recovery models of therapeutic change. *Psychological Record, 55,* 377–399.

Roth, A., & Fonagy, P. (2006). *What works for whom: A critical review of psychotherapy* (2nd ed.). New York: Guilford.

Rotter, J. B. (1982). *The development and application of social learning theory*. New York: Praeger.

Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The Consumer Reports study. *American Psychologist, 50*(12), 965–974.

Seligman, M., Steen, T., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*, 410–421.

Senger, H. L. (1987). The "placebo" effect of psychotherapy: A moose in the rabbit stew. *American Journal of Psychotherapy, 41*(1), 68–81.

Silverman, W. (1996). Cookbooks, manuals, and paint-by-numbers: Psychotherapy in the 90's. *Psychotherapy, 33*(2), 207–215.

Stewart-Williams, S., & Podd, J. (2004a). The placebo effect: Dissolving the expectancy versus conditioning debate. *Psychological Bulletin, 130*(2), 324–340.

Stewart-Williams, S., & Podd, J. (2004b). Placebo psychotherapies and non-conscious learning in the placebo effect: Reply to Kirsch (2004). *Psychological Bulletin, 130*(2), 344–345.

Task Force on Promotion and Dissemination of Psychological Procedures. Division of Clinical Psychology, American Psychological Association. (1995). Training in and dissemination of empirically validated psychological treatments: Report and recommendations. *Clinical Psychologist, 48*(1), 3–23.

Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings.* Mahwah, NJ: Lawrence Erlbaum.

Weiner, B. (1986). *An attributional theory of motivation and emotion.* New York: Springer.

Wolf, S. (1950). Effects of suggestion and conditioning on the action of chemical agents in human subjects: The pharmacology of placebos. *Journal of Clinical Investigation, 29,* 100–109.

About the Authors

Brad Hagen, Ph.D., R.N., is an associate professor in the School of Health Sciences at the University Lethbridge, where he teaches courses in the nursing program, as well as in the addictions counselling program. His research interests include counselling and mental health issues involving older persons, problem gambling in later life, family care-giving of older persons, and use of psychotropic medications by older persons.

Thelma Gunn, Ph.D., is an educational psychologist in the Faculty of Education, University of Lethbridge. She teaches both undergraduate and graduate courses concerning learning and counselling. Her research interests include cognition and learning, information processing, motivation, and text processing.

Address correspondence to Brad Hagen, School of Health Sciences, The University of Lethbridge, 4401 University Drive, Lethbridge, Alberta T1K 3M4, e-mail <brad.hagen@uleth.ca>.