

BACK PAIN PATIENTS' ADHERENCE TO SUSTAINABLE PHYSIOTHERAPY

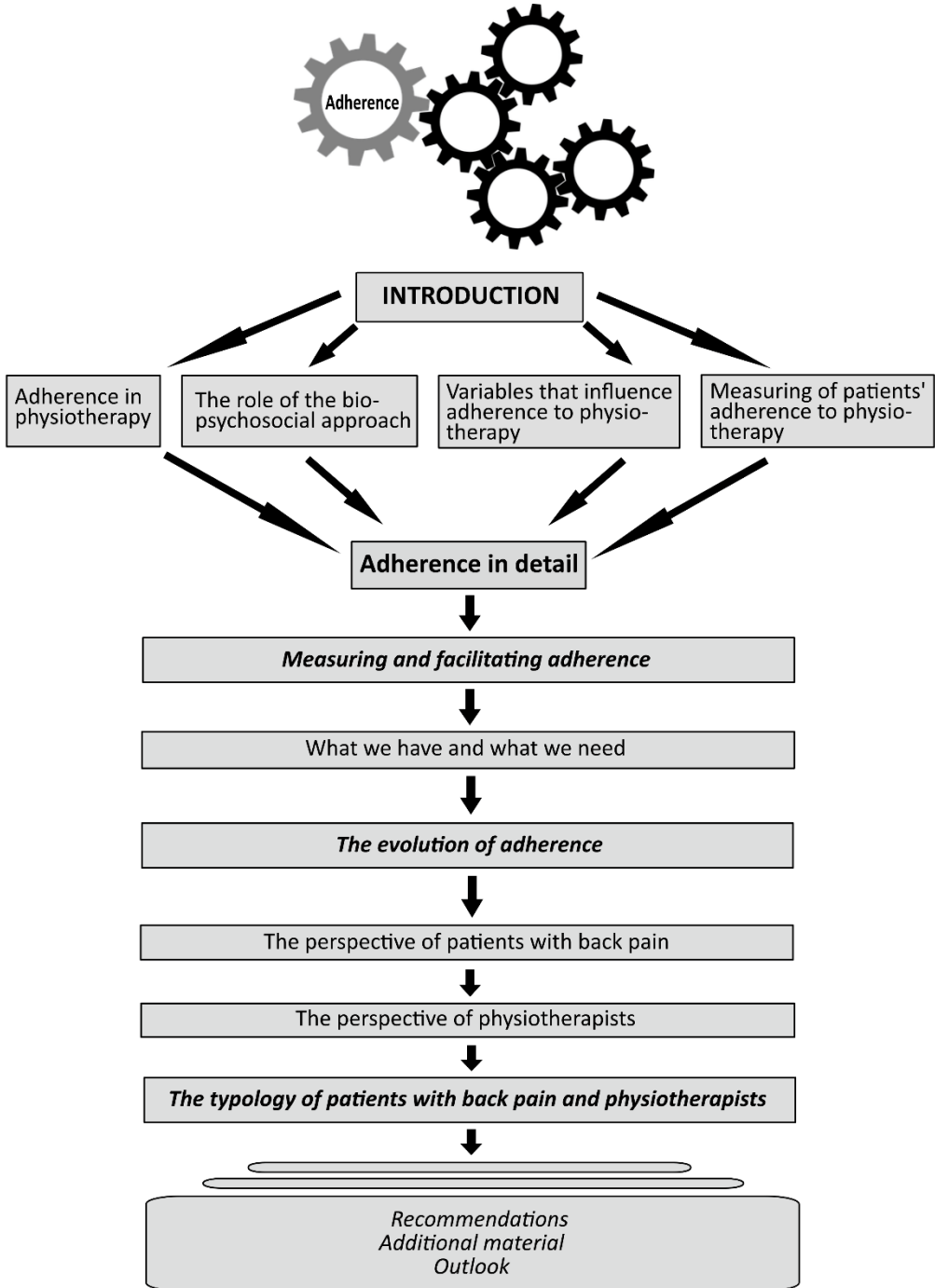
– where are the opportunities?



Andreas Alt



BACK PAIN PATIENTS' ADHERENCE TO SUSTAINABLE PHYSIOTHERAPY – where are the opportunities?



The book titled "Back pain patients' adherence to sustainable physiotherapy - where are the opportunities?" presents the latest evidence on back pain patients' adherence to physiotherapy.

Even the most effective therapy becomes ineffective if the patient does not adhere to the therapy. Sustainability is becoming increasingly important in medicine and healthcare, especially in the context of adherence quality. There are various dimensions to the term "sustainability". For a long time, it has not only been about economic sustainability in the sense of cost efficiency in healthcare. The clinical approach in everyday practice and the avoidance of environmentally damaging consequences through expensive diagnostics and therapies are also key aspects of sustainability. But what is sustainable physiotherapy dependent on? One possible answer could be "adherence".

"The cognition, management, and quality of back pain patients' adherence to physiotherapy and the influence of physiotherapists to increase adherence quality."

The results of various scientific projects are thoughtfully considered in this book. Among many interesting facts, the book examines the issue of back pain patients' adherence to physiotherapy and presents opportunities to physiotherapists to improve adherence. In addition, the book provides detailed practice recommendations on adherence management for physiotherapists and back pain patients.

The quality of adherence is far from dependent on a single factor, a belief, or a specific group of people.

This book is particularly suitable for physiotherapists, students, teachers, and managers wanting to improve adherence to physiotherapy and support sustainable healthcare.

"Adherence to self-management in physiotherapy is the key to sustainable healthcare."

Foreword

This book provides an overview of the latest knowledge on adherence of patients with back pain to physiotherapy. Detailed explanations of the specific topics are added to enable the reader a more comprehensive range of information. This includes specific recommendations on how to optimize adherence of back pain patients, especially in the long term. The key factors are therapeutic strategies that promote self-management, sustainable patient resilience, and the reduction of physiotherapeutic and medical resources, e. g., pharmacies, human resources, traffic, and related emissions. This means that it is not easy to facilitate adherence in terms of patients' often dubious expectations and preferences that do not alleviate their symptoms and make them even less manageable. This is especially recognizable when there is a request only for short-term effective methods in the therapy. It can be difficult to encourage adherence to strategies that "demand" something from the patient, such as behavior changes. Exactly which strategies these are and how to deal with them therapeutically is shown in the further course of the book.

We should not ignore the fact that the "guilt" for low or non-adherence to sustainable effective strategies is not built up automatically by only one party, such as the patients with their expectations. Physiotherapists, physicians, or other healthcare providers also influence the adherence quality, either positively or negatively. The characteristic and in this case the professional view of physiotherapists can be blamed for this.

Therefore, this book also recommends how patients with low back pain should interact with their physiotherapists. We physiotherapists have an ethical and moral obligation to provide, implement, and facilitate adherence of patients to sustainably effective physiotherapy.

The book explains several research projects that build on each other and finally provide a solid insight into the current state of adherence in physiotherapy. This offers the reader a wealth of expertise and detailed insight into the scientific methods used to research adherence in physiotherapy.

It begins with detailed background information on adherence, followed by a specification regarding the measurement and facilitation of adherence. This chapter explains the current possibilities for analyzing and optimizing the adherence quality of patients with back pain, shows the qualitative lacks of these methods, and points out the required needs.

After learning more about the details of measuring and facilitating adherence, the patient's and the physiotherapist's perspectives on adherence became relevant. This chapter explains the complex processes that influence the quality of adherence in back pain patients and the typologies of patients and physiotherapists.

Finally, the concretization of strategies became interesting to define the tools for an independent "Adherence Therapy". This chapter presents the agreements of different researchers and experts regarding the facilitation of adherence as an independent strategy. The resulting information

should be used in the future to serve the goal of an effective and patient-centered Adherence Therapy, especially for patients with back pain.

When you have read and processed all these major sections of the book, you should not ignore the concluding Chapter 15 *Closing words and Outlook* at the end of the book. There you will find perhaps the most exciting thoughts of the book, especially for the future of physiotherapy.

Uncovering the complexities and recognizing the challenges of adherence in patients with back pain will hopefully take you on an interesting journey. The book contains a variety of illustrations that will help you realize the opportunities and great potential of adherence in physiotherapy.

Thank you for your interest in this relevant topic and enjoy the following content!

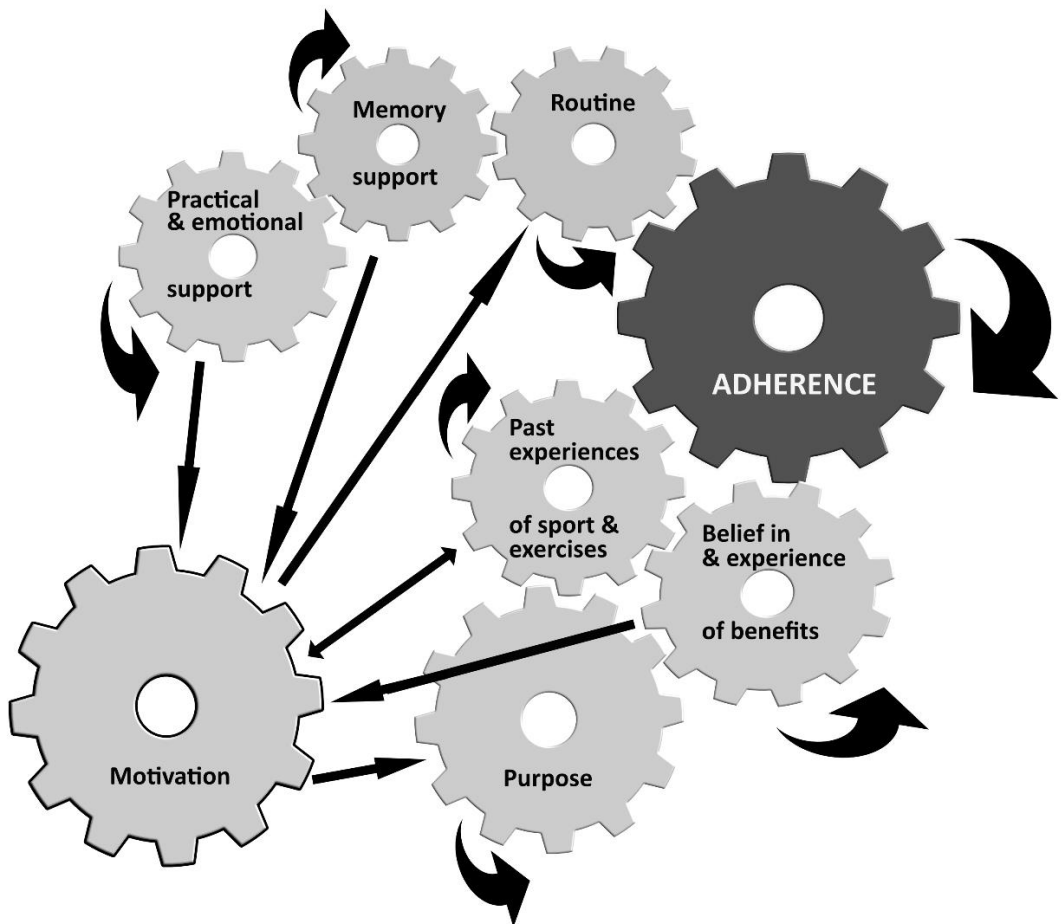


Figure 1 The functioning of adherence

This Figure shows the complexity of how adherence works based on the individual elements that play a role. The psychological and multidimensional become apparent (extended based on Hancox et al., 2019).

The factor "motivation" is probably most often mentioned as decisive for the adherence of patients and the development of adherence. Whether and how dominant motivation really is in the context of adherence will be clarified later in the book. But what is this popular driver that helps us "jump over our shadow" or "start dominant with something"? How does it differ from other drivers, such as "discipline"?



Notification: Motivation encompasses the totality of all motives that lead to the willingness to act and the human striving for goals can be related to emotional and neuronal activity (Hildebrandt et al., 2002; LeDoux et al., 2006). Motivational states are generally understood as forces that generate a disposition to goal-directed behavior. It is assumed that different mental states compete and that only the strongest state determines behavior (Wasserman et al., 2020). In physiotherapy, this means that, for example, a patient can be motivated to perform the exercise program without doing it. It can also mean that a physiotherapist is motivated to behave in a guideline- or evidence-based approach but does not. In contrast, "discipline" would help to perform the action for which one is motivated. The paradigmatic mental state that causes motivation is desire. But various other states, such as beliefs about what to do, can also motivate. The conversion of motives into actions is called "volition" (Kanfer, 1987).

The neurotransmitter dopamine plays an important role in reinforcing and motivating actions. However, drugs that impair dopamine transmission interfere with reinforcement learning, whereas manipulations that enhance dopamine transmission (brain stimulation, addictive drugs = reinforcers). It is important to note that negative sensations can also be "reinforced," which has nothing to do with positive motivation as a reinforcing initialization. Dopamine transmission is critical for generating a motivational state and for building memories of associations between cues (e.g., request to perform exercise) and reward (e.g., pain reduction, functional improvement, etc.). Dopamine release is critical for goals to be "wanted" (= motivating actions) (Bromberg-Martin et al., 2010). This can also be observed in patients' adherence behavior (Figure 2).

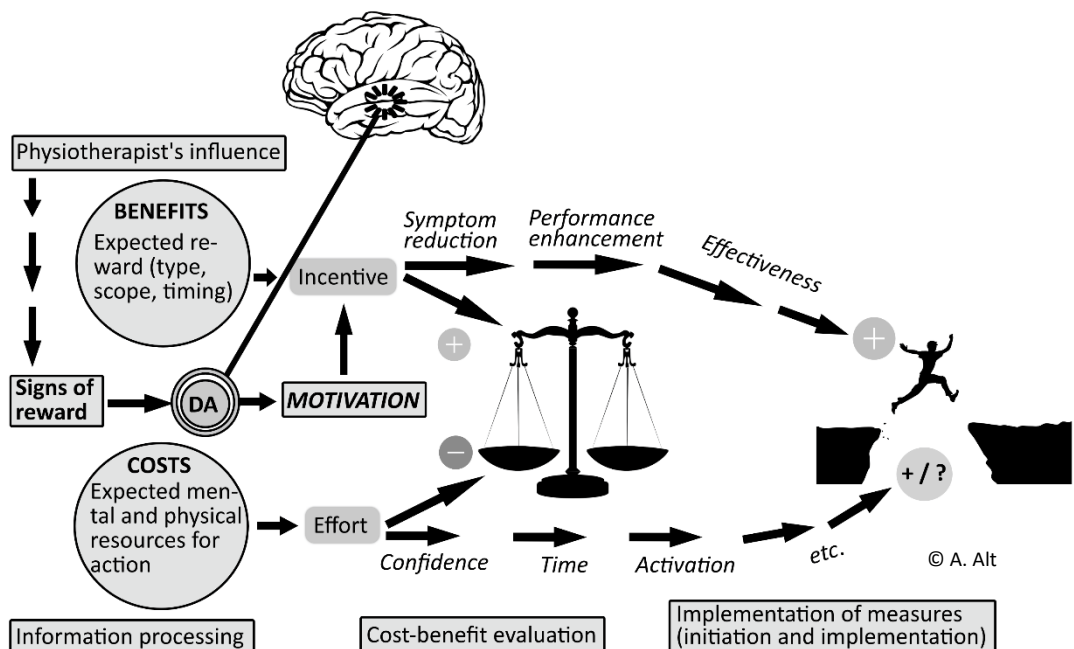


Figure 2 The influence of motivation and dopamine on adherence

This Figure shows the influence of patients' motivation on dopamine (DA) and adherence.

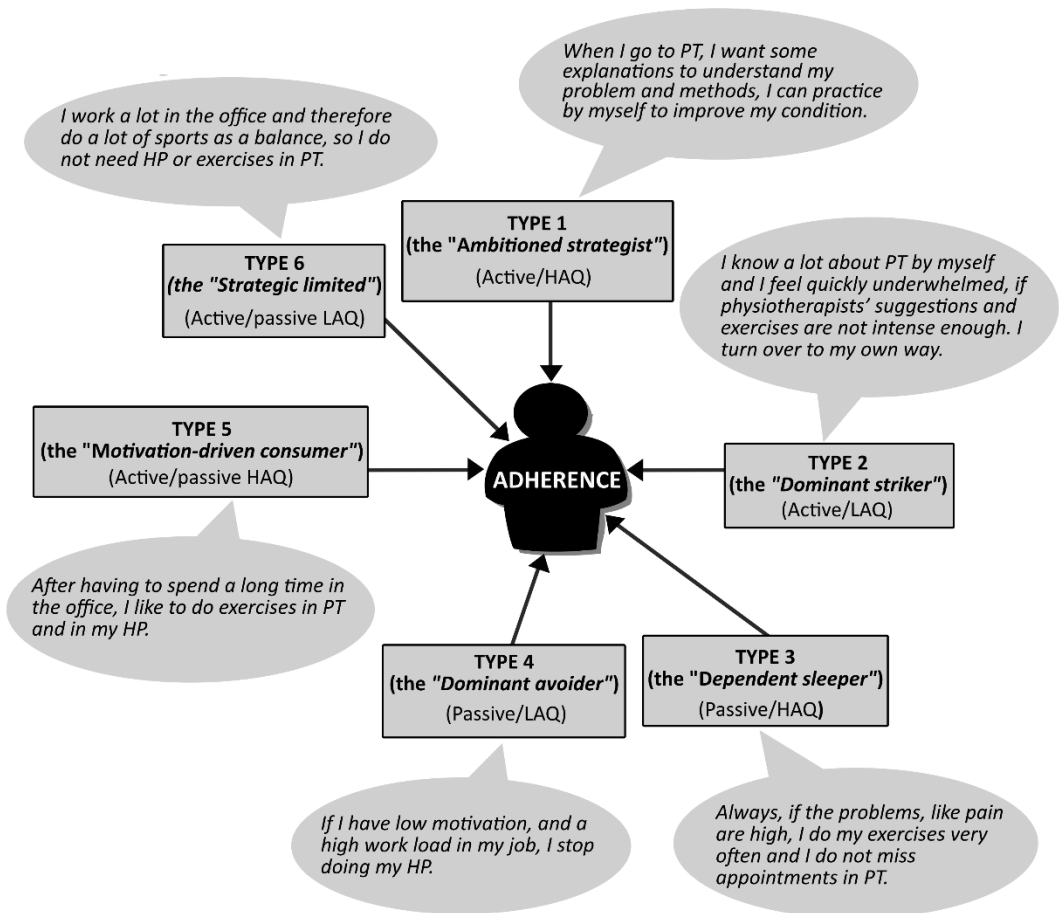


Figure 3 Types of back pain patients in relation to their adherence to PT and HP

This Figure shows six different types that could be assigned to the patients and typical statements about each. The focus is on adherence. NSLBP = non-specific low back pain; HP = home program, PT = physiotherapy; HAQ = high adherence quality; LAQ = low adherence quality

9.4 Type characterization of back pain patients

Six different types of patients with back pain formed from the deductive information. Four of the six types could be identified in the data from the previously conducted focus group study. The types can be described as...

In order to avoid patient bias, which seems to have been caused by colleagues or other medical actors, direct discussions with these people to clarify the conflict situation are suitable. In this way, the risk of subsequent distortions can be reduced. To use the potential of communication, strategies are available that relate to the development of sympathy, reflective listening, targeted questioning, and the respectful presentation of expertise. In this way, misunderstandings can be prevented and refuted more easily because a basis of trust has been created.

Recommendations for non-specific back pain patients' physiotherapists...



- ➔ Be sure to systematically follow patients throughout the therapy process, especially in face-to-face PT, but also in collaboration with the HP.
- ➔ Physiotherapists should be aware of their responsible role as experts and try to implement evidence-based therapy content in an attractive way for the patient.
- ➔ Develop PT that is perceived as meaningful by the patient.
- ➔ Expand your skills, e.g., in the context of behavioral knowledge.
- ➔ Avoid patient bias that seems to be caused by colleagues or other medical actors; direct discussions with these persons to clarify the conflict situation are appropriate.
- ➔ Avoid misunderstandings by reflective listening, targeted inquiries and respectful presentation of expertise.

To develop an autonomous adherence strategy, defined as a PT application, reading between the lines, listening carefully to what the patient is saying, educating the patient regarding their discomfort, coaching the patient related to goal attainment, and the communication recommended as essential elements.

Recommendations for physiotherapists treating back pain patients

The following are recommendations for physiotherapists of patients with back pain that relate directly to PT with these patients.

Patient type 1

Therapeutic cooperation with this patient type has a lot of potential to be successful. It is important for physiotherapists to interact with this type regularly by asking questions about reflection, experiences, and goals...

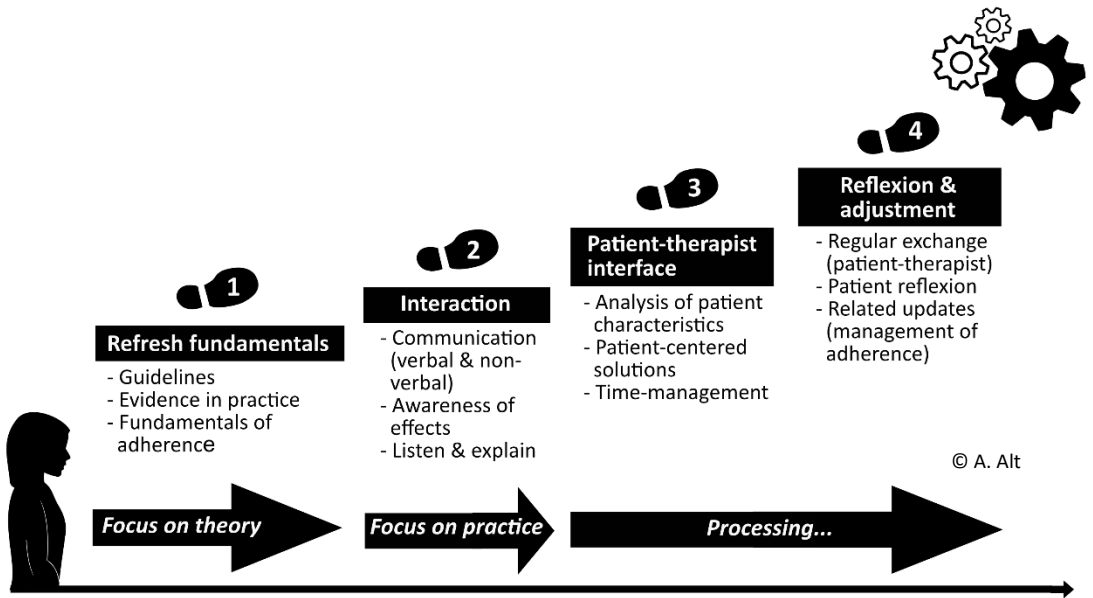


Figure 4 Model of an independent Adherence Therapy by Andreas Alt

This figure shows the essential content of an independent Adherence Therapy in patients with back pain in PT. It is structured in four essential steps and works progressively. This illustration is a first prototype.

The first step of the model refers to the basics of knowledge needed on the topic of adherence in back pain patients' PT...

Further literature and partners

Andreas Alt's partnerships are renowned and responsible players in the fields of science, education, and practice. The journals and books also listed are suitable for professionals to deepen their expertise and for patients to recommend for the implementation of their self-management.

For professionals

- Alt, A., Herbst, M., Reis, J. (2022). *Physiotherapie Grundlagen (Best Practice)*, 3. Auflage *Amazon & Books*
- Alt, A., Sommer, M. (2021). *Evidenzbasierte Physiotherapie verstehen. Die Fachwelt*
- Alt, A. (2022). Is the physio2future model suitable as an orientation for sustainable physiotherapy? *OPJ*. <https://doi.org/10.14426/opj/20230404e>
- Buttler, D., Moseley, G.L. (2014). *Explain Pain*, 2nd Edition. *NOI Group*
- Nicholls, A.D. (2019). *The End of Physiotherapy*. *Routledge*
- Ringel, S. (2021). *Professionalisierung der deutschen Physiotherapie aus einer ethischen und moralischen Perspektive*. *GRIN*.

For patients

- Alt, A., Kolster, B.C. (2021). *Du bist dein eigener Therapeut – Buchserie*. KVM – Der Medizinverlag (**QR-Code**)



PARTNERSHIPS & RELEVANT ORGANIZATIONS

Deutsche Gesellschaft für Physiotherapiewissenschaft

www.dgptw.org

e3 PHYSIOTHERAPIE – Erlangen

www.e3-physiotherapie.de

Environmental Physiotherapy Association

www.environmentalphysio.com

Fysiotherapie Zug

www.fysiotherapiezug.ch

PI-Physiotherapie – Privatpraxis für Physio- und Trainingstherapie

www.pi-physio.de

pt Zeitschrift

www.physiotherapeuten.de

Therapiezentrum BergAuf

www.therapiezentrum-bergauf.de