



# THE FOREIGN LANGUAGE EFFECT IN PSYCHOTHERAPY



## INTRODUCTION

This policy report addresses the possible benefits and implications of using a foreign language as part of an intervention in psychotherapy, particularly in combination with emotion regulation strategies and exposure to fearful objects. Given the increased linguistic diversity in Europe and beyond, it is important for mental health professionals, teachers, and the general public to understand how the choice of the language used may affect the success of psychological therapies. This report includes findings from various collaborations in the clinical, academic and scientific fields within the framework of the project “The Multilingual Mind – MultiMind.”

**MULTI MIND!** is a research and training network that seeks fundamental breakthroughs in multilingualism research by adopting a multi-disciplinary perspective with the following main scientific themes: language learning, cognition, and creativity, language processing and the multilingual brain, multilingual cognition and society, language impairment in multilingual children, and multilingualism in migration and refugee settings

## KEY FINDINGS

### Psychotherapy in a foreign language context:

- Using a foreign language does not negatively affect therapies focused on extinction of fear.
- The emotion regulation strategy of reappraisal works similarly in both the native language and a foreign language.
- The use of a foreign language does not cause an impediment in the course of exposure therapy in bilingual people.

### Considerations of the foreign language effect that could improve the benefits in therapy:

- Offer patients the possibility of carrying out the session in either their native language or in a foreign language.
- Inform the relevant professionals (clinicians, teachers) of the possibility and potential benefits of using a foreign language of the person concerned.

## METHODOLOGY

This report establishes some guidelines according to the results obtained from research conducted within the project “MultiMind”, which is also based on previous evidence in the field of foreign language and psychotherapy. Relevant references are provided at the end of the report. The report begins with a summary of the findings related to this line of research.

**The evaluation of the evidence-based findings rests on the following principles:**

**(a)** psychotherapeutic protocols: data availability on therapeutic processes and interventions in clinical cases of bilingual patients.

**(b)** scientific experiments: experimental paradigms testing the foreign language effect with respect to an appropriate control group.

A selection of the studies was based on the inclusion of adult bilinguals, so that the information collected reflects the perspective of a particular group of bilinguals with similar characteristics and who can express themselves in a similar way, even if it is in different countries and in different native and foreign languages.

## BACKGROUND & CHALLENGES

### Define the therapeutic approach

There are different therapeutic approaches for every disorder. The selected approaches involve the manipulation of emotions. Exposure therapy is a commonly used technique that deals with the emotion of fear in a series of gradual steps (Hofmann, 2008). The use of this paradigm has previously been tested (García-Palacios et al., 2018), resulting in a modulating role of the foreign language in the acquisition of fear. Along with exposure therapy, there are other strategies that are directly related to the management or reduction of the intensity of emotions, either positive (joy, surprise) or negative ones (sadness, fear). These strategies are called emotion regulation strategies. In this research, they have been used in combination with exposure therapy in order to achieve a solid approach involving language in several forms (writing, reading, speaking). These strategies use language as a helpful tool for the management of emotions. For instance, an explicit strategy, such as reappraisal, allows participants to verbalize a sentence. This helps them to reduce or modulate the level of emotion they are feeling when confronted with the stimulus presented to them. To make sure all participants are able to regulate emotions and understand the concept, a set of questionnaires involving regulation strategies, anxiety, and depression are completed.

## LIMITATIONS OF PREVIOUS RESEARCH



The need to explore the efficacy of therapy in a foreign language emerged from clinical cases. Generally, these cases were anecdotal and lacked **empirical evidence** (e.g. Freud, 1918). Only a limited number of studies have explored the effect of foreign language within the field of psychotherapy or within an emotional framework.

Moreover, **physiological measures** are a recent addition to this area of research which need to be used in more depth in order to measure arousal levels and to complement the conventional self-reports.

Finally, many studies have focused on linguistic material in exploring the foreign language effect, and not much attention has been drawn to **nonlinguistic stimuli** that can additionally be modulated by linguistic tools.

### Role of context & age of acquisition of the second language

Relevant characteristics concerning the bilingualism of the participants are the age of acquisition (Harris, 2004) and the context of acquisition (Altarriba, 2008). A later age of learning a second language is usually related to a lower proficiency, which leads to a remarkable difference in the level of knowledge and linguistic fluency in comparison to a mother tongue. This marked difference between languages eventually results in the foreign language effect, as it has been noted in previous studies (Chee et al., 2001). A questionnaire exploring the perceived level of English and the age of acquisition provided the necessary information to ensure that the participants in this study had a similar proficiency level, as well as a similar age and context of acquisition. The selected level of proficiency in exploring the foreign language effect ranged between an intermediate and high level of proficiency, which in practice differed considerably from a native language. In addition, the fact that the second language was not used frequently contributes to the difference from the native language. The set of these factors determine the presence of the foreign language effect. Essentially, the context and age of acquisition as well as the frequency of use are some of the factors that have had to be carefully taken into account to produce this research.

## POSSIBLE SOLUTIONS

### Paradigm selection

Inclusion of experimental groups allowed the foreign language effect to be tested amongst a broader sample of people beyond clinical cases. Exposure therapy is a paradigm that offers the possibility to expose patients to the extinction of fear through language via instructions and accompanied by emotion regulation. This particular paradigm was chosen due to its frequent use in anxiety disorders that involve the emotion of fear, such as phobias (Craske et al., 2018).

Exposure therapy does not necessarily involve language during the process. The inclusion of instructions and regulation strategies added a convenient method to modulate the emotional response through one language or the other (native or foreign).

Firstly, the paradigm had to be tested in a brief course of exposure therapy, generating a fear to neutral stimuli, and using non-relevant numbers in order to produce language. Afterwards, a stage that is closer to the procedure used in psychotherapy included the strategy of reappraisal instead of non-relevant numbers. This allowed the participants to produce language at the same time as they were able to decrease the emotion of fear and arousal generated by the stimuli presented.

### Nonlinguistic stimuli

Many of the concerns and fears are caused by objects, people or situations. However, we often find a linguistic way through our thoughts to confront and moderate them.

Research on the foreign language effect has often presented participants with linguistic material to observe differences in the use of language. However, only a limited number of studies has explored the difference in the emotional response between native language and foreign language with non-linguistic material. In this regard, psychotherapy offers various methods based on the language of thought that can attune our mindset to manage a fearful object, which are useful to confront non-linguistic fears. Within the emotion regulation strategies, affect-labeling, and more importantly, reappraisal have been shown as being effective techniques involving language to modulate external negative stimuli, even if they are not linguistic (Jackson et al., 2000; Tabibnia et al., 2008).

### Assessing arousal

To overcome the limitations of the scarce clinical cases reported throughout the scientific tradition in therapy, one further step is to include physiological measures in order to expand the quality of the data. The use of these measures aims at increasing the precision in the measurement of emotional reactivity, indexed by the level of arousal, and therefore, at observing the emotional reaction in every second of the process. Pupil dilation as a physiological measure has been shown to be an accurate measure of the level of arousal, even capturing the different emotional reactivity between languages, native and foreign (Iacozza et al., 2017). Electrodermal activity (EDA) has also been traditionally used to measure arousal in studies involving bilingualism (Eilola & Havlenka, 2011), proving to be an effective measure of emotional reactivity (see Kreibig, 2010 for a review). The combination of both measures ensures accuracy in the measurement of the emotional response of individuals when facing fearful stimuli in each language. Finally, physiological measures provide information beyond the conscious control of individuals, something that cannot be achieved in self-reports (Ciuk et al., 2015).

### KEY FINDINGS (EXTENDED)

Using a foreign language is not an impediment for positive results in therapies which involve the extinction of the emotion of fear, and can facilitate clinical sessions with bilingual individuals. Studies exploring fear in both languages show differences in the effectiveness of therapy in the two languages depending on the strategy used (Morawetz et al., 2017), and sometimes show better effectiveness when therapy takes place in the foreign language.

The foreign language involves higher activation than the native language. Yet, this difference disappears after a few seconds, reaching a similar level of activation in the two languages.

The use of physiological measures in affective processing in a foreign language can provide new evidence towards a positive use of a foreign language for therapy in bilingual individuals. This information could be used to expand the future knowledge on new strategies in psychotherapy for people living abroad.

## POLICY IMPLICATIONS



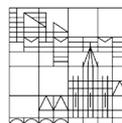
### The results lead to the following recommendations:

- Stimulate the use of a foreign language in therapeutic environments that involve issues of high emotional load. The use of a foreign language in psychotherapy can be as effective as using the native language or it may be even more effective in some aspects of the therapy, depending on how the foreign language is being used.
- **Teachers** should be aware of this point in order to be able to facilitate the necessary help and advice from mental health services for their bilingual students. In order to be able to give adequate advice, teachers should receive information and training related to therapy in a foreign language.
- **Mental health** professionals should be informed that there is no impediment in using a foreign language in therapy. Likewise, mental health professionals should receive training on the possible uses of a foreign language in some techniques commonly used in therapy, such as exposure therapy or emotion regulation strategies.
- **The general population** can benefit from information about emotion regulation in the native and a foreign language because we can find emotional or even fearful encounters in our daily lives. Language can help us handle these emotional or fearful experiences. Emotion regulation is a prevalent routine that we inevitably engage in throughout our daily life. The general public could benefit from information regarding how to take advantage of their foreign language(s) to improve their emotion regulation abilities.

### Further reading

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The complete reference list can be accessed here: [www.multilingualmind.eu/policy-reports](http://www.multilingualmind.eu/policy-reports)



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