

## The contribution of *EMDR* to psychotherapists' training in the alliance : A quasi-experimental study

Plantade-Gipch, A.<sup>1,2,3</sup> [orcid.org/0000-0001-8695-7871](https://orcid.org/0000-0001-8695-7871), Rotonda, C.<sup>3,4</sup> [orcid.org/0000-0002-8854-0591](https://orcid.org/0000-0002-8854-0591) & Tarquinio, C.<sup>3,4</sup> [orcid.org/0000-0001-8467-0826](https://orcid.org/0000-0001-8467-0826)

<sup>1</sup> Vulnerability, Capability, and Recovery research team (VCR), School of Practitioners' Psychologists of the Catholic Institute of Paris, 23 du Montparnasse street, 75006 Paris, France.

<sup>2</sup> Department of Psychology of the University of Quebec in Montreal, 405 Sainte-Catherine Street E., H2L 2C4, Montreal, Canada.

<sup>3</sup> University of Lorraine, APEMAC, 3 Augustin Fresnel Street, 57000 Metz, France.

<sup>4</sup> Pierre Janet Center, University of Lorraine, Building A, Saulcy island, 57000 Metz, France.  
Corresponding author: Anne Plantade-Gipch, email: [aplantade@psycho-prat.fr](mailto:aplantade@psycho-prat.fr).

### Abstract

This study aims at showing that *EMDR* training can influence psychotherapists' ability to build and develop therapeutic alliances at an early stage of psychotherapy. Three groups of psychotherapists were compared: 6 trained in *EMDR* only, 4 trained in *EMDR* and another therapeutic method, and 10 trained in other therapeutic methods. The results show a strong improvement in the scores of the patients in the Working Alliance Inventory - more specifically in the agreement on the therapeutic goals - when the patients worked with a psychotherapist trained in *EMDR*. The study underlines the relevance of the *EMDR* training to help the professional reflect on the therapeutic direction, and the care plan, and negotiate these with the patient. To sustain the therapeutic progress, the present study also suggests the relevance for all psychotherapists to acquire directionality skills, as it is done in *EMDR*.

**Keywords:** *EMDR*, therapeutic alliance, agreement on the therapeutic goals, care project, continuing education of psychotherapists.

### The alliance and the therapeutic progress

Since the 1990s, studies underline the importance of the therapeutic alliance for the development of trust between patient and psychotherapist, and for therapeutic progress (Norcross, 2011). The alliance is the agreement between the patient and the psychotherapist regarding their emotional bond (emotional alliance), and the goals and tasks of the psychotherapy (working alliance) (Bordin, 1979, 1983; Horvath & Greenberg, 1994). The working alliance

also refers to the therapeutic direction and the care project.

An alliance type 1 exists at an early stage of psychotherapy, and a type 2 develops later (Luborsky, 1976). Type 1 builds during the first three sessions and predicts the therapeutic progress of the patient (Horvath & Luborsky 1993). Type 2 develops as the psychotherapy progresses. The psychotherapist then begins questioning the pathogenic perceptions and behavior of the patient (Luborsky, 1976). At the beginning of the

psychotherapy, the patient's perception of the therapeutic alliance predicts its strength at the end of the process (Horvath & Bedi, 2002). Therefore, it is important to establish an alliance from the beginning of the therapeutic work: chances are that the patient's perception will probably not change drastically over time (Martin & al., 2000). Also, this perception is a better predictor of therapeutic progress than the psychotherapist's (Duncan & Moynihan, 1994). What about the alliance between patient and psychotherapist in *EMDR* therapy?

### **The alliance in EMDR training**

Inspired by neurosciences, *EMDR* psychotherapy uses auditory and tactile stimulations to cure Post-Traumatic Stress Disorder (PTSD) and reactional disorders (e.g., depression, and anxiety disorders). Since 1989, numerous publications highlighted the efficacy of this method, especially for PTSD. Initially intended for the treatment of individuals having experienced traumatic events, the method was later developed to find indications in the treatment of several pathological disorders (De Jongh et al., 1999; Faretta, 2013; Hofmann et al., 2014; Perlini et al., 2020), of anxious and depressive disorders (Faretta et al., 2019), and acute mental health crises (Proudlock & Peris, 2020). The efficacy of *EMDR* in the treatment of PTSD was underlined by several controlled and randomized trials. Many meta-analyses confirmed the strength of the effects (Bisson & Andrew, 2007; Bradley et al., 2005; Chen et al., 2014; Lee & Cuijpers, 2013; Maxfield & Hyer, 2002).

*EMDR* is one of the "protocolized" psychotherapies (Shapiro, 2001). But like other therapeutic methods, it calls for the

construction and the development of the alliance. This psychotherapy organizes itself around a specific protocol, which by nature gives a certain direction to the treatment. However, there remains a part of negotiation and adjustment between the patient and the psychotherapist. At least in part, the construction of the therapeutic bond, the negotiation of therapeutic goals, as well as the agreement on the care project will be at work. They will serve as the basis for the construction of the therapeutic alliance. What about the alliance according to the type of training of psychotherapists? How do initial and continuing education of professionals influence the alliance and the therapeutic progress of the patients?

### **The alliance and the psychotherapist's training**

Studies stress the importance of psychotherapists' ability to negotiate the alliance with the patient, which allows them to develop cooperation and sustain therapeutic progress (Skovholt & Rønnestad, 2003). Therefore, to be able to adjust to the relationship, the psychotherapist should be trained to collect the patient's feedback regarding the therapeutic process and the interaction (Duncan, Miller & Sparks, 2004). The professional will then be in a better position to consider the patient's difficulties, needs, and wishes for the psychotherapy (Safran & Muran, 2000). Other studies also show the importance that the psychotherapist develops the ability to negotiate the therapeutic direction with the patient (Plantade-Gipch et al., 2021). Depending on the type of psychotherapy, the training received will influence the professional's alliance negotiation skills in a particular way.

It is recognized that all therapeutic methods contribute to the progress of the patient (Smith & Glass, 1977), but what participates in this effect for each method? Being able to answer this question could help us better orient psychotherapists' training concerning the alliance and therapeutic progress. This study questions the contribution of the *EMDR* method to the training of psychotherapists. The researchers accessed professionals trained in different therapeutic methods, which allowed a comparison of these training. Also, the psychotherapists differed in the level of their professional experience, which allowed another comparison. Fifteen years ago, the training of French psychotherapists probably emphasized the relational dimensions of the alliance, corresponding to the mainstream therapeutic methods at the time. Changes in the training landscape occurred, especially with the development of *EMDR*. The focus of the training of psychotherapists could have shifted around the therapeutic goals and the care project, which also represent important dimensions of the working alliance.

This study will focus on the effect of the type of training received, on the professionals' ability to build and develop the alliance at the beginning of psychotherapy, which is an important dimension for the patient's therapeutic progress. More precisely, the study questions the possible contribution of *EMDR* training to the construction and development of the therapeutic alliance, between an early stage of psychotherapy (session 3) and a later one (session 6).

The alliance scores of the patients will be considered predictive of the future

strength of the alliance and the therapeutic progress in the advanced stages of psychotherapy. Scores at the three alliance sub-factors will also be used to understand the effect of psychotherapists' training on the alliance. These sub-factors are the agreement between the patient and the psychotherapist on the therapeutic 1) bond, 2) tasks, and 3) goals. The researchers hope to contribute to enriching the training of psychotherapists coming from all therapeutic orientations.

The first goal of this study is to compare the effect of the type of psychotherapists' training on the development of the alliance. Some psychotherapists were trained in other methods than *EMDR*. Others were trained in *EMDR* and with another method during their studies and careers. Finally, a part of the psychotherapists - the less experienced ones - was only trained in *EMDR*. Therefore, this therapeutic method was at the heart of their practice.

## Hypotheses

In this study, psychotherapists trained in *EMDR* and another method, as well as psychotherapists trained in other methods were more experienced than psychotherapists only trained in *EMDR* therapy. The training of the experienced psychotherapists was probably influenced by the mainstream practices at the time of their studies and the beginning of their professional practice. Therefore, we hypothesize that psychotherapists trained in *EMDR* and another method, and professionals trained in other methods would be more sensitized to the relational dimension of the therapeutic alliance, and to its importance for the success of the psychotherapy than professionals only

trained in *EMDR*. We can expect that the scores of the emotional alliance for *EMDR* psychotherapists also trained in another therapeutic method, as well as for those only trained in other methods might be higher than those of psychotherapists only trained in *EMDR*.

We also hypothesize that such a phenomenon will amplify over time and strengthen over the sessions. Then, there would be a double dynamic: first, the psychotherapists that are sensitive to the quality of the emotional bond, and understand the *EMDR* training in a relational dynamic, and second, the *EMDR* psychotherapists that are less sensitive to this bond. This potential difference could impact the patients' emotional experience in psychotherapy.

If professionals start their career as psychotherapists only trained in *EMDR*, it is possible that the importance and the weight of the relational dimension of the therapeutic alliance - although seen as important - will not be considered an essential dimension of care. The psychotherapists whose training imply knowledge and practice of a standard protocol, like *EMDR*, generally give more importance to the working alliance dimensions (therapeutic tasks and goals) rather than to the emotional bond. Therefore, we can expect that the scores on the agreement on therapeutic goals might be higher when psychotherapists are trained in *EMDR* - with another previous training or not - than when they are only trained in other therapeutic methods. We also hypothesize that such a phenomenon would amplify over time and strengthen over the sessions.

Studies tend to point out differences between experienced and novice psychotherapists regarding the alliance (Mallinckrodt et Nelson, 1991). More specifically, these differences concern the reflexive competencies and the ones related to emotional and interpersonal regulation, which seem to be more developed for experienced professionals (Skovholt et Rønnestad, 2003). In this study, we hypothesize that the professional experience would strengthen the effect of psychotherapists' training on the therapeutic alliance.

## Methods

### Sample

Starting in March 2018, this study was carried out at the Pierre Janet Consultation Center (University of Lorraine, France), and focused on all-comers patients starting psychotherapy. The research method was mixed observational and was carried out as part of routine care. No change occurred in the care during the study. The inclusion of patients lasted two years. Quantitative socio-demographic and scale data were collected from the start, and at the 3<sup>rd</sup> and 6<sup>th</sup> therapeutic sessions.

The Pierre Janet Consultation Center delivers therapeutic care. The psychotherapists at the center received different training. In this study, a group variable was created to aggregate the psychotherapists into three categories. The professionals from group G1 were trained in *EMDR* and other therapeutic methods (systemic, cognitive-behavioral therapies, psychodynamics, neuropsychology/development). The psychotherapists from group G2 were only trained in *EMDR* and those of group G3 in other methods than *EMDR*.

### Instrument

The Working Alliance Inventory (WAI, Horvath & Greenberg, 1989) was chosen for this study. This scale is the most used to assess therapeutic alliance (Martin, et al., 2000). The questionnaire contains 36 items in the long version. It divides into three sub-factors of 12 items each: agreement on the therapeutic bond, tasks, and goals of the psychotherapy. Each item is rated on a scale from 0 to 7 (“Never” to “Always”). The scores of the three sub-factors can be added to obtain a total score, from 36 to 252. High scores refer to high levels of the alliance. The English version of the long questionnaire has good psychometric qualities, with an alpha of Cronbach coefficient of  $\alpha = 0,84$  (Horvath, 1994). A validation study of the French version was conducted in the context of

mother-infant consultations. It showed good internal consistency, with an alpha of Cronbach coefficient of  $\alpha = 0,94$  (Hervé et al., 2008).

### Procedure

Socio-demographics data were collected regarding patients at the beginning of the psychotherapy (age, gender, marital status, family context, professional activity and category, reason for consultation) (see table 1), and regarding psychotherapists (age, gender, professional experience, and type of therapeutic training) (see table 3). After being informed of the goals of the study and having accepted the conditions to participate, the patients of the study filled the alliance scale two times: after the 3<sup>rd</sup> and 6<sup>th</sup> sessions.

*Table 3*  
Psychotherapists' characteristics

| Psychotherapists' groups | Training in EMDR and another method<br>n= 4, G1 | Training in EMDR only<br>n=10, G2     | Other training only<br>n=6, G3       | <i>p</i> |
|--------------------------|---|---------------------------------------|--------------------------------------|----------|
| Age G1-G2-G3             | m =52 (3.35)                                    | m =34.5 (7.1)                         | m =49.1 (14.8)                       | <.001    |
| Age G1-G2                | m =52 (3.35)                                    | m =34.5 (7.1)                         |                                      | <.001    |
| Age G2-G3                |   | m =34.5 (7.1)                         | m =49.1 (14.8)                       | 0.01     |
| Gender                   | Men: 0<br>Women: 4                              | Men: 4<br>Women: 6                    | Men: 2<br>Women: 4                   | 0.03     |
| Professional experience  | Experienced: 4<br>Not experienced: 0            | Experienced: 0<br>Not experienced: 10 | Experienced: 6<br>Not experienced: 0 | <.001    |

Note. Experienced: More than 6 years. Not experienced: Less than 6 years.

### Data analysis

First, a descriptive analysis of the data collected from the patients (sociodemographic data; WAI scale: 3 sub-factors and a total score, at each time of the study) was performed using means and standard deviations for numeric variables, and percentages for categorical variables.

One of the goals of this study was to compare the effect of the type of psychotherapists' training on the development of the alliance during therapy. To do this, an analysis of the variance (ANOVA) with repeated measures, including the two modalities of the inter-subject factor « Time » (session s3 and s6), the two modalities of the inter-subject factor « Group » (according to the type of training of psychotherapists: G1, G2, G3) and the two modalities of the inter-subject factor « Gender » (men or women) was then performed on the three sub-factors and the total score of the WAI scale (patients' scores), with a confidence level of 95%. The homogeneity of the variables was tested for each ANOVA. The quantitative analyzes were carried out using the open-access *Jasp* software.

Another of our study was to assess the modulating effect of professional experience on the relationship between psychotherapists' training and the therapeutic alliance. The partial least squares structural equation modeling (PLS-SEM) using the *Smart PLS* software was used to analyze the data based on the hypothesized model. Sanchez (2013) recommends doing so when the research is rather exploratory and the number of data is limited, as it is here. Our heuristic model considered all the latent variables defining the alliance, using the manifest variables: bond, tasks, and goals. The model also considered psychotherapists' professional experience, as well as the time at which the alliance scores were collected during the psychotherapy (3<sup>rd</sup> or 6<sup>th</sup> sessions). Differential correlations were calculated between the variables of the chosen model.

## Results

### Description of the patients

83 patients were included over two years and completed the WAI at both times of the study: the 3<sup>rd</sup> and 6<sup>th</sup> sessions of psychotherapy. The alliance scores are described in table 1.

Table 1

Mean and standard deviations of the patients' alliance scores according to the two-time assessment and the psychotherapists' groups

| Alliance (WAI) | Psychotherapists' groups | S3 Mean (SD)  | S6 Mean (SD)  |
|----------------|--------------------------|---------------|---------------|
| Total scores   | G1                       | 207,4 (47,3)  | 225,9 (10,93) |
|                | G2                       | 211,3 (23,11) | 214,2 (29,06) |
|                | G3                       | 218,8 (9,88)  | 206,9 (25,5)  |
| Scores of the  | G1                       | 68,00         | 72,67         |

|   |    |                  |                  |
|---|----|------------------|------------------|
|   |    | (15,08)          | (3,20)           |
| ‘agreement on goals’                            |    |                  |                  |
|   | G2 | 67,90<br>(10,32) | 68,94<br>(10,12) |
|   | G3 | 69,58<br>(5,92)  | 63,75<br>(10,30) |
| Scores of the ‘agreement on the emotional bond’ | G1 | 71,9<br>(20)     | 79,7<br>(5,81)   |
|   | G2 | 74,03<br>(8,41)  | 74,7<br>(9,10)   |
|   | G3 | 77,8<br>(4,12)   | 74,42<br>(9,93)  |
| Scores of the ‘agreement on tasks’              | G1 | 67,6<br>(14,11)  | 73,6<br>(4,45)   |
|   | G2 | 69,4<br>(8,33)   | 70,6<br>(11,82)  |
|   | G3 | 71,42<br>(5,52)  | 68,8<br>(7,42)   |

Note. G1 = *EMDR* psychotherapists also trained in another method (n=4). G2 = Psychotherapists trained in *EMDR* only (n=10). G3 = Psychotherapists trained in other methods only (n=6).

The statistical comparison of patients’ characteristics showed that there was no significant difference between those for the three groups of psychotherapists G1, G2, and G3 (see Table 2). Indeed, for the age, the result of the Kruskal-Wallis test was the following: ( $H = 0.65$ ;  $p = 0,72$ ). Also, the results at the Chi2 tests were: gender ( $\chi^2(2) = 3.46$  ;  $p = 0.17$ ), marital status ( $\chi^2(2) = 1.20$  ;  $p = 0.6$ ), whether or not the patients had children ( $\chi^2(2) = 4.01$  ;  $p = 0.13$ ), whether or not the patients had dependent children ( $\chi^2(4) = 6.31$  ;  $p = 0.18$ ), person who advised the consultation ( $\chi^2(4) = 3.49$  ;  $p = 0.48$ ), professional status ( $\chi^2(4) = 1.82$ ;  $p = 0.77$ ), and socio-professional category ( $\chi^2(12) = 6.89$  ;  $p = 0.87$ ). Therefore, the patients’ characteristics of the three groups of psychotherapists were homogeneous

Table 2

Description of patients’ socio-demographic data (n=83)

Patients, N=83

|                               |            |
|-------------------------------|------------|
| Age (Mean, SD)                | 43 (14.8)  |
| Gender                        |            |
| Women                         | 57 (68,8%) |
| Men                           | 25 (31,2%) |
| Marital status                |            |
| In a relationship             | 42 (50.6%) |
| Alone                         | 41 (49.4%) |
| Children                      |            |
| No                            | 37 (44.0%) |
| Yes                           | 47 (56.0%) |
| Dependent children            |            |
| No                            | 34 (72.3%) |
| Yes                           | 13 (27.7%) |
| Consultation advised by:      |            |
| Health professional           | 10 (11.9%) |
| Relatives                     | 19 (22.6%) |
| Psychologist                  | 14 (16.7%) |
| No advice                     | 41 (48.8%) |
| Professional activity         |            |
| Working                       | 49 (59.0%) |
| Student                       | 12 (14.5%) |
| Not working                   | 22 (26.5%) |
| Socio-professional categories |            |
| Craftsman, Merchant           | 5 (5.95%)  |
| Other                         | 17 (20.2%) |
| Manager                       | 13 (15.5%) |
| Employee                      | 31 (36.9%) |
| Worker                        | 3 (3.57%)  |
| Middle-level profession       | 5 (5.95%)  |
| Retired                       | 10 (11.9%) |

The main reasons for patients' consultation were the following: depressive disorders, divorce/separation, burnout, bereavement, anxiety, family issues, and experiences of violence. Of the 83 patients, 63 (76%) were working with a psychotherapist only trained in *EMDR* (G2), 8 (10%) with an *EMDR* psychotherapist also trained in another method (G1), and 12 (14%) with a psychotherapist trained to other methods only (G3).

### Psychotherapists' description

The analysis of the psychotherapists' descriptive data showed a significant and moderate difference between the mean age of the professionals of the three groups (see Table 3). Indeed, the result of the Kruskal-Wallis test was the following: ( $H = 28,9; p < .001$ ).

Table 3

Psychotherapists' characteristics

| Psychotherapists' groups | Training in EMDR and another method<br>n= 4, G1 | Training in EMDR only<br>n=10, G2     | Other training only<br>n=6, G3       | <i>p</i> |
|--------------------------|---|---------------------------------------|--------------------------------------|----------|
| Age G1-G2-G3             | m =52 (3.35)                                    | m =34.5 (7.1)                         | m =49.1 (14.8)                       | <.001    |
| Age G1-G2                | m =52 (3.35)                                    | m =34.5 (7.1)                         |                                      | <.001    |
| Age G2-G3                |   | m =34.5 (7.1)                         | m =49.1 (14.8)                       | 0.01     |
| Gender                   | Men: 0<br>Women: 4                              | Men: 4<br>Women: 6                    | Men: 2<br>Women: 4                   | 0.03     |
| Professional experience  | Experienced: 4<br>Not experienced: 0            | Experienced: 0<br>Not experienced: 10 | Experienced: 6<br>Not experienced: 0 | <.001    |

Note. Experienced: More than 6 years. Not experienced: Less than 6 years.

Regarding the psychotherapists' ages, comparisons of the groups in pairs helped deepen the analysis. The Mann-Whitney test showed that there was a significant and strong difference in the mean age of psychotherapists for groups G1 (EMDR also trained to another method) and G2 (EMDR only): ( $W = 516, p < .001, d = 0,85$ ). Also, the Mann-Whitney test showed no difference between the mean ages of groups G1 and G3 (trained to other methods only): ( $W = 65, p = 0,45$ ). Finally, the Mann-Whitney test showed a significant and moderate difference between the means ages of the groups G2 and G3: ( $W = 187, p = 0,01, d = 0,50$ ). Therefore, G1 and G3 groups were

homogeneous in age, but not G1 and G2, nor G1 and G3.

Regarding the psychotherapists' gender, the Chi2 test showed a significant difference between the three groups of psychotherapists: ( $\chi^2(2) = 6,93; p = 0.03$ ). The groups were compared in pairs. The Chi2 test showed a significant gender difference between groups G1 (EMDR and another method) and G2 (EMDR only): ( $\chi^2(2) = 6,93; p = 0.03$ ). Also, there was no significant difference between groups G1 and G3 (other methods only): ( $\chi^2(1) = 3,71; p = 0.05$ ). Finally, there was no significant difference between groups G2 and G3: ( $\chi^2(1) = 0,57; p = 0.45$ ). Therefore, groups G2 and G3, as well as G1 and G3

were homogeneous regarding gender, but not G1 and G2.

Regarding the psychotherapist's professional experience, the Chi2 showed a significant difference between the three groups ( $\chi^2(2) = 81; p < .001$ ). The groups were compared in pairs. The Chi2 test showed a significant difference in professional experience between the psychotherapists' groups G1 (*EMDR* and another method) and G2 (*EMDR* only): ( $\chi^2(1) = 69; p < .001$ ). Also, there was no difference between groups G1 and G3 (other methods only): ( $\chi^2(1) = 0,43; p = 0.51$ ). Finally, there was a significant difference in professional experience between groups G2 and G3: ( $\chi^2(1) = 72; p < .001$ ). Therefore, the groups G1 and G3 were homogeneous regarding professional experience, but not G1 and G2, nor G2 and G3.

### Results of the repeated measures ANOVA of the WAI's scores

The results of the repeated measure ANOVA of the patients' WAI scores showed no main effects of the Group (G1, G2, G3), nor of the Time (sessions s3 vs s6) on the progress of the total score of the WAI. Also, there was no interaction effect Group\*Gender, and Time\*Group\*Gender. However, there was an interaction effect « Group\*Time », with a strong effect size:  $F(2, 77) = 3,95$  ,  $p = 0,02$  ,  $\eta_p^2 = 0.09$ . Between the two measures, the change in the total score of the WAI was significantly different according to psychotherapists' groups. Indeed, the means of the total scores of the alliance for the patients of the *EMDR* psychotherapists also trained to another method (G1), as well as those of patients seen by psychotherapists only trained to *EMDR* (G2) significantly increased, while those of patients seen by psychotherapists using

another method only (G3) did not. Post hoc comparisons showed no difference between the means of the alliance scores of the two *EMDR* psychotherapists' groups at the two times of the study, whether they were trained in another therapeutic method or not.

Regarding the score of the sub-factor "agreement on goals", there were no main effects of the Groups (G1, G2, G3) nor of the Time (s3 vs s6). Also, there was no interaction effect Group\*Gender, and Time\*Group\*Gender. However, there was an interaction effect « Group\*Time », with a strong effect size:  $F(2, 77) = 4,23$  ,  $p = 0,02$  ,  $\eta_p^2 = 0.10$ . Between the two measures, the change in the scores of the agreement on the therapeutic goals was significantly different according to psychotherapists' groups. Indeed, the means of the scores of the agreement on goals for the patients of the *EMDR* psychotherapists also trained to another method (G1), as well as those of patients seen by psychotherapists only trained to *EMDR* (G2) significantly increased, while those of patients seen by psychotherapists using another method only (G3) decreased. The post hoc comparisons showed no difference between the means of the two *EMDR* psychotherapists' groups regarding the agreement on the therapeutic goals at the two times of the study, whether they were trained in another therapeutic method or not.

### Results of the analysis with the partial least squares method

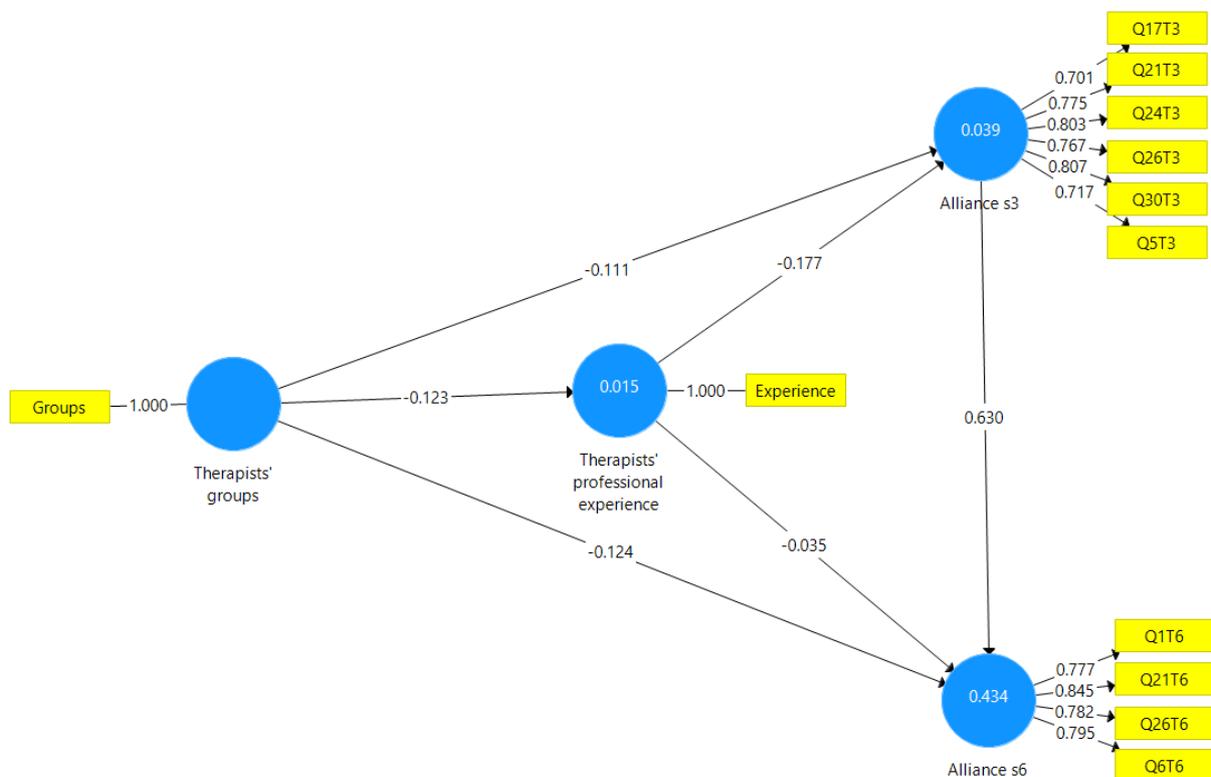
The partial least squares structural equation modeling was used to assess whether the psychotherapists' professional experience would strengthen the effect of their training on the therapeutic alliance. Assessment of the heuristic model was based on construct reliability and validity,

and discriminant validity. The indicators' outer loadings were not all above the recommended 0.70. Consequently, only 6 items were kept for the first measurement of the alliance ("alliance s3") and 4 for the second one ("alliance s6"). The other items were deleted because they influenced composite reliability as well as discriminant validity, impeding the attainment of threshold values (Hair et al.,

2017). However, at alliance s3, the remaining items assessed trust, collaboration, and common goals. At alliance s6, the remaining items assessed trust, common goals, and tasks. For both measurement times, the concept of the alliance was then preserved despite the reduction in the number of items (see Figure 1).

Figure 1

Model for the variables analyzed with PLS.



The data were therefore reanalyzed based on this new model. Then, Cronbach alpha values and composite reliability values all exceeded the threshold value of 0.70. AVE-values were 0.5 or higher, therefore establishing convergent validity (Hair et al., 2017). The quality of the adjustment of the model was then acceptable (SRMR = 0.09, NFI = 0,70). The analysis of reliability showed that the

factors' one-dimensionality for the alliance scale was particularly good (0.81 < Cronbach's Alpha  $\alpha$  < 1.00).

A bootstrapping procedure was then applied to assess the significance of path coefficients using 5000 bootstrap samples (Hair et al., 2017). With a confidence level of 97.5%., the first measurement time (alliance s3) significantly predicted the second one

(alliance s6): ( $t = 7.6, p < 0.001$ ). The psychotherapists' groups significantly predicted the second measurement time (alliance s6): ( $t = 2.1, p = 0.04$ ). The psychotherapists' professional experience significantly predicted the alliance at the first measurement time (alliance s3): ( $t = 2.4, p = 0.02$ ), but not at the second measurement time (alliance s6).

### Discussion

To summarize, the psychotherapists practicing *EMDR* and another therapeutic method (G1), and those practicing another method only (G3) were older than the *EMDR* psychotherapists (G2). There were more women in the group practicing *EMDR* and another method (G1) than in the group practicing *EMDR* only (G2). There were two significant and strong interactions Time\*Groups between, on the one hand, the alliance, and the psychotherapists' groups and, on the other hand, the agreement on therapeutic goals and the psychotherapists' groups. Also, the PLS-SEM analysis showed that the psychotherapists' professional experience influenced the alliance at an early stage of psychotherapy (type 1), but not later (type 2 alliance).

### Characteristics of the therapist according to the training

We noticed that the psychotherapists' training groups showed some differences in age, gender, and professional experience. The *EMDR* psychotherapists were younger and had less professional experience than the *EMDR* psychotherapists also trained in another therapeutic method. Also, they had less professional experience than psychotherapists trained in other methods only. These findings are consistent with the fact that *EMDR* gained in popularity in the last years in France. From this point of

view, it can be considered a relatively recent therapeutic method - although historically more ancient. The older psychotherapists of the study - practicing *EMDR* or not - were trained in therapeutic methods existing before the rise of *EMDR*. Therefore, the youngest psychotherapists seemed particularly likely to be interested in *EMDR* training compared to the experienced ones. Regarding gender, there were more women in the group of older *EMDR* psychotherapists trained in another method than in the group of psychotherapists only trained in *EMDR*. As most of the professionals in the sample were psychologists, this could be explained by the fact that the profession has long been mainly feminine in France, and that this tendency appears to change today.

### The alliance, the emotional bond, and the therapist training

The agreement between psychotherapist and patient on the alliance participates in the therapeutic progress, no matter which therapeutic method is used (Crits-Christoph et al., 2011). From the beginning of the psychotherapy, it is therefore significantly important that the professional stay tuned to the agreement with the patient on the emotional bond, the tasks, and goals of the psychotherapy. At the beginning of this study, the researchers thought that the training in *EMDR* psychotherapy - a protocolized method - would be relevant to establishing and developing the working alliance in psychotherapy, more particularly from the point of view of the therapeutic direction and healthcare project. The analysis of the data confirmed that hypothesis. Also, the researchers thought that the training in other non-protocolized therapeutic methods would put more emphasis on the

agreement on the emotional bond, which was not validated.

### **The agreement around therapeutic goals and the therapist training**

Regarding the working alliance, the patients of the group of psychotherapists trained in *EMDR* (solely or not) had a strong feeling that the professional did contribute to improving the agreement on the therapeutic goals between the two-time measurement of the study. The patients of the group in which the psychotherapists were trained only with a different therapeutic method did not note any difference between the measurement times. The patient's acceptance of the protocol and their ability to get involved in the action plan is considered particularly important for the therapeutic progress in *EMDR*. Therefore, the psychotherapist's ability to encourage the patient to work in a common direction around the therapeutic project seems crucial. This result is particularly interesting for the training of all therapeutic methods: the ability to orient the psychotherapy helps the patient progress.

Given the fact that the alliance score is calculated by adding the three sub-factors "Bond", "Task" and "Goals", it seems logical to think that the effect of the sub-factor "Goals" largely contributed to the total effect of the "Alliance" factor. The results at the "Alliance" showed that the patients working with a psychotherapist trained in *EMDR* (solely or not) had a strong feeling that the professional did contribute to improving the agreement on the therapeutic alliance between the two times of the study, while the patients of the group in which the psychotherapists were trained to other therapeutic methods did not note any difference. Compared to other training, *EMDR* seems to give a strong

advantage to the professionals of this study to negotiate the alliance with the patient and sustain the therapeutic progress at the beginning of the psychotherapy. This effect is noticeable between the development of the early alliance (type 1) and that of a later one (type 2). Also, it predicts more sustainably the alliance and the therapeutic progress.

The effect of the *EMDR* training on the agreement between psychotherapist and patient on the alliance and the therapeutic goals - whether the psychotherapist is also trained in another method or not - can then be considered important because of the power of the ANOVA results. The results of the PLS-SEM analysis seemed to go in the same direction, particularly at the second measurement time (alliance s6). Moreover, the PLS-SEM analysis indicates that patients perceived the influence of professional experience at the very beginning of psychotherapy (session 3), but that it was not the case later (session 6). Patients' perception of professional experience then modulates their feeling of the relationship between the alliance and the psychotherapist training, at a very early stage of psychotherapy only. Therefore, the results support the idea that passed the early stage of therapy, *EMDR* training gives an advantage to psychotherapists to negotiate the alliance and the direction of the therapeutic project with the patients compared to other types of training, regardless of professional experience. The hypothesis that the psychotherapist's professional experience would amplify the relationship between the type of training received and the alliance scores was then only partially validated. This result gives weight to the idea that *EMDR* psychotherapists would be favored in

negotiating the alliance, the therapeutic direction, and the care when therapy moves forward.

In this study, the researchers questioned the contribution of the *EMDR* training for the psychotherapists' training from all therapeutic orientations regarding the construction and development of the alliance. The study showed an important effect of the *EMDR* training on the psychotherapist's ability to negotiate the agreement on the therapeutic goals with the patient, which also strongly influenced the total scores of the alliance. This effect might be explained by the ability developed by the *EMDR* psychotherapists to negotiate a direction and the therapeutic project with the patient – an important dimension of their training. These directionality skills can be considered likely to enrich the training of psychotherapists from all therapeutic orientations.

A recent study gave similar results. 30 novice psychotherapists with less than 6 years of professional experience in psychotherapy or counseling were included in the research. Among these, 15 psychologists of all therapeutic orientations participated in alliance-focused supervision, and 15 did not participate. The analysis of the data at the Working Alliance Inventory (short version) revealed that patients and professionals from the group in which the psychologist was trained identified a small improvement in the alliance, and a moderate improvement in the psychologist's ability to negotiate the agreement on therapeutic goals at the three times of the study, while there was no improvement in the group in which the psychologists were not trained (Plantade-Gipch et al., 2021). The researchers

concluded that there is a need to train novice psychotherapists in the alliance, and particularly to deepen the training at the level of the agreement on therapeutic goals with the patient, which seems close to the present study. Indeed, in the described study, at the beginning of the psychotherapy, all professionals seemed sufficiently trained to negotiate the therapeutic bond, but not to the agreement on the therapeutic goals.

### **Professional experience and psychotherapist training**

This study underlined a possible contribution of the *EMDR* training regarding the negotiation of the therapeutic goals, regardless of the psychotherapists' level of professional experience. The training in the *EMDR* protocol seems to allow the psychotherapist to take a distance from the phantasmatic dimension of the alliance, to center the work on the real and 'pragmatic' dimensions, in the positive and productive meaning of this word: to help the patient progress. It would be interesting to conduct research interviews with the professionals to better understand this process. For now, it can be hypothesized that having a therapeutic direction in mind for each session could improve the agreement on therapeutic goals, the alliance, and the therapeutic progress of the patient. It is then reasonable to think that it would be important to train psychotherapists from all therapeutic orientations to develop their ability to give direction to the psychotherapy, negotiate it with the patient, as well as to build the therapeutic project with the person consulting in psychotherapy.

Regarding the limits of the study, it would be crucial to replicate the research using a more important number of

psychotherapists in each group, comparing *EMDR* training to more specific training, for example, dialectic psychodynamic psychotherapy. Also, it would have been appropriate to use more than two measurements of the alliance, to better identify the effect of the psychotherapist's training through time. Furthermore, it would have been important to balance and increase the number of psychotherapists per group for a more adjusted method. In addition, it would have been important to better control the inclusion of the psychotherapists trained in a method other than *EMDR* to build a more homogeneous group. Also, the distribution of age, gender, and professional experience would have benefited from being better balanced. Finally, it would have been relevant to collect more socio-demographic and health data from the patients, especially to test the relationship between the type of patient (e.g.: the disorder) the alliance, and the psychotherapists' training.

To summarize, at the start of the psychotherapy, between the 3<sup>rd</sup> and 6<sup>th</sup> sessions, the patients' feeling regarding the agreement on therapeutic goals was improved when they were working with *EMDR* psychotherapists – whether they were trained in another method or not. It was not the case when the patients were working with a psychotherapist trained in another therapeutic method only. These results suggest that *EMDR* training can help the psychotherapist negotiate the alliance, especially at the level of the agreement with the patient on therapeutic goals. Indeed, protocolized psychotherapy requires a therapeutic direction for each session. This direction is negotiated with the patient. Developing this skill appears important for psychotherapists of all therapeutic orientations.

It would be relevant to conduct a study on the perception of the patient regarding the psychotherapists' ability to negotiate the therapeutic goals at the end of the graduate study in psychology, comparing different psychotherapeutic methods. Developing other studies on the subject could also allow formulating recommendations to deepen the initial training, or to build continuing education training modules intended for all psychotherapists.

### Conclusions

This study focused on the contribution of the *EMDR* training to all psychotherapists' training, regarding the agreement on therapeutic goals and the alliance. At the start of the psychotherapy, when the early alliance evolves towards a more lasting one, the psychotherapists' training in *EMDR* strongly improved the feeling of the alliance of the patient as well as his perception of the ability of the psychotherapist to negotiate the agreement on therapeutic goals. Also, the training in other therapeutic methods did not improve patients' perception regarding the psychotherapist's ability to negotiate the agreement on the emotional bond or the alliance. Furthermore, the psychotherapist's professional experience did not seem to particularly influence the alliance entering a later stage of the therapy.

The *EMDR* training appears useful to negotiate the alliance, giving a working direction, and finding an agreement with the patient around the therapeutic project. Having in mind the importance of therapeutic goals for each session - as it is done in protocolized methods like *EMDR* - could be relevant to sustaining the alliance and the patient's therapeutic progress.

Other studies must be conducted on the subject to fuel reflections regarding the initial and continuing education of all psychotherapists.

### Notes

**EMDR** = Eye Movement Desensitization Reprocessing

**WAI** = Working Alliance Inventory

### Declarations

**Consort 2010:** The study is not based on randomized trials.

**Ethics approval:** Concerning the data collected: compliance with the GDPR and registration of the observational study with the DPO of the University of Lorraine in the reference methodology MR003 on June 16, 2017.

**Consent to participate:** The participants were informed of the goals of the study, and the conditions of the experiment and accepted to participate.

**Consent for publication:** The authors agree to jointly publish this article.

**Availability of data and materials:** The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

**Competing interests:** The authors have declared that no conflict of interests and no competing interests exist.

**Authors' contributions:** All the authors contributed to the different sections of the article.

**Funding/Acknowledgments:** Special thanks to the operational program ERDF-FSE Lorraine and Massif des Vosges 2014 – 2020.

### References

Bisson, J., & Andrew, M. (2007). Psychological treatment of post-traumatic stress disorder (PTSD). *The Cochrane database of*

*systematic reviews*, 18(3), 97-104. <https://doi.org/10.1002/14651858.CD003388.pub3>

Bordin, E.S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research, and Practice*, 16(3), 252–260. <https://doi.org/10.1037/h0085885>

Bordin, E.S. (1983). A working alliance-based model of supervision. *The Counseling Psychologist*, 11, 35-42. <https://doi.org/10.1177/0011000083111007>

Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. A. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry*. <https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.162.2.214>

Chen, Y.R., Hung, K.W., Tsai, J.C., Chu, H., Chung, M.H., Chen, S.R., ... & Chou, K.R. (2014). Efficacy of eye-movement desensitization and reprocessing for patients with posttraumatic-stress disorder: a meta-analysis of randomized controlled trials. *PloS one*. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0103676>

Crits-Christoph, P., Connolly Gibbons, M.B., Hamilton, J., Ring-Kurtz, S., & Gallop, R. (2011). The dependability of alliance assessments: The alliance-outcome correlation is larger than you might think. *Journal of Consulting and Clinical Psychology*, 79(3), 267-

278.  
<https://doi.org/10.1037/a0023668>
- De Jongh, A., Ten Broeke, E., & Renssen, M.R. (1999). Treatment of specific phobias with eye movement desensitization and reprocessing (EMDR): Protocol, empirical status, and conceptual issues. *Journal of Anxiety Disorders*, 7, 182-200.  
[https://doi.org/10.1016/s0887-6185\(98\)00040-1](https://doi.org/10.1016/s0887-6185(98)00040-1)
- Duncan, B.L., & Moynihan, D.W. (1994). Applying outcome research: Intentional utilization of the client's frame of reference. *Psychotherapy*, 31(2), 294-301.  
<https://doi.org/10.1037/h0090215>
- Duncan, B.L., Miller, S.D., & Sparks, J. (2004). *The Heroic Client: A Revolutionary Way to Improve Effectiveness through Client-Directed, Outcome-Informed Therapy* (2nd Edition). Jossey-Bass.
- Faretta, E. (2013). EMDR and cognitive behavioral therapy in the treatment of panic disorder: A comparison. *Journal of EMDR Practice and Research*, 7(3), 121-133.  
<https://doi.org/10.1891/1933-3196.7.3.121>
- Faretta E., Dal Farra M. (2019). Efficacy of EMDR therapy for anxiety disorders. *Journal of EMDR Practice and Research*, 13(4), 325-332. <https://doi.org/10.1891/1933-3196.13.4.325>
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Starstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: SAGE Publications Ltd.
- Hofmann, A., Hilgers, A., Lehnung, M., Liebermann, P., Ostacoli, L., Schneider, W., & Hase, M. (2014). Eye movement desensitization and reprocessing as an adjunctive treatment of unipolar depression: a controlled study. *Journal of EMDR Practice and Research*, 5(6).  
<https://doi.org/10.1891/1933-3196.8.3.103>
- Horvath, A.O., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology*, 61(4), 561-573.  
<https://doi.org/10.1037/0022-006x.61.4.561>
- Horvath, A.O., & Greenberg, L.S. (1994). The therapeutic alliance as interpersonal process. In: Horvath AO., & Greenberg, LS., editors. *The working alliance, theory, research, and practice*. Wiley (pp. 51-84).
- Horvath, A.O., & Bedi R.P. (2002). The alliance. In: Norcross JC., editor. *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients*. Oxford University Press (pp. 37-69).
- Lee, C.W., & Cuijpers, P. (2013). A meta-analysis of the contribution of eye movements in processing emotional memories. *Journal of Behavior Therapy & Experimental Psychiatry*, 44(2), 231-239.  
<https://doi.org/10.1016/j.jbtep.2012>

- .11.001 23(1), 26-42  
<https://doi.org/10.1080/1364253BMS p7.2021.1881138>
- Luborsky, L. (1976). Helping alliance in psychotherapy. In: Cleghorn JL., editor. *Successful psychotherapy*. Brunner/Mazel (pp. 92-116).
- Maxfield, L., & Hyer, L.A. (2002). The relationship between efficacy and methodology in studies investigating EMDR treatment of PTSD. *Journal of Clinical Psychology*, 58(1), 23-41. <https://doi.org/10.1002/jclp.1127>
- Martin D.J., Garske J.P., & Davis M.K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Clinical Psychology*. 68(3), 438-450. <https://doi.org/10.1037/0022-006X.68.3.438>
- Norcross, J.C. (2011) *Psychotherapy relationships that work: Evidence-based responsiveness*. 2nd ed. Oxford.
- Perlini, C., Donisi, V., Rossetti, M.G., Moltrasio, C., Bellani, M., & Brambilla, P (2020). The potential role of EMDR on trauma in affective disorders: A narrative review. *Journal of affective disorders*, 269, 1-11. <https://doi.org/10.1016/j.jad.2020.03.001>
- Plantade-Gipch A., Drouin M.S., & Blanchet A. (2021). Can alliance-focused supervision help improve emotional involvement and collaboration between client and therapist? *European Journal of Psychotherapy & Counselling*, 23(1), 26-42. <https://doi.org/10.1080/1364253BMS p7.2021.1881138>
- Proudlock, S., & Peris, J. (2020). Using EMDR therapy with patients in an acute mental health crisis. *BMC Psychiatry*, 20(1), 14-23. <https://doi.org/10.1186/s12888-019-2426-7>
- Shapiro, F. (2001). *Eye Movement Desensitization and Reprocessing (EMDR): Basic Principles, Protocols, and Procedures*. 2nd ed. Guilford Press.
- Skovholt, T. M., & Rønnestad, M. H. (2003). The journey of the counselor and therapist: Research findings and perspectives on professional development. *Journal of Career Development*, 30(1), 5-44. <http://doi.org/10.1023/A:1025173508081>.
- Safran, J.D., & Muran, J.C. (2000). *Negotiating the therapeutic alliance. A relational treatment guide*. The Guilford Press.
- Smith, M.L., & Glass, G.V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 32(9), 752-760. <https://doi.org/10.1037/0003-066X.32.9.752>