

From Bodily Sensations to Metacognitive Reflection: A Qualitative Language Analysis of ReAttach Interventions

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Abstract

In this paper, we explore how language reflects emotional and metacognitive changes during ReAttach interventions. Using verbatim transcripts, we compare the short-term language changes of two healthy adults during a three-day training with the long-term data (over six months) of a patient with Functional Neurological Disorder (FND). Our analysis shows a clear developmental pattern in how participants talk about their experiences. They move from focusing on physical sensations and emotions to reflecting on their own thoughts, describing daily functioning, and eventually expressing a strong sense of agency. Interestingly, this pattern appears in both groups. The healthy trainees reached the functional and agency stages within just 72 hours, which suggests that this developmental process can happen much faster in non-clinical populations. The training basically mirrors the long-term therapeutic process on a smaller scale. This supports the idea that the mechanisms of change in ReAttach are transdiagnostic and universally human.

Keywords: ReAttach, Forgive and Forget Hood (FFH), Wiring Affect with ReAttach (W.A.R.A.), New Mind Creation (NMC), Functional Movement Disorder (FMD), language analysis, transdiagnostic intervention, self-regulation

Introduction

ReAttach is a short-term, transdiagnostic intervention that helps people regulate their emotions, process information, and improve their self-image. It does this by combining multisensory stimulation with cognitive bias modification (Zeestraten-Bartholomeus, 2021). Unlike traditional therapies that rely a lot on talking or reconstructing detailed life stories, ReAttach focuses on activating associative networks without needing direct conscious control. The main goal is to reduce the emotional charge of negative schemas and core beliefs, making room for healthier thinking patterns (Young et al., 2003; Zeestraten-Bartholomeus, 2021).

Qualitative language analysis is a great way to document how people actually experience these internal shifts. Language essentially acts as a window into what's happening on a neurocognitive and emotional level. In this article, we present a comparative case study looking at two different settings and timeframes. First, we examine the immediate language changes ReAtt Aff Co 2(2): 181-186 (2026)

in two trainees (Participant A and Participant B) who experienced ReAttach themselves during an intensive three-day professional training. Second, we look at the long-term therapeutic progress of a patient diagnosed with Functional Neurological Disorder (Participant C) over six months. By comparing these cases, we aim to identify early signs of psychological change and see if the ReAttach developmental model applies to both clinical and non-clinical groups.

Method

Research Design

We used an exploratory qualitative case series design working directly with verbatim session transcripts. The data comes from two completely different settings:

Training Context (Micro-scale): Transcripts from Participant A and Participant B during an intensive three-day practical training blitz where they acted as clients, experiencing

the initial phase of the ReAttach protocol, including the Forgive and Forget Hood (FFH), New Mind Creation (NMC), and Wiring Affect with ReAttach (W.A.R.A.) exercises. The sessions were facilitated by the creator of the methodology (Speaker 0).

Therapeutic Context (Macro-scale): Long-term data tracking Participant C, a patient with FND/FMD, who received remote ReAttach sessions over a six-month period between January and June 2026 (Call et al., 2026).

Procedure

The training context comprised three consecutive days:

Day 1: Intake, FFH exercise (pre and during), and the first part of the ReAttach Protocol (social cognitive training and identifications).

Day 2: Complete ReAttach session including NMC and a hypervigilance exercise.

Day 3: Morning evaluation, W.A.R.A. transfer (three consecutive W.A.R.A. exercises + self-administered practice), and final evaluation.

All sessions were audio-recorded and transcribed verbatim. Language analysis focused specifically on affect-descriptive terms, somatic references, metacognitive formulations, functional language, and agency markers.

Ethics and Anonymization

This study followed standard ethical guidelines for qualitative research. Explicit written informed consent was obtained from both trainees (Participants A and B) and the FND patient (Participant C) for the use and publication of their anonymized transcript data. To ensure total anonymity, all identifying details, personal names, family descriptions, and specific locations were completely scrubbed or swapped out for generic terms.

Results

Case 1: Participant A

(Training Context - Three Days)

Baseline (Intake): Participant A presented with a mixed physical-emotional baseline of physical tension and curiosity: *"physically I notice all sorts of things... breathing, stomach ache, sweating sometimes."* She used consistent hedging language (*"a little bit," "I think"*) when opening up about her fear of failure—a common early maladaptive schema (Young et al., 2003). Her initial stress ratings were high: 70% for overall burden and 90-95% for intolerance toward a specific person.

Day 1 (FFH and Protocol): During the first FFH exercise, her language shifted to somatic-phenomenological descriptions: *"It's heavy, really heavy."* The exercise was experienced as physically demanding. After self-administered repetition, her reported burden decreased to 40%, while her intolerance score stayed the same. She accepted this linguistically using a ReAtt Aff Co 2(2): 181-186 (2026)

metaphor, calling the issue an *"annoying monkey."* Following the first part of the ReAttach Protocol, she reported a novel mental state: *"A bit empty... I don't really have thoughts."* When Speaker 0 asked if that felt nice, Participant A noted, *"I don't know this, so that's very special for me."* By the end of Day 1, her burden rating fell to 20% and her intolerance dropped to 60%, introducing a key metacognitive shift: *"Right now, my cognition is fighting my feelings."* She described the day as *"full but satisfied."*

Day 2 (Complete Session and NMC): After sleeping heavily (*"A lot, for my standards"*), Participant A reported an absence of mental looping: *"I just drove and enjoyed the surroundings."* She could not fully verbalize the experience yet, noting that *"it has to land first."* Following the complete ReAttach session, which included the NMC and a hypervigilance exercise, she reported a partial re-coding of her stress. When asked if she felt safe, she used a characteristic double negation: *"No, not unsafe."*

Day 3 (W.A.R.A. Transfer and Final Evaluation): During the morning evaluation, Participant A showed a highly differentiated self-observation, balancing two parallel emotional states: *"I feel calmer on one hand, and on the other hand some tension comes through because it's an assessment moment."* She directly attributed her reduced fear of failure to co-regulation with the trainer: *"I think it really matters how you handle it, and that somewhat reassures me."* During the W.A.R.A. transfer, after three exercises administered by Speaker 0 and her own self-administered practice, she reported: *"The associating was easy. And quite funny."* She also spontaneously differentiated between physical sensations and emotions: *"I'm not sure if I focused too much on a physical sensation instead of a... feeling, let's say."* The post-exercise check revealed a total absence of overstimulation: *"I think I don't feel that."*

In her final evaluation, Participant A shared a powerful contrastive self-observation: *"Surprisingly good, because I recognize from myself that when I have to perform, it costs so much energy that I'm completely drained afterward. But I actually have energy now, so that's very nice to notice."* She attributed this rapid tension reduction to the supportive *"climate of the training days"* and the sessions she underwent. Labeling the experience a *"success experience,"* she directly updated her old failure schema. She also experienced a sudden shift in self-perception regarding her own creativity: *"Funny, I don't consider myself creative at all, but... I surprise myself."* Finally, she highly valued her sense of autonomy within the training structure: *"Normally with training, you have to show something the way someone envisions it. And now there was: this is the protocol, but within it you can do your own things. And that's very nice."*

Case 2: Participant B (Training Context-Three Days)

Baseline (Intake): Participant B presented with a baseline combination of light anxiety and anticipation, localized heavily in her body: *"Tension I feel in my stomach. I have warm hands. Overstimulation I sometimes feel too. Really a full head."* She

Summary: Linguistic Trajectory of Participant A

Timepoint	Burden %	Intolerance %	Dominant Affects	Language Features
Intake	—	—	Tension, curiosity, fear of failure	Somatic localization, cautious hedging
Pre-FFH Day 1	70	90-95	Tension, intolerance	Numeric quantification
Post-FFH Day 1	40	90-95	Reduced tension	"Very heavy" metaphor, person as "monkey"
Post-Protocol Day 1	—	—	Calm, emptiness	"Empty head" described as a novel state
End Day 1	20	60	Satisfied, tired	"Cognition vs. feeling" (metacognitive marker)
Start Day 2	—	—	Calm, presence	No rumination, experience "needs to land"
Post-session Day 2	—	—	Associative state	Mind "still searching"
Post-NMC Day 2	—	—	Partial recoding	"Not unsafe" (characteristic double negation)
Start Day 3	—	—	Calm AND exam tension	Differentiated self-observation, co-regulation
Post-W.A.R.A. Day 3	—	—	Mental lightness, no sensory overload	Distinction between physical sensation and feeling
Final Eval Day 3	—	—	High energy, success experience	"Surprisingly good," agency language, creativity discovered

articulated a clear, dual motivation: acquiring professional skills for her practice while also seeking a personal, systemic application for family members facing developmental challenges.

Day 1 (FFH and Protocol): Before the FFH exercise, Participant B reported a low-intensity emotional state (*"Not that much"*). Her style of processing during the exercise was highly visual and narrative-driven: *"I literally saw it fall... the puppet got smaller."* This highlights a deep state of mental absorption. During the identification exercises, she experienced a strong emotional release when focusing on concepts like 'mother' and 'good person,' which led to crying. Linguistically, she immediately connected this to her real-life situation, talking about the challenges of raising three young children, including a son with autism. This triggered a direct metacognitive insight about her self-criticism: *"that's how I look at myself... I should be a bit kinder."* By the end of Day 1, her stress rating dropped to 10%, though she noted she felt mentally exhausted (*"my head is totally full"*). Unlike Participant A, she actively looked for cognitive structure by re-reading her course materials that night.

Day 2 (Complete Session and NMC): Participant B reported feeling completely *"away"* during the session, indicating a state of deep absorption. When asked about her sense of safety during the NMC check, she gave a completely direct, unconditioned answer, contrasting with Participant A: *"Safe."*

Day 3 (W.A.R.A. Transfer and Final Evaluation): During her morning evaluation, Participant B reported an unexpected

energy surplus: *"I still had energy left yesterday."* She backed this up by describing concrete leisure activities from the previous evening (exploring caves, riding a cable car, buying souvenirs, and going out for a pizza dinner). Her use of the term *"pleasantly tired"* stood in stark contrast to her utter exhaustion at the end of Day 1. When anticipating the practical exam, she used a colorful metaphor, calling the steps a bit of *"abracadabra,"* but immediately added a self-reassuring phrase: *"I think it'll be fine."* During the W.A.R.A. transfer, after three exercises and self-administered practice, she noticed a direct effect: *"I think it went well, because I tried to repeat that negative feeling, but I couldn't. I thought I can't do that again."* The post-exercise check confirmed a completely clear mind: *"Calm in my head."*

In her final evaluation, Participant B gave an enthusiastic, unqualified positive review: *"Super fun! Super!"* She credited the trainer's enthusiasm and practical examples, noting how much she loved gaining *"a completely different way of looking at things."* She also demonstrated strong professional ownership and an immediate desire for knowledge transfer, stating: *"I was really thinking about my colleague... I think she'd really like this."* Commenting on her relaxation levels after three days of intensive training, she noted an absence of expected burnout: *"Yesterday I was really much more relaxed. Yes, today too. It's not like I'm completely done. No, no. Nice, right."*

Case 3: Participant C (Therapeutic Context-Six Months)

The linguistic journey of Participant C (a chronic FND patient

Summary: Linguistic Trajectory of Participant B

Timepoint	Dominant Affects	Language Features
Intake	Light tension, curiosity	Somatic focus (stomach/hands), dual motivation
Pre-FFH Day 1	Curiosity, low emotional intensity	"Not that much"
Post-FFH Day 1	Relaxation, visual processing	Highly descriptive imagery, "falling" puppet
Post-Protocol Day 1	Emotional release, deep insight	Tears, "should be kinder" (metacognitive shift)
End Day 1	Burden at 10%, mental fatigue	"Full head," self-identified as a visual thinker
Start Day 2	Fatigue, active structuring	Re-reading course literature to process
Post-session Day 2	Absorption	"Was completely away"
Post-NMC Day 2	Safety	"Safe" (direct, unconditioned affirmation)
Start Day 3	Energy surplus, minor exam zenuwen	"Abracadabra" metaphor paired with self-reassurance
Post-W.A.R.A. Day 3	Calm, complete erasure of bad affect	"Tried to repeat the feeling, but I couldn't"
Final Eval Day 3	Deep relaxation, high enthusiasm	"Super fun," active plan for knowledge transfer

followed over a six-month window) outlines a clear, three-phase developmental pattern (Call et al., 2026):

Early Sessions (Somatic Focus): Her verbal output was very brief, hesitant, and broken up. The way she spoke was completely tied to raw physical distress and basic shifts in her immediate state (using terms like *"feeling peace," "calm," "clearer,"* but also *"strange"* or *"slowed down"*). Her descriptive range was narrow; physical symptoms and emotional language were completely intertwined.

Midway Sessions (Emotional Differentiation): She began to develop the linguistic ability to observe and talk about fluctuations and contrasts in her condition. She started using phrases like *"less foggy"* compared to *"hard days."* Real differentiation emerged here: she could point out improvements in one area while still acknowledging ongoing struggles in another.

Late Sessions (Functional Language and Agency):

Her language finally shifted away from passive symptom reporting toward active, function-based self-observation. She began talking about concrete, daily activities like going for walks or shopping on her own. She also came up with creative, meta-reflective terms, describing her brain fog as being *"lifted"* or her state as *"unstable"* rather than just *"bad."* Her phrasing showed clear signs of personal agency and self-direction (using words like *"managing," "doing,"* and *"noticing"*).

Cross-Case Comparison: The Developmental Model

Looking at all three cases, we see a predictable four-phase progression in how language evolves:

Somatic / Affective Baseline → Metacognitive Differentiation → Functional Self-Observation → Personal Agency

Phase	Participants A & B (3-Day Training)	Participant C (6-Month Therapy)
Somatic/Affective	Day 1: "breathing, stomach ache," "stomach, hands," "very heavy." High baseline stress.	Early sessions: very brief contributions, tightly bound to raw physical distress and state shifts.
Metacognitive	Day 1-2: "cognition vs. feeling," "should be kinder to myself," "empty head" experienced as a novel phenomenon.	Mid-way sessions: "less foggy" vs. "hard days," tracking variations and drawing contrasts between domains.
Functional	Day 3: "visited caves," "went on a cable car ride," "had a pizza dinner," plans to talk to work colleagues.	Late sessions: language connects directly to daily activities like walking, independent shopping, and social tasks.
Agency	Day 3: "success experience," "just going to do it," unexpected creativity discovered, "I surprise myself."	Late sessions: active verbs showing personal control, such as "managing," "doing," and "noticing."

Wiring Affect with ReAttach (W.A.R.A.) as a Self-Regulation Tool

On Day 3, the training group underwent three consecutive W.A.R.A. exercises led by Speaker 0, followed by independent practice. The immediate language markers of this technique were highly consistent across both participants. Participant A reported that *"the associating was easy. And quite funny,"* and noted that her usual overstimulation had vanished (*"I think I don't feel that"*). Participant B highlighted an active erasure of negative emotions: *"I tried to repeat that negative feeling, but I couldn't. It was already gone."* She pointed to an immediate sense of internal peace (*"Calm in my head"*).

These real-time reports show that the W.A.R.A. technique generates rapid, subjectively verifiable effects. The noticeable shift from effortful processing (e.g., describing the FFH as *"very heavy"* on Day 1) to automatic self-regulation (describing it as *"easy"* or finding it impossible to recall the distress) indicates that self-regulation capacity can be consolidated remarkably quickly when chronic barriers are absent.

Discussion

Comparing the short training of healthy adults with the long-term therapy of a chronic FND patient reveals an interesting parallel. The quick language changes in the trainees are basically a micro-version of the developmental path that takes months for a clinical patient. This strongly suggests that language change during ReAttach isn't just a side effect of symptoms improving; rather, it reflects a core process of neurocognitive reorganization that happens regardless of diagnosis.

All three participants started by using language focused heavily on physical experiences (breathing, stomach tension, warm hands, brain fog). This fits with the theory behind ReAttach: sensory and somatic processing is the necessary starting point for regulating emotions (Painter et al., 2025; Zeestraten-Bartholomeus, 2021). The next stage—metacognitive differentiation—happened for the trainees in just 24 to 48 hours (Participant A: *"cognition fighting feelings"*; Participant B: *"should be kinder to myself"*). For Participant C, it took months to reach this stage because her physical symptoms were so deeply rooted. However, the linguistic pattern—the ability to step back and compare different inner states—was exactly the same.

The most interesting finding from Day 3 is how quickly functional and agency language appeared in the healthy trainees. For the clinical patient (Participant C), functional language (like walking or shopping) took months because severe physical symptoms prevented her from doing daily activities. The trainees, of course, didn't face those physical limits. By Day 3, they were already using active functional language (talking about visiting caves, cable cars, and dinners) and framing their experiences with high agency (Participant A: *"success experience," "I surprise myself"*; Participant B: *"just going to do it," "will tell my colleague"*). This proves that the entire four-phase developmental model can happen much faster in non-ReAtt Aff Co 2(2): 181-186 (2026)

clinical populations.

Finally, individual communication styles—like Participant A's constant hedging and double negatives versus Participant B's directness and need for structure—suggest that a person's existing personality and coping mechanisms influence how their language transforms (Young et al., 2003). Interestingly, these traits became more positive over the three days: Participant A's hedging turned into careful, non-defensive self-reflection, while Participant B's need for structure became confident, active professional planning.

Transdiagnostic Implications

The fact that healthy trainees go through the exact same linguistic sequence as a chronic patient—just much faster—strongly supports the transdiagnostic nature of ReAttach. As the developer noted during the training: *"We resemble our patients more than we think; nothing human is foreign to us."* The mechanism of change seems to be a universal human learning process, not a specific fix for a particular disorder. The process starts with somatic-affective processing, moves to metacognitive differentiation, and ends with functional and agency language. The overall pattern is the same; only the speed depends on the person's baseline trauma and chronic symptoms.

Conclusion and Recommendations

This study shows that qualitative language analysis is a great, practical tool for tracking how ReAttach works over time. Moving from a bodily focus to metacognitive distance, and finally to functional, self-directed descriptions, seems to be a core part of the intervention's success. The three-day training data adds to previous research by showing that healthy adults can go through the entire sequence within 72 hours, and that the W.A.R.A. technique produces immediate, noticeable self-regulation effects.

Recommendations for Future Research

- 1. Formalize and Scale the Coding System:** Apply this linguistic framework (Somatic → Metacognitive → Functional → Agency) to larger groups of both clinical and non-clinical populations to see if it holds up.
- 2. Link with Quantitative Measures:** Connect qualitative language markers with quantitative metrics, like the Symptom Amplification Module (SAM) used in the NeuroLog protocol (Painter et al., 2025), to find clear linguistic predictors for treatment success.
- 3. Longitudinal Follow-up of Trainees:** Gather follow-up language data from trainees weeks or months after the course to see how well their new language and self-regulation skills hold up when they start working independently.
- 4. Explore Coping Styles as Moderators:** Do more studies to see if specific coping tendencies (like using a lot of hedging

vs. being very direct) affect the speed and path of linguistic and emotional change.

References

1. Call, E., et al. (2026). From hopelessness to self- and co-regulation: A mixed-methods exploratory case series of remote ReAttach in Functional Neurological Disorder. *ReAttach Affect Coach Journal* (manuscript in preparation).
2. Painter, S., Zeestraten-Bartholomeus, P., & Mehrad, A. (2025). Evaluation of ReAttach in FND with the Symptom Amplification Module (SAM) of Neurolog: Study protocol. *ReAttach Affect Coach Journal*, 1(2), 73-78.
3. Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. Guilford Press.
4. Zeestraten-Bartholomeus, P. (2021). *ReAttach: A transdiagnostic intervention for adults and children with mental health problems* [Doctoral dissertation, Maastricht University].



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