Logosynthesis as a psychotherapeutic and coaching model to neutralize mental imagery and relieve emotional distress: A review of the literature to identify research opportunities

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Abstract:

The role of mental imagery in mental health issues and emotional distress is gaining recognition in the medical research community. In the context of post-traumatic stress disorder (PTSD), recurrent sensory images known as flashbacks and intrusive images, contribute to the re-experiencing of traumatic events. The vividness of mental imagery is now shown to be related to the intensity of emotional distress, including fear, social anxiety and depression. Understanding the role of mental imagery in PTSD and mental health issues is crucial for effective treatment approaches.

Current recognized treatments for PTSD and mental health issues have limitations, highlighted in reviews of literature and studies on patient preferences. Cognitive Behaviour Therapy (CBT) is challenged to offer lasting relief of symptoms. (Pham et al., 2019) Eye Movement Desensitization and Reprocessing (EMDR) shows high clinical recommendation yet low patient preference. (Schwartzkopff et al., 2021). While many treatments focus on mental imagery, they are challenged to precisely identify and resolve the underlying mental imagery that trigger the symptoms to satisfy patient preferences and prevent reoccurrence. These results reinforce the need for novel approaches to offer lasting relief and meet client comfort needs.

Logosynthesis, a psychotherapeutic model developed by Dr. Willem Lammers. It offers a precise, repeatable technique to both identify and neutralize the underlying mental imagery (sensory representations) that triggers emotional distress. This includes distressing thoughts, emotions, and physical sensations commonly associated with mental health issues. This literature review will explore the role of mental imagery in emotional distress and highlight the potential of Logosynthesis as an integrative treatment approach.

Introduction:

Mental imagery, including sensory representations from the five senses, plays a pervasive role in our mental lives. In recent years, the significance of mental imagery in PTSD and emotional distress has gained greater recognition in scientific research. The naming of 'aphantasia' in 2015 as 'the absence of seeing mental images' offers further opportunity to research the association between mental imagery and the intensity of emotions.

Mental imagery, as it relates to this report, includes all sensory representations: visual, auditory, kinesthetic, olfactory and gustatory (VAKOG). The Stanford Encyclopedia of Philosophy offers a comprehensive overview of the scope of the term 'mental imagery', including this description:

> If you close your eyes and visualize an apple, what you experience is mental imagery - visual imagery. But mental imagery is far more pervasive in our mental life than just visualizing. It happens in all sense modalities and it plays a crucial role not just in perception, but also in memory, emotions, language, desires and action-execution. It even plays a substantial role in our engagement with artworks. (Nanay, 2021)

Visualizing desired outcomes is a wellrecognized form of mental imagery, allowing individuals to influence emotions in a positive manner. Intrusive mental imagery limits the influence of the individual over both the content and the emotions. Brewin et al (2010) reviewed literature on the role of intrusive images in psychological disorders. They observed that these intrusions are not limited to PTSD. "It is striking that virtually all studies describe these recurrent intrusions as being vivid, detailed, and accompanied by (often extremely strong) physical sensations and emotions. Across disorders the visual modality is almost invariably the most common, but it is clear that sound, taste, and smell are also frequently involved." (Brewin et al., 2010)

They continue that among the various psychological conditions associated with distressing symptoms, post-traumatic stress disorder (PTSD) stands out for its hallmark feature—recurrent sensory images of past traumas, commonly known as 'flashbacks.' These vivid and intrusive mental images, accompanied by strong emotions and physical sensations, contribute to the re-experiencing of traumatic events. Understanding the role of mental imagery in PTSD and other mental health issues is crucial for developing effective treatment approaches.

In exploring the relationship between mental imagery and emotional experiences, research suggests a bidirectional interaction between emotions and mental imagery. Emotions significantly influence the content and control of mental imagery, while mental imagery, in turn, profoundly impacts emotions. This suggests the possibility that the sensory perception and emotional reaction are fused. Focusing on emotional mental imagery in treatment protocols shows promise in reducing anxiety and depression and improving intervention effectiveness. (Nanay, 2021)

There is a call to target mental imagery in the treatment of psychological disorders and emotional distress: "Research that has manipulated self-imagery in social phobia has shown that negative imagery has a key role in maintaining the disorder. Anxious imagery often relates to a memory of an earlier aversive or traumatic situation, but the clients experience it as if it is happening in the 'here and now' and that the imagery is a true representation of how they appear to others. Clinicians need to assess and target imagery in the psychological treatment of anxiety disorders." (Hirsch & Holmes, 2007)

New models are being developed to offer lasting symptom relief by identifying and neutralizing the underlying mental imagery. Logosynthesis offers a structured, repeatable technique, embedded in a comprehensive model, to both gently and quickly identify and to neutralize the mental imagery that triggers distressing thoughts, emotions, and physical sensations. The model utilizes the power and intention of words to shift the energy in the energetic structure of mental imagery, providing immediate and lasting relief. Logosynthesis is a relatively new therapeutic and coaching model that is not yet evidence based. An initial pilot study titled The Effectiveness of Logosynthesis: New Methods in Integrative Psychotherapy (von Blumenthal et al., 2022) highlights promising results, including significant improvements in psychosocial functioning levels. This literature review aims to highlight the role of mental imagery in emotional distress and to offer Logosynthesis as a preferred treatment model to identify and neutralize mental imagery.

Review Topics:

The role of psychotherapy in PTSD and mental health issues.

"Psychotherapy includes a variety of treatment techniques that mental health professionals use to help people identify and change troubling emotions, thoughts, and behaviors. Psychotherapy can provide support, education, and guidance to people with PTSD and their families. Treatment can take place one on one or in a group setting and usually lasts 6 to 12 weeks but can last longer. Some types of psychotherapy target PTSD symptoms, while others focus on social, family, or job-related problems. Effective psychotherapies often emphasize a few key components, including learning skills to help identify triggers and manage symptoms. A common type of psychotherapy called cognitive behavioral therapy can include exposure therapy and cognitive restructuring." (National Institute of Mental Health (NIMH), 2023)

Psychotherapeutic interventions aim to offer clients relief from presenting symptoms. CBT is recognized as a leading treatment modality for PTSD, depression, anxiety and other mental health issues. Pham et al (2019) undertook a systematic review and meta-analysis of the literature as follows: "Nine hundred thirty-four articles were identified [830 articles identified through database search, and 107 through article references]. Sixty-nine full-text articles were reviewed for eligibility. Of these, 33 were included for qualitative analysis. Thirteen studies evaluating the effect of CBT-based interventions on the severity of PTSD, anxiety, and depression symptoms underwent metaanalysis. While CBT-treated patients experienced clinically significant decreases in symptom severity, there were no statistically significant differences between treatment and control groups at follow-up for PTSD, anxiety, and depression." (Pham et al., 2019) They concluded that "compared with usual care, CBTbased interventions may not be effective in decreasing or preventing PTSD, anxiety, or depression symptoms in trauma survivors."

Measurement of symptoms in treatment.

A symptom is defined as "any change in the body or its functions as perceived by the patient. The patient describes his or her symptoms in his or her complaint or history of the present illness. A sign, however, is an objective finding observed or discovered during the examination." (*Taber's Medical Dictionary*, 2021)

Given the subjective nature of emotional and physical symptoms, therapeutic treatment models (such as CBT, EMDR and others) widely use a rating scale known as Subjective Units of Distress (SUDS) to measure the impact of treatment interventions in mental health. This scale emphasizes the importance of understanding and addressing symptoms from the individual's perspective and provides valuable insights into the impact of treatment interventions.

To assess the validity of using this measure, Tanner (2012) reviewed literature. "Despite the wide-spread use of SUDS, to measure anxiety to specific stimuli, little information has been published on the validity of such scales and even less on their use as global measures of emotional and physical discomfort. Data was examined for 182 consecutive admissions to a psychology clinic to determine the relationship of self-rating of emotional and physical discomfort to one another and of the emotional self-rating to the clinician rating of general functioning (GAF)." (Tanner, 2012) He concluded "the data supports SUDS as global measures of both physical and emotional discomfort."

Patient treatment preferences for PTSD and mental health issues.

Patient preference is an important effectiveness measure for treatment approaches. A study by Schwartzkopff et al. (2021) aimed to gain a better understanding of patient treatment preferences for PTSD, expanding previous research by "investigating (a) the treatment preferences of PTSD patients with respect to five evidence based (EMDR, CBT, prolonged exposure) or frequently used (psychodynamic therapy and stabilization) psychotherapeutic treatments for PTSD, (b) the influence of demographic and psychopathological factors on patients' treatment preferences, and (c) the reasons for treatment choice." 104 traumatized adults completed an online survey and results indicate that prolonged exposure and CBT were each preferred by nearly 30%, and EMDR and psychodynamic psychotherapy were preferred

by nearly 20%. The perceived treatment mechanism played the most important role in influencing patients' treatment choice at 41%. This was followed by treatment efficacy at 26%. The key treatment mechanism cited was "Correct thought patterns to speed up the healing process" (29%). The key treatment efficacy measure was "Has long-lasting positive effects" (29%). (Schwartzkopff et al., 2021) This study cites preferences and highlights that patients are interested in how the treatment works and its lasting impacts. This study does not reference neutralizing mental imagery as a treatment mechanism nor a treatment effect.

Limitations of current recognized treatments for PTSD and mental health issues.

The reliance on cognitive processing can limit treatment results for people experiencing PTSD and high negative affect (the tendency to experience negative emotions). Brown et al (2018) performed a critical review of literature to determine how negative affect associated with PTSD disrupts cognitive processes. Their results highlighted areas where cognitive processes were disrupted, including "a narrowed focus on stimuli of a negative valence, increased rumination of negative autobiographical memories, inflexible preservation of initial information, difficulty considering counterfactuals, reliance on emotional reasoning, and misinterpretation of neutral or ambiguous events as negative, among others." (Brown et al., 2018) In these conditions, it can be challenging for people to maintain the required 'frame of mind' to realize the desired behaviour changes.

The role of mental imagery in emotional distress.

Post-traumatic stress disorder (PTSD) is often characterized by the individual re-experiencing a traumatic event. It is common for a current incident to trigger an automatic reaction which includes the initial mental imagery in lockstep with the thoughts, emotions and physical sensations experienced at the time of the trauma. "The hallmark feature of posttraumatic stress disorder (PTSD) is recurrent sensory images of a past trauma, known as 'flashbacks'". (Hirsch & Holmes, 2007)

The Stanford Encyclopedia of Philosophy speaks to the interconnection between mental imagery and emotions:

"Imagery dramatically affects emotions – it seems for instance difficult to make sense of what goes on in the mind of a fearful or angry person without appealing to imagery. On the other hand, the impact of emotions on imagery is equally significant - the imagery that occupies our minds is very often under the control of our dominant emotion, which sometimes alters its fabric and our capacity to control it. In other words, there is a twowav interaction between emotions and mental imagery." (Nanay, 2021)

Distressing mental imagery can be associated with both past and future events. Brewin et al (2010) highlight that "the clinical studies reviewed previously have demonstrated a close correspondence between intrusive images of dreaded future outcomes and intrusive memories of past upsetting or dangerous events." (Brewin et al., 2010) This specifies that both memories and fantasies can present as mental imagery with corresponding distressing physical sensations and emotions.

A study by Holmes and Hackmann (2004) suggests that rather than experiencing a large number of random mental images, the distressing mental imagery appears to be recurrent, thematic and familiar to the client. "Intrusive images and memories appear to be a common feature of many disparate psychological conditions. Where the data have been collected, it is generally found that there are a relatively small number of recurrent intrusions, rarely exceeding six per person and more often ranging between one and three per person. Memories tend to be linked in thematic groups, and intrusive images are frequently associated with specific adverse events in ways that often come as a surprise to patients when their attention is directed to it." (Holmes & Hackmann, 2004). This finding suggests an opportunity to focus treatment on identifying and neutralizing the recurrent mental imagery.

Intrusive mental imagery is reportedly widespread in the population yet not everyone experiences the same degree of distress related to mental imagery. "Recurrent intrusions also occur in healthy controls, but they are significantly less common, and when they do occur, they are less frequent and less distressing." (Brewin et al., 2010) Given the widespread nature of intrusive mental imagery, people can benefit from learning how to neutralize this to relieve stress.

Aphantasia is defined as *"the inability to form mental images of real or imaginary people, places, or thing."* (Merriam Webster Dictionary, 2023) Research involving individuals who experience aphantasia suggests that individuals with aphantasia experience emotions with less intensity compared to those with hyperphantasia. This indicates a measurable link between the vividness of mental imagery and the intensity of emotional experiences. (Wicken et al., 2021), (Keogh et al., 2021) (Keogh et al., 2023)

Wicken et al (2021) highlight that the aphantasic individuals' lack of a physiological response when imaging scenarios is likely to be driven by their inability to visualize and is not due to a general emotional or physiological dampening. Their work provides evidence that a lack of visual imagery results in a dampened emotional response when reading fearful scenarios, providing evidence for the emotional amplification theory of mental imagery. (Wicken et al., 2021)

To explore difference in the vividness of mental imagery across lifespan, Gulyád et al (2022) collected data on a random sample of 2252 participants between the ages of 12–60 years. They postulate that "a novel developmental pattern that describes a declining ability to elicit vivid visual mental images in the group averages of different age groups from adolescence to middle age. This effect involves both a decreasing proportion of individuals with vivid visual imagery vividness and an increasing proportion of individuals with low imagery vividness as maturation and ageing progress." (Gulyás et al., 2022)

The influence of mental imagery on overall wellbeing has a broader scope than dealing with intrusive images and symptoms of PTSD. Çili & Stopa (2015) propose self-imagery goes beyond the scope of impacting beliefs, emotions and behaviours to encompass the broader sense of self. They propose that "when patients encounter situations that remind them of these events, they do not simply experience the activation of related images: they experience the activation of an entire working self, consisting of the images, negative self-beliefs, and goals that aim to distance them from the failure- or threat-related standard represented by the intrusive image(s)." (Çili & Stopa, 2015)

Neutralizing mental imagery to relieve PTSD and mental health symptoms

Relieving distress, including distressing thoughts, emotions and physical sensations, is the goal of psychotherapeutic approaches. Research indicates associations between intrusive mental imagery and emotional distress and between the vividness of mental imagery and the intensity of emotions. Therefore, maximizing the impact of psychotherapeutic interventions will involve identifying and resolving intrusive and vivid distressing mental imagery. Pile et al (2021) concluded that "harnessing emotional mental imagery in psychological interventions could be a promising approach to reduce anxiety and depression and that mental health science could inform the development of new interventions and help to maximise intervention effectiveness." (Pile et al., 2021)

Logosynthesis as a psychotherapeutic treatment to neutralize mental imagery

Logosynthesis is a psychotherapeutic and coaching model that offers a targeted approach to identify and to neutralize mental imagery for immediate and sustained relief of presenting symptoms. "Logosynthesis is based on a coherent and fascinating energy concept that goes beyond psychology and biology." (Lammers, 2020) To support understanding of the scope of issues that can be addressed, Dr. Lammers presents 48 real-life case examples across a variety of presenting issues in the book *Minute Miracles: The Practice of Logosynthesis* (Lammers & Morisset, 2019)

"The mechanism of action is based on neutralising subjectively stressful representations in the limbic system by saying certain sentences. By using a clear protocol, the stored perceptions are activated and neutralised by means of words. The processing takes place immediately." (von Blumenthal et al., 2022) In using the age-old power and intention of words, this treatment protocol not only empowers the individual in their own healing and development but also limits any side effects from any outside source. The intervention can be easily integrated with other treatment approaches to support holistic healing and recovery.

Distressing mental imagery is recognized in the literature in many forms, including intrusive memories, limiting beliefs and fantasies. Mental

imagery can also be suppressed and reside outside of the level of awareness and triggers distressing thoughts, emotions and physical sensations. Logosynthesis offers a Basic Procedure that guides the client to identify mental imagery of this nature. Based on the findings of Çili & Stopa (2015), there is also benefit to further explore neutralizing mental imagery in the broader context of the self. Logosynthesis offers a precise, targeted technique to address the presenting issue. It can be applied with guidance of a trained professional and learned by the client to use routinely as a self-coaching model to support their own healing and development journey. Articles and thesis work supports the benefits of using Logosynthesis in virtual and group therapy and coaching sessions. (Caswell, 2023)

To date, the model is predominantly being used by therapists and coaches working in private practice in German-speaking Switzerland. The model is only beginning to gain the attention of research through the work of Dr. Suzanne von Blumenthal, a psychiatrist and psychotherapist in Thusis, Switzerland. She is also the director of the Swiss Institute for Logosynthesis in Bad Ragaz, Switzerland. In 2022, Dr. von Blumenthal presented a poster of a pilot study to the Swiss Congress of Psychiatry and Psychotherapy titled: The Effectiveness of Logosynthesis: New Methods in Integrative Psychotherapy. The report highlights: "Logosynthesis is a new and integrative method that represents such a development. This non-randomized pilot study examines Logosynthesis' effectiveness for clinical application for the first time. The intervention group was anticipated to experience a reduction in depressive symptoms and overall psychopathological level of distress as well as an improvement in general functioning level. The results showed a significant increase in psychosocial functioning level when measured by external assessment, and a non-significant improvement in symptom burden when measured by self-assessment." (von Blumenthal et al., 2022)

In the first peer-reviewed research published about Logosynthesis, "Efficacy of Logosynthesis in reducing PTSD symptoms and distress among adults with Adverse Childhood Experiences" (Beltran-Salanguit, 2022), the author aimed to show the efficacy of the Logosynthesis Basic Procedure in reducing PTSD symptoms and distress among adults with Adverse Childhood Experiences using a Multiple Baseline Single-Subject Experimental Design. The author concluded that "this study suggests that the Logosynthesis basic procedure is effective in reducing PTSD symptoms, distress, and belief in negative cognition as well as changing the negative to positive cognitions and behaviors."

In May 2023, Dr. Natasha Jones at University West Virginia defended her doctoral dissertation titled: "A New Approach to Healing Traumatic Memories: Using Logosynthesis to Resolve Subjective Units of Distress Associated with Intimate Partner Violence." The hypotheses were that the intervention group would report a reduction in SUDS and intrusive memories, with results that showed a significantly greater reduction in SUDS and intrusive memories than the control group. The summary of findings indicates that: "Analysis revealed the treatment group means reflected significant improvement over the control group, indicating Logosynthesis may be effective at reducing SUDS with sustained gains and reducing the occurrence of intrusive symptoms." (Jones, 2023)

To understand user preferences, several surveys have been conducted with professionals trained in Logosynthesis. Based on a 2017 survey, respondents cited a preference over other models based on: overall effectiveness (89%) ; speed of work (80%) ; ease of use / simplicity (74%) ; client comfort (71%) ; and targets the presented issue (66%). (Caswell, 2017). Given CBT is well recognized as an evidence-based model, qualitative commentary was solicited to understand how Logosynthesis compared to CBT. (Caswell, 2018) Further, a 2020 survey of a group of professionals with various levels of training in Logosynthesis indicated that Logosynthesis is highly preferred or preferred by 88% of respondents. Among all respondents, regardless of level of training or duration of working with the method, 80% cited Logosynthesis as their preferred method of working with clients and 83% indicated that Logosynthesis has transformed how they approach their role as coach, therapist or guide. (Caswell, 2020) These survey results of professionals with various levels of training in Logosynthesis warrant further research to assess the preference for and effectiveness of the model.

Conclusion:

In conclusion, mental imagery plays a significant role in mental health issues and emotional distress, including symptoms associated with PTSD, depression, social anxiety and other psychological disorders. Trauma research has highlighted the association between mental imagery and re-experiencing traumatic events, complete with emotions and physical sensations. Studies indicate that resolving mental imagery and/or reducing the vividness of mental imagery can alleviate distressing symptoms, offering direction for therapeutic intervention.

In the healthcare system, much of the focus in psychotherapeutic approaches has been on changing thought processes and prolonged exposure to relieve symptoms. This literature review highlights the opportunity for new and improved models to identify and resolve distressing mental imagery. Logosynthesis offers a structured, repeatable model to both identify and to shift the underlying mental imagery that triggers distressing thoughts, emotions and physical sensations for immediate and lasting results. Using a specific protocol, Logosynthesis aims to identify and neutralize subjectively stressful representations in the limbic system. When the mental imagery is neutralized, the results are immediate and lasting. A poster

presentation to the Swiss Counsel for Psychiatry and Psychotherapy shows promising results, including a significant improvement in psychosocial functioning levels. (von Blumenthal et al., 2022). Additionally, a doctoral thesis by Dr. Natasha Jones at Virginia State University identifies benefits in group counselling by resolving distressing mental imagery related domestic violence. (Dissertation brief pending).

There is opportunity to conduct peer-reviewed research to better understand the efficacy and potential of Logosynthesis as an integrative psychotherapeutic treatment model to resolve PTSD and other mental health issues.

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