



Can A Single Imagery Session Positively Change Sense of Wellbeing?

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Abstract

Mental imagery or cognitive imagery is a technique that can be used in the treatment of many psychological and affective disorders. Wellbeing in turn, is a global concern and related to the feeling of happiness, fulfillment and satisfaction in life. The hypothesis of the present study was that use of the imagery technique can change subjects' scores on the Ryff multi-dimensional Psychological Well-being (PWB) scale. A total of 127 healthy volunteers aged 36-49 years were randomly assigned to one of two groups as follows: 85 to the Imagery Group (IG) and 42 to the Control Group (CG). Participants answered the PWB before and after undergoing a 15-minute session of the guided imagery technique (IG) or a 15-minute period of silence (CG). The groups were statistically equal before treatment (ANOVA – $p=0.6$). Comparing scores before and after treatment, the IG had a mean and standard deviation of 75.3 ± 34.8 , while the CG attained 8.3 ± 13.3 for the same parameters. ANOVA before and after treatment for the two groups was $p<0.004$, indicating a difference between the groups studied. Thus, it was concluded that a single 15-minute imagery session sufficed to change the feeling of wellbeing in the population studied.

Keywords

Imagery, Wellbeing, Ryff scale

Introduction

Our imagination can evoke emotional states in a powerful way. We have the ability to use imagination as will to mimic or simulate sensations, actions, and other experiences, for good or for bad. Mental Imagery is a characteristic process that manifests in post-traumatic stress disorder [1]. Strong emotions can be evoked by images in the form of “flashbacks” of the original traumatic event. Thus, emotional disorders are often characterized by intrusive and distressing emotional pictures - or attempts to avoid them [2,3].

For example, flashbacks in posttraumatic stress disorder consist of vivid memories of emotional trauma accompanied by a strong sense of current threat, wherefor instance, a traffic accident survivor may experience flashbacks of the images and sounds of the car crash [4-9]. Worry-related images repeat often in reports of patients with emotional disorders such as post-traumatic stress disorder or social phobia [2,3]. These images contribute to the development or persistence of such disorders [10,11].

This is a common complaint among patients who suffer from social phobia. These patients see themselves deeply anxious in social situations and also red-faced feeling ashamed or stuttering [12]. These prospective images are also found in schizophrenia [13]. In agoraphobia, patients often describe the image of being unable to cope with an impending catastrophe, whether physical or mental, such as seeing themselves frozen and surrounded by an intimidating crowd [14-16]. In obsessive-compulsive disorder, the images may represent fear of becoming ill or contaminated or of being bullied or threatened [17].

Imagery also occurs in specific phobias [18], Body Dysmorphic Disorder [19], Eating disorders [20,21], Depression [22-26], Social anxiety [27,28], Addiction [29,30], Suicidal plans [31], Unrealistic goals in the manic phases of bipolar disorder [32], Obsessive Compulsive Disorder [17], Psychotic Symptoms [33], and even Pain [34].

Based on the proposition that mental imagery plays a key role in emotions and feelings [35,36], the role of imagery processes in the onset, maintenance, and treatment of various psychological disorders has been studied [37-39] and its therapeutic value has been proved [31,39,40].

Thus, imagery is a clinical tool that helps people suffering from depression [41] or anxiety [3], may change and improve behaviors [42], plays a special role in emotions and feelings [35,36], and is involved in the onset, persistence and treatment of various psychological disorders [37-40].

Wellbeing is related to people's thoughts about themselves and their lives, degree of satisfaction with life, happiness, positive feelings [43-46] and good mental states [46]. It can be defined as good mental states, including all of the various evaluations, positive and negative, that people make of their lives, and the affective reactions of people to their experiences [46] or the total sum of a cognitive and an emotional or affective component [43,45]. This state encompasses a spectrum of positive feelings and subjective life assessments. It also conveys information regarding a broad array of behaviors and health, including physical and mental health, social relationships, leisure, and subjective states such as emotions and mental engagement [47].

Moreover, wellbeing has become an important research topic. Wellbeing has a role in socio-economic issues and economic development [48-51]. Wellbeing predicts longevity and its positive

effect is similar in magnitude to the negative effect of smoking [52,53].

Since imagery is a simple to use, low-cost technique widely used in the relief of a variety of conditions, the objective of this study was to evaluate the psychological wellbeing of volunteers and subjective variation by self-administration of a scale, after undergoing a single imagery session.

Methods

A total of 127 healthy subjects not in use of any medication, aged 36-49 years were selected as volunteers for the present study. Participants were randomly assigned to one of two groups as follows: 85 to the Imagery Group (IG) and 42 to the Control Group (CG).

The exclusion criteria were: severe disabling diseases, substance or alcohol abuse, or any psychiatric or neurological disorder.

All volunteers underwent the same screening process to verify the inclusion and exclusion criteria and completed a form collecting demographic data. After being informed of the experimental model and signing the consent form, subjects answered the Ryff multi-dimensional Psychological Well-being scales (PWB) [54]. After completing the PWB, the IG underwent the guided imagery technique for 15 minutes, whose narrative was standardized and recorded onto a regular CD, and was intended to produce positive and relaxing images, promote relaxation, self-esteem, calmness and happiness. The CG simply received the instruction to relax for 15 minutes in silence. After the end of the procedure all subjects answered the PWB again.

Normal data (according to the Shapiro-Wilk test) was analyzed using ANOVA for comparing groups. Each group consisted of the difference in PWB scores taken before and after the intervention.

Results

The groups were statistically equal before treatment (ANOVA – $p=0.6$)

Comparing scores before and after treatment, the IG had a mean and standard deviation of 75.3 ± 34.8 , while the CG attained 8.3 ± 13.3 for the same parameters. ANOVA before and after treatment for the two groups was $p<0.004$, indicating a difference between the groups studied.

Discussion

While correlating the definitions and components of both wellbeing and imagery, the hypothesis that effective treatment to improve wellbeing could be based on imagery was devised in our laboratory. Thus, the hypothesis of the study was that the imagery technique for wellbeing can change subjects' scores on the PWB. The ANOVA p -value of 0.004 confirmed this hypothesis.

The fact that imagery is a very simple and low-cost technique that can be applied anywhere, renders it an important tool for improving wellbeing in the population. As the technique proved effective using a CD alone, it could be applied widely without professional guidance, constituting an inexpensive and powerful approach for dealing with the subjective feelings of happiness and fulfillment in life.

Unfortunately, no objective method for evaluating wellbeing exists, which could have lent further support to the results of this study. The broad array of feelings that affect wellbeing and the difficulty defining the concept makes its study challenging. On the other hand, the scale utilized in this study has been considered a reliable measure for average levels of wellbeing [55].

Nevertheless, imagery is an important way of managing emotions and many different psychiatric diseases [12-34]. Thus, this is a vast and promising field that warrants further research to cast scientific light on a clinical technique that can be used for the treatment and prevention of numerous illnesses.

Conclusion

A single 15-minute imagery session proved sufficient to change

the sense of wellbeing in the population studied. Further studies elucidating this relationship are warranted, since wellbeing is a global concern and imagery an inexpensive and versatile technique.

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