

# Therapeutic Reprocessing of Association of Memories (TRAM)

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**ABSTRACT:** *Therapeutic reprocessing of association of memories (TRAM) is a treatment approach for phobia and other emotional disorders based upon proposed 'Emotion Model' by Das. This article describes the theoretical guidelines of TRAM for the effective treatment of phobia. Currently 'desensitization' and 'flooding' are in vogue treatment modalities for the treatment of phobia. Therapeutic reprocessing of association of memories can add a new dimension for the treatment of 'phobia'. Though the treatment strategy of TRAM has been described here basing on 'phobia', TRAM could be extended to further areas of psychotherapeutic treatment, treating other emotional imbalances also. The strategy of TRAM is founded on two fundamental theories – theories of associative learning and the new emotion model. The design of this study aims at rational analysis and logical way of approaches for the treatment of phobia and other emotional difficulties. This treatment modality is simple, more patient compatible and cost-effective, but involves application of some innovative interventions on the part of the therapists.*

**KEYWORDS:** *Emotions, Memory, Associated memory, Phobias, Emotional disorders*

## INTRODUCTION

Treatment strategy of TRAM (Therapeutic Reprocessing of Association of Memories) depends on understanding of two basic pivots: 'Association of Memories' and 'Emotion Model'.

### Association of Memories

Association of memories means memories which are being associated with a particular 'object' or 'situation' through the conditioning or learning processes during the development of an organism. Like 'tree', 'leaves', 'fruits', 'branches', 'grown on soil'; or 'bird', 'wings', 'feathers', 'can fly'. For this, whenever we look at the sky, we expect to see 'stars' or 'clouds' in it.

This process constructs the knowledge about the ways the things are related to one another. Without this associative process, our learning would have been impractical. 'Associative memory' is defined as the ability to learn and remember the relationship between unrelated items (Suzuki, 2005).

Science of associative learning began with the pioneering studies of Pavlov and Thorndike nearly 100 years back. Pavlov with his experiment with 'dog', demonstrated how 'the memory of sound of bell' could be associated with 'the memory of food'. Associative learning is modelled as gradual accrual of excitatory and inhibitory connections between stimulus units. Typically associative strength is treated as summative. So the strength of an association between stimuli stands for the entire history of learning (Jamieson et al., 1992).

Associative strength as Rescorla and Wagner predicted in their theory of associative learning (Rescorla & Wagner, 1972) can be demonstrated as followingly:

If associative strength of cue C with the outcome O is changed from  $V_i$  to  $V_t$  after trial T, then

$$V_t = V_i + \Delta V_{it}$$

$\Delta V_{it}$  is the change of associative strength and calculated by the formula:

$$\Delta V_{it} = \alpha\beta(\lambda - V_i)$$

Here  $\lambda$  is the maximum level of associative strength possible, and  $V_i$  is the associative strength before trial.  $\alpha$  measures the salience of the particular cue, and  $\beta$  represents the salience of the particular situation in which the outcome occurs. Rescorla and Wagner indicated  $\alpha$  &  $\beta$  as learning parameters, which are specific to particular CS (Conditioned Stimulus) and US (Unconditioned Stimulus) respectively.

Causal-model theory provides an alternative statistical concept of contingency. It states that the objective relationship between a cue and an outcome, in relation to which the accuracy of judgements is assessed, is estimated by mean of  $\Delta P$ . This statistic ( $\Delta P$ ) is defined as the difference between the probability of the outcome given that the cue has been presented  $P(O/C)$  and the probability of the outcome given that the cue has not been presented  $P(O/\sim C)$ .

$$\Delta P = P(O/C) - P(O/\sim C)$$

$\sim C$  signifies the absence of the cue/cause. Here, the concept of contingency depends not only on the proportion of cases in which

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the effect and cause co-occurring, but also on the proportion of cases in which the effect occurs in absence of the possible cause (Ward & Jenkins, 1965; Shaklee and Tucker, 1980; Waldmann & Holyoak, 1992; Catena et al., 2004).

## Emotion Model

Emotion could be defined as “a specific sensation or feeling in the mind that provides directional drive to the other faculties of the mind – memory, intelligence, physical or motor activities – for their actions to be performed to pursue a specific goal”.

Some researchers believe there are some basic or primary emotions, from which secondary or complex emotions develop, like primary and secondary colours (Plutchik, 1980; Ekman, 1992, 1999; Izard, 1992; Panksepp, 1992). However the concepts of primary and secondary emotions are not supported by all (Ortony & Turner, 1992; Das, 2017). Our present study does not support the idea of existence of primary and secondary emotions. All emotions are distinct, different, and could be both qualitatively and quantitatively determined.

According to the ‘Emotion Model’ posited by Das (Das, 2017), every ‘emotion’ could be characterised as followingly:

### Location

Every emotion has been developed during the course of evolution of the species. And they are controlled by specific regions of the brain. Grossly, all of our emotion-controlling areas are located in the limbic system. These structures include hypothalamus, amygdala, anterior nuclei of thalamus, paraolfactory area, fornix, hippocampus, parahippocampal gyrus, portions of basal ganglia, nucleus accumbens, mammillary bodies, cingulate gyrus, orbitofrontal cortex, and septate nuclei. Every emotion has two different centers, one controlling pleasure or satiety end and another controlling pain or non-satiety end. Complex biochemical reactions by which emotions are controlled are not known. But between these two extreme ends, emotional scale is maintained.

### Positive and Negative End

Controlled by two mutually distinctive areas, every emotion has two extreme ends on their scale. One negative end or pain end or non-satiety end, and another positive end or pleasure end or satiety end. This is also true for the emotions like fear, anger etc. which are usually considered as negative emotions. ‘Fear’ has other positive end of ‘courage’, ‘anger’ has other positive end of ‘revenge satisfaction’. Consider we go to watch movies to see the revenge action at the end of the movie, even we pay for it, because for that particular moment, the stylus of stimulus on our ‘anger’ emotion scale evokes response towards the positive end. Other examples are ‘joy and sadness’, ‘love and bereavement’, ‘shame or embarrassment and confidence’, ‘disgust and attraction’, etc.

### Adaptive Point and Range

In any particular moment, our mind experiences all of our emotions. Yet those do not reach to our conscious awareness, because their styluses of stimuli lie on the adaptive point or move within the adaptive range (Figure 1).

When the stylus of the stimulus lies within the adaptive range of the scale, it does not bring any conscious sensation to our mind. We feel that particular emotion only when the stylus of stimulus for that emotion moves beyond the adaptive range; or certain event or situation incites emotional response away from the adaptive range, either towards the positive end or towards the negative end (Figure 2).

When a stimulus induces a response on the positive side of the scale beyond the adaptive range, it brings pleasurable sensation to us. When the stimulus stimulates on the negative side of the scale away from the adaptive range, it brings unpleasurable sensation to us.

[Note: It is the adaptive point and range, not the midpoint of the emotional scale.]

For this reason, same type of emotional stimuli can bring different sensations in different persons, and even in same person in different times when the adaptive range has been shifted. Adaptive point and adaptive range for every emotion is not fixed in a person during his life. More happier the person is, when the more displacement and fixation of the ARs of emotions occurs towards the pleasure or satiety end.

Now, how these adaptive ranges are formed? Formation of adaptive range is dependent on how much we are compromising with our surroundings. If a person is put to a situation of fear for some time, he would feel it and would physically and psychologically express ‘fear’ reactions. But if the person has to coexist with the situation persistently, the mind and body of the person will gradually become adapted to that situation, and after a time, he would no longer feel any sensation of fear, neither he would express any fear reaction through his physique or through his psyche. Here the ‘adaptive point and range’ for his ‘fear’ emotion has undergone shifting towards the negative end on the scale (Figure 3).

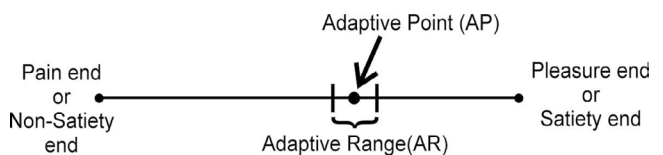


Figure 1: Adaptive point, adaptive range on an emotion scale.

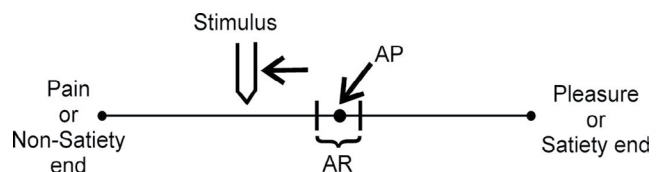


Figure 2: We feel a particular emotion only when the stylus of stimulus for that emotion moves beyond the adaptive range, or certain event or situation incites emotional response away from the adaptive range, either towards the positive end or towards the negative end.

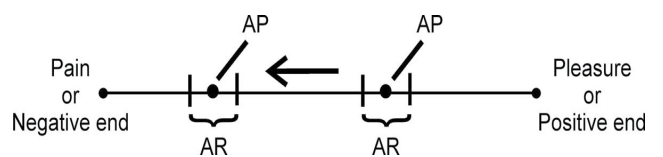


Figure 3: Adaptive point and range moving towards the negative end on an emotion scale.

## ***Positive and Negative Adaptation***

When the AR moves from the negative side towards the positive side to be adapted, it is called positive adaptation of that emotion, and when the AR moves in opposite direction to be adapted, it is termed as negative adaptation of that emotion. The time for adaptation to be completed varies. It depends on the distance from the point of inciting stimulus to the adaptive point. The more the distance the more the time is needed for the process of adaptation to have been completed. Usually it is completed within one week, but may take longer time in more intent cases.

Taking in consideration of these above mentioned characteristics of emotions, there are some general conclusions that could be drawn:

- (1) In a happy mind, adaptive ranges for the most of the emotions lie towards the positive or pleasure end on the emotion scales.
- (2) In an unhappy mind, adaptive ranges for the most of the emotions lie towards the negative or pain end on the emotion scales.
- (3) A person, though happy on most of the other emotional scales, could be unhappy in respect of one or few particular emotions.
- (4) In an unhappy mind, though adaptive ranges of most of the emotions lie towards the negative end on the emotional scales, they create always a pressure on the psyche of the person for the placement of them towards the positive side of the scales; and these pressures, being aggregated, produce consistently a directional drive that intensely involves means, that is our other houses of mind – house of memory, house of intelligence, etc.

## ***Arousal of Emotions***

Simple associated memories are mostly responsible for arousal of emotions in man and animals. These associated memories could be regarding either an object (living or non-living), or a situation. The associated memories bring the recollection of previous painful or pleasurable experiences, either physical (that is perceptual or receptor mediated sensation), or emotional (that is past favourable or unfavourable emotional experiences or emotional memories). For example, seeing a frightful scene we get afraid, seeing a delicious food we get hungry, seeing the beloved one we get sensation of 'love'. In some cases, emotions occur instantly, but that is reflex retrieval of memories, without making the consciousness aware much. Sometimes we get sad hearing some sad music, feel romantic hearing some romantic music; or a particular odour may cause arousal of sexual desire. Here, the things have been conditioned with those emotions. Or in other words, these sad or romantic music, or particular odour are part of associated memories of some situations which were responsible for arousal of those emotions in the past.

Besides memory, our house of intelligence also takes part in arousal of emotions, both in direct and indirect way. In indirect mode, 'thinking' helps to reach the final consequence of an event or incoming series of sequences, which ultimately brings about

the recollection of the associated memories attached with the final consequence. And that finally evokes the emotional response. In direct way, though 'thinking' or 'cognitive appraisal' itself educates the emotion directly – but considering deeply, it is also dependent on our past or previous knowledge. So it could be also described as a complex variety of indirect mode of cognition induced emotional arousal, which is ultimately based on previously embedded memories.

## ***Hunger and Sex***

Hunger and Sex are two basic passions. They both have the features of a perception and an emotion. We perceive or feel hungry by internal stimuli aroused by the receptors located in hypothalamus which detect fall in glucose and other nutrients (amino acids, fatty acids, keto acids etc.) level in blood. Again, we feel hungry by thinking of food. We get sexual stimulation from different parts of the body through receptor mediated neural arousal. Local stimulation, massaging of glans penis in male and glans clitoris in female stimulate sensory nerve end organs, and the sexual sensation is passed through the pudendal nerve and sacral plexus to the cerebrum. And also we get sexually stimulated by thinking of sexually provoking thoughts. So these two basic passions carry the features of both receptor mediated perception and emotion. Though we are not sure at this stage whether 'emotions' are also not aroused by the receptors located in the cells of emotional centers (limbic system); and it is also difficult to say whether the perceptual center and emotional center for both of these two basic passions are same or different anatomically and physiologically. Besides hunger and sex, some other emotions may also have perceptual features; like pressing any object (even inanimate) against breast a person will feel a sensation of love.

## **STRATEGY OF TRAM IN THE TREATMENT OF PHOBIA**

### **What is Phobia?**

'Phobia' is defined as 'an irrational fear or fear out of proportion to any specific object, situation, or activity'. Here the fear is not based on reason or logic. In most cases the object of phobia causes reflex fear to us.

The reason of phobia is rooted in traumatic or unpleasurable past memories or experiences. Here the memory of the 'object' or 'situation' has been conditioned or associated with the memory of some unpleasurable experiences during some past course of life. Here the object might have not directly harmed the individual, but the whole set of associated memories regarding that 'object' or 'situation', bearing heavily with unpleasurable memories or experiences, induces the arousal of the emotion 'fear' or 'disgust'.

For example, the person with 'social phobia' has borne past experience of social humiliation, repeated criticism, disapproval, etc. The persons with 'Katsaridaphobia' bear many unpleasurable memories with cockroaches, like 'had seen them in dirty places and rotten materials', 'had seen them frequently spoiling foods', 'had them flying into their bodies', and even 'had seen others to be terrified by them'.

Cross-national lifetime and 12 months prevalence rates of specific phobias are respectively 7.4% and 5.5%. The rates of specific phobias in women are double than those in men (Wardenaar K J et al., 2017).

### **Current Treatment for ‘Phobia’**

‘Systematic Desensitization’ and ‘Flooding’ are two main treatment modalities currently used as behaviour therapies for the treatment of phobia (Hussain M J, 1971; Marks I M, 1977, 1979). Insight oriented psychotherapy, psychoanalytic psychotherapy, hypnosis are other psychotherapeutic approaches for the treatment.

#### ***Systematic Desensitization***

Systematic desensitization is a type of behavioural therapy developed by psychiatrist Joseph Wolpe (Wolpe J, 1958, 1969). In this therapy, the subject is gradually exposed to ‘fear’ provoking object or situation, and the subject overcomes his ‘fear’ by learning through relaxation technique. Different relaxation techniques are adopted in the treatment. Wolpe suggested Jacobson’s progressive relaxation technique (Jacobson E, 1938), where the patients are trained to relax different groups of muscles in sequential order.

A hierarchy of stimulus intensities are set. The subject after experiencing a completely relaxed and ‘fear-free’ state in a step, enters the next higher step in the hierarchy till he can feel a total ‘fear-free’ state at the highest or maximum level.

But systematic desensitization therapy is primarily an adaptation process on the emotional scale ‘fear’, though it has a small ‘associative part of learning’; as the number of times the individual is observing the object or situation of phobia with the absence of unpleasurable experiences in the treatment, is also being counted in the associative strength according to causal-model theory.

For that, after long time following discontinuation of therapy, the old ‘fear’ can come back to the subject to some extent, as in the absence of the adaptive state, the Adaptive Range (AR) on that particular emotion scale (fear) will gradually again come back to the previous state. Here we are considering recurrence of unpleasurable incidences did not happen.

#### ***Flooding***

In this treatment, no hierarchy is maintained. The subject is made directly exposed to the object or situation of phobia, and the escape is made impossible. Through prolonged co-existence with the object of ‘fear’ without any harm along with the therapist’s guidance and encouragement, the patient gradually becomes adapted to the fear provoking object or situation, and his anxiety slowly diminishes till he is able to experience a total ‘fear-free’ state.

### **Proposed Treatment of Therapeutic Reprocessing of Association of Memories**

This therapy is not just adaptation process to combat the fear provoking object or situation. But this therapy aims at the reprocessing of association of memories associated with the ‘object’ or ‘situation’, so that pleasurable or favourable memories

could be added to the memory about that ‘object’ or ‘situation’.

The main concept of this therapy is our emotions are aroused at the sight or thought of an object, person, or situation by a group of embedded memories associated or conditioned with that object, person, or situation. Though, our ‘cognition’ (or ‘appraisal’) can also evoke emotions, but they, to be precisely, lead to the ultimate set of associated memories which eventually elude response on an emotion scale. When some memories of this embedded set of associated memories bear past pleasurable or painful experiences, they induce stimulations at particular points on an emotion scale away from the adaptive range and the person feels that particular emotion. They can evoke responses on more than one emotion scale, depending on the emotive memories included in that set of association. For example, one can feel ‘fear’ and ‘disgust’ after watching an object. If this stimulation occurs too much negativewards on any scale of emotion, we feel difficulties to cope with it.

It can be successfully treated if we can deliberately change this association of memories. It could be done by attaching pleasurable memories with the object or situation, so that the whole set can go for pleasurable memories outweighing the sum of unpleasurable memories.

Whenever a set of association of memories has both pleasurable and unpleasurable memories connected with a particular object or situation in respect of a particular emotion, the set of memories produce an estimated ‘mean’ or ‘average’ response on that particular emotional scale.

The intensity of any individual emotional memory about an object or situation depends on its associative strength with the object or situation and its strength of emotive response. Associative strength is altered as described in causal model theory. The emotive strength is altered depending on how much the person is expressing out his particular emotional memory.

For example, I went to ‘X’ place and I was robbed there. So I will feel ‘fear’ about going to the ‘X’ place. But for some reason, I had to go to the ‘X’ place again and this time nothing happened. This will change the associative strength of the fearful memory of being robbed with ‘X’ place. So third time I will feel less ‘fear’ response about going to ‘X’ place than that I felt in the second time.

Now, after the first incidence, it has been passed a long time during which time I have expressed out a significant proportion of the fearful emotive memory of being robbed. In that case also, I will feel less fearful feeling about going to the ‘X’ place, when I am going there after a long time or after I have expressed out a portion of that emotional memory.

Difference between informational memory and emotional memory is that both are faded over time. But informational memory fades out due to non-recollection of them through the process of forgetting. But emotional memory dies out over time because of both conscious and unconscious expressing out of them. Consciously we can forcefully express out them by imaginative thinking of them repeatedly. And they are also expressed out unconsciously (better to say subconsciously) through the expression of our physique and

psyche. Whenever we relax, many of our emotional memories get expressed out (partly, not always completely) through our eyes and physical expressions. This process makes many emotion-provoking events eventually emotionally neutral. So after a long time, as an informational memory, the person will feel that it was a fearful incident, but would not feel 'fear' anymore by thinking about it.

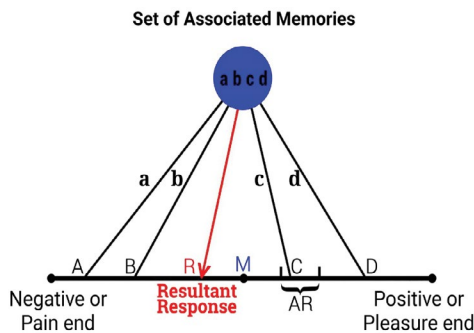
Here, in Figure 4, there are four pieces of memories a, b, c, and d, associated with an object or situation. They individually elude responses on different points on an emotion scale (say 'fear'). The strength of each individual response of them, which depends on both the associative strength of the memories with the object or situation and also strength of their emotive potentiality, is determined by the distance of their evoking points from the midpoint M on the emotion scale. Here, AM, BM, CM and DM are the distances of their stimulating points from the midpoint M.

The mean or resultant response of all four of these responses is detected by the arithmetic mean of these distances from the midpoint. When we will calculate the average or mean resultant response, that would determine the nature of sensation the person will feel. If it lies on the positive side of AR, it will bring pleasurable sensation and if it lies on the negative side of AR, it will bring painful sensation; and its intensity will be determined by the distance of it from the adaptive point (Note: the intensity of the person's subjective feeling is determined by the distance of the stimulus from the adaptive point; but the strength of any individual emotional response is non-subjective and that is determined by the distance of its stimulating point from the midpoint of the emotion scale). Here RM is the distance of the resultant response from the midpoint M, and it could be measured by the equation:

$$(+/-) RM = (-AM - BM + CM + DM) / 4$$

In calculation, to designate the location of the resultant response, midpoint of the emotional scale has been taken, not the adaptive point. The positive or negative sign of the resultant response indicates its position with respect to midpoint of the emotional scale. But this sign does not discern whether it will bring positive or negative sensation to the person. That depends on its distance from the adaptive point, and on which side of AR, it is lying on the emotional scale.

Taking midpoint in the calculation of the resultant response, it makes mathematically conspicuous that in case of a happy person, in whom AR is lying towards positive end, same set of associated memories with a negative resultant emotional response with



**Figure 4:** Mechanisms of action of Associated Memories to elude a response on a particular point on an emotion scale.

respect to adaptive point will produce more painful sensation than that in an unhappy person in whom AR is lying in more negative wards location. And in case of an unhappy person, same set of associated memories with a positive resultant response with respect to adaptive point will induce more pleasurable sensation than that in a happy person.

As we observe in practical life, a happy person is hard to please with, whereas an unhappy person can be pleased with small things; also a happy person shows exaggerated reaction to trivial pain, whereas an unhappy person often remains indifferent to intense pain – considering same emotional scale in both cases (consider 'hunger').

Again, as already said, adaptive point and adaptive range is not fixed in a person in his lifetime. So same things would happen when the person is either happy or unhappy in different times, i.e., adaptive range has been shifted positive wards or negative wards. And obviously it also concludes that same set of associated memories can bring both positive and negative feelings in the same person depending on the location of AR on the emotion scale in different times.

In therapeutic reprocessing of association of memories, the subject is not adapting with the object, but is winning over the emotion (or 'fear') about that object or situation. So after discontinuation of the treatment, the AR will not come back to the previous state, if recurrence of unpleasurable incidents with the object does not happen. But in the treatment settings like desensitization process adaptation will occur here to some extent also.

Treatment setting for TRAM should be carefully sorted out.

For example, a girl is suffering from acrophobia (fear of height). So let her be put on high place with her romantic partner or bosom friend, bring her there bunch of flowers delivering enticing fragrance, bring her there some delicious food which she likes intensely, or bring her there anything of her intense desire.

Or, when treating a subject with arachnophobia, while the subject is experiencing the spider, the room should be well decorated, scented with enticing smell - may be sexually erotic, good music of her choice should be played along with.

These proceedings should be carried out on repeated intervals, twice or thrice in a week for a considerable period of time. And gradually new association of memories will be formed in the subject's mind.

But to combat initial acute intense reaction, the process may start with desensitization process for some initial adaptation. Once the subject is desensitized or adapted to a range, the TRAM could be started. Alternatively, pharmacotherapy with  $\beta$ -adrenergic receptor antagonist, or benzodiazepines could be used to reduce the intensity of acute fearful attack in the initial stages of the treatment in case of specific phobias (Gorman et al., 1985; Lydiard et al., 1988; Gelernter et al., 1991).

Through TRAM, the subject will be able to build a positive attitude towards the fear-provoking object or situation, rather than neutral and adaptive attitude. And even the condition may come

when the subject will start to like the object or situation.

It should be asserted here that therapeutic reprocessing of association of memories does not neutralize any unfavourable unneutralized past emotional memory that has been associated with the object or situation earlier. Those memories must have to be neutralized. This neutralization could be accomplished by expressing out of those memories. Emotional memories also die out over time, as stated earlier, if recurrence of the similar unfavourable incidences does not happen. But if TRAM adds pleasurable memory about that object on same emotion scale, it will diminish the responsive emotional reaction of the unfavourability; or if the new memories overweigh the past memories of unfavourable incidents, they would aggregatedly evince pleasurable sensation about that 'object' or 'situation' on that particular emotion scale.

If the new memories are added on a different emotional scale, it would create a different type of liking for that 'object' or 'situation'. In that case, the person will feel alternatively 'repulsion' and 'attraction'.

So, for the successful treatment with TRAM, therapist should think of settings that could add pleasurable memories on the same emotional scale. But also adding on other emotional scale will help, as it will create an another type of liking towards the object in the subject's mind. Or in other words, it would create a positive attitude towards that object in the subject's mind, and the subject would start to like the object or situation.

The opposite end of the emotion 'fear' is 'courage' or 'confidence'. So in case of phobia, the therapist should create a 'courage' or 'confidence' evoking situation, like a 'caged spider' or 'caged cockroach' in a case of arachnophobia or katsaridaphobia; 'appreciating and approving company' rather than criticisive and disparaging people in a case of social phobia. This would alleviate the phobic part about that object or situation.

Further positive attitude about that object or situation could be established, by creating associated likings on other emotional scales.

In this regard, it is to be affirmed here that though 'phobia' is restricted to be applied to the emotion 'fear' only, but it is not always necessarily directed to 'fear' singularly. For instance, in katsaridaphobia, the emotional reaction is more 'disgust' than 'fear'. Why disgust? Because that insect is frequently seen in dirty places, rotten foods and materials, etc. So the pleasurable memories which are to be associated with it, should create response on opposite end of 'disgust' emotion scale - that is healthy attraction - flowers, green leaves, open space or garden. In case of social phobia, the emotion is more 'shame or embarrassment', rather than 'fear'. This emotion's opposite end is 'self-esteem' or 'self-confidence'. So the therapist should think of associating memories of 'self-confidence' evoking situations; like truly appreciating company appreciating the subject's any quality or work. And the subject should also be advised to reject the company of disapproving criticisive people to prevent recurrence, and strengthening of unpleasurable memories.

It should also be clarified that TRAM is not positive reinforcement; but it is reprocessing of memories, so that a particular set of memories can be altered where the memories of undesirable emotional experiences are overweighed by the desirable and pleasurable emotional memories or experiences (Figure 5).

TRAM could be applied for the management of not just

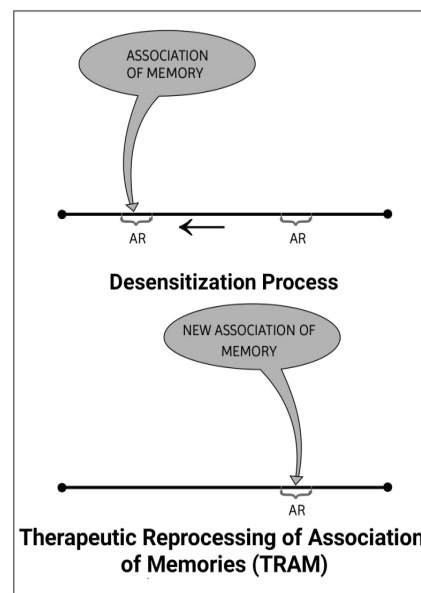


Figure 5: Difference between Desensitization and TRAM.

'fear' emotion only. It could be applied for curing troubles in case of any of the other emotions also. Like 'joy and sadness', 'anger and revenge satisfaction', 'disgust and attraction', 'love and bereavement', 'shame or embarrassment and confidence', 'laughter and graveness' – whenever there has been developed an unfavourable experience attached with the memory of something.

For an example, a certain person owing to some awkward incident, made himself an object of laughter to my mind. Afterwards, whenever I saw him, I could not check myself from laughing. It was embarrassing to both me and him, because he could feel it. To counterbalance my reaction, I decided to sit down with him and talk on some serious subjects. It exposed his inner personality, knowledge, seriousness of mind and altered my associated memories about him. And I stopped laughing at the sight of him.

## CONCLUSION

This article has described the principles and guidelines of the therapeutic reprocessing of association of memories (TRAM) for the treatment of phobia. This is a theoretical approach and an analysis of the strategy of TRAM. But maintaining ethical guidelines, conducted research is needed in future to more clarify the effectivity of the treatment. And that will not only add further a new modality to the treatment of phobia, but also add to the psychotherapeutic approaches to encounter emotional imbalances on different emotional scales to treat many other emotional disorders.

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