

A scoping review on emotion regulation mechanisms employed in the control of Dharaneeya vegas (emotions that should be restrained) in light of Modern psychology and Ayurveda

Review Article

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Abstract

Experiencing positive emotions are now becoming one among the highest virtues. It becomes important for individuals to develop emotional intelligence competencies. There are many ways through which positive emotions can be reinforced. Modern psychology also encourages cultivation of emotional regulation capacity. This article describes modern as well as *Ayurvedic* mechanisms for emotional regulation to cultivate healthy emotion regulation competency. After database search from PUBMED, total 14 articles, 11 from modern psychiatry and 3 *Ayurveda* were reviewed and following results are obtained. There are five instances in which emotion regulation may occur: Situation Selection, Situation Modification, Attention Deployment, Cognitive Change and Response Modulation. *Ayurveda* observes that the main reason for mental disequilibrium is taking extreme or minimal stance in *mano-arthas*. *Ayurveda* perceives that *dhee*, *dhriti* and *smriti* are tripods that help a person regulate his inclination towards *mano-arthas*. *Ayurveda* advises certain conducts to be followed by every person irrespective of *Manasa prakriti*. *Ayurveda* insists on controlling certain urges and those urges are termed as *dharaneeya vegas*. It preaches some conducts to strengthen *dhee*, *dhriti* and *smriti* and they can be collectively called *sadvrittam*. *Sadvrittam* advocates human to always engage in learning (education) all existing science, persuades a person with ultimate aim of salvation by following right conduct, incentivisation with incentives health and prosperity, coercion through fear of diseases, rebirths, bad offspring's, training through detachment, restriction by morality, environmental restructuring by execution in community level, modelling by showing *aptas* and enablement by teaching it to every one irrespective of inequality.

Key Words: *Ayurveda*, Psychology, *Dharaneeya Vega*, *Sadvritta*, *Prajnaparadha*, Emotion.

Introduction

Mental health and substance use disorders affect 13 percent of the world population. Number could possibly rise amidst present pandemic situation. Experiencing positive emotions are now becoming highest virtues since people are mentally vulnerable and prone to anxiety, depression or other mental illness that give rise to alarming rise in suicidal deaths. It becomes important for individuals to develop emotional intelligence competencies. These competencies will enable an individual to accurately read and respond to moods of others, remain calm in stressful situations, remain optimistic in the face of setbacks, adapt to change in circumstances, seek out opportunities and work efficiently in groups. Such competencies vary from person to person and are the foundation stone to mental health. The concept of cultivating emotional

intelligence through regulation of one's emotion dates back to centuries. *Yama*, first among *ashtanga yoga* is also built under same concept. According to *Ayurveda*, certain emotions must be restrained while certain emotions must be encouraged for proper allostasis. Emotions to be restrained are termed as *dharaneeya vegas*. There are many ways through which these emotions can be restrained and positive emotions can be reinforced. Modern psychology also encourages cultivation of emotional regulation capacity. This article describes modern as well as *ayurvedic* mechanisms for emotional regulation to cultivate healthy emotion regulation competency.

Methodology

The review aims to examine different models of emotion regulation according to modern science, *Ayurvedic* reasons for mental disequilibrium and ways to prevent the incidence of mental disequilibrium. A systematic search was conducted in PUBMED database to identify studies related to coping mechanism. Key word used was emotion regulation. All journals indexed in MEDLINE and of English language within a period from 1998 to 2021 are filtered. From selected studies, data was extracted to make a narrative account of the findings. For *Ayurvedic* part, articles are searched using

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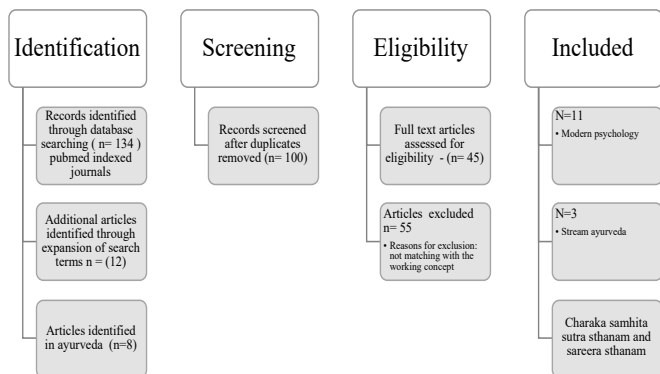
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key words *sadvritta* and *prajnaparadha*. *Charaka Samhita* was closely analysed for techniques *Acharya* emphasise for emotional regulations and a narrative account of findings were recorded.

Figure 1 Methodology of scoping review



Results

Emotional regulation can be explicit or implicit. Explicit emotion regulation means there is conscious effort from a person to regulate his/her emotions. Implicit emotional regulation acts on a non-conscious level. According to Gross, emotion regulation occur through 5 instances. They are, situation selection, situation modification, attention deployment, cognitive change and response modulation. The first four strategies are called *antecedent-focused*, because they are done before the emotional response. These five strategies are explained with example from a job interview context. For a person who employs situation selection strategy, the person may deny the interview offer since the idea of attending interview stresses the person. Here avoidance is the strategy used to conquer stress. In situation modification, the person is stressed about the idea of interview but he/she might request the setting to move into a more comfortable area to make it easier for him/her. Here direct request is the selected strategy to manage stress. Next is attention deployment in which the person may distract his attention to non-emotional aspect of situation i.e., hearing music or counting numbers to face situation comfortably. Next is the cognitive change in which person employs reappraisal strategy i.e., a negative or no response from the interviewer will be purposely visualised positively that he must be trained not to show any positive response to applicants. Last strategy is response modulation in which person suppresses his/her true emotions like trying to make face neutral to prevent outward expression of a particular emotional state.

There are many studies to explain the importance of cognitive reappraisal in regulating negative emotions. Particularly a new study concludes that creative reappraisal improves the emotion regulation effect rather than self-generation strategy. This is explained on the basis of neural networks representing the process of deep and structural mental

representational change accompanied by the feeling of positive emotion and mental reward. The behavioural results from the study suggested that creative reappraisal resulted in a positive rating for standardized negative emotions and creative reappraisal had a long-lasting effect in reducing negative effect. The imaging data suggested that creative reappraisal was specifically associated with greater engagement of the amygdala and hippocampus as well as regions in the ventral striatum. The engagement of the amygdala predicted the transient regulatory effect of creative reappraisal, while the involvement of the hippocampus and the ventral striatum predicted long-term regulatory effects. These findings suggest that the superior regulatory effect of creative reappraisal could be mediated by amygdala-based salient emotional arousal, hippocampus-based new association formation, and striatum-based mental rewarding to lead to a novel and positive experience that could be kept in long-term memory.

In another study(8), 3 components; capability, opportunity, and motivation were identified to generate any behaviour. Capability can be defined as the person’s mental and physical capacity to involve in the activity concerned i.e. Having the necessary knowledge and skills. Motivation is defined as all those brain processes that energize and direct behaviour. It includes habitual processes, emotional responding, as well as analytical decision-making. Opportunity is defined as all the factors that lie outside the individual that make the behaviour possible or prompt it. A given intervention to correct a behaviour might change one or more components in the behaviour system. Interventions to change behaviour can be through education, persuasion, incentivisation, coercion, training, restriction, environmental restructuring, modelling and enablement.

According to *Ayurveda*, mind has two dimensions, spiritual and psychological. Hence emotion regulation in *Ayurveda* also has two scopes. Spiritual as well as psychological. Spiritual that includes following rituals, obeying laws structured by the society due to fear of god, concept of punishments waiting for the sinner in hell etc. The person will apologise and do rituals to please god for his/her sin committed. Next is psychological, there the person employs his or her intellect to differentiate between right and wrong and concept of righteousness varies from person to person depending on his education, surroundings etc. Theory of generation of emotion according to *Ayurveda* is through *adhyatma dravya guna sangraha*. They include *Manas*, *Mano-arthas*, *Buddhi* and *Atma*. *Mano-arthas* are 5 in number. They are *chintyam* (thoughts), *vicharyam* (reasoning), *uhyam* (speculation), *dhyeyam* (concentration) and *sankalpyam* (assumption). *Manas* always wish to indulge with the *mano-arthas*. This information will be passed to the *atma* and it processes information as *hita* or *ahita*. Depending on the experience, the stimulus will be stored in memory as *sukha* or *dukha* by *buddhi* for future knowledge.

Table 1: Generation of Emotions According To Ayurveda



Ayurveda observes that the main reason for mental disequilibrium is taking extreme or minimal stance in *mano-arthas*. For e.g., excessive thought provokes *vata dosha*. The reason behind such stances is observed to be any derangement in *dhee*, *dhriti* or *smrithi* called *prajnaparadha*. *Prajnaparadha* is identified as important causative factor for mental illnesses like *atavabhinivesha* and *anavasthita chittata*. *Ayurveda* perceive that *dhee*, *dhriti* and *smrithi* are tripods that helps a person regulate his inclination towards *mano-arthas*. *Dhee* is one's ability to observe things as such and to evaluate the right or wrongness of a situation or an object. *Dhriti* is one's ability to stick to a decision which he/she things right based on his /her *dhee*. *Smriti* is knowledge registered as good or bad associated with previous experiences. It might be derived from one's own experience or observation from others. *Smriti* is extremely important in categorisation of a stimulus into pleasant or unpleasant. When we memorise an incident, we not only memorise the incident but it also evokes a similar emotional response associated with that memory. *Dhee*, *Dhriti* and *Smriti* develops through *jnanolpatti*. *Dhee*, *Dhriti* and *smrithi* though are present in every human being its strength may vary from person to person depending on *sareera* and *manasa prakriti*.

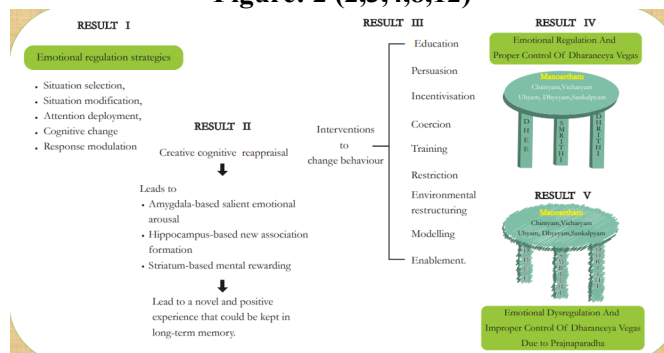
Vulnerability of a person towards emotional imbalance depends on both *sareera* and *manasa prakriti*. *Kapha prakriti* has good *dhee*, *dhriti* and *smrithi* they perform best in emotion regulation. *Pitta prakriti* has good *dhee* and *smrithi* but *dhriti* is comparatively less compared to *kapha prakriti*. In *vata prakriti*, *dhee*, *dhriti* and *smriti* are less compared to *pitta* and *kapha prakriti*. *Manasa prakriti* categorises people into 3 *satvaika*, *rajasa* and *tamasa*. Characteristics that are inherent in *Satvika Guna* persons are Cleanliness (*kayika*, *vachika* and *manasika*), Gratefulness, Obligation, Compassion, Valour, Nobility, Ingenuity and Good Memory. Bravery, Ungratefulness, Pleasure Seeking - especially in sexual activities and Unsteadiness are qualities inherent in *Rajoguna*. Committing Errors, Poor Intellect, Lack of Memory, Courage and Strength are some qualities inherent in *Tamoguna*. *Ayurveda* observes that these particular peoples have inborn tendencies to behave according to their stereotypes. There should be conscious effort from childhood onwards to control those inherent negative emotions which is difficult but not impossible. That should be through strengthening *dhee*, *dhriti* and *smrithi* of a person.

Ayurveda advices certain conduct to be followed by every person irrespective of *Manasa prakriti*. *Ayurveda* insist to control certain urges and

explain different ways to prepare a person to control these urges. Those urges to be controlled are termed as *dharaneeya vegas*. They are greed, grief, fear, anger, egoism, shamelessness (impudence), jealousy, excessive affliction (in anything), and desire to acquire someone else's wealth. Verbal urges like Harsh talks, excessive talking, that which intends to harm others or backbiting, lying and untimely speech (improper words at improper time) are to be restrained during speaking and Physical actions intended to trouble others, excessive indulgence in sex, stealing, violence (persecution), etc. should be restrained. The advices about how one should live is explained in *sutra sthana* of *Charaka samhitha* under heading *sadvrittam*.

There are several measures used to overcome a behavioural problem (8). They include Education, Persuasion, Incentivisation, Coercion, Training, Restriction, Environmental restructuring, Modelling and Enablement. All these methods will help a person to get rid of a particular behaviour like smoking, alcohol or drugs.

Figure: 2 (2,3,4,8,12)



Discussion

While incorporating modern knowledge with ayurvedic wisdom, Explicit regulation of one's emotion is the key behind control of *dharaneeya vegas*. This explicit regulation of emotion should be through creative reappraisal so that person could actually develop a control on how to perceive a particular situation. When a stimulus received, the possibility of being adaptive depends on how we perceive that situation or in ayurvedic term, *jnanolpatti*. In case of emotions, it is through *adhyatma dravya guna sangraha*. Five strategies of emotional regulation happen in various levels in *adhyatma dravya guna sangraha*. Situation selection or avoidance must take place at the level of *manas*. Individual did not want to enter into the situation and involve *buddhi*. Situation modification and Attention deployment also works in the level of *manas* in which *manas* tries to redirect thoughts to a comfort zone. Cognitive reappraisal and response modulation works in level of *buddhi*. In order to execute all above strategies, *dhee*, *dhriti* and *smrithi* is important. *Dhee* helps to be alert about an emotional imbalance, *dhriti* helps to take apt decision under critical situations and *smrithi* helps to recall the

experiences to get out of emotional disturbance. If *dhee* and *dhriti* is strong and *smriti* is abundant with experiences, possibility of good emotion regulation is high.

Table 2: Emotional regulation in various levels of *adyatma dravya guna sangraha*

Situation selection	Situation modification	Attention deployment	Cognitive reappraisal	Response modulation
• at the level of manas	• At the level of manas	• At the level of manas	• At the level of buddhi	• At the level of buddhi

The 7 interventions for behavioural changes modern researches emphasise is applicable here.

Table 3: Behavioural Therapy Techniques and Its Effect On *Dhee Dhriti* and *Smriti*

Interventions	Examples	Effects
Education	<i>Satatam adhyayanam</i>	Strengthens <i>dhee</i>
Persuasion	<i>Moksham</i>	Strengthens <i>dhriti</i>
Incentivisation	<i>Ardham, kamam</i>	Strengthens <i>smriti</i>
Coercion	<i>Karmaja vyadhi, dushpraja</i>	Strengthens <i>dhriti</i>
Training	<i>Satvavajayam</i>	Strengthens <i>smriti</i>
Restriction	<i>Dharaneeya vegam</i>	Strengthens <i>dhee</i>
Environmental restructuring	<i>Community level practice</i>	Strengthens <i>dhriti</i>
Modelling	<i>Apta</i>	Strengthens <i>dhee</i>
Enablement	<i>Available to everyone</i>	Strengthens <i>dhriti</i>

Ayurveda acknowledges variations of personalities in individual levels in all its light and dark shades. So, it preached some conducts that includes above all interventions to strengthen *dhee*, *dhriti* and *smriti* and they can be collectively called *sadvrittam*. *Sadvrittam* advocates human to always engage in learning (education) all existing science, persuades a person with ultimate aim of salvation by following right conduct, incentivisation with incentives health and prosperity, coercion through fear of diseases, rebirths, bad offspring's, training through detachment, restriction by morality, environmental restructuring by execution in community level, modelling by showing *aptas* and enablement by teaching it to every one irrespective of inequality. If *sadvrittam* is practiced from childhood onwards, it enhances creative reappraisal and whatever the personality types may be, dysregulation of emotions can be prevented to a great extent. In light of modern evidences, creative reappraisals can bring about visible changes in the emotional brain, and can stimulate the person to experience more positive emotions. A person with good *dhee*, *dhriti* and *smriti* can effectively regulate his emotions and raise his threshold for *dharaneeya vegas* as it is impossible to vanish it completely. They can develop good emotional discipline and resist stress and associated psychosomatic disorders to a great extent.

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