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## A Study of Defense Mechanisms and Psycho-Immunity on Gender and the Use of Indigenous Techniques to Improve Psycho-Immunity: A Review Paper

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### ABSTRACT

This paper reviews all the literatures related to Defense Mechanisms and Psycho-immunity individually, based on various articles and books. A framework is provided that determines the correlation between the use of defense mechanisms and Psycho-immunity and does gender play a major role difference in this process. And to improve Psycho-immunity by using some indigenous techniques. The review is structured first, to provide a brief overview. Second, to integrate the literatures of defense mechanisms and psycho-immunity. Third, to describe the literatures of improving psycho-immunity with the help of indigenous techniques. Finally, the research agenda of this review article is to provide suggestions, about the dynamics of behavioral patterns of both the gender as well as their psycho-immunities, and how to improve their psycho-immunity.

**Key Words:** *Defense Mechanisms, Psycho-immunity, Gender, Indigenous Techniques.*

### INTRODUCTION

#### Défense mechanisms and its types

Defense mechanisms are unconscious psychological tactics which are employed to shield a oneself from panic, anxiety and stress arising from undesirable or unacceptable thoughts, feelings or emotions.

The concept of Defense mechanisms is originated from **Freudian psychoanalytic theory (1926)**, a perspective of psychology that sees human personality as the interplay between the three components of mind: id, ego, and super-ego. The defense mechanisms are employed by the unconscious part of mind to exploit, deny or escape from reality in order to guard against feelings of stress and undesirable impulses and to sustain one's self esteem. These may aid people to stay at a from dangers or intolerable feelings, such as guilt or embarrassment, which arise because when we feel frightened, or resulting from conflicts between two parts of our mind which are, id and superego. Defense mechanism can be good to a limit as they allow us to adapt to our environment but they can become a problem when they prevent us from accepting the reality and living in it.

Thus, defense mechanisms are used unconsciously by a person to guard himself (although for the time being) against various psychological dangers.

They are not the permanent solution of the trouble. But, may be regarded as temporary defense against stressors, anxiety and inadequacies.

First proposed by a well-known, American-psychologist, **Sigmund Freud**, and later briefly explained by his daughter **Anna Freud**, the psychoanalytical theory has advanced over time and states that using defense mechanisms, are not in conscious power of a person. In fact, most people practice them without realizing it. When an individual faces a situation filled with anxiety, the ego employs a wide variety of defense strategies in order to overcome with stressful situation by twisting reality in order to protect an individual's self-esteem and integrity. it is essential to use defense mechanisms for managing failures, decreasing cognitive dissonance, abating anxiety and guarding feelings of self-sufficiency and personal worth.

Originally 10 defense mechanisms were described, that were most regularly adopted by the ego in a stressful situation. However, many psychologists and mental health professionals later recognized other defense mechanisms and sub-grouped them based on their effectiveness. (primitive-vs-advanced).

## **MOST PRIMITIVE**

**DENIAL:** It refers to escaping from real situation that is distressing or traumatizing. In this an individual avoid talking about the issue or address any feelings or emotions attached to it. It is the most habitual defense mechanisms. Even children adopt it to endure with trauma or chronic stress. For example, an individual who is addicted to any substance may deny that their actions, habits and behavior is problematic. He / She may constantly deny until encountered severe losses, such as separating from loved ones, being jobless, or economic crisis. This may help them, for the short period of time, but the issue lingers on.

**PROJECTION:** It is a means of transferring your own unacceptable or irrational feelings or thoughts on another person as if they belong to them. It is a way of expressing the undesirable feelings without accepting them. Absence of awareness of a person's own emotions, desires make him/her employ this mechanism. For example, any one in a marital relationship may blame their partners for cheating without any evidence.

**REGRESSION:** It means returning back to a former phase of psychological development. This states that, when a person hasn't sorted the problem or disputes of a specific developmental stage, they can become captivated.

This strategy takes a person back to the behaviors of that captivated phase. For example, after any stressful presentation in the office, an adult employee may refuse to move out of bed and start their day, and may behave like a little kid.

**ACTING OUT:** It means performing something extravagant to vent out emotions or thoughts which are resulting in intense anxiety. This exaggerated action soothes the intensity of the bad feeling for a short period. For example, anyone who is irritated, angry or frustrated with their situation at home might become violent.

**DISSOCIATION:** It is an act of psychologically withdrawing oneself from current experiences. Anyone who use this is tersely just detaching from real situation. This type of detachment or dissociation permits the ego to avoid anxiety activated by that reality. Dissociation is frequently used by people who have undergone traumatic events such as, childhood abuse, violence or rape. For example, there exist a large and a broad spectrum of behavior that comes under dissociation. On one edge of the range are mild dissociations like daydreaming. Extreme dissociation, on the other hand, occurs when a person separates from the present while riding in a car after being engaged in a terrible auto accident. He/she is escaping from the terror, stress and unpleasant memories of the earlier accident.

**REACTION FORMATION:** It simply means, behaving in a way just opposite to what the current thinking or feeling is. By doing this, a person is concealing their genuine emotions even from themselves. For example, a reaction formation is when someone congratulates and acknowledges their rival after winning an award. Acting fervently in support of their competitors may prevent the person from acknowledging their own feelings of disappointment or failure at that same moment.

**AVOIDANCE:** Avoidance is the dismissal of people, places, or events that trigger stress, guilt or anxiety. It is commonly used by people experiencing post-traumatic stress disorder (PTSD) to escape the place where trauma initially took place. For example, an individual who has had a bad encounter with a doctor, might never visit a doctor as a means of avoiding from the anxiety related with that experience.

**COMPARTMENTALIZATION:** Compartmentalization is somewhat similar to dissociation. It is used to deal with conflicts of internal viewpoints. With this, an individual separates feelings or thoughts that contradicts each other into various 'compartments' to escape anxiety. For example, an individual might consider himself caring towards everyone. But then, act as rude to some people. **LEAST PRIMITIVE**

**REPRESSION:** Repression is unconsciously repressing irrational feelings or thoughts. The repressed thoughts persist in our unconscious part of mind and continue to affect our actions. For example, a person, in his childhood have been bitten by a monkey, and now being an adult he has a phobia of monkeys. Although he doesn't recall that childhood experience. But, the fear of monkeys has been suppressed in his mind till now.

**DISPLACEMENT:** It is redirecting your thoughts, emotions or impulses about one recipient toward another less-dangerous or less-intimidated recipient. For example, a person who is angry at their office boss but displaces that frustration toward their partner, children or any friend.

**INTELLECTUALIZATION:** It is the act of avoiding emotions in a circumstance and concentrating solely on the intellectual aspect. For example, an individual might be informed that he has lost his loved one but instead of grieving he immediately begin to act wisely by making arrangements for memorial service.

**RATIONALIZATION:** Rationalization is using logics and reasoning to justify something distressing that has occurred. For example, someone who has failed in an interview might rationalize it by saying that the interviewers were biased.

**UNDOING:** It refers to ‘undo’ or make up for a deed or action, thought and impulse that is destructive. For example, anyone who has unthinkingly offended someone, might feel guilty for their actions, and then would act overly nice to them.

**PASSIVE- AGGRESSION:** Passive-aggression is expressing anger indirectly instead of actually showing it. For example, someone is passively angry, instead, they are constantly saying ‘they are fine’, but the case doesn’t look so.

**FANTASY:** When used as a defense mechanism, fantasy refers to channeling your irrational or unattainable goals into complete imagine. For example, someone imagining himself being a successful business tycoon but isn’t working hard for it.

#### **MOST ADVANCED**

**SUPPRESSION:** Suppression is consciously making efforts to remove irrational or unpleasant thoughts, impulses, or memories from conscious mind to unconscious mind. For example, someone who has done something wrong, would stop thinking about it to avoid evoke the feeling of guilt.

**SUBLIMATION:** It means redirecting, socially undesirable feelings or impulses into more socially desirable behaviors. For example, A cricketer who is feeling angry for performing bad in a match, might vent out their anger by practicing hard.

**COMPENSATION:** It is an act of counterbalance or cover up for perceived flaw or deficiency in one area by excelling in area of life. For example, a person who has bad habit of binge eating, might compensate it by doing vigorous exercise to digest it.

**ASSERTIVENESS:** Assertiveness is expressing one’s need in a direct, clear and a respectful manner. The words adopted are not disrespectful or malicious. For example, anyone who is declining to perform a favor for a closed one is being assertive by refusing to help in a polite manner.

**HUMOR:** Humor is the use of comedic elements to cope up with stressful or unpleasant situations. It is considered as one of the complex defense strategies. For example, making a joke after an unpleasant fight with your friend, is a way of getting distract from the negative feelings associated with it.

#### **Human Psycho-Immunity**

**Olah** has created the **Psychological Immunity Model (2000, 2002)**. This claims that in addition to biological immunity, there is also a psychological immune system, often known to be the human psycho-immunity. This system performs two major tasks. Firstly, it independently controls the systems that maintain human psychological health. Secondly, by providing them with information about the bodily condition and behavior, it aids the somatic immunological processes in their activity.

The most crucial topic now is how to develop psycho-immunity and what nutrients are necessary for building a strong psychological immune system. Optimism, future orientation, positive thinking, resilience, humor, etc. may be the nutrients for the psychological immune system that have been independently explored up to this point. The psychological immune system of a person has a significant impact on how that person reacts to stress [1]. The body, mind, and soul all possess innate immune systems, but when these capacities or immune systems are compromised for a variety of reasons, discrepancies start to show up at that specific level, which eventually develops into diseases.

The immune system of the mind or psyche function similar to immune system in the body. A person's general mental and emotional health determines their capacity to deal with life's difficulties, protect themselves from daily stresses, and to cope with stressful and unfavorable events. Mental or psychiatric immunity is the term used to describe this process of sustaining overall mental health.

(**Vasudevan, 2003**) defined mental immunity, also known as psychiatric immunity, as: i the ability to handle clashing emotions.

- ii. The capacity to enjoy things without discomfort.
- iii. To be adaptable, to acquire new behaviors, with the changing environment.
- iv. Character strength.
- v. The ability to live without anxiety, guilt, or fear.
- vi. Accepting accountability for one's own behavior.
- vii. The ability to distinguish between good and bad, as well as between good and better.
- viii. Not just acting on emotional impulses and surges, but to rationalize and control emotions.
- ix. To gain understanding of oneself.

The three most significant and interdependent facets of human life are emotion, thoughts, and behavior. The way we think is shaped by how we feel, and how we act is shaped by how we think, in a loop that never ends. The signs of mental disease are preceded by emotional stress and emotional issues. Emotional tension is unavoidable if one is unable to manage their moods and emotions well. Our level of psycho-immunity would be directly correlated with the right balance between them, and psycho-immunity is essential for mental health. The inquiry of the interactions between mental or psychological processes, the neural and immunity systems of the body is known as psycho-neuro-immunology (PNI) or psycho-endo-neuro-immunology (PENI) in current neuroscience. An interdisciplinary approach is used by PNI, includes elements of immunology, physiology, genetics, pharmacology, molecular biology, psychiatry, behavioral medicine, infectious illnesses, endocrinology, and rheumatology. PNI is primarily concerned with how the neurological and immune systems interact as well as how the mind and body are related.

### **Role of Gender in Defense Mechanisms and Psycho-immunity**

Numerous studies have looked at the various coping strategies used by men and women to deal with stress on a daily basis and to shield their self-esteem from challenging circumstances. Masculine men employ rationalizing defenses like principalization and externalizing defenses like turning against objects more frequently than feminine men who use internalizing defenses like turning against self.

**Shah S. S. & Verma R., [2]** came to the conclusion that women manage their anxiety or conflicts of mind by reacting in a way which is positive or neutral or would be predicted to elicit a pessimistic response. Girls, on the other hand, prefer to employ Turning against self comparably more than women, who utilize Reversal more.

Thus, the above- mentioned studies clearly shows how both the gender use unique defense mechanisms differently, based on their conflicting situations. Since, their ways of managing stressors of life are different then their level of psychological immunity will also be different.

### **Use of Indigenous techniques to enhance Psycho-Immunity**

**Trivedi P., [3]**, described the eight strategies or tools to strengthen psychological immunity. The eight tools are:

#### **1. Rasāyana Brain Tonics**

##### **Herbs**

**Sharma P.V., [4]** Increasing psycho-immunity may be helped by ayurvedic *Medhya rasayana*. *Brahmi* (*Bacopa monnieri*) and *Shankhpushpi* (*Convolvulus pluricaulis choisy*) has been the subject of numerous therapeutic researches, and studies related to mental health. **Sulaiman A. et al, [5]** conducted various clinical trials on the effect of using *Brahmi* (*Bacopa monnieri*) to enhance memory power. The study showed the improvement in 54 rat's novel object recognition power.

#### **Mentone tablet as a brain tonic**

2 grams of Mentone tablet containing *Mandukparni* (*Centella Asiatica*), *Shankhpushpi* (*Convolvulus pluricaulis Choisy*), *Guduchi* (*Tinospora cordifolia*), *Yastimadhu* (*Glycyrrhiza Glabra*) as ingredients can be divided in two doses with milk, first in the morning and second, in the night, after food for 30 days to manage anxiety as well as for overall psycho-immunity.

#### **2. Behavioral Rasayana**

(Behavioral) *Achar Rasayana* is an Ayurvedic code of conduct that includes things like honesty, nonviolence, lack of rage, speaking in a pleasing manner, having a mind focused on spirituality, etc. Because they nourish our brain, they are also regarded as brain tonics. This area of Indigenous practise is currently unexplored in terms of evidence-based practices, because, it is challenging to do an experimental study on such practices. In *Achar-Rasayana*, ghee is also used frequently. **Ahir et al., [6]** there are numerous pieces of empirical evidence available about Ghee-based Ayurvedic medicines. In survey research, *Kushmandadi Ghrīt* was administered on 60 patients with generalized anxiety disorder (GAD). A considerable improvement in a number of clinical indicators related to GAD has been seen with the experimental medication.

#### **3. Golden Rules of happiness (Philosophy and Lifestyle)**

The righteous desire, which is one of the key components of happiness and is regarded as one of the golden Rules for a happy and healthy life, was given significant importance in Indian Scriptures and Indigenous knowledge. According to indigenous spiritual guidance, it is crucial to seek livelihood that do not violate social or religious principles, in order to keep excellent mental health. These golden guidelines are crucial in preserving mental health because they are based on the idea of Karma, which states that what you do determines what you get.

Since no systematic modern study has been conducted so far to evaluate the impact of these golden rules on mental health, such studies would add a new dimension to modern psychology. However, many studies have shown the correlation between disturbed daily schedule and anxiety or mood related disorders, [7].

#### **4. Ashtanga Yoga**

There are several research available that look at how yoga affects anxiety and mental health. For instance, a study

by, **Novelia et al.**, [8] demonstrates the effectiveness of yoga in lowering anxiety levels in pregnant women during the third trimester, while a study by [9], demonstrates the effectiveness of yoga in improving middle school students' abilities to regulate their emotions.

### 5. *Yajna and other Satvik Karma*

The three *Gun*as —*Satva* (which is related to virtues like sympathy, nobility, courage, care, etc.), *Rajas* (which is related to restlessness, state of unhappiness due to vices like anger, greediness, fear, selfishness etc.), and *Tamas* (which is related to laziness, dormancy due to ignorance, darkness, guilt, dependency, apathy etc. are fundamental concepts in indigenous studies. According to Ayurveda, *Rajas and Tamas* are the two mental doshas that are at the cornerstones of mental disorders of the mind. According to Ayurveda, a person who has low *Satva-Guna* is particularly vulnerable to mental health issues like Unmad. A person's level of *Satva-guna* can be raised through a combination of simple indigenous practices such as Ayurvedic brain tonics, *Pancha-karma*, yoga, yogic lifestyle, and spiritual practices like Yajna and Gayatri Mantra Chanting. One method for treating these doshas is to increase *Satva-Guna*. [10], Yajna, Gayatri, Mantra Chanting, and other *satvik* karmas have previously been shown in numerous studies to be beneficial in treating mental illnesses like stress and anxiety, obsessive compulsion disorder, and (Polycystic Ovarian disorder) [11] and Epilepsy [12,13]

### 6. *Somatic Health*

A healthy body fosters a healthy mind. Chronic physiological issues might also result in psychological issues. Anxiety and other psychological issues are linked to a variety of physiological factors. For instance, a study by, [14] found a connection between worry and low blood pressure. It is possible to enhance somatic health by yogic and ayurvedic practices in order to have strong psycho-immunity.

### 7. *Biological & Psychological Pollution*

A new area of scientific research focuses on the link between air pollution and psychological problems like anxiety. A 2017 study by [15] demonstrates the link between ageing and psychological illnesses. Indigenous techniques *Satvik Karma*, Code of conducts, golden rules etc., play an important role in reducing psychological pollution.

### 8. *Sub-pillars (Aahar-nidra-Bramacharya)*

Food, sleep and Brahmacharya (celibacy) are the sub-pillars for overall health.

#### **Food**

**Ansari W, Adetunji H, & Oskrochi R.**, [16] A study demonstrated that, eating 'unhealthy' items, such as candies, cookies, snacks, and fast food, can significantly improve one's perception of stress in women alone and one's experience of depressive symptoms in both the genders. Consuming 'nutritious' foods like fruits, healthy salads, green vegetables, are negatively correlated with stress that is perceived and depression symptoms for both males and females.

#### **Sleep**

**OASIS [17]**, Adequate sleep is associated with a reduction in psychotic experiences.

#### **Brahmacharya**

This indicates that a person's actions, thoughts, and character should be consistent with their religious beliefs and in accordance with the supreme soul. **P. V. Sharma [18]** Such a way of living results in mental wellness and psycho-immunity.

**Bhardwaj, [19]** studied the impact of *Pragyayog sadhna* (a spiritual exercise), on healthy male adolescents who had never been engaged in it, to determine the impact of this spiritual practice on their level of psycho-immunity. Total 62 teenagers were split into the control group (n=31) and the yoga sadhana group (n=62). The group engaged in constant practice of *yog sadhna* for two months at a time. The level of psycho-immunity in male teenagers was found to have greatly improved as a result of practicing *pragyayog sadhna*, according to the results.

**Kulkarni. D and Bera. K, [20]** Yoga features a breath-awareness component that helps to control the brain's cortical activity. This might be the key for boosting general homeostasis. All non-communicable diseases (NCD) are known to have stress as their primary cause, and yogic exercises are thought to be the most effective way to manage stress. Thus, Yoga poses assist in overcoming tension or stress, with the help of body-oriented awareness practices such as, relaxation potential and stretching of muscles [21]. This suggests that potentially yoga workouts have an impact on the central nervous system (CNS), which is the brain's primary source of relaxation potential, in detecting and regulating immune system [22]. Additionally, the immunity system is regarded as a sensory part that is on par with the nervous system in its recognition of non-cognitive stimuli like bacteria and viruses [23]. This in reality supports the theory that yoga activity effects immunity and relaxation of the central nervous system [24,25].

## **CONCLUSION**

The paper presents a literature-reviews on role of using defense mechanisms on gender & psycho-immunity separately. Also, integrates both of these aspects, and involves the use of indigenous techniques like consuming brain

tonics, behavioural rasayana (code of conduct), following golden rules of happiness (lifestyle and philosophy), practicing Ashtanga yoga, yajna and satvik karma, having good somatic health, improvement of mental and bodily pollution, balancing three pillars of health (vata-pitta-kapha), balancing three sub-pillars of health (aahar-nidra- brahmacharya), and practicing spiritual yogic practices like pragyayog sadhna., to improve psycho-immunity.

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