A Methodology for addiction recovery in Advaita Vedanta

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Abstract

The common conception is that philosophy is an armchair endeavour. For many (Žižek 2023), the task of philosophy is just to provide the right kinds of questions to the sciences upon which they can develop further tools etc. The research will aim to show that it is not just the right kind of questions that philosophy can provide, instead, it can provide practical solutions as well. The research paper will primarily aim to showcase a methodology for addiction recovery based on the philosophy of Advaita Vedanta, which can be broadly applied to most kinds of addiction. The biggest problem with most kinds of addiction treatment programmes is relapse. So, can we devise a methodology which not only cures the problem of addiction but also provides aid in refraining from subsequent relapse?

Keywords: Addiction Recovery, Advaita Vedanta, Neuro-philosophy, Applied Philosophy, Philosophy of Mind

1. <u>Defining Addiction</u>

Before we begin with the paper it would be prudent to acknowledge the definition of addiction. Addiction according to the American Society of Addiction Medicine is a chronic disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. (Definition of Addiction 2019) Similarly, National Health Service defines addiction as not having control over doing, taking or using something, to the point where it could be harmful to you. (Addiction: What is it? 2023) *The International Classification of Diseases 11th revision*" defines "addiction as a neurophysiological symptom defining pervasive and intense urge to engage in maladaptive behaviours providing immediate sensory rewards (e.g. Consuming drugs, excessively gambling), despite their harmful sequences."

What we can clearly understand is that addiction is a repetitive behaviour that one does knowingly, despite being aware of its harmful effects and a person is unable to refrain from it. Amongst the four big questions concerning addiction, the first question itself is How Broadly should we define addiction? (Holmes 2015) Is just substance use like nicotine, opium, etc addiction or is there more else to it? As mentioned above addiction is repetitive maladaptive behaviour. So, it can encompass a wide range of behavioural issues like watching 30-second reels as is common in this era of social media. It can range from gambling (an officially recognized behavioural addiction) to porn addiction to sex addiction etc.

What can then be a broader definition of addiction? During my interactions with Dr Alok Bajpai, he claimed that addictions are an escape route. To explicate this further, imagine you need to finish an article in say 10 days and you have set a deadline for it and yet you fail to do

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¹ For a detailed discussion one can refer to (Bajpai 2018), particularly chapter 14 and 19.

it due to some activity that you are constantly running to. That can be watching YouTube reels or smoking etc. If you have a goal in mind and yet you run to that activity to divert your mind, then it is a problem, which can safely be called addiction. Hence a broader philosophical definition of addiction can be that Addictions are an escape route which constantly hinders you from achieving your goals, without which daily life activities cannot be performed properly. Hence it is a behavioural disorder. In the next section, we will try to discuss some theories of addiction.

2. Theories of Addiction

In this section, we will try to discuss some theories of addiction. For this section, I have referred to the paper 'The Neurocircuitry of Addiction: An Overview.' (Feltenstein 2008) Firstly, I would try to discuss the theories mentioned in the paper and then expand upon the same considering Dr Alok Bajpai's view.

- a) One theory suggests that a person takes a substance for its potent properties say the relaxation of the mind or loosening of the body (as in alcohol etc) or losing weight (methamphetamine) etc. The substance produces the desired effect. Upon further and continuous repetition person develops a dependence on the substance for that desired result. (R. Wise 1980) The Psychological translation of this theory would be positive reinforcement, wherein if we do a task that gives us pleasure, we tend to repeat it again and again. (Gill 1988) After some time, the body develops a tolerance. Towards the substance and enforcing properties reduce and now the person has to increase the intake of the substance.
- b) Another theory suggests, based on the concept of negative reinforcement² that a person takes a substance to numb some pain or other sensations etc. Say you are in a bad situation for ex. heartbreak, or the loss of a loved one and you are avoiding that pain, you resort to the substance you know the properties of which can remove the pain away. (Camí 2003) The same is the case when a person tries to withdraw from a substance after long use of it. The withdrawal symptoms say anxiety etc kick in and the person relapses again into substance addiction.
- c) Another theory by (Koob 1997) suggests that if a person feels in his life that no matter how hard he or she tries one can never be enough: or happier in life. One will always be at baseline. Take an example of a person who faces pathological shyness in interaction and thinks that alcohol may help him and maybe it supposedly does. Or take an example of a person who feels that he needs cigarettes to bring hoarseness in his voice and again it supposedly helps. This repetitive behaviour of always feeling less, which leads to frustration is the cause of addiction. Now these processes are governed is via allostatic processes, that is the body trying to achieve homeostasis³. These substances which one takes bring forth a disequilibrium in the brain's reward systems which is the root cause of addiction.

² An increase in the probability of occurrence of some activity because that activity results in the presentation of a stimulus or of some circumstance. (Positive Reinforcement n.d.)

³ Homeostasis is the bodily mechanism to keep the bodily mechanisms at a baseline which can be different for different individual. It involves processes from heartbeat regulation to body temperature regulations etc.

- d) (Robinson 1993) (Berridge 1995) propounds the 'incentive sensitization theory' of drug addiction wherein they postulate that addictions work on the limbic system which is responsible for survival instincts and memory. The limbic system connects to the cortex which is responsible for higher-order brain functions like thinking, abstractions, decision making etc. The limbic system is involved in incentive motivation by natural appetitive enforcers like water, food etc. Hence by working on the limbic system by providing enforcement they hack the unconscious memory which is also seated in the limbic system. And the connections that move from the limbic system to the cortex to are hacked. As a result, the brain is tricked into thinking that the substance of abuse which causes addiction is what will make one survive. In a way, it hacks the survival instincts of the brain. Common examples of this can be the use of marijuana by people to calm down their sex drive or smokers smoking cigarettes to suppress the urge for food intake or people drinking excessive tea to suppress thirst.
- e) Other theories (R. A. Wise 2002) (Everitt 2005) that tend to explain the persistent nature of addiction are motivated by what is called the aberrant stimulus-response theory. This implies a top-down trickle of addiction; in the sense that one consciously chooses the addictive behaviour that is apart or different from standard accepted behaviour. The seat of such conscious thinking is the pre-frontal cortex. This when repeated forms a pattern which trickles down to the limbic system which is the seat of memory, survival instincts and the unconscious. (Hyman 2001) This results in what is called maladaptive associative learning (Di Chiara 1999). An example can be when a person consciously chooses an act say rash driving to look cool or what one can call being seen as apart from the herd. This conscious choice to drive recklessly and the dopamine kick thereof adds up to form a repetitive behaviour. Finally, one associate 'looking cool' with rash driving. (Feltenstein 2008)

Dr Alok equates attachment and addiction to external stuff. He writes 'The attachment or addiction to external stuff, material or religious is just latching on to the appearance of more certain stuff Similarly, the dopamine and endorphin-regulated reward centres in the limbic structures have a significant weightage in determining action or pursuing a target /object—exploration, adventure, reward-punishment...almost fooling the self through their proportional weight in the final wave, sometimes through need, rest through fulfilling the withdrawal need to maintain the feeling of reward. This explains addiction, irrational behaviour, risk-taking etc. (Bajpai 2018, 84)

We know and understand that addiction is repetitive behaviour guided by repeated firing of neurons and secretion of neurotransmitters. It is the mind which is the basis of addiction. Now is the mind material? Or immaterial is a different debate altogether. The next prudent question would be how the mind and body get involved in this whole debate of addiction. This shall form the discourse of the next section.

3. The Mind-Body Dichotomy of Addiction

Every time we use a substance⁴ we engage our sense modalities and body at large. Say when we smoke (nicotine addiction) we engage our hands and lungs and nose etc. Similarly,

⁴ Substance here refers not just to drugs of abuse but to a broad range of behavioural addictions like video addiction, excessive spending on things like books or antique items etc.

when we face a behavioural addiction therein too, we use the same sensory modalities and the body. An example can be of watching 30-second reels. It engages our haptic sensations and our visual senses. Take another example of excessive spending on books. There too our sensory modalities get engaged. We see the book, maybe feel the smell of the pages, and pay which involves our haptic sensations.

But we know that it is the mind that is engaged in constant repetitive addictive behaviour. The theories discussed earlier suggest the role of the brain in addiction. So how does that come to be? Let us take an example of my book-buying addiction (shopping/consumerism addiction) and understand it sequentially. You go to a bookshop. It engages your sensory modalities. Next, you buy a book and come back home. Next time you go again and buy that book and come back home. I never wanted to read or study but give the impression that I am a voracious reader. At the shop, I went to the shopkeeper⁵ talked bought some books and came back.

Now, what was I doing? I was filling that empty space inside me where I felt that I did not want to read and that people around me did not have enough knowledge. I was finding an escape route. So, the body which went there walked, touched the books, saw fancy covers and names and buzzwords, had a chat with the shopkeeper and came back with books, upon which I could feel proud. This goes on to form repetitive patterns of neuronal firing in the brain. Next time I come across a situation say, I need to read a certain topic and I do not want to or feel that people around me know nothing or I feel the need to talk, I go back to the same place. And the constant firing of the neurons coupled with the bodily need of repeating that behaviour to reinforce the pattern finally culminates into addiction.

So, what has happened is that the strong desire to, first escape a situation, in my case read a book, and secondly try to form a connection via a small chat makes me follow the escape route. It acts as a trigger situation. This trigger situation coupled with the feeling of restlessness in the body makes me follow the same repetitive pattern. So the case is that now our brain has correlated the trigger situation and the need to connect, with the activity of buying books and going to that particular shop which releases neurochemicals and gives a sense of pleasure. Hence Dr Alok Bajpai's definition of addiction as an escape route seems to be true in the sense that where I needed to study I ran to the bookshop, where I needed to connect with people who are everywhere in a world of seven billion people I ran to the book shop to talk to a specific person. This constant running and not facing up to the reality of the situation and the desire for a particular event to last forever is what addiction is all about, an escape route. In the next section we will try to discuss, the Advaita theory of empirical self and try to understand how the Advaita model can explain the same addictive pattern of behaviour.

⁵ I would like to acknowledge his name, Amit Ji or Amit Dada as I would often call him.

⁶ I am thankful to Gabor Maté ted Talk at TEDxRio+20 titled 'The Power of Addiction and The Addiction of Power'.

4. The Advaita Theory of Antaḥkaraṇa

According to Advaita Vedanta the mind is not the brain. It is a subtle organ, more subtle than the brain (i.e., matter). It is composed of four quarters, namely the Manas, Buddhi, Chitta and Ahaṃkāra. The manas is what weighs the pros and cons of the object presented by the sensory modalities. The Buddhi is the faculty that chooses the object based on the pros and cons decided by the manas. The translation of Chitta is rather a tricky one. Some like Prof D.N Tiwari⁷ call the Chitta to be self-awareness. While many others deem the Chitta to be a memory⁸. I prefer that though depending on the context the terminology might be different, but they are the same. This is to say that self-awareness and memory are the same, in the sense that if we ask ourselves a question what is it that maintains the continuity in daily life, it is memory. The awareness of a continuous self is maintained by memory. Finally, Ahaṃkāra is what imbues the sense of 'I-ness'. One must also remember that immutable, pure

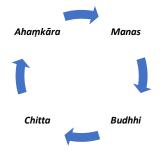


Figure 1: Antaḥkaraṇa

consciousness at the empirical level of self is called Sākṣi, which is different from Antaḥkaraṇa, the mind and the body. It is pure witness consciousness. (Singh 2022)

Swami Satprakashananda writes about the process of cognition by the mind "On seeing a chair a person does not at once determine it as a chair. In the beginning, he is vaguely aware of it as something. He is in an indecisive state. So he cogitates "What is it? What is it?" This function of deliberation is manas. Then he searches within and recalls some past impression akin to it. With this recollection he cognizes the object as "this is a chair." This function of determination is buddhi. The function of recollection is citta. With the knowledge "this a chair" arises the knowledge "I know the chair". This function of egoism is ahamkara. Because of the rapid succession of the four functions, they seem to be instantaneous. The four functions represent four different states of the mind." (Satprakashananda 1994, 11)

(Rao 2016, 101-105) tries to provide a rather modern terminology for the Antaḥkaraṇa. The manas is what he calls the central processing system. Buddhi is the executive system, Chitta is the memory, ahamkara is the self-referencing system. However, I would beg to differ with them on the point where he tries to merge the yoga system into Advaita terminology. (Rao 2016, 102, 119) How the Antaḥkaraṇa (mind) probably works is that the sensory modalities bring in the sense-data which is processed by the manas which does the saṅkalpa

⁷ In my talks with the professor, he explicated the term to me.

^{8 (}Satprakashananda 1994)

-vikalpa, i.e. weigh the pros and cons. Next, the Budhhi which is the faculty of intelligence chooses an option. The cons are rejected but stored in Chitta and based on the pros a choice is made. The pros too along with the sensory data that is chosen are stored in the memory. The final decision is then internalized by the Ahaṃkāra (the self-referential system). Hence, the final choice is internalized and there occurs a vṛtti, a modification of the mind.

5. Advaita Model of Addiction

To understand how addictions form a repetitive pattern I think we need to look at the Advaita theory of illusion also known as *Anirvacanīya-khyātivāda*. Firstly, one has an indeterminate perception. Which is given a name and that perception becomes determinate. According to it the object of illusion is neither real, nor unreal, nor both, i.e., real, and unreal both. It is indescribable. It is real till it lasts and unreal since it fades away after the dawn of the true nature of knowledge about the object. Take the classical example of perceiving a snake in a rope in dark. The snake is real till there is no contradicting perception. Once a person gets a hold of himself and gains the right knowledge of rope as rope the illusion of the snake disappears. But till we perceive the rope as a snake 'it' (the illusory snake) has the potency to initiate action, i.e., generate fear, anxiety, etc. Now, why do we say that it is neither real nor unreal? For with the dawn of true knowledge, the illusion fades and secondly two opposing realities, in lieu of a better word; cannot co-exist simultaneously. Here lies the discourse for free will, in the context of addiction riddance. How can it be so will form the next section of the discussion.

Now Antaḥkaraṇa and Ajñāna have the same substratum viz consciousness. (Gupta 1966) Ajñāna is also many times translated as Avidya. It has two-fold functions. Firstly, it hides the true nature of reality, i.e. āvaraṇa and secondly it projects a new reality overlaying the original one, i.e vikṣepa. (Śarmā 1960, 232) What probably happens during addiction is that when we take a substance of abuse for the first time; it can be something as tangible as nicotine to something non-tangible as 30—second reels, we take it for its potency or the sheer adventure or peer pressure. The aforementioned process of modification of the mind, i.e. vṛtti takes place. Next time the same substance occurs in front of us through the sensory modalities, manas again weighs the pros and cons. However, this time what happens is that the bodily state of relaxation, i.e. the potency for which the substance of addiction was taken is added to the pros and buddhi finds one more cause to choose the substance over the other. Now the buddhi finds the intelligent decision to be the substance of addiction since in the Chitta, i.e. the memory is where the 'added pro' of the substance of abuse comes from. This is what Dr Alok would call a 'feedback loop'. This feedback loop and the decision to take the substance thereof is internalized in the form of vṛtti, via the self-referential system, i.e., Ahaṃkāra. Over

⁹ In psychology a parallel concept is that of perceptual masking. Where a stimulus is hidden and overlayed with another such that the overpowering stimulus takes the place of the original and hides away the other. (Masking)

¹⁰ I would like to mention the story of the demon which once came to a king. King defeated him the first time, but he let him go away. Next time the demon came a bit bigger and stronger. The king felt some difficulty, but he defeated the demon again and let him go. This continued till the demon became more powerful than the king himself. (Babbitt 1895)

repeated cycles of the same process, the Ahaṃkāra, i.e the self-referential system attributes on the mind, i.e. Antaḥkaraṇa, the vritti of the user of the abused substance and the person becomes an addict of the substance. Primarily because the chitta is now filled with saṃskāras of the desired effect of the substance of abuse. Manas too weighs the pros of the substance to be higher based on the vast reservoir of saṃskāras of the Chitta and the buddhi too burdened under the reservoir chooses the substance of abuse. Following can be a schematic diagram of the same.

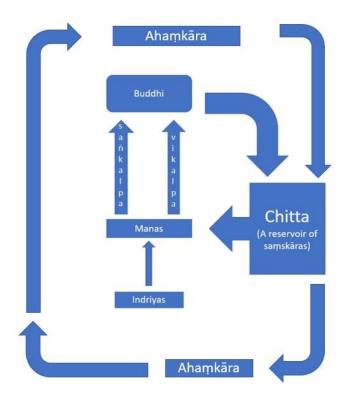


Figure 2: A feedback Loop model of Antaḥkaraṇa stuck in Addiction.

6. <u>A Riddance Programme of Addiction Based on the Advaita Model and 12 Step</u> Recovery Programme

There is fair amount of evidence that addiction addictions or addictive behavior is partly genetic and partly epigenetic. (Szalavitz 2015) That it is partly free will and part negation thereof. It is a matter of sciences to debate and experiment of genes and make medicine or have a better understanding thereof. But since we do not have any vaccine shot for addiction we have to focus on the epigenetics where free will lies. If we have to say this in scientific terms, the question would be if addiction is repetitive firing of neurons, then how can we short the brain circuitry involved in addiction. (Holmes 2015)

I think at this juncture it would be prudent enough to draw the reader's attention to the 12-step recovery model of addiction. The 12-step recovery programme was founded by Bill Wilson and Bob Smith in the 1930s, during their course in Alcoholics Anonymous, which they themselves founded. 11 The twelve steps stated in chapter five of alcoholics anonymous are:

- 1. Admitting powerlessness over addiction.
- 2. Finding hope.
- 3. Surrendering yourself to that hope.
- 4. Make a search within oneself and develop a fearless moral inventory.
- 5. Share the inventory of addiction with other people.
- 6. Become ready to guit the addiction.
- 7. Ask your hope for help to get yourself rid of addiction and believe in that hope whatever it may be.
- 8. Make a list of harm you have done due to addiction.
- 9. Make amends by acknowledging the wrong you have done.
- 10. Continue the inventory.
- 11. Pray and meditate on the hope that you can guit the addiction.
- 12. Help other by sharing your knowledge and experience. (Bill W. 2001)

I would like to draw a parallel between the 12 Step recovery programme and the Advaita theory of liberation. There are two ways to seek liberation in Advaita Vedanta. They are not contradictory but complementary to each other. Liberation in Advaita Vedanta is knowing oneself, 'Thou art That'. Knowing that the true form of oneself is pure consciousness that is Brahman. Now I will try to discuss the first method, i.e., of 'Sādhanācatuṣṭaya'. (Śaṅkarācārya 2013) lt defined therein as "Sādhanācatuṣṭayasaṃpannādhikāriṇāṃ is Mokṣasādhanabhūnaṃ Tatvavivekaprakāraṃ Vakṣyāma". It involves:

- 1) Nityānityavastuvivekah It involves the discrimination between permanent and nonpermanent things. In the context of the paper, 12 it means, accepting that the addict was not always an addict, but is an addict now. Most importantly that the addiction one faces is temporary and the person can come out of it. One's addictive persona can undergo modification. While being an addict he fell to the qualities of an addict of a particular addiction. These qualities can be modified. Since they are temporary.
- 2) Ihamutrārthaphalabhoqavirāqah It involves the refusal of pleasures. 13 Again here it means both the object of addiction and the effect the addiction causes.
- 3) Śamādi-Ṣaṭkasampattiḥ śamo-dama-uparamastitikṣā-śraddhā-samādhānam ceti // (Śaṅkarācārya 2013, 1-3)

The third process involves the cultivation of six accomplishments:

They are -

- i. Śamaḥ ITCoTP Restraint of the mind and meditating on the riddance from the addiction.
- ii. Damah ITCoTP Restraint of the external organs from the object of addiction.

¹¹ Gary R. VandenBos, APA Dictionary of Psychology, 1st ed. (Washington, DC: American Psychological Association, 2007)

¹² Here after 'In the context of the paper' would be mentioned as 'ITCoTP'

¹³ In the esoteric sotereological terminology it would be renunciation of all wordly pleasures.

- iii. *Uparama* ITCoTP observance of one's own quality as a non-addict should be observed, i.e the reasons for which the addict wants to quit.
- iv. $Titik s\bar{a}$ Next one should try to make a balance between the extreme opposites of being an addict to a non-addict in a single day. Since it is what causes relapse.
- v. $\acute{S}raddh\bar{a}$ Next one should cultivate faith in the Brahman, which is the supreme consciousness beyond the modifications of the mind, i.e., Antaḥkaraṇa.¹⁴
- vi. Samādhānam ITCoTP it means single-pointed focusness on the Brahman via the chanting of the Mahavakyas or oneself as a non-addict.
- 4) *Mumukṣutvam* The intense desire of attaining soteriological liberation is *Mumukṣutva*. Herein it means liberation from addiction.

The Vedanta's Sādhanācatuṣṭaya can be seen as a program not just for transcending the boundaries of the empirical self and realization of Brahman but for other fecund purposes as well, i.e., transcending the boundaries of addiction, ultimately living a happy and fruitful life. The first step as we can see corresponds to the 12-step AA programme, i.e., acknowledging that one is an addict, and the addiction is just his current reality. One is not born an addict and it is up to oneself to not die an addict. Firstly, The impermanent nature of addiction as a habit is to be acknowledged. Next one must start making amends, i.e., refrain from the object of addiction. The end goal however is Mumukṣutva, ITCoTP liberation or freedom not from all earthly desires but from addiction. The third step, i.e., Ṣaṭ Sampatti is not a process in between but a complementary process that is to be continuously maintained as a daily process amongst the three determinations, i.e., Vivek, Vairagya and Mumukṣutva.

This process should be run in conjunction with Śravaṇa, Manana and Nididhyāsana. One should be mindful that this too is a process of self-realization or liberation in Advaita Vedanta. The Brihadaranyaka Upanishad says:

ātmā vā are draṣṭavyaḥ śrotavyo mantavyo nididhyāsitavyo maitreyi, ātmano va are darśanena śravaṇena matyā vijñānenedaṃ sarvaṃ viditam

Hearing, reflection, and liberation too can serve as means to liberation. (Rao 2016, 6) translate the Śravaṇa, Manana and Nididhyāsana as the level of observation, understanding and meditative realization of truth.¹⁵ In my opinion, this can help one from relapsing to a certain addiction. Since it is not just the desire to quit addiction that leads to riddance of the same but constant meditation (for lack of a better synonymous word) on it. This works as a positive reinforcement. But what should one put the tripartite effort on; the Ṣaṭ Sampatti. Since it is that which will help one in future in letting an addict stay addiction free. This in conjunction with the constant exercise of discriminative intellect, Viveka and the goal in

¹⁴ Herein chanting of any of the four Mahavakyas can be helpful. Referring to the four Mahāvākyas of the Upaniṣad as compiled in (Radhakrishnan 1994)

[•] Prajñānam Brahma (Aitarēya Upaniṣad 3.3 of the Rig Veda)

[•] Ayam Ātmā Brahma (Māṇḍūkya Upaniṣad 1.2 of the Atharva Veda)

[•] Tat Tvam Asi (Chāndōgya Upanişad 6.8.7 of the Sāma Veda)

[•] Aham Brahmāsmi (Bṛhadāraṇyaka Upaniṣad 1.4.10 of the Yajur Veda)

¹⁵ A detailed explanation can be found in (Rao 2016, 177-178)

mind,.e., Mumukṣutva running in a feedback loop can be a programme for addiction riddance. Following is a diagram for the same:

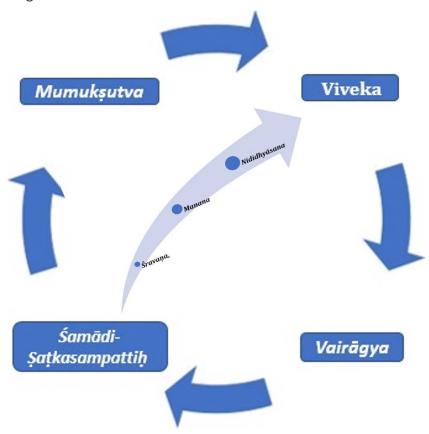


Figure 3: An Addiction Riddance Programme based on Advaita Philosophy

7. Conclusion

In the paper hitherto we discussed the problem of addiction which is quite rampant in our age with many behavioural addictions. From substances of abuse to ancient behavioural disorders like gambling which almost destroyed the Pandavas to modern addictions like watching short reels which hampers life by limiting our attention span, we have just started to understand the depth of the problem which is most likely to shoot up in the future. We tried to aim for a definition of the same in light of the prevailing psychological definitions. Next, we tried to understand how addiction is an escape route in the context of its neurological underpinnings. In the next two sections, we brought out the empirical theory of mind, i.e., Antahkarana and tried to addictive behaviour in the light of the same. Next, we tried to map the Alcoholic Anonymous 12-step addiction recovery programme and tried to formulate a programme based on the Advaita philosophy. To end I shall like to quote, Ramakrishna Puligandla from his book 'Fundamentals of Indian Philosophy'; From the Point of View of Moksa, History and The Phenomenal World Have A Pragmatic Significance. Pointing towards another great Indologist; Heinrich Robert Zimmer he says, Indian Thought Has a Lot to say about matters Of Temporal Existence. Consistent with their ontological hierarchy, Indian Thinkers also originated and expounded the Philosophies of Eternity-Philosophies whose aim is to enable man to transcend temporality and gain freedom through the Knowledge of The Eternal, thereby surpassing the human condition.

I hope this paper can provide a valuable solution to the problem of addiction via an indigenous soteriological model and instil the faith that the mokṣa śāstras deal not just with realizing the fundamental nature of reality but can serve their practical purpose in daily life as well.

References

- 1) NHS. "Addiction: What is it?" NHS, 2023. https://www.nhs.uk/live-well/addiction-what-is-it/.
- 2) Babbitt, Ellen C. 1895. "Mahā-Ummagga-Jātaka." Vol. 2, in The Jataka, or Stories of the Buddha's Former Births, edited by E. B. Cowell, 140-50. Cambridge: Cambridge University Press.
- 3) Bajpai, Alok. 2018. Maya is Reality & Brain Creates It. Vol. 1. New Delhi: Kautilya Publication.
- 4) Berridge, K. C., and T. E. Robinson. 1995. "The mind of an addicted brain: Neural sensitization of wanting versus liking." Current Directions in Psychological Science 4 (3): 71-75.
- 5) Bill W. 2001. "Chapter 5: How It Works." In Alcoholics Anonymous, 29-60. New York: Alcoholics Anonymous World Services.
- 6) Camí, Jordi, and Marta Farré. 2003. "Drug addiction." The New England Journal of Medicine 349 (10): 975-986. https://doi.org/10.1056/NEJMra023160.
- 7) American Society of Addiction Medicine. 2019. "Definition of Addiction." Accessed April 6, 2023. https://www.asam.org/quality-care/definition-of-addiction.
- 8) Di Chiara, Gaetano. "Drug addiction as dopamine-dependent associative learning disorder." European Journal of Pharmacology 375, no. 1-3 (1999): 13-30.
- 9) Everitt, Barry J., and Trevor W. Robbins. "Neural systems of reinforcement for drug addiction: from actions to habits to compulsion." Nature Neuroscience 8, no. 11 (2005): 1481-1489.
- 10) Feltenstein, Matthew W., and Regina E. See. "The neurocircuitry of addiction: an overview." British Journal of Pharmacology 154, no. 2 (2008): 261-274. Accessed April 6, 2023. https://doi.org/10.1038/bjp.2008.51.
- 11) Gill, K., Zalman Amit, and BK Koe. "Treatment with sertraline, a new serotonin uptake inhibitor, reduces voluntary ethanol consumption in rats." Alcohol (Elsevier) 5, no. 5 (1988): 349-354.
- 12) Gupta, Sanjukta. Studies in the Philosophy of Madhusudana Saraswati. Vol. 1. Calcutta: Sanskrit Pustak Bhandar, 1966.

- 13) Holmes, David. "Addiction: 4 big questions." Nature 522, no. 7557 (2015): S63. https://doi.org/10.1038/522S63a.
- 14) Hyman, Steven E., and Robert C. Malenka. "Addiction and the brain: the neurobiology of compulsion and its persistence." Nature Reviews Neuroscience 2, no. 10 (2001): 695-703.
- 15) Koob, George F., and Michel Le Moal. "Drug abuse: hedonic homeostatic dysregulation." Science 278, no. 5335 (1997): 52-58. https://doi.org/10.1126/science.278.5335.52.
- 16) "Masking." American Psychological Association. Accessed April 9, 2023. https://dictionary.apa.org/masking.
- 17) "Positive Reinforcement." Accessed April 6, 2023. https://dictionary.apa.org/positive-reinforcement.
- 18) Radhakrishnan, Sarvepalli. The Principal Upanishads. New Delhi, India: Indus / Harper Collins India, 1994.
- 19) Rao, K. Ramakrishna, and Anand C. Paranjpe. Mind in Advaita Vedānta. New Delhi: Springer India, 2016.
- 20) Robinson, Terry E., and Kent C. Berridge. "The neural basis of drug craving: an incentive-sensitization theory of addiction." Brain Research Reviews (Elsevier) 18, no. 3 (1993): 247-291.
- 21) Śańkarācārya. Tattvabodha. Bombay: Central Chinmaya Mission Trust, 2013.
- 22) Śarmā, Candradhara. A Critical Survey of Indian Philosophy. Delhi: Motilal Banarsidas, 1960.
- 23) Satprakashananda, Swami. Mind According to Vedanta. Madras: Sri Ramakrishna Math, 1994.
- 24) Singh, Shivendra Vikram. "Arguments for Witness Consciousness in Advaita Vēdāmta." The Eternity 13, no. 2 (2022): 301-310.
- 25) Szalavitz, M. (2015). Nature, 522(7557), S48–S49. https://doi.org/10.1038/522S48a. 2015. "Genetics: No more addictive personality." Nature 522 (7557): S48-S49. doi:10.1038/522S48a.
- 26) Maté, Gabor. "The Power of Addiction and The Addiction of Power." Tedx Talks. Video, 18:46. October 10, 2012. https://www.youtube.com/watch?v=u2cNj4orsrE.
- 27) VandenBos, Gary R. 2007. *APA Dictionary of Psychology.* 1. Washington, DC: American Psychological Association.

- 28) Wise, R. A. 2002. "Brain reward circuitry: insights from unsensed incentives." Neuron 36 (2): 229-240.
- 29) Wise, R.A. 1980. "Action of drugs of abuse on brain reward systems." Pharmacology Biochemistry and Behavior 13: 213-223.
- 30) Žižek, Slavoj. 2023. The Purpose of Philosophy is to Ask the Right Questions. May 4. Accessed April 10, 2023. https://bigthink.com/videos/the-purpose-of-philosophy-is-to-ask-the-right-questions/.