

Yoga and Smoking: A Pilot Study on the effects of yoga and resulting perception shifts on the process of quitting smoking

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ABSTRACT

The Surgeon General states that smoking is the leading cause of preventable disease and death in the United States.ⁱ Smoking harms every organ in one's body, generally worsening one's health. It highly increases one's risk of cancer, cardiovascular disease, respiratory disease, and reproductive dysfunction. Nicola O'Connell, from Nurse Prescribing Journal stated that according to researchⁱⁱ "a burning cigarette releases a cocktail of about 4000 chemicals including at least 80 cancer-causing chemicals and hundreds of other poisons. Some of the cancer-causing chemicals in tobacco smoke include tar, arsenic, benzene, cadmium, formaldehyde, polonium-210, chromium, nitrosamines and acrolein."ⁱⁱⁱ

Regardless of the many health risks, 60 million people in the U.S. continue to smoke, resulting in 440,000 premature annual deaths, or one in every five deaths. Most people who smoke want to quit, have experimented with quitting, or are planning to quit within the next year, but more than three-fourths fail in these attempts. The Surgeon General's Report reminds us that smokers often experience these failed attempts more than once before finally successfully quitting.^{iv}

Studies show yoga to be among the variety of treatments used in smoking cessation programs. In a majority of these studies yoga primarily is seen as a complementary portion of a broader treatment program. This pilot study investigates how yoga can stand alone as a complete therapeutic program. Further, rather than yoga's influence on the outcome (the act of quitting smoking), this study is more concerned with yoga's influence on the *process* of quitting smoking and charting the perception shifts which result. It looks into the multidimensional nature of addiction and how yoga, when used as a multidimensional system of support, can change the perceptions around smoking, creating empowerment towards the eventual act of successful cessation.

Thirty participants started the study, and nine completed it. This eight-week study involved attending weekly group classes and two private sessions. Participants were

instructed to perform a daily home practice. They were introduced to the concepts outlined in *The Yoga Sutra of Patanjali*, the authoritative text on yoga.^v They were also introduced to a variety of yogic tools in the tradition of T.Krishnamacharya,^{vi} which emphasizes individualized practice, breath centered movement, and study of the *Yoga Sutra*.

Primary outcome measures included data compiled from the initial questionnaire, oral feedback during group discussions and private sessions, and a six-month post-study interview.

Analysis of three case studies of the total nine remaining participants revealed common trends including: identification and confrontation of deeper fears pertaining to their relationship with smoking, better understanding of their motive in relation to smoking, identification and management of stress, and increased self-confidence in their ability to eventually quit, or in one participant's case, to stay smoke free. Among all of the participants, the most effective aspects of the study were the *pranayama* (breathing exercises), the consistency of meeting weekly, and emphasis on self-reflection. There was some conflicting data around the effectiveness of the home exercises and the home yoga practices.

Analysis of the outcome measures reveals that one hundred percent of the participants reported a positive perception shift six months after the course. Behavior changes reflected a 78% success rate of decreased smoking behavior during the course, and 22% maintenance or further decreased smoking behavior six months post-study. In summary, long-term perception shifts resulted from this study yet long-term behavior shifts were less substantial. Future studies may benefit from a longer course in order to chart if continued involvement would affect long-term behavior shifts as well as perception shifts.

This study's investigation of yoga as a complete therapeutic program to change perceptions around smoking can be concluded as successful due to the found results. It can serve as a useful pilot study for future advancements in the subject of yoga and smoking cessation.

KEY WORDS: Yoga, smoking cessation, Yoga Sutra, T. Krishnamacharya

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INTRODUCTION

I personally have never smoked, nor do I know many people who do smoke. I had never really given much thought to the questions of why people smoke or why it is so hard to quit, until I had a yoga student who confided in me the difficulties of trying to quit smoking. She shared that her yoga practice was helping her to work through the feelings of regret, shame, and guilt she felt around her smoking addiction. She said that, ironically, the more she “let go” of these feelings, the more she was able to disassociate from the image of herself as dependent on cigarettes. She was surprised at how intertwined the negative beliefs about herself were tied into her identity as a smoker. We then worked on creating new images of herself without those negative feelings associated with smoking. In time, her cravings had less “power” over her, and she was able to cut back more easily. She found herself with more *choices*.

While we stopped working together due to scheduling conflicts, her story stayed with me. This concept became the foundation for my study, using yoga to change one’s perceptions around smoking towards the eventual act of quitting.

To ensure long-term success in quitting smoking, I wondered if a perception shift was perhaps first necessary for the individual attempting to quit. Once an individual starts to understand the complex and multilayered behaviors, thoughts, and beliefs associated with their perceived *needs*, or even ultimately their perception of self *as a smoker*, could they then perhaps have a clearer picture of *why* they continue to smoke even when they say they want to quit? I was interested in looking at the root cause, rather than just addressing the symptoms. And as my past student experienced, once one has an increased understanding of why, could one then be able to shift his or her perspective and make alternate choices? To do this within the context of yogic teachings, I wondered if I could use the yoga philosophy found in the *Yoga Sutra-s* to create a system of support and structure towards the *process* of self-evaluation and self-perception.

Before delving deeper into the design of this system of support, it is first important to look more in depth at the definitions of yoga and of addiction. One of the most popular definitions of yoga is “to yoke, or to unite.” This concept of unification becomes clearer when taken in context with Sutra I.12, which explains that the “state of Yoga” is achieved

by simultaneously striving (*abhyasa*) and letting go (*vairagya*).^{vii} This unification of striving and letting go can be attained through a system of implementation called *Kriya Yoga*, also known as the Yoga of Action, outlined by Sutra II.1.^{viii} It is based on the three principles: 1) *tapas* - physical and mental cleansing such as using *asana* (body postures) and *pranayama* (breathing practices), 2) *svadhyaya* - self-reflection and inquiry, and 3) *isvarapranidhana* – wholeheartedly performing actions not motivated by outcome and letting go of the fruits of our labor. *Tapas* helps us to strive, *svadhyaya* keeps us clear and focused, and *isvara* helps us to let go, leading us to the united state of yoga.

The definition of yoga as unification also illuminates the *Panca Maya* yogic model,^{ix} which describes the human system in five layers – the physical body, the energetic or breath body, the mental body, the emotional body or personality, and the purest essence or spiritual body. Each individual layer affects and reinforces the others. One seeks to create union and balance within these layers with practical and therapeutic tools specific to each layer. For example, focusing on slowing down breathing can relax one's physical body, can help the mind to be more clear, and can even bring about emotions of joy or peace. Multiple layers can be affected by changing just one layer. The opposite is also true. Multiple layers, such as changing patterns of thought, breath, and body, can in turn affect one's spiritual layer. The tools to affect these changes include: *asana* (body postures), *pranayama* (breathing practices), *dhyana* (meditation), *mudra* (gestures), *mantra* (chanting), *bhavana* (visualizations), *vihara niyama* (lifestyle suggestions), *ahara niyama* (dietary recommendations), *svadhyaya* (guided self-inquiry), and *isvarapranidhana*, or surrender to a higher power or path, such as the process itself.

Researchers agree that addiction is a disease with multidimensional aspects, including cognitive, behavioral, psychological and physiological symptoms. The Merriam-Webster dictionary defines addiction as “compulsive need for and use of a habit-forming substance characterized by tolerance and by well-defined physiological symptoms upon withdrawal.” The World Health Organization defines dependence, a form of addiction, as “a cluster of cognitive, behavioural and physiologic symptoms that indicate a person has impaired control of psychoactive substance use and continues use of the substance despite adverse consequences.”^x Such a complex involvement of multidimensional symptoms makes addiction difficult to treat with a single one-dimensional method such

as only attempting to treat the cognitive symptoms while ignoring the physiological.

From a yogic point of view an addiction can be looked at as a *samskara*, or an unconscious habit, which affects not only our patterns of thinking, but also patterns of behavior, emotion, and physical body. T.K.V. Desikachar defines it as the conditioning of the mind that lets it continually take the same direction [even if we know that direction is not good for us].^{xi} In the case of addiction, these *samskaras* can become very powerful on every level, leaving us with the perception of having less options or choices. Yoga helps by bringing awareness to these negative patterns, helping to dissociate from these patterns, and giving us yogic tools to replace them with more positive patterns.

With the above background of the yoga system and concepts of *samskara* in mind, one can see how the self-reflective philosophies and tools of yoga appears to be an ideal multidimensional system of support to affect change. In the context of yoga and smoking cessation, yoga can create a change in one's self-perception, and in one's perceived *need* to smoke. These changes can affect the view of smoking as one of many choices rather than the only choice.

LITERATURE REVIEW

In researching smoking cessation, I found the majority of research agrees that nicotine is a key component in addiction to smoking, yet there is less research on the impact of alternate sources of addictive behavior. I discovered some studies, which explore the alternate sources of lifestyle,^{xii} genetics,^{xiii} and behavioral conditioning. One study, from Johns Hopkins University School of Medicine, attempted to measure the effects of de-nicotinized cigarettes over a period of eleven days.^{xiv} They found over time, participants reduced the number of cigarettes smoked and experienced decreased enjoyment of, and motivation for smoking, yet the cravings were not changed. In other words, the removal of the chemical nicotine reduced participant's motivation to smoke because it was less pleasurable, but the conditioned behaviors associated with the act of smoking (e.g., time of day associated with smoking, or the act of lighting and smoking the de-nicotinized cigarette) continued to cause cravings even with the removal of the "addictive" element.

I found several concepts within this study interesting. Even when the known

physiological source of addiction was removed, a group of conditioned behaviors continued to elicit a physiological, mental, and often times emotional response in the form of a craving. The behaviors themselves become triggers for the mind. The associations made, from the perceived triggers, cross multiple layers (mental, physical, emotional) to give the experience of craving. When looking at this from the viewpoint of the yogic *Panca Maya* model, this makes sense, since our mental, physical, and emotional habits, or *samskaras*, all affect and reinforce one another. One could argue that the true source of addiction is within the associations made by the mind. Yoga Sutra II.5 would classify these associations as unclear perception, or *avidya*.^{xv} An object or behavior, which is perceived to bring pleasure (*sukha*), actually continues to bring suffering (*duhkha*).

Another interesting concept was in the term *conditioned*, as suggesting a patterning over time. It takes a while for the body to become dependent on the chemical influences of smoking, and it takes repetition and practice for the mind, also, to become dependent on the behaviors associated with smoking. There is a gradual progression over time – a process. This process of becoming conditioned, is a perfect demonstration of the yogic concept of *samskara*, an unconscious habit, which has been developed over time.

Just as there is a process to becoming conditioned to a behavior such as smoking, it is important to be aware that there is also a process to successfully change and replace it. The *Yoga Sutra*-s state there is a gradual “process” to directing the mind to promote change. Sutra III.15 explains, change (*parinama*) has it’s own sequence composed by a series of small steps (*krama*). Changing the sequence from a conditioned pattern to a new pattern is possible when we take a new and different step (*anyatvam*) in the direction we wish to change.^{xvi} Desikachar further explains that this process “also involve(s) preparation, gradual progression and sustained interest.”^{xvii} We see that yoga has the tools to help us re-condition ourselves through the process of re-directing the mind and in turn, changing our associations. These changed associations, or changed perceptions, may then ultimately result in choosing to take different steps, changing our behavior.

Research by Prochaska and DiClemente^{xviii} identified four identifiable stages in the process of those who had successfully quit: pre-contemplation, contemplation, action, and maintenance. These stages resemble the mental preparation, direction, and

maintenance described by Desikachar when explaining the process of directing the mind. It was additionally observed by George Shuster, founder of a community-based, self-help smoking cessation program, “the process of quitting consisted of combined cognitive and affective aspects that require many self-help skills.”^{xxix} This observation of a successful process also mirrors the yogic practices based in self-awareness, which by their very nature are cognitive and effective “self-help skills.”

From comparing the research with the above-mentioned yogic concepts, I began to conclude that in order to successfully implement change within the multidimensional individual, the system of support needed, also, to be multidimensional, addressing both the symptoms and the causes of one’s addiction to smoking. Research on “smoking cessation” showed many tools available to people to help manage symptoms, including drug therapies and exercise. The drug therapies included 1) nicotine replacement such as gums, inhalers, patches or pills 2) pharmaceutical drugs to alter brain chemistry^{xx} 3) homeopathic drugs and herbs.^{xxi} Often these treatments are used pre-cessation, preparing the individual to quit through gradual tapering methods at the same time increasing confidence. The physiological effects of exercise and some of the drug therapies have been found effective in managing withdrawal symptoms.^{xxii} These therapies can further act to replace the act of smoking for some individuals.

While these tools to manage symptoms are effective for some people, it was repeatedly observed that programs with the most success also addressed the cause of one’s addiction. These programs offered methods of self-evaluation and education on the health effects of smoking to support the process of understanding the participant’s addiction, changing their perception. The tool of self-evaluation was typically achieved through some form of individual counseling or psychotherapy, group therapy, and lifestyle modification training. It should also be noted that successful programs often utilized these multiple tools in an individualized way.

The interesting thing I found in regard to information on “yoga and smoking cessation” was that not only was there limited research on the subject, but also, the smoking cessation studies that did include yoga often presented it as a complementary approach to other more classic smoking cessation approaches, such as drug or psychotherapies. Of these studies, the popular yogic tools of *asana* (body postures) and

pranayama (breathing practices) appeared primarily as tools to replace the act of smoking, additionally highlighting the physiological effects in a similar category as exercise.^{xxiii} This particular utilization of yoga, however, was limiting in that it did not include the full range of therapeutic tools of yoga^{xxiv} or use yogic philosophy as a method of self-evaluation to address the root cause and promote long-term change.

Conversely, quite a few of the non-yoga smoking cessation programs shared many yogic philosophies and therapeutic tools. They appeared to be utilizing more of the multidimensional system of yoga than some of the actual yoga programs. For example, the program called Quitting for Life^{xxv} offered a varied and well-rounded approach, reflecting some yogic philosophy and integrative tools. The 10-session course meets once a week for four weeks and on the fifth week holds sessions each day. The sessions include self-reflection and goal setting; focus on stress management and coping tools such as relaxation tapes, imagery, deep breathing, foam stress grips, and physical exercise including yoga postures; the issue of weight gain associated with quitting and diet choices; and a discussion of different approaches and lifestyle changes. The presence of the yoga tools of self-reflection (*svadhyaya*), breathing exercises (*pranayama*), goal setting and imagery (*bhavana*), yoga poses (*asana*), use of hands with foam grips (*nyasam*), dietary recommendations (*ahara niyama*), and lifestyle alterations (*vihara niyama*) show their effectiveness in this smoking cessation program even if not referred to as yoga.

Another study called Quitting-In-Balance is currently underway,^{xxvi} which uses yoga as a complementary treatment for smoking cessation. This study is attempting to compare the effects of a weekly one-hour yoga class including *asana*, *pranayama*, and meditation, with the effects of a weekly one-hour class of Health Wellness training, which includes information and discussion on general health and wellness topics. The sessions last eight weeks. Each group additionally participates in a weekly group Cognitive-Behavioral Therapy class. The CBT class aims to aid people in discovering new ways of reacting to conditioned patterns by utilizing tools of self-reflection such as self-monitoring, stimulus control, coping with high-risk situations, and stress management. CBT classes also cover topics of healthy eating, weight management, and balancing multiple roles and multiple demands. I found this Cognitive-Behavioral Therapy class particularly interesting

because it remarkably resembles the philosophies and practices found in yoga. The National Association of Cognitive-Behavioral Therapists explains Cognitive-behavioral therapy as “based on the idea that our *thoughts* cause our feelings and behaviors, not external things, like people, situations, and events. The benefit of this fact is that we can change the way we think to feel and act better even if the situation does not change.”^{xxvii} While this study did include yoga as a complementary component, the general themes found in the CBT courses more fully mirror concepts of self-understanding, self-empowerment and self-transformation found in deeper study of the *Yoga Sutra-s*.

A final limitation noted in previous studies was that yoga was taught only in the group setting. I did not find literature on the use of private yoga instruction or individualized yoga practices. This group-centered focus, while having many benefits including *sanga*, or community, did not offer tailored tools or address personalized goals regarding one’s unique situation, needs, and interests. As the tradition of T. Krishnamacharya emphasizes, yoga is most effective when individualized since each person has unique *samskaras*, needing their own unique blend of tools to create change.

When looking at the breadth and depth of previous and current research, I found that many of the successful programs use concepts and tools that resemble yoga, even when they don’t label it as such. The way yoga is used in current research is very narrow, using only group *asana* and *pranayama*, with perhaps some meditation techniques. Stacie Stutkin from *Yoga Journal* states: “The use of yoga in addiction treatment centers is certainly not part of mainstream therapy”^{xxviii} in part due to the lack of studies on the subject. “Most addiction specialists agree that yoga should merely complement the therapy of choice.”

I am attempting in my study to show that one can create a program, which presents yoga as a complete therapeutic program on it’s own rather than a mere complementary treatment. This program would emphasize individualized and group treatments, education of yoga philosophy, and increased self-understanding as a way to change perceptions around the need to smoke, creating empowerment towards the eventual act of successful cessation.

OBJECTIVE

As discussed in the Literature Review, when looking at other smoking cessation programs that included yoga as part of the treatment, I found some potential limitations, which led me to formulate the purpose and presentation of this study.

The first limitation was that yoga was presented as simply a complementary activity, limited to the therapeutic tools of *asana* (movement) and *pranayama* (breathing). In fact, yoga is a multidimensional philosophy, explained in the *Yoga Sutra*, which utilizes numerous tools. Yoga was commonly portrayed in my research, as synonymous with the complementary activity of general exercise, comparing the physiological effects. The psychological and emotional aspects of changing patterns of perception were left to psychotherapy, cognitive behavioral therapy, and other such related therapies. These programs lacked education on the philosophy of yoga as well as actual use of yoga philosophy to structure and guide the program itself. While using the tools of *asana* and *pranayama* in a positive way, these programs did not provide a complete representation of yoga and the potential that yoga can play in the process of quitting smoking.

The second set of limitations of the “yoga and smoking cessation” research was that these smoking cessation programs offered the same *asana* and *pranayama* practices in a group setting to all of the participants, so the practices were not individualized. If all people were the same – body composition, personal histories, motivations and beliefs – there would need to be only one technique or tool needed to quit smoking. However, people are different from one another and need different tools depending on their unique situation, needs and interests.

Actual cessation is not the focus of this study. Rather, *the objective of this study is to show that yoga can be used as a complete therapeutic program on its own, to guide in changing one’s perceptions relating to smoking while creating self-empowerment toward successful smoking cessation.* My hypothesis was that perception shifts around smoking are a necessary first step towards long-term cessation. Second, I hypothesized that when we use yoga as a multidimensional system of support, the result has the potential for self-understanding and self-empowerment leading to long-term perception shifts.

METHODOLOGY

Participants were found through referrals from Tobacco Control,^{xxix} through flyers put up around town and on campus at local colleges, and from email listings of yoga students. The search for participants lasted six weeks. Current use of tobacco (smoking or chewing) was the single prerequisite to choose participants.

Intake forms and initial questionnaires (Appendix A-B) were used to collect data such as the length, duration, and intensity of each individual's smoking patterns, previous attempts at quitting, previous experience with yoga, health history, goals, and expectations. Outtake forms and interviews held at six months post-study (Appendix C) were used to collect personal experience and results from the study.

Participants committed to attending a one-hour long group class for eight weeks, and two additional private sessions with the teacher. The class involved lecture and group discussion for 15-20 minutes and yoga practice for the remaining 40-45 minutes. Each week a topic of focus was presented, which built cumulatively, and included homework (samples included in Appendix D-K) pertaining to the week's topic, as well as a home yoga practice. The weekly group discussions allowed participants to give input relating to their experiences in the previous class, their homework, their personal yoga practice, and weekly experiences, thoughts, revelations. Documentation of this input was kept at the conclusion of each class. The "weekly overviews" section below outlines this progression.

The two private sessions were intended to further individualize each participant's home practice, and involved a full review of medical history and a discussion of goals pertaining to the smoking cessation as well as other factors such as back pain or depression. The full spectrum of yogic tools were considered for each participant.^{xxx} Documentation for private sessions included the intake form, copies of the practice and notes taken about what was discussed.

The objective of the study: *to show that yoga can be used as a complete therapeutic program on its own, to guide in changing one's perceptions relating to smoking while creating self-empowerment toward successful smoking cessation* was tested in two parts. First, by using *The Yoga Sutra of Patanjali* to guide the process and increase awareness

of yoga's purpose and potential. Second, by using the *Kriya Yoga* model (or Yoga of Action, utilizing tools of cleansing, self-reflection, and letting go), as presented in the second chapter of the *Yoga Sutra*, to implement the full variety of yoga tools in a way that people can choose and tailor a combination of these tools to individualize their treatment.

Various *Sutra*-s from *The Yoga Sutra of Patanjali* set the foundation of this study, helping to guide the weekly topics of focus, discussions, and general direction of the process. And more specifically, the *Kriya Yoga* model of *tapas* (cleansing), *svadhyaya* (self-inquiry) and *isvarapranidhana* (surrender), further helped give form to the implementation of the various tools, which include the meditative tools of *mudra/nyasam* (gesture), *mantra* (sound), and *bhavana* (visualization), as well as the practical tools of *svadhyaya* (self-reflection), *vihara niyama* (lifestyle suggestions), and *ahara niyama* (dietary recommendations). The concept of *tapas* was presented in the form of the yoga *asana* and *pranayama* practices, which we did in class and participants were instructed to do daily at home. *Svadhyaya* was presented in the form of homework assignments asking participants to look at daily patterns, triggers, and deeper motivations, which was discussed and practiced in class as well as at home. It should also be noted here that some of the homework assignments were modeled on activities within current smoking cessation programs.^{xxxii} *Isvarapranidhana* was presented in the form of the discussions and use of meditative tools, looking at the concept of divine presence, our image of our highest selves modeled from the divine, and our relationships with that divine image or concept.

These tools and concepts were presented and initially discussed in the group setting. They were then further developed through the use of homework assignments and home practice, and then refined and further discussed in the private settings. This structure gave the participants opportunity to fully take part in and help individualize their own treatment, further empowering the experience.

WEEKLY OVERVIEWS

This overview outlines each week's focus, main tools used, main concepts introduced, *Sutra*-s cited, brief description, and homework given.

Week 1 - Focus: WHY YOGA

Main tools: *Svadhyaya* (self-reflection), *pranayama* (breathing practices)

Main Concepts Introduced: Defining Yoga, *Panca Maya*, *Samskara* (patterns)

Sutras: *Yoga is the ability to direct the mind exclusively towards an object and sustain focus in that direction without any distractions (S I.2)*^{xxxii}

Description: This week served to introduce yoga to the participants and to introduce them to the concept of becoming aware of behavioral patterns. We talked about *Sutra* I.2, introducing the idea that yoga is a state of mind and state of being, as well as a practice. A diagram of the *Panca Maya* model and discussion of the layers - body, energy, mind, personality, true (joy) self – gave people a basis for understanding yoga as a holistic, multidimensional system. The various tools of yoga, including *asana* (body postures), *pranayama* (breathing), *bhavana* (visualizations), *mantra* (chanting), *mudra/nyasam* (hand gestures), and *svadhyaya* (self-reflection), were also introduced and discussed. These concepts were presented in the therapeutic context of changing undesirable conditioned patterns in each of our layers. A short *pranayama* focusing on lengthening the exhale was taught.

Homework: Home activities included further observing of their daily patterns to set the foundation of developing self-reflective awareness (*svadhyaya*) to change their current perception around smoking and to eventually begin to break down undesirable, unconscious behaviors (*samskaras*). Participants were also instructed to practice the *pranayama* learned in class.

Week 2 - Focus: WHY SMOKE

Main tools: *Svadhyaya*, *pranayama*, *asana*, *nyasam*

Main Concepts Introduced: *Svadhyaya*

Sutras: *When an individual has achieved complete understanding of his true self, he will no longer be disturbed by the distracting influences within and around him (S I.16)*^{xxxiii}

Description: This week attempted to assist the participants in identifying their triggers to better understand why they smoke and accept where they are in their addiction to smoking. The concept of *Svadhyaya* was introduced, focusing on the importance of self-

reflection as means to understand deeper motivations. *Asana* was introduced, focusing on simple awareness of breath with movement. *Niyasam* of bringing all fingers into palm on inhale and releasing on exhale was added to the *pranayama*.

Homework: The “Seeing Beyond My Triggers” handout (Appendix E) asked a series of questions prompting self-reflection and understanding. Some examples: Does the act of smoking help you to relax or allow you personal space/quiet time? Do you enjoy the act of breathing deeply when you smoke? Do you find smoking helps to transition or bring conclusion to certain events in your day/life? Participants were also instructed to continue the *pranayama* practice from the previous week, adding the *nyasam* and three *asanas* from class.

Week 3 – Focus: FORM VS. FUNCTION

Main tools: *Svadhyaya*, *pranayama*, *asana*, *nyasam*

Main Concepts Introduced: *Avidya* (misapprehension), *Tapas* (cleansing)

Sutras: *Misapprehension leads to errors in comprehension of the character, origin and effects of the object perceived. (S II.5)^{xxxiv}*

Description: The purpose of this week’s class was to clarify that the form, or act, of smoking is different than the function, or deeper motivations, such as being used to stimulate, relax or distract the person. The concept of *avidya*, or misapprehension, was briefly brought up. Students and teacher discussed the idea that what we perceive to be may not always be what is. For example, thinking that the only way to relax is to smoke may be a misapprehension, or *avidya*. The idea of *tapas* was also introduced by discussing the structural, physiological, mental, emotional and spiritual functions of yoga (see “Functions of Yoga” handout in Appendix G). We drew parallels from these functions that yoga serves, to the perceived functions that smoking appears to serve. During *asana* practice, the function of each pose in relation to the needs of a person who smokes was discussed. For example: *virabhadrasana* (warrior) physically creates more space in the chest and abdominal regions, allowing for better cardiopulmonary efficiency in the body – especially important for smokers. It can also create feelings of confidence, conviction and mental stimulation or focus. In regards to twisting postures,

the detoxifying effects on the body's visceral function were also discussed. *Niyasam* was refined to bring thumb and finger together on inhale and to release on exhale.

Homework: The "Labeling Each Craving" handout (Appendix.F) encouraged participants to examine the *function* of each cigarette of the day. *Asana, pranayama* and refined *nyasam* were also given for homework, with focus on the function of the practice rather than the form of the practice.

Week 4 – Focus: WHY QUIT

Main tools: *Svadhya, pranayama, asana, niyasa*

Main Concepts Introduced: *Duhkha* (discomfort), *Sukha* (ease)

Sutras: *Painful effects which are likely to occur should be anticipated and avoided. (S II.16)^{xxxv}*

Description: We discussed the physiology of withdrawal as well as its perceived discomfort (see "Understanding Withdrawal Symptoms" handout in Appendix H). The concept of discomfort, or *duhkha*, was further explored in class, comparing the perception of discomfort in some yoga poses to the discomfort of withdrawal. The focus was on learning how to redefine the discomfort as ever-changing sensation, seeing how this temporary discomfort eventually leads to a positive experience. For example, a yoga posture may initially be uncomfortable because our muscles are tight or weak, but if we relax and perform the posture in a way that we do not force or react to discomfort, eventually the posture becomes more comfortable and stable. Withdrawal symptoms may initially present discomfort, leading one to crave relief by smoking. But if we can remember that these unpleasant sensations are temporary, and not to react to the discomfort by smoking, but instead finding an alternate source of relief, eventually the craving to smoke will change.

Homework: The "Remembering Why I Want to Quit" assignment (Appendix I) encouraged participants to remain aware of the negative effects of smoking through various self-reflective questions. The "Breathing Breaks" (Appendix I) exercises help participants deal with the negative effects of withdrawal through implementing breathing practices throughout their day. Home *asana, pranayama* and *nyasam* practices continue.

Week 5 – Focus: WHY NOW

Main tools: *Svadhya*, *pranayama*, *asana*, *nyasam*, *bhavana*

Main Concepts Introduced: *Bhavana* (visualizations), *Isvarapranidhana* (surrender)

Sutras: *By enquiring into the cause of the rigid situation binding the mind to the individual, and examining the means of relaxing this rigidity, there is great potential for an individual to reach beyond the confines of himself (S III-38)^{xxxvi}; Offering regular prayers to God with a feeling of submission to his power, surely enables the state of Yoga to be achieved. (S I.23)^{xxxvii}; God is the Supreme Being whose actions are never based on misapprehension. (S I.24)^{xxxviii}*

Description: This week participants were encouraged to look honestly at their core beliefs pertaining to smoking. At one's core it may be discovered that they are being pressured to quit by someone else or by society-at-large, or they don't believe they can quit or that they are worthy of quitting for. The concepts of *bhavana* and *isvarapranidhana* were also briefly introduced. *Bhavana* is one's core belief manifested into an image or goal. This image or goal becomes the deeper intention of the actions carried out. One definition of *Isvarapranidhana* is working towards one's goal without getting overly attached to its outcome. During practice the participants were asked to visualize their highest self and/or an image of the Divine. Then, after a *pranayama* incorporating this image, they were asked to let the image go and to find contentment in who they currently were, while deep down being supported by the Divine image. They were encouraged to keep their intentions to quit, but to fully surrender to the whole process.

Homework: They were instructed to re-write a list of reasons for why they want to quit to support the image of themselves as non-smokers. This was a practice in setting intention, utilizing the concepts of *bhavana* and *isvarapranidhana*. They continued the *asana* home practice, adding *bhavana* with the *pranayama* and *nyasam*. Inhale - touch fingers and visualize highest self, Exhale - let that image take root in skin, bones and cells - in other words, feel it.

Week 6 - Focus: REPLACING FORM

Main tools: *Svadhyaya, pranayama, asana, niyama, bhavana, vihara niyama* (lifestyle)

Main Concepts Introduced: *Kriya Yoga*

Sutras: *The practice of Yoga must reduce both physical and mental impurities. It must develop our capacity for self-examination and help us to understand that, in the final analysis, we are not the masters of everything we do. (S II.1)^{xxxix}*

Description: The weeks leading up to week six introduced the participants to the concepts of *tapas, svadhyaya* and *isvarapranidhana*, which together compose the *Kriya Yoga* system, also known as the Yoga of Action. This week's discussion highlighted the importance of creating a plan of action, and how to implement it. We discussed how making our own plan of action further perpetuates the internal strength it will take to continue along our path because our new actions will be infused with our refined self-understanding and awareness of our deeper motivations. We also talked about the importance of being patient and forgiving of ourselves along the way.

Homework: The tool of *vihara niyama*, lifestyle, was introduced in the handout "Mapping Out New Form." (Appendix J) The participants were encouraged to choose an action that would replace the act of smoking yet still achieve the same deeper motive, such as practicing *asana* and *pranayama* instead of a cigarette to relax, or brushing one's teeth after a meal instead of having a cigarette. Home *asana, pranayama, niyama* and *bhavana* practices continue.

Week 7 – Focus: STRENGTHENING NEW FORM

Main tools: *Svadhyaya, pranayama, asana, niyama, bhavana*

Main Concepts Introduced: *Abhyasa* (practice)

Sutras: *The mind can reach the state of Yoga through practice and detachment. (S I.12)^{xl}; It is only when the correct practice is followed for a long time, without interruptions, and with a positive attitude and eagerness, that it can succeed. (S I.14)^{xli}*

Description: We talked about the concept of practice (*abhyasa*) and how, until now, they had been "practicing" smoking, "practicing" responding to their triggers, and "practicing" the internal mental talk that comes along with smoking for many years. We discussed how replacing a new habit with an old habit takes diligence. During class, participants repeated the same *asana/pranayama/bhavana* sequences as past classes, yet

with the intent to purposefully “practice” to set new habits into their body, breath, and mind. Most importantly they were encouraged to “practice believing in” their ability to succeed.

Homework: By this week most people had met privately to receive their individualized practices, so their homework was to perform their personal practice with the intent to “practice” as discussed in class. Also, to encourage positive change, they were assigned to write down each time they replaced a positive behavior with the old behavior of smoking, and add up at the end of the day how many times they succeeded, with the idea that acknowledging successes on a daily basis would reinforce belief in oneself. At the end of the week, they were then to add up all of their successes and then reward themselves for it (e.g., receive a foot massage from spouse or go out to dinner to celebrate). They were encouraged to celebrate their successes to strengthen their ability to continue along that path, and to strengthen their own will to want to succeed.

Week 8 – Focus: LONG TERM CHANGE

Main tools: *Svadyaya, pranayama, asana, niasam, bhavana*

Main Concepts Introduced: *vairagyam* (detachment), *sraddha* (faith)

Sutras: *The mind can reach the state of Yoga through practice and detachment. (S I.12); Through faith, which will give sufficient energy to achieve success against all odds, direction will be maintained. The realization of the goal of Yoga is a matter of time. (S I.21)^{xlii}*

Description: This week we looked at the second part of Sutra I.12, *vairagyam*, or detachment/ letting go. We discussed how, when we practice nonattachment, we strengthen our power of choice and we become less attached to, or less dependent on things. We become empowered to choose what we wish to do, or how we wish to respond in any given moment. The group then discussed how faith, or belief in oneself –*sraddha* - is at the heart of all we do and will give direction and motivation through the difficult phases of the journey. We reviewed all that we had discussed and experienced in the previous weeks and reflected on the many personal revelations and stories of success. The *asana* practice during class incorporated this reflective look at the eight-week journey and emphasized the faith in oneself needed to sustain one’s way.

Homework: To look back on all of the activities we did throughout the past eight weeks to see what stretched them and what helped them to understand or change the most. Then, write a letter or list to one's self, (see "Long Term Change" handout in Appendix K) noting all of the things learned in this process, about their successes, realizations, and general growth. Continuation of the daily home yoga practice was encouraged.

RESULTS AND DISCUSSION

Results were measured in four ways: 1) presentation of three case studies to show the selected participants' personal progress through feedback in weekly discussions, private sessions and post-study interviews, 2) compiling data from the initial questionnaire, 3) presenting data to show stats on graphs and graph analysis, and 4) analyzing feedback from the six-month post-study interviews.

Overall, the results show that each participant who completed the eight-week study had a positive experience and shift in perspective towards the ability and/or desire to quit smoking, proving success of the original objective and hypothesis. While actual long-term (six-months post-study) cessation was achieved by only one participant, a degree of success was met for every participant towards his or her personal goals, which varied from cutting back smoking, to decreasing stress, to finding tools to become more calm.

CASE STUDIES

Introduction

Due to the individualized nature of this study, the following case studies are presented to show the full picture of the impact that this study had on the three highlighted participants. It attempts to tell the story of their personal experiences from their personal history before the study began, throughout the study, to the six-month post-study interview.

Feedback Categories

PERSONAL HISTORY – A personal history of each participant highlighted in the case studies was composed from the data contained in the intake form and initial questionnaire.

WEEKLY DISCUSSIONS - As stated in the methodology section, each week had a specific focus introducing yogic philosophical concepts pertaining to smoking, and yogic tools in reference to smoking cessation. These concepts and tools were introduced during the 15-20 minute lecture/discussion period during which participants had the option to verbally share feedback and personal experiences. Some participants spoke more often than others, while some chose to not speak at all. Therefore, the participants chosen for the case studies were among the participants who regularly chose to share the most about their personal experiences in the weekly discussions. Documentation of these discussions was kept at the conclusion of each class.

PRIVATE SESSIONS - Each participant received two private sessions during the eight-week course. The sessions involved a full review of medical history, a discussion of goals pertaining to smoking cessation, and other factors such as back pain, heart disease, or depression. Tools and concepts from class and homework assignments were refined and further discussed in the private settings, giving the participants the opportunity to fully take part in and help individualize their own treatment.

SIX-MONTH POST-STUDY INTERVIEWS – The post-study interviews were intended to chart success during and six months after the completion of the eight-week study. Questions on smoking intake (charted and analyzed in graphs below), changed thinking/behavioral patterns, the most helpful aspects of the course, and goal achievement from the beginning of the course were included.

Case Study 1 – Mike

Personal History

Mike has been chewing tobacco for over 30 years. The amount was not stated. His father smoked when he was a child. Members of his current household and his typical social setting do not smoke, but at work, other colleagues chew. He is a fireman and the demands of the job can be stressful. He quit once, five years ago, for four months. He found during this period that his temper and anxiety were increased. On the initial intake form, his stated goals and expectations for this course were to quit chewing and to obtain tools that will help him to remain centered and calm. He had previously taken a few yoga classes and was impressed by the calming effects.

Weekly Feedback

Week 1 – Mike was very open in his introduction, stating much of the information in his personal history. He emphasized his readiness to finally quit tobacco products. He was encouraging to other participants and optimistic about yoga's role in his success.

Week 2 – Mike reported that he found it difficult to remember to reflect on the home assignment every day but that he did practice the breathing exercise about four times. He said that it helped to center and focus him. He expressed surprise at the number of unconscious patterns that he noticed throughout his day from the homework assignment instructing participants to become aware of their daily patterns. He realized how chewing was especially woven into the events of the day and how much it was on his mind.

Week 3 – Mike revealed that he is well aware that chewing is a way to monitor his mood. Without it, he feels anxious and short-tempered. I prompted him with the question: "then is this addiction only serving your aversion to withdrawal?" He responded that that was part of it. Other parts were that he truly enjoys it and that it makes him "feel right," and that it is woven into his workday since all of his colleagues chew as well. He then added that he enjoyed doing the yoga *asana* and *pranayama*. He stated that he was confident that the calm, alert state felt immediately after practicing yoga would help him reduce his chewing.

Week 4 – Mike arrived late to the fourth class, missing the discussion, so there was no verbal feedback for the preceding week.

Week 5 – He admitted he did not do the breathing exercises on the handout but did notice an overall increased awareness of taking deep breaths to release tension, particularly increasing the length of the exhale. He also commented that the previous class (week 4), compared uncomfortable sensations in deeply held yoga poses to the uncomfortable sensations of withdrawal, was helpful to his experience of perceiving discomfort. He was starting to cut back on his tobacco intake, and he used the awareness of discomfort as pure sensation during withdrawals to fend off cravings. Also, he loved the *nyasam* and found himself using it periodically through the day.

Week 6 – He shared that he had been learning a lot about his deeper motivations and beliefs regarding his dependency on tobacco. He felt that this class gave him a

“vocabulary for the process of addiction” and gave him the tools to “deconstruct the process.” He stated that while he did not write down in his homework, the reasons to quit, he knew his reasons strongly in his mind and they were always with him.

Week 7 – He did not come to the seventh class so there was no verbal feedback for the preceding week.

Week 8 - He shared that he had really been enjoying his personal yoga practice from our private session. He stated that while he hadn't been documenting it, he had regularly been practicing his breathing in the mornings, in the car at red lights, in stressful situations, and when he had a craving for tobacco. He found this helped immensely with decreasing the cravings and reminding him of his intention to quit.

Private Sessions

We had our first private session on the seventh week and the second session two weeks after the group sessions concluded. Other conditions Mike was working with were: a history of orthopedic surgeries from job-related accidents, including left knee and right shoulder surgery, and L5/S1 fusion. These surgeries left him with limited range of motion and in low-grade chronic pain. The primary goals of the session were to address his initial goals of finding calm and centeredness, and secondary goals to address his pain and range of motion needs.

In our first private session Mike was able to express in more depth his views on his addiction and on the effects of the course. He shared that he now realizes how much stress, and his reactions to stress, influenced his health. Before he saw his addiction as a purely physical thing, but now he sees that the way he thinks and reacts to situations are even more a part of his addiction. He felt that this was good news because he feels he can now gain control of his mind with the yoga tools of reflection, and help his body with the breathing, *nyasam* and *asana*. We decided on a simple meditative practice using very gentle *asana*, with the goal to continually strengthen his powers of self-reflection and self-connection, and to induce calming effects. Since anxiety and anger were symptoms of withdrawal for him, we talked about invoking an image of himself as joyful and being in a joyful place. This image became the central focus of the practice. He left the session feeling optimistic and excited to go home to practice his yoga.

By the second private session he shared that he was starting to understand that his addiction was deeply woven into his whole personality and the reason it had been so difficult to quit was that he liked who he was as a person better when he chewed. He had previously feared that that person only existed with the tobacco. We talked about the effects of withdrawal on our body and personality, and discussed the importance of realizing that effects of withdrawal are temporary. He expressed relief that the angry and agitated man under the influence of withdrawal was not his true self, but a temporary way of feeling. We discussed the concept of faith with regard to letting go of this fear and trusting that he would eventually feel like the person he wants to be without chewing. We refined the meditation practice to include some more gentle *asana* with the intent to make the practice more holistic (for his secondary goals), being that it was the final time we were meeting.

Six-Month Post-Study Interview

When asked his current level of chewing, Mike stated that he had cut back by less than half the amount during the course and has maintained that amount since then. When asked what were the most useful tools throughout the course, he said “it was really the whole cumulative process that was so helpful.” He said while he didn’t always do the assignments given, the lecture and discussions about awareness of our patterns, thoughts, and beliefs had a lasting effect on his perception of his “relationship” with chewing. He described withdrawal as a physical and emotional “hunger,” and that yoga had been like water to quench this hunger. The experience of the weekly *asana*, *pranayama*, and meditation was also very transformative. He said it was more difficult to reach the same level of calm or depth when practicing at home rather than in class, but that he continues to regularly practice the breathing and *nyasam*. He does the personal practice on occasion (once every few weeks/months) and feels calm and alert when he remembers to do it. When asked what he learned about himself, he stated, “I learned that the mind and stress can have huge effects on long term health.” When asked if his thoughts or behaviors had changed regarding quitting chewing, he said that, mentally, he feels more confident and comfortable, and, physically, he feels less agitated and anxious when in moments of withdrawal. He stated that his original goals of finding yoga tools to become

more centered and calm had been met and that he feels confident that he will quit in the near future, instead of hoping to quit, as he did before.

Case Study 2 – Carol-Dean

Personal History

Carol-Dean has been smoking a half a pack of cigarettes a day for over 30 years. Although she lives alone she frequently sees her mother and sister, who do not smoke. Her work and social environments include people who smoke, although recently she has changed her social setting to be with non-smokers. She did not state if she had quit in the past. On the initial intake form, her stated goals and expectations for this course were that she wanted to learn to relax and to quit smoking. She had not had previous experience with yoga.

Weekly Feedback

Week 1 – She had joined a four-week cessation class at Tobacco Control two weeks prior to this course, which is where she heard of this study. She was soft spoken and appeared nervous, but she was strong in her intention to quit smoking. Since taking the Tobacco Control course she realized how anxious and lonely she had been, which played a part in her smoking addiction. Upon this realization, she knew this yoga class would be a good way to learn to relax and to be supported by other people.

Week 2 – She started journaling about her observations from the homework assignment “Becoming Aware of Our Patterns” (Appendix D). She shared that she has been depressed and lonely for a long time, and she found that the simple act of paying more attention to her mental, physical and emotional states, and to the mundane things she does during the day, made her feel better about herself, and less lonely. She also realized she thought about smoking a lot, and found she picked up the cigarette as a way to do something or to escape her sadness. She did practice the breathing nearly every day and said it made her feel good.

Week 3 – She said that last weeks discussion and homework assignment about deeper motivations opened her eyes to how many possible triggers there were and to how many triggers she had. Her main trigger, which she discovered at her Tobacco Control class,

was that smoking served as companionship for her. She was still regularly practicing her breathing and enjoyed the addition of the *asana*. She said it “helps me relax.”

Week 4 – She stated that the act of labeling her triggers helped her to further remove herself from the form of cigarettes as a way to experience the different needs they were filling, and to see the needs for what they were. She even did an exercise at Tobacco Control where she wrote a “breakup letter” to her cigarette. She said that the process of writing the letter and being a part of this group gave her the strength to cut down to half of what she regularly smoked. The yoga *asana* and *pranayama* practices further helped her to relax from the anxiety of withdrawal.

Week 5 - She announced that this week things finally started clicking for her and that she had been off cigarettes for three days. She claimed that she was finally through with “this controlling habit.” She continued to practice her yoga regularly.

Week 6 – She said she had been able to stay off cigarettes and feels great. She keeps the breakup letter and re-reads it as a reminder of her commitment. She still has regularly been practicing the yoga and said it helped her immensely when she felt increased anxiety and loneliness. I suggested that the breath could be her new “friend” and she liked that idea.

Week 7 - She did not come to the seventh class so there was no verbal feedback for the preceding week.

Week 8 – She announced that this course came at a great time for her because she felt she was truly ready to quit and the yoga helped give her relaxation skills and was the “perfect thing” during that process. She said she plans to make yoga a lifelong habit.

Private Sessions

We had our first private session in the sixth week and the second session one week after the group sessions concluded. Other conditions she was working with were: depression, high blood pressure, cirrhosis of the liver, right foot and low back pain, and arthritis. The primary goals of the session were to address her initial goal to learn to relax when dealing with withdrawal symptoms, and secondary goals to address her pain, sleeping problems, and depression.

In our first private session Carol-Dean was able to express in more depth her views on her addiction and on the effects of the course. She shared that she had been realizing for quite some time how lonely she was and how much smoking served as companionship for her. Particularly on days when her stress levels were high, she found she did not have a person to vent to or activity to let out her frustrations. Her cigarettes had always been there for her instead and she got into the habit of going to them to relax and to comfort her from the stressors of life. Once she started to label her smoking habit as a “friend whom she could break off the friendship with” from her classes in Tobacco Control, she felt something within her click. This prompted a discussion about the concepts of nonattachment and letting go. She stated that the “click” she felt was herself detaching from the form of a cigarette as a companion, which helped her to physically stop the behavior of smoking. However, she revealed that not smoking was mentally still a struggle for her. We decided on a simple and relaxing meditative practice around the concept of “letting go” with very gentle *asana*. The practice was created to address her primary goals of relaxation and learning to let go, and to address her secondary goals of pain relief, sleep aid, and depression. We talked about invoking an image of the moon over water, which was to provide nourishment for her, and support to let go. This image became the central focus of the practice. She left the session feeling optimistic and “refreshed.”

By the second private session she shared that she loved her practice and had been doing it every night. She reported that the practice was helping her to fall asleep more easily. She described it as an increased ability to “let go into sleep.” She also shared that she was starting to realize deeper fears of not being able to replace the feeling of companionship with anyone/anything else because she feared she was not worth the love. While saddened by this thought, she expressed an optimism that she was starting to understand her depression and feelings of loneliness, and that she now finally believed she would soon be able to move past it by learning to “let go of the past and let go of the fear.” In fact, since the last private session, she noticed that her relationship with her mother and sister was improving, which she attributes to her quitting smoking and to her ability to let go. We refined the evening meditation practice to include some *nyasam* and chanting with the breathing and visualizations. We also added a short morning practice

with a visualization of the sun and *nyasam* with breathing. This would help her start the day with the intention towards self-nourishment to carry her through the day.

Six-Month Post-Study Interview

When asked her current level of smoking, Carol-Dean stated that since the program, she continued to no longer smoke. Upon reflecting on the most useful tools throughout the course, she stated that the consistency of meeting weekly, identifying her triggers, learning to breathe correctly, and guided relaxation were the most helpful. She also loved her individualized practice from the private sessions and continues to practice at home to help with the “general anxieties of life.” The class discussions and weekly assignments gave her “a lot to think about,” helping to sort through her anxieties and fears. She realized these were the deeper triggers compelling her to smoke. She learned how restless she was and how hard it is to let go and stop frequently dwelling on her problems. She stated that learning to meditate and relax with the yoga practices were among her keys to successfully maintaining her ability to not smoke. Some major behavior changes that she noted, aside from quitting, were that she started to eat more vegetables and adopt healthier daily habits. She also stopped going outside for smoking-breaks at work and stopped spending time socially with people who smoke. Instead, she spends more time with her sister and mother who support her life-style changes. She stated that her original goals of quitting smoking and learning to relax had been met and that she is confident that yoga will continue to be a lifelong practice.

Case Study 3 – Herb

Personal History

Herb has been smoking between half a pack and a pack a day for over 30 years. He has quit many times, for as much as a couple of years at a time, but he always returns to smoking. There is no family history of smoking, no one in his household or work smokes, but he is around smokers in typical social settings. On the initial intake form, his stated goals and expectations for this course were to relax, to learn how to breathe, and to gain direction and focus. He has had previous experience with yoga, taking just a few classes in the past.

Weekly Feedback

Week 1 - Herb was very grateful for the opportunity to be a part of this study. He shared how smoking has been such an integral part of his life and has been a part of defining who he is as a person. He said he was not sure he would be able to quit long term, but that he was interested in how yoga might help.

Week 2 – Of all the volunteers, he was the most thorough with the weekly assignments. Every day, he said, he was diligent in observing his patterns and writing them down. In class, he shared that this was a profound activity for him and that he was learning that “awareness is the key.” He also enjoyed and practiced the breathing daily.

Week 3 – He said that he was still diligent in his self-reflections and dictations and that he was realizing more and more that his smoking was a reflection of an “inner crisis” that he had not yet identified. He continued with the breathing practices regularly but was not as successful with the *asana*, doing it only twice.

Week 4 – He said he could feel that the breathing helped to quiet his mind and keep him calm and focused. The idea that smoking served a deeper function was not new to him. However, the weekly meetings, handouts, and general guidance helped to support him and continually redirect his focus on the “deeper current of motivation,” which he said he had been avoiding for some time.

Week 5 - In our discussion, he stated that the most inconvenient thing about smoking was that it was socially unacceptable and increased his feelings of being an outcast, which affected his self-confidence. He felt the tolerance for smokers was low, putting pressure on him to quit. He was enjoying this class because now the focus was internal, building an “internal pressure to quit” rather than external. He continued to do the breathing practices and particularly liked the *nyasam* added that week.

Week 6 – He reported that he wrote his list of reasons to quit and kept it with him everywhere he went. The constant reminders increased his self-awareness, which increased his ability to not give in to every craving. He also found it helpful to incorporate the image of himself as a nonsmoker during the breathing practices, again reinforcing his internal strength.

Week 7 – He shared that he has been quite disconnected from his body for many years. The concept of “physically” replacing the act of smoking with other behaviors to affect deeper states of being was a challenging but useful concept to try.

Week 8 - Reflecting upon the past eight weeks, he noted that these classes were “like a sanctuary” where he could “wipe clean” his old patterns and “be held in the supporting image of a new way.” He said he “could almost believe it is possible when I am here.” He stated that he wished the classes would continue as he felt that he was just in the middle of a great transformation.

Private Sessions

We had our first private session on the seventh week and the second session one week after the group sessions concluded. Other conditions Herb was working with were low back and shoulder tension, and kyphotic posture. The primary goals of the session were to address his initial goals of finding deep peace, grounding, and direction, and secondary goals to address the pain and range of motion needs.

In our first private session Herb was able to share more about his personal life. After years of practicing as a monk he decided to live without a home or a car. He shared that he has never been too concerned with the physical realm, stating that his smoking habit evolved out of this mindset. Yet he was experiencing “unrest and demoralization” due to his inability to quit smoking. He saw the inability as a lack of “self-mastery.” He thought yoga might help him because he understood yoga to be a way of achieving self-mastery. What he came to realize during the eight-week course was that he had been denying the presence and worth of his body, and the view of himself as a physical being. We discussed the concept of *tapas* in the *Kriya Yoga* System (Yoga of Action) and he further revealed that he was ready for “action planted on this earth.” We decided on a simple meditative practice with the focus on gentle *asana*, *nyasam* and chanting. The *nyasam* with breathing that we did from class had already been very helpful to him, so it was woven through the practice along with chest-opening *asanas* (lying and seated), which were intended to help improve his kyphotic posture. He was impressed by the *cakra* model as a way of learning to become more attuned to one’s body, so we chose to chant the Sanskrit word “LAM”, which is the seed sound for the root *cakra*, symbolizing

the earth and grounding. This sound became the central focus of the practice. He left the session feeling optimistic that this practice was well suited to his needs.

By the second private session he shared that he had been practicing regularly and had been successful with day to week-long bouts of not smoking. He then shared some insights on the emotional struggles he felt his chosen lifestyle brought him. He expressed remorse at letting important relationships go in his life and how smoking had further influenced feelings of being an outcast. We discussed the *Panca Maya* model reflecting on the “physical body,” which he had been working on embracing and re-connecting with in his practice, and the “joy body,” or *ananda maya*, which was the deepest layer. We discussed the concept of relationship at this deepest layer – relationship with divine, with self, with loved ones, with life, and with his smoking habit. He concluded that continuing to acknowledge and bring balance to all of his “layers” would help him find the direction, deep peace, and self-mastery he was searching for. He felt confident that his dependency on smoking would drop away as these things evolved. We refined the meditation practice to include a warrior *asana* sequence with the dual purpose to ground him as well as to open his chest. We then added affirmations that he helped to develop, which he chanted along with *nyasam*. The sound “LAM” was still woven into the practice as well. He seemed very satisfied with our discussion, with the practice, and where this “yoga journey” had brought him.

Six-Month Post-Study Interview

When asked his current level of smoking, Herb stated that during the course he had quit for weeks at a time and that he was sure he had quit for good. But currently he was back to smoking again, although less than when he started the course. Upon reflecting on the most useful tools of the course, he listed the breathing practices, the consistency of meeting weekly, the self-reflection, and the private sessions. He said they were “strong motivations to augment my initial promptings.” During the course he noticed patterns around his thinking had changed due to his increased self-understanding. The assignments, discussions, and practices all helped to take his awareness to a deeper level where he felt he was able to access different choices than smoking. He said he still has “more space to make choices more often.” He added that he loved the experience of the

weekly *asana*, *pranayama* and meditation, and that he would continue to take the course indefinitely if it was offered. He also enjoyed the home practice but had a more difficult time sticking to it, due partly to his living circumstances and due to his lack of internal motivation. He said he currently does parts of it throughout the week. When asked what he learned about himself, he said that he believes quitting is possible, yet at this point it seems he requires outside support, such as this course or a friend. He stated that his original goals of learning to breathe, relax, and find direction had been met. His direction included continuing to use yoga to bring balance and self-understanding, which he believed would eventually help end his smoking habit.

Case Study Analysis

As can be seen from the above case studies, each person had a very personal and individualized experience. Each of the participants highlighted in the case studies achieved success towards their personal goals and benefited from the objective of the study, which was *to show that yoga can be used as a complete therapeutic program on its own, to guide in changing one's perceptions relating to smoking while creating self-empowerment toward successful smoking cessation.*

In comparing the experiences of the three individuals in the case studies, while much of the experience was individualized with different goals met, there were also similar experiences and outcomes. One similarity was that each of the participants identified and confronted deeper fears throughout the process of the course. Identification of these deeper fears enhanced understanding of their motive to smoke. This allowed them the ability to further separate the form of smoking from the deeper need. The result for all participants was less dependence on the act of smoking, and increased ability to choose different alternatives. The process evolved from the intellectual understanding to the application of yogic concepts in their own lives, by using the tools and practices of yoga.

Another common theme was that yoga helped each of them to further identify and manage their stress. Mike and Carol-Dean each identified as cause for stress external factors such as work and the general anxieties of life, which often times triggered the need to smoke. The relaxation techniques of deep breathing, visualizations, *nyasam* and *mantra*, which were learned in class and practiced at home, were used to decrease or

replace the act of smoking/chewing, while helping to manage the symptoms of stress. Herb identified internal factors such as lack of direction and disconnection with his body as cause for his stress and found the yogic practices of *pranayama*, chanting and grounding *asana* to help him manage his symptoms of stress. Continued use of the yoga tools to manage stress will likely contribute to the ability to eventually quit smoking in the long term.

A third common theme was an increased confidence in themselves and their ability to eventually quit, or in Carol-Dean's case, to stay smoke free. This deeper confidence is important in that it supports one's will and desire to do the hard work of changing the conditioned patterns of smoking, particularly over the long-term.

By analyzing each participant's individual and similar successes, it can be concluded that through involvement in this study, each participant experienced yoga as a positive influence on the process of quitting smoking, and that each experienced positive perception shifts around their smoking habit. Each of the other remaining six participants had similar successes, which are summarized in the post-study interview feedback analysis below.

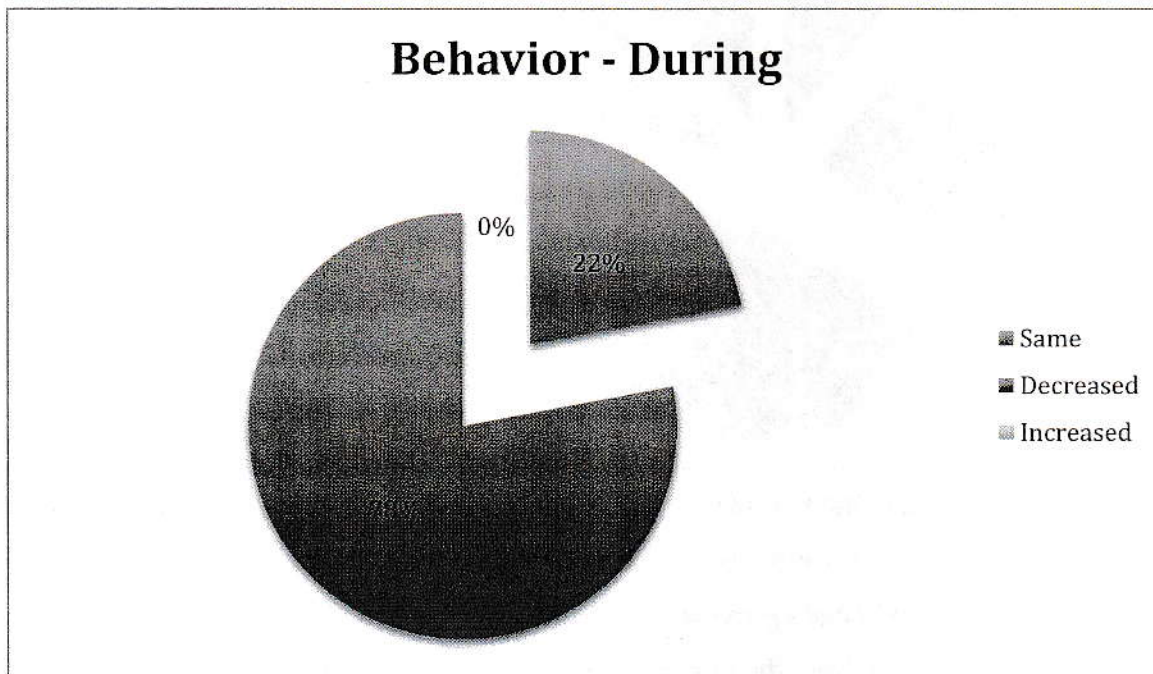
DATA FROM INITIAL QUESTIONNAIRE

Of the 30 initial participants, 15 questionnaires were received with the following personal history data: 14 participants smoked at the start of the study while one participant chewed tobacco. Nine had made previous attempts to quit, 2 had not made attempts to quit, and 4 did not state an answer. One participant smoked more than a pack a day, 3 smoked a pack a day, 7 smoked between ½-1 pack a day, and 3 smoked less than ½ a pack a day.

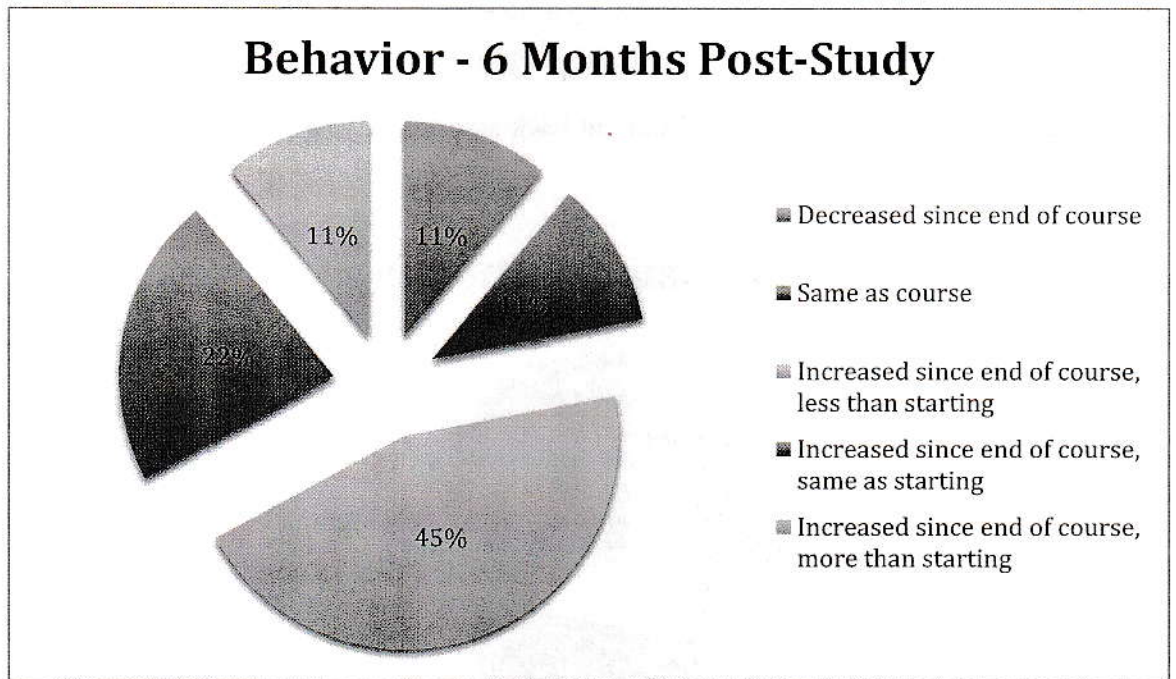
GRAPH ANALYSIS

Graph #1 is labeled "Behavior-During." This graph shows the behavioral changes comparing participant's smoking intake before the course to their smoking intake during the eight-week course. It was charted whether participants' smoking behavior stayed the same as before the course, whether their smoking behaviors decreased, or whether their smoking behavior actually increased. Of the nine remaining participants, seven either cut

back or quit all together, while two continued with the same behavior as before, and zero participant's increased their smoking behavior. Of the seven participants who decreased smoking input, two quit completely, four cut back significantly (over half), and one cut back minimally.



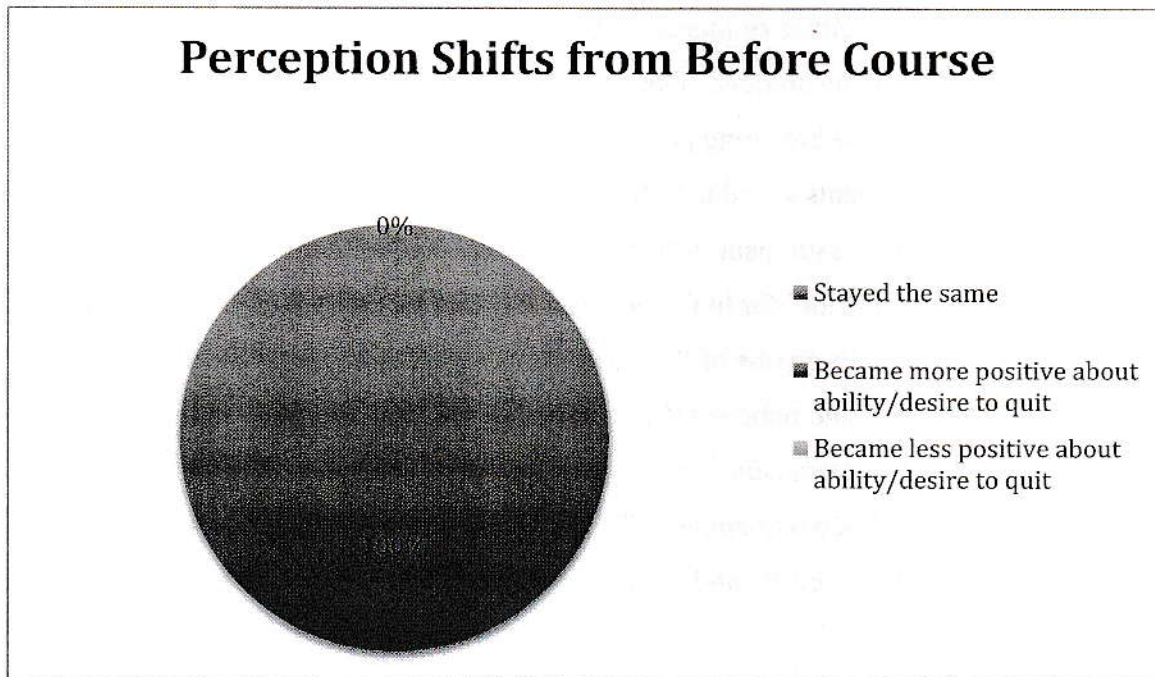
Graph #2 is labeled "Behavior – 6 Months Post-Study." This graph shows the long-term effects of behavioral changes in participants of this eight-week study. The graph shows that one participant's smoking intake decreased since the completion of the course, one participant's smoking intake stayed the same as behaviors during the course, four participants' smoking intake increased since the completion of the course but was still less than before the course, two participants' smoking intake increased from the completion of the course but was the same as before the start of the course, and one participant's smoking intake increased both since the completion of the course and before the start of the course.



An analysis of the first two graphs shows that participants had a higher rate of success during the course than six months post-study. This could be due to the fact that the presence of the weekly class provided consistent motivation and support. This is supported by feedback from the post-study surveys, showing that the consistency of meeting weekly was among one of the most effective aspects of the study. Nevertheless, graph #2 demonstrates a degree of long-term success in that 67% of the participants continued to have increased success six months post-study compared to their behaviors before the study.

Graph #3 is labeled “Perception Shifts from Before Course.” The data collected for this graph is six months post-study. This graph attempted to show the long-term effects of positive perception shift regarding one’s ability/desire to quit smoking. As can be seen on the graph, 100% of the total of nine remaining participants felt they had a positive perception shift in their ability and/or desire to eventually quit smoking. This is interesting when compared to the first two graphs charting behavior. While the actual behavior to cut back or quit smoking declined during the period six months post-study, the perception shift from before the course positively increased. One participant of particular interest noted in the post-study interview that due to current stressful life situations he found himself smoking more than before the course, yet he still felt positive perception shifts towards his eventual ability to quit smoking. He stated that he knew this

stressful time would pass and that he believed he had the tools and desire to quit in the future. These findings support the success of the proposed objective of the study.



To summarize, as seen from graph #1, there was a 78% success rate of decreased smoking behavior during the course while graph #2 showed 22% maintenance or further decreased smoking behavior six months post-study. Graph #3 shows 100% of the participants reporting a positive perception shift six months after the course. Long-term perception shifts resulted from this study yet long-term behavior shifts were less substantial. Due to the positive influence on behavior during the course, it can be concluded that a longer course would be beneficial to the success of the participants, both in positive perception and behavioral shifts.

SIX-MONTH POST-STUDY INTERVIEW ANALYSIS

Along with the information charted in the graphs, feedback from the nine final participants' post-evaluations showed several findings. *Pranayama*, the consistency of meeting weekly, and emphasis on self-reflection were the most effective aspects of the study, while the home assignments were noted as least beneficial.

Each participant noted that the breathing practices learned in class and prescribed in the homework were often effective, such as substituting "Breathing Breaks" (Appendix I) at work instead of smoking breaks. The breathing techniques, particularly in combination

with the *nyasam*, helped to postpone or fully counter smoking cravings, and helped reduce stressful situations, which would normally trigger a need to smoke. A few of the participants reported feelings of increased health, energy or focus when they regularly practiced the breathing techniques. Others reported feelings of calm and the ability to “let go” as a result of the breathing practices.

Most of the participants stated that the consistency of meeting weekly was an effective part of the study. One participant went further to explain that the presence of the weekly classes was like “an anchor” for him, keeping his priorities focused on the intention to change his behaviors. Everyone of the participants stated that they would take the course again if it was offered, and believed it would further contribute to long-term success. In addition to the weekly consistency, participants pointed to the group support element of the class (in Sanskrit known as *sanga*). They noted that it helped them to support one another, to keep accountability, and as one participant stated, was “a reminder of the evils of this unnecessary habit.”

The emphasis on self-reflection was a major component of this study, as it is one of the main tools of yoga. Here it was used as a source for further understanding smoking addiction. Many of the post-study evaluations cited the “process of self-reflection” and “increased awareness and understanding” as vital parts of their positive perception shift in seeing their smoking addiction in a new and more manageable way. Many of the homework assignments involved increasing one’s skills in self-reflection such as observing patterns throughout the day, observing triggers to smoking, and observing one’s reaction to triggers or withdrawal symptoms. The weekly lecture, group discussion and yoga practice also emphasized an element of self-reflection, as the participants not only learned the information given, but then processed it by reflecting on how that information pertained to them and their unique situation. They had the opportunity to further process this information by verbally sharing and discussing their experience, all part of the process of “self-reflection.” A few participants commented that the process of self-reflection and understanding continues to evolve, informing their choices around smoking and building the confidence to one day be ready to quit smoking.

Participants noted that the homework assignments were among the least effective parts of the course. The assignments were in addition to a home yoga practice and were

optional, so many of the participants did not do them. Lack of time may have been a contributing factor to why participants chose not to participate in the assignments, particularly because the participants were also asked to do a daily home yoga practice. Or perhaps the term “assignment” felt too demanding for some participants.

This feedback about the need for assignments was contradictory because the post-study interviews also reflected the effectiveness of tools of self-reflection, which included the homework assignments. In reflecting on the contradictory information, I believe it might also be due to the fact that the methods for charting and analyzing both the homework assignments and the home yoga practice were not in place. This made it difficult to distinguish between them in the post-study interviews, as well as to why they were perceived as less effective. Was it because people did not have the time to do them, was the content of the assignments not pertinent, was the home yoga practice not suited correctly to the individual? In my opinion, the assignments were an important part of the study. Along with the weekly discussions, they helped to build deeper self-observation and reflection skills throughout the week as well as motivation to practice the individualized home yoga practices. They were helpful indirectly, giving more weight to the power of the tools being used. Likewise, I believe the home yoga practice was a key component in individualizing and empowering the participants’ experiences. Clarifying the measurement tools would likely have resolved this contradiction.

Overall, the post-study evaluations showed that the participants had a positive experience in the study and learned much about themselves and their relationship to smoking. They felt that both their behaviors and ways of thinking had been challenged and changed for the better. While it was more difficult for the behaviors to stay changed over time without the presence of a weekly class, it was more consistent that their thoughts and perceptions around smoking had significantly shifted.

FUTURE CONSIDERATIONS

In retrospect, while the overall function of this study proved to be beneficial, future attempts at using this approach would benefit from refinement in the following

categories: data collection throughout the study, improvements made from participant feedback, and methods of increasing participant retention.

With regard to collecting measurable data, it was challenging to rely on the participants to follow through with turning in written information. I thought that if they were asked to fill out too much paperwork, they would become disinterested from the study all together. At the beginning of the course, participants were repeatedly asked for intake and questionnaire forms. It took weeks for a number of the forms to be returned after multiple reminders, while many were not returned at all. Most of the forms not returned were from people who eventually dropped out of the study. Post-study evaluation forms also proved to be a challenge to collect, so phone interviews were conducted instead.

To improve data collection in future studies, a few minor changes would be made. Since much of the data was collected from discussions, each group and private session would be audiotaped to document the discussions and verbal feedback. Time would be added in class for questionnaires to be filled out, rather than taken home, to ensure the information was collected. A pre-study orientation would further help to resolve this issue, for the purpose of filling out and collecting the initial surveys, and clarifying expectations which would include the amount of time expected to invest outside of the group class, participating in weekly data collection (to be filled out and collected in class) and occasional questionnaire/assignment collection. To further validate the study in the scientific community and further confirm outcomes, it would also be beneficial to collect objective data and weekly subjective questionnaires. Examples may be to monitor home practice frequency and effectiveness with weekly questionnaires, to monitor cigarette consumption with questionnaires and/or oxygen measurements, and weekly questionnaires about physical, mental, and emotional progress. A survey on the last day of the study as well as a three month and one year follow-up could also add further insights.

Feedback from the participants' post-study evaluations showed many findings, which could lead to further refinement in future studies. As brought up in the results/discussion section, the use of and collection of assignments would be modified. Instead of calling them "assignments," I would refer to them as "suggested home study," collecting only

one “assignment” called “Seeing Beyond My Triggers” (Appendix E), which I believe would still be helpful to further individualize the private sessions. I would narrow the number of suggested home study assignments to one per week (eight total as opposed to eleven) and I would simplify the content as per participant feedback, putting more emphasis on the *pranayama* exercises and removing some of the other list-making and processing exercises.

It could also be concluded from the feedback presented in the graphs, that a longer course would support the success of long-term behavior change along with the positive perception shift. This is mirrored in the feedback, which shows 100% interest in continuing the course if it were offered. It would be interesting to double and triple the duration of the current study (16 weeks and 24 weeks) and then compare the findings to see if, in fact, the presence of the weekly classes provided substantial motivation and support towards behavior change.

Participant retention proved to be one of the major limitations of the study. The study started out with 30 participants and decreased to nine. Part of this could have been prevented by starting with a larger number. This could have been achieved by increasing the time used to advertise from six weeks to sixteen weeks. More interaction with existing programs, such as Tobacco Control, may have been helpful in recruiting more participants. As discussed above, having an orientation and a more clear list of expectations may have better prepared the participants for how much time they needed to invest, improving retention. Another retention idea: an incentive for those who complete the program, such as a discount on future yoga classes. One final thought is that perhaps the people who dropped out were not influenced by the yoga in a positive way, and/or were not *ready* to experience a perception shift. It is also important to note that had they stayed with the program, perhaps the 100% positive perception shift of the nine remaining participants would be lower.

With the above stated refinements, perhaps more future participants would find the study accessible. To make the study more valid in the scientific community I would suggest making many of the improvements discussed above, including using a double-blind test group.

CONCLUSION

This study served as a unique contribution to the research on smoking cessation programs using yoga. Rather than presenting yoga as a complementary treatment, solely using the common practices of *pranayama* and *asana* to manage the symptoms of smoking, it went further, presenting yoga as a complete therapeutic system. It not only addressed the symptoms of smoking, but also the cause. We did this by offering the full variety of yoga tools from which the participants could choose and individualize practices. And most importantly, we used the philosophies of yoga found in *The Yoga Sutra of Patanjali* to help people identify the deeper reasons for why they were smoking, and to assist them with the process of disassociation from old patterns and development of new ones. Sutra III.38^{xliii} illustrates this process of disassociation elegantly:

Bandha karana saithilyat pracara samvedanat cittasya para sarira a vesah

It explains that our identification with these deeper reasons is the cause of our bondage to these unwanted behaviors (*bandhakarana*). If we can begin to release (*saithilyat*) the cause of this bondage, our minds have great potential to more clearly see ourselves (*pracara samvedanat cittasya*), viewing ourselves and the situation differently (*parasariravesah*).

Our very image of ourselves is tied in with our addiction, and when we can release that image, our fundamental view of ourselves changes. Only then is a new image of ourselves available for us to create, causing our associated behaviors to more easily change for the long-term. As the woman who originally inspired me to begin this study experienced, once she identified and let go of the deeper reasons which were tied to her image of herself, her cravings had less “power” because she became a new *her* so to speak. This perception shift led to increased alternate choices and decreased dependency on smoking.

As seen from the results section, each participant who completed the study also experienced perception shifts around smoking. They reported positive outcomes such as increased self-understanding, decreased smoking behavior, attainment of personal goals, and positive perception shifts about their ability or desire to eventually quit. The common experiences of the three participants highlighted in the case studies further

reflect the initial process of dissociation discussed in Sutra III.38. They each learned to identify and confront deeper fears pertaining to their relationship with smoking, they expressed better understanding of their motive in relation to smoking, they learned to identify and manage their stress in alternate ways, and they found increased self-confidence in their ability to eventually quit, or in one participant's case, to stay smoke free. The objective of this study has clearly been proven effective by the participants' successes, which was *to show that yoga can be used as a complete therapeutic program on its own, to guide in changing one's perceptions relating to smoking while creating self-empowerment toward successful smoking cessation.*

In summary, this study's enquiry of self-understanding and self-perception gives insight to the complex nature of addiction and the deeper reasons for which we become "bound." The process of untying this bondage is a very personal and often times a difficult journey. Yoga, when used in its entirety and under the guidance of an experienced teacher, has the potential to empower and transform within these deep levels found in addiction. Hence, this served as a useful pilot study for looking at both the education and practice of yoga as a means to shift perception around smoking. It demonstrated the use of the system of yoga at large to structure the process of the program itself. While some inherent limitations within the study were identified and are reviewed, the successes of this study proved to be beneficial, presenting some exciting results, which are sure to advance the use of yoga for smoking cessation in future programs.

Appendix A: Intake Form

Name: _____ Phone: _____ DOB: _____

Occupation: _____ E-mail: _____
Digestion: good irritable Energy Level: low moderate good

Sleep onset: good irritable Sleep duration: good irritable
Blood Pressure: _____ Resting Heart Rate (taken upon waking): _____

Menstrual Cycle: good irritable Delivery: normal cesarean # of children: _____

Forms of exercise & how often: _____

Current Medical Condition/ Needs/ Concerns: _____

Current Medications: _____

Please list activities/ positions that aggravate your condition(s): _____

Health History: _____

Father History: diabetes, cardiac problems, cancer, depression, other: _____

Mother History: diabetes, cardiac problems, cancer, depression, other: _____

Other info pertaining to your physical and/or emotional health: _____

Expectations/ Goals: _____

Appendix B: Yoga for Quitting Initial Questionnaire

Do you currently smoke cigarettes/ chew/ use another tobacco product? Please specify which product.

If not, how long ago did you quit, what product did you use, and what form of quitting did you use?

How much do you (or did you) smoke?

How long have you smoked/ chewed/ etc (or how long did you if you recently quit)?

Is there a history of smoking in your family?

Does anyone in your household (spouse, roommate, etc) smoke?

Do people at your place of work smoke?

Do people in your typical social settings smoke?

Please list the reasons you want to quit:

Have you had experience with yoga? If so, what style and for how long?

Expectations/ Goals:

Any other info (use back if needed):

Appendix C: Yoga for Quitting Exit Survey

Name: _____

1. Smoking Intake: a) Did your smoking intake during the course: stay the same as before you started, decrease or increase? _____

b) 6-months after the course has your smoking intake: decreased further / remained the same as during the course / increased from the conclusion of the course but still less than the start of the course / increased from the conclusion of the course but the same as the start of the course / or increased from the conclusion and the start of the course? _____

2. What did you find most helpful from the course? Please circle as many as apply:

- | | | |
|------------------------------|-------------------------------|---------------------|
| identifying your triggers | physical yoga practice | breathing exercises |
| self-reflection | consistency of meeting weekly | group support |
| private session and practice | homework assignments | |
| other _____ | | |

3. Explain how the above was helpful for you? _____

4. Did your thinking change throughout the course? How? _____

5. Is it still changed? Explain. _____

6. Were your behaviors changed throughout the course? How? Did you cut back on smoking, did you quit completely, etc? _____

Appendix C: (cont.)

7. Are your behaviors still changed? _____

8. What did you learn about yourself? _____

9. Would you take a weekly Yoga for Quitting class if it was offered? _____

10. Were your goals/expectations met from the beginning of class? _____

11. Any other final thoughts? _____

Appendix D: Becoming Aware of Our Patterns

Our day is filled with unconscious behaviors which have been conditioned over time - like immediately hitting snooze (my personal favorite), brushing your teeth, checking your email, turning off the lights before you leave a room, etc... We all have both positive and not so positive habits, or as yoga philosophy call them, samskaras. This exercise is to help you simply start noticing your daily habits, and then taking it one step further, writing it down. You are not trying to change or judge, just observe. This act of acknowledgement itself is setting the foundation to begin to break down undesirable, unconscious behaviors.

Please try to do this every day - it is for your benefit. You will forget, because this exercise itself is a new habit, but even if you remember to notice just one thing every day, you are already strengthening the same mental muscle it takes to break your addiction to smoking, and building the same mental strength to remember why you want to quit.

How do you wake up (e.g. sunlight, alarm clock, etc)/ What is the very first thing you do?

What is your mental state upon waking? / What are your first thoughts?

What behaviors did you observe within the first hour of waking? (eg. Turning on the light, having a cigarette, getting the paper, showering, practicing yoga, etc)

What thoughts did you observe during the first hour of the day?

What habits/ rituals did you notice throughout the day? (get as specific as you can in your descriptions, e.g., around food, driving, route to work/store, certain people, moods, time of day, etc)

What behaviors/ thoughts do you notice the last 3 hours of the day?
The last 30 minutes before bed:

How many times did you think about wanting to smoke?

How many times did you actually smoke?

How often was smoking part of your daily routine?

Was it difficult to add the Breathing Exercises to your daily routine? When did you think about them and/or do them?

Was there anything surprising or interesting you learned from your observations? Do you notice certain patterns? Other thoughts?

Appendix E: Seeing Beyond My Triggers

The act of questioning and self-reflection is a hugely transformative tool, called svadhyaya. It is just the beginning in attaining clarity, giving you the eventual power to disassociate yourself from your patterns of thought and behavior, stopping the cycle of unconscious reaction associated with smoking.

Try to answer these questions as honestly and with as much detail as you can. They are just to get you thinking about and observing the full spectrum of experiences associated with smoking. Knowing the scope of your deeper motivations is a huge step in finding out not only why you continue to smoke even though you don't want to, but also in finding other actions to take the place of smoking.

When do you crave your first cigarette of the day? Why do you enjoy it?

Is the act of smoking relaxing for you? Is it a chance to have personal space, quiet time? Explain.

Do you enjoy the act of breathing deeply? What do you notice about the inhale and exhale when you smoke?

Is smoking a sensual experience for you? Do you enjoy the smell, taste, feeling of holding something in your hand? Do you like to watch the smoke change shape? Explain.

Do you smoke when you are stressed, anxious, bored, unfocused, procrastinating from doing something else, etc? Explain how you feel during and after your cigarette?

Is smoking social for you (friends, colleagues, family, etc)? Does smoking positively influence these relationships? Explain.

Do you smoke when or after you drink or eat? Why? How does it enhance/ affect that experience?

Do you find smoking helps to transition or bring conclusion to certain events in your day/ life?

Do you notice any other triggers that follow a pattern, like a certain person always making you crave to smoke, a certain time of day like a regular smoke break at work, or a certain place like your car, etc? Why do you think you crave to smoke during these moments?

Do you smoke to avoid the negative feelings of withdrawal? Explain the feelings.

What do you feel like, physically and/or mentally while you are craving a smoke? once you are smoking? once you have finished smoking?

Appendix F: Labeling Each Craving

Understanding the rewards of smoking can give you power to separate the act of smoking from the results of smoking. Once you can separate the act (form) with the desired result (function), you begin to see more clearly. You will find that there are other ways to achieve your desired results. Other rewarding options are available that can replace the act of smoking.

Now you will go through your day and simply label each craving/ smoke. This will help you to learn to clearly see it for what it is on the deeper level.

You can choose some of these single words or phrases, or write it out as in the example below:

'Stimulation'

'Relaxation'

'Time with Self'

'Time to think'

'Time to zone out', etc

'Time with friends'/ spouse/ etc

'Avoidance of withdrawal symptoms'

'Avoiding work'

'Procrastination' or as a means of distraction from something else

'Bored'

'Hungry'

...and the list goes on. Create your own labels and add them to the exercise below:

Example:

Wednesday

1 – 7am, my mind needs help waking up, helps me focus and plan the day. plus it is a nice way to start of the day with time to myself. The deep breathing feels good too.

2 – 10:30am, need a break from work. I feel shaky, irritable, etc. if I don't have one. Plus, I like the excuse to go out side for a few minutes to get away.

3 - 1pm, after lunch it helps me to not feel hungry anymore and digest.

4 - 3pm, sleepy/ unfocused at work. I need some stimulation and a small break.

5 - 5pm, in car going home. Helps me unwind. Plus I always smoke in my car.

6 - 8pm, my husband also smokes and this is part of how we spend time together, plus I always smoke with a drink – it helps me to relax.

Appendix G: The Functions of Yoga

Physically-Structurally:

- Creates muscular balance
- Improves tone of muscles and organs
- Increases joint mobility and function
- Improves posture
- Creates more space in chest and abdominal regions, allowing for better visceral function
- Increases bone density
- Increases diaphragmatic mobility and lung capacity

Physically-Physiologically:

- Induces the relaxation response (parasympathetic nervous system)
- Lowers heart rate
- Lowers blood pressure by dilating arteries
- Increases blood flow to the body, allowing for more oxygen uptake and toxin removal
- Slows respiration rate
- Decreases the level of cortisol (stress hormone) into the system
- Increases immune system responsiveness
- Improves digestion
- Improves cardiopulmonary system
- Increases sensitivity of sensory systems

Mentally/ Emotionally:

- Improves mind-body coordination and awareness
- Reduces pace and volume of thoughts (quiet mind)
- Increases one's focus/ concentration
- Increases feelings of peace, safety and wellbeing
- Decreases feelings of aggression, anger, worry

Spiritually:

- Teaches one to listen to intuition/ inner guidance
- Supports one's goals; chosen path
- Helps to improve one's relationships (with others, self, divine)
- Helps to reveal and give voice to deeper self/ essence

Appendix H: Understanding Withdrawal Symptoms

Understanding what is happening physiologically to your body during withdrawal can give you the power of choice because once you start associating the withdrawal symptoms with positive changes in your body, you will be able to more easily make the choice to allow the symptoms to take their course.

At the body level, carbon monoxide, one of the 4,000+ chemicals found in cigarettes, attaches itself to your blood (the hemoglobin) and makes it so less oxygen can be transferred through your blood. This lack of oxygen on the cellular level deprives body tissues, including heart, muscle, even bone, from receiving the nourishment it needs from the oxygen. In a way this is like starving or suffocating your body. It is important to remember that part of the withdrawal process is eliminating the carbon monoxide from your system (a 12 hour process). No matter how bad withdrawal makes us feel, it can make you feel good just remembering this fact and enjoying all the oxygen rich blood moving through you!

The brain level is where the discomfort of withdrawal is really centered, even if you experience bad sensations through your whole body. Your body is used to a normal dose of nicotine, which binds to pleasure receptors in the brain (like dopamine and acetylcholine) causing feelings of alertness and relaxation. Your brain becomes dependent on this pleasure pathway and begins to understand this state as normal, so when you decrease the amount of nicotine coming into your body you all of a sudden don't feel "normal", in fact you feel quite awful – unfocused, irritable, etc. The thing is, there are many other natural ways to increase these pleasure pathways, like exercising, deep breathing, meditating, laughing, simply becoming aware of pleasant sensations (like good music, tasty food, a beautiful sunset, a massage, etc) but when we smoke, we desensitize our system. Once we are to the point of addiction, the neural pathways to nicotine are stronger than to other forms of pleasure. The good news is that when we start to cut out the nicotine, that pathway eventually loses its strength and as you develop the other pathways, they become stronger, creating pleasure, alertness and relaxation naturally.

An interesting fact is that the Sanskrit term for yoga posture is asana, which translates as alert and relaxed. Sounds like the perfect antidote!

Appendix I: Re-patterning through Breathing with “BREATHING BREAKS”

1) Breaking Withdrawal Discomfort -

In the heat of the moment, when you first get a craving to smoke or are going through sensations of withdrawal, stop, breathe and observe sensations – notice the physical and mental discomfort associated with withdrawal and like our physical yoga practice breathe in – observe, exhale – let it go

Continue to label the trigger

Then breathe again

2) Developing New Patterns –

Start noticing when you smoke, how long do you inhale, how long do you exhale? How long do you hold the breath? Do you notice a regular pattern? What is it?

If you have already quit or are trying to take more breathing breaks, see if you notice what breathing pattern feels best for you – do you tend to like to take deep inhales, or exhales or both?

Remembering why I want to quit

What is inconvenient about smoking?

Does smoking negatively influence your relationships? Explain.

What do you physically notice that is undesirable?

What do you mentally/ emotionally notice that is undesirable?

List possessions you have that smell like smoke (bed sheets, clothing, toothbrush, couch, car, etc):

Appendix J: Mapping Out New Form

Whether you realized it or not, you are already well on your way to becoming a life long non-smoker. We have been hashing through all the not so easy to see (and deal with) deeper beliefs and triggers, trying to get inside our deeper motivations – what they are and why we have them. What you are already in the process of doing is the hard part. Now that we have all of that information, we are ready to replace our old behaviors with new ones.

This weeks assignment is to create a list of alternatives to smoking based on what you learned about your deeper motivations, and coming from a deeper awareness about the image of yourself you are constructing. Some examples:

<u>Cigarette used for:</u>	<u>Will be replaced by:</u>
Digestion after a meal	Brushing /flossing teeth after a meal, deep breathing
Time to think	Breathing breaks and/or journaling
Stimulating my body or mind	Yoga, a brisk walk, push-ups, etc...
Relaxation	Yoga, a bath, foot rub
To relieve stress	Yoga, be in nature, talk to a friend, gardening, etc...
Boredom	Breathing, write a letter to a friend, walk, color, spending quality time with yourself or with someone you love, etc..
Self-destructive purposes	Loving and nurturing activities – time in nature, meditation, call a caring friend
Purposes we have yet to understand	any of the above, or anything you enjoy doing... no harm in trying

...and the list goes on. Get creative, yet also be realistic. Choose activities that you enjoy, or can see yourself learning to enjoy. The idea is to physically get you doing something, even if that means just consciously breathing deeply. The “physical” act not only replaces the old “physical” act of picking up a cigarette, going to the place you go to smoke it, and then smoking, but it also helps to work the “physical” sensations of withdrawal out of your system and helps to “physically” reset the neural pathways in your brain. This physical act is infused with your refined self-understanding and awareness of your deeper motivations. And most importantly, this process of self-discovery has led us back to our highest image of ourselves, reminding us not only of our highest potential, but to be patient and forgiving of ourselves along the way.

You have the power to change. You need knowledge, self-understanding, intention and a plan of action to carry it out. Making your own plan of action further perpetuates the internal strength it will take to continue this path. You can do it!

Appendix K: Long Term Change

These last 7 weeks have been spent observing, understanding, and deeply uprooting ourselves and our relationship to the act of smoking. We have identified triggers and deeper reasons for being held to a habit that we no longer want in our lives. We have made steps to set the intention to truly quit by redefining our image of ourselves as we wish to be and by establishing new behaviors, which support our goal to change. Last week we looked at the importance of *practicing* these new behaviors and mind set on a daily basis, and celebrating our successes.

Along with practice, the Yoga Sutra-s talk of *nonattachment* as being the other element to finding freedom from old patterns. Now obviously this may seem like an oxymoron since the whole issue may be that you currently feel attached to smoking, making quitting the difficult process it is. But we have already been building our abilities to *un-attach* from smoking (see the above paragraph and notes from the last 7 weeks). When we practice nonattachment we strengthen our power of choice and we become less dependent on things. Rather, we become empowered to choose what we wish to do, or how we wish to respond in any given moment. Of course no body can live up to this ideal all the time right away, but it becomes a practice. Your initial reaction might still be to yell back at someone yelling at you, or it might be to initially want to pick up a cigarette after dinner, but as we catch ourselves dead in our tracks, and remind ourselves to not be attached, then we have the *choice* to choose other behaviors. We have already been building up to this with our self-reflection skills. Now we have one more tool in the shed by thinking of this nonattachment as a practice in and of itself. We are not bound to the old, weaker image of ourselves, but we are free to choose to create the new image of ourselves and allow that image to be played out in our beliefs, thoughts and behaviors. While we are consciously and purposefully nonattaching ourselves from things/images/reactions we don't want, we are consciously and purposefully choosing what we do want to take the place. Nonattachment is freedom of choice, and this freedom can be found through practice and continuous belief in yourself, or Faith. The Yoga Sutras site Faith as the key, against all odd, to staying motivated and directed towards our goals. So believe in yourself, practice and let go of old ways, and make miracles happen!

Homework:

Look back on all of the activities we did throughout the past 7 weeks (eg. identifying and labeling our triggers, breathing breaks, developing the image of your ideal self, your experience with daily yoga and breathing exercises, etc). Look back to what stretched you and what helped you to understand or change the most. Then write a letter or list to yourself, noting all of the things that you have learned in this process, about your successes, realizations, and general growth. Examples:

- Making the list of triggers helped me to understand.... about myself.
- I am currently still smoking but this is how my thinking has changed...
- I have been able to cut back to... cigarettes and this is how I feel...
- I haven't smoked for... days and I feel...
- I have more motivation and more faith in myself because...
- The... activity really helped me because...

- After I practice my daily yoga/ breathing I feel...
- I've learned...
- I am grateful for...

...etc. continue to remind yourself daily about how far you've come, what you've learned, about your ideal image of you, and to celebrate each mini success. Pretty soon you will look back and see that you have changed for the good – CONGRATULATIONS and THANK YOU for all you have done! May you continue to remember your hearts deepest intentions and walk the path that you deserve!

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