Laughter and mental health: a case study of Dr. Madan Kataria

Abstract

Purpose: The purpose of this paper is to meet Dr. Madan Kataria, the founder and creator of Laughter Yoga.

Design/methodology/approach: This case study is presented in two sections: a transcribed autobiography of Madan Kataria, followed by a ten-question interview with him.

Findings: The popularity of Laughter Yoga has spread from a handful of people in 1995 to a global movement with tens of thousands of people who commune in person and online, *laughing for the health of it.*

Research limitations/implications: This is a personal narrative, albeit from someone who has been at the forefront of using intentional laughter for well-being for thirty years.

Practical implications: Laughter Yoga promotes an array of physical, psychological, and emotional health outcomes that does not rely on humour or jokes to stimulate laughter. It is a beneficial resource suited for use in vulnerable population groups including people experiencing depression or anxiety.

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Social implications: The Laughter Yoga methodology is suited to people of all ages and abilities, enhancing mental health, decreasing stress levels and growing social connections and community through the universal language of laughter.

Originality/value: To the best of the authors' knowledge, this is the first case study and interview with Dr Kataria that delves into his personal background, outlining his motivation and experience behind founding Laughter Yoga internationally.

Type of paper Case Study

Laughter Yoga, laughter, humour, mental health, intentional laughter, prescribing laughter

1. Introduction

In this case study we meet the creator of Laughter Yoga, Dr. Madan Kataria. Ros Ben-Moshe has known Madan for 18 years, also training as a Laughter Yoga teacher with him. Freda first met Madan in 2023. We have seen in previous case studies (Neal and Gonot-Schoupinsky, 2022; Berger and Gonot-Schoupinsky, 2023; Ben-Moshe and Gonot-Schoupinsky, 2023) the wide-ranging potential of using laughter, and humour to support mental health. Here we dig deeper into the use of voluntary non-humour driven laughter. Intentional laughter is increasingly shown to be a very effective way to improve well-being and mental health. And the person who has incontestably made the biggest mark on its dissemination, in the form of Laughter Yoga, is Dr. Kataria.

Research into the use of Laughter Yoga (LY) is growing. Ros herself has undertaken several studies looking at its impact, starting with a pioneering intervention that used LY to ameliorate quality of life for haemodialysis patients (Bennett et al., 2015). A six-week LY program in three residential care homes (Ellis et al., 2017), found it lowered blood pressure and improved mood (n = 28). There are also randomized control trials pointing to evidence for its benefits on mental health and social inclusion. For example, and just to talk of the most recent studies, Çelik and Kılınç (2022) found LY was effective in decreasing perceived stress and burnout and improving life satisfaction (n = 101). A randomized control pilot study (Öztürk et al., 2023), using eight sessions of LY, reported reduced loneliness, and increased quality of life and resilience in older adults (n = 33).

We could report on many other studies, but we are here to meet with Madan, and he will discuss other studies, but also, and most importantly, tell us about his life, and how Laughter Yoga came about in the first place.

2. Dr. Madan Kataria shares his story

(Told by, and confirmed by, Madan Kataria. Transcription and editing by Ros and Freda).

2.1 My childhood and a culture of joy

I was born in India into an agricultural family in a small village with a population of 250 people on the Indo-Pakistan border. I'm the youngest of eight children – we are four brothers and four sisters. We lived with the basics and didn't have electricity. However, I found that people in our village laughed often at such small things. Growing up I hadn't even heard of

the concept of laughing through jokes or puns. You see, India is not a big country with humour. We are not using jokes so much. Our country is not identified with comedies. We don't have many comical characters. India has a culture of festivities, and of singing and dancing. And for children, play is important. And these things result in laughter. Laughter is not an outcome of jokes. It is an outcome of celebrating together, and for children of playing together. The origin of laughter is childhood. Children laugh a lot, maybe 300 or 400 times a day. This is the one lesson coming from my background that was so important for me.

With almost one or two festivals every month, we regularly got together with family and friends and laughed a lot! Laughter was the outcome of being together. At all the festivals, including marriages, we sing and dance a lot resulting in lots of laughter. It is not humour based; it is joy based. And it comes from the joy of celebrating life. There's no need for humour. It was only when I went to the city to become a doctor that I heard about jokes.

In my village there was no doctor. We had to travel about 10 or 15 miles for medical assistance. My mother had a dream that one of her sons would become a doctor one day. As I was good at my studies I was sent to a boarding school. I studied hard and qualified for medical school and eventually my mother's dream came true. I was admitted into a medical college in Amritsar, North India, which was a long way from my little village.

2.2 My life as a medical doctor

Instead of returning to my village to practice medicine, I flew all the way to Mumbai, the city of dreams. I wanted to be a big doctor, to become rich and famous (ha ha ha). I tried my best to reach for the stars but nothing happened. Without a business background I couldn't

achieve what I was hoping, and it caused me a lot of stress. I was also editor of a health magazine, "My Doctor" and bringing out two publications every month was painful. I began writing articles about stress management in my magazine, hoping that I would find the solution to my own stress. However, my stress levels kept mounting. I began looking for things to help me de-stress and tried several things; yoga, meditation, but nothing worked.

The origin of Laughter Yoga (LY) came from my own stresses. When I was practicing as a physician and I started to write articles on stress management hoping I would find the solution to my own. In March 1995 I decided to write an article on "Laughter is the best medicine". There were so many scientific studies about laughter and its benefits, but I thought, "hey, nobody's laughing, including myself". That's when the idea to start a laughter club popped into my head. I went to the public park near my house and said to a few people that I wanted to start a laughter club. They started ridiculing and laughing at me, saying it wasn't a good idea to laugh in the park. However, five people agreed to participate. In the beginning we started laughing by telling jokes. After about 10 days our crowd grew to around 55 people. But as I said, India does not really identify with a comedy culture or have many comedians. So, it wasn't long before we ran out of jokes! People thought we should stop. Many jokes were negative, harmful, vulgar, or sexist. It just was not working, and everyone wanted to give in. I didn't have the faintest idea about what this breakthrough was, but I believed I'd find something. I said, "give me one day and I'll find a breakthrough technique on how to laugh without jokes."

2.3 The beginning of Laughter Yoga

I went home and started flipping through books, and there was one that stood out, *The Complete Guide to Your Emotions and Your Health* (Padus, 1985) that had made a lasting impression on me. My next action was informed by its key takeaway message – your body cannot differentiate if you are really happy or if you are acting like a happy person. Even if you act like a happy person, your body doesn't know the difference between real or fake happiness. So, even if you fake happiness you still get the same benefits.

That's when I realised we can make laughter an exercise, rather than relying on jokes. I raced back to the park with a photocopy of the pages from the book and excitedly relayed to my people that I'd found a breakthrough! "We can fake it, until we make it". That's how the idea for laughing for no reason was born.

On that day there were about 50 people, and we fake laughed for one minute. On the count of one, two three, everybody went ha, ha, ha. We couldn't even fake laugh for 30 seconds because everybody began laughing for real. So much so, that people started falling to the ground laughing. We could see that laughter is contagious. If you laugh in a group, you don't need anything. You just look at each other and begin laughing. Then we started creating laughter exercises.

The first laughter exercise was the "namaste" greeting laugh, as that's how we greet each other, joining both hands in front of the heart space and looking into someone's eyes while laughing gently. The second was a milkshake laugh, (although in India, we call it "lassi laughter"), by mixing and shaking two imaginary glasses and pouring into each other while chanting *Aeee aeee aeee*, and then pouring it back into the first glass again saying *Aeee aeee aeee aeee*. After that, everyone laughs and pretends to drink milk. The third was the

mobile phone laugh, laughing into an imaginary mobile phone while engaging with each other, and then lots more laughter exercises and heaps and heaps of laughter.

It was so much fun, but it was so tiring to keep laughing continuously. We needed to have a break. At this time, I was also practicing Yoga breathing exercises – pranayama, and thought it made sense to combine breathing and laughter exercises. I realised that laughter itself is like a yogic breathing exercise, as both involve an exchange of air with the exhale longer than the inhale, which helps rid the lungs of residual air. What do we do when we laugh? We exhale. That's why I decided to name it Laughter Yoga. The word "yoga" means to unite body, mind and spirit. And the reason why we call it Yoga of Laughter is because it encompasses the physical effect on mind, body and spirit. The yoga of laughter is in other words combining breathing and laughter exercises together. That's how Laughter Yoga was born. I created a system and structure which could easily be followed and multiply all over the world – repetitions of breath, clapping and chanting "ho, ho, ha, ha, ha" and assorted laughter exercises inspired rather by life than comedy.

2.4 Laughter Yoga becomes a global phenomenon

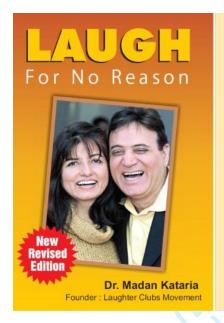
When we started the first Laughter Yoga club it became very popular because people got many benefits from it. Everybody felt so great. They were more energized for the remainder of the day and sleeping better. Numbers in the park grew and it caught the attention of a newspaper in Mumbai. It became a headline on the front page, "This club is no laughing matter". People started inviting me to different clubs and we started laughter clubs in different parks across India. For five years I went the length and breadth of India to set up laughter clubs.

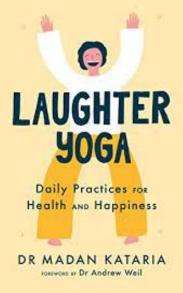
Then in 1999 I was invited to the United States by Steve Wilson, a psychologist from Columbus, Ohio. He thought it was a great idea to introduce to the US market. So, my wife, Madhuri and I went there. She is also a Laughter Yoga teacher. In six weeks, we visited 14 cities and spoke at 23 seminars. The people in America loved it and this is how it began spreading. After the success there, in 2001, I went to Switzerland, Germany, Denmark, and we even came to Australia. And then slowly it started spreading all over the world. The growth was organic based on peoples' experience. Within five years from our time laughing in the park, Laughter Yoga had spread to 50 countries.

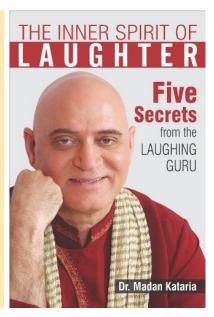
Then research began with assorted university institutions conducting research into the effect of Laughter Yoga on health and wellbeing. Until then most laughter therapy research had been humour-based.

I have written quite a few books about Laughter Yoga, and you can see three of them in Figure 1. My first book was Laugh For No Reason (Kataria, 1999). Another of my books is The Inner Spirit of Laughter: Five Secrets from the Laughing Guru (Kataria, 2012). More recently I have written Laughter Yoga, Daily Laughter Practices for Health and Happiness (Kataria, 2018)

Figure 1. Three of my books.







Laughter is a great way to connect with people and everybody wants to be with happy people. No one wants to sit with a grumpy person. My dream is bringing world peace through laughter. Unconditional laughter can connect without using any language or culture bias. Everybody laughs the same way, especially when we are doing laughter exercises.

Laughter Yoga plays a big role in my family. Madhuri, my wife, assists and supports me in my work. You can see her on the cover of my first book. While we don't have kids, my brother and sisters have 32 children. And they are like my own children. We get together for Laughter Yoga and enjoy laughing together. And as I have said before, children laugh naturally and that is an outcome of play. And play is the seed of creativity.

2.5 My own laughter routine and practice

I start laughing at 4 am, for around 30 to 40 minutes. It is a mix of laughter and silence, laughter and silence. I laugh for four to five minutes continuously. However, it's gentle and soft, as it would be funny (not) if I started laughing out loud too loudly at 4 am. I wasn't

always like this, however I learnt this by teaching Laughter Yoga and it has become a part of my program in my head. Now I can laugh, even at the drop of the hat at anything. This is called the "art of laughing" – learning to laugh for no reason so that you can practice laughter anywhere, anytime.

Then I have a Laughter club online which is 30 minutes. After that I conduct interviews with assorted people around the globe where we also share lots of laughter. Then I teach online basic learning teacher training and have to laugh, *ha ha hah*. Probably as a whole day average I would laugh around two hours each day. If anybody calls me on the phone, the moment I pick it up I respond with laughter. Even if someone invites me for dinner there's an expectation that we will also do a little Laughter Yoga. So I'm eating laughter, I'm drinking laughter, I'm sleeping laughter, and one day I'm going to die laughing. I've been laughing for 27 years non-stop!

I laugh with many diverse groups, included people with a mental or physical disability. I laugh with cerebral palsy patients. Half paralysed. Nobody can make them laugh. No comedian can make them laugh; you can only use humour so far. Laughter Yoga is the only way. Even for blind people. The sound of laughter is infectious, and Laughter Yoga works well. I've come to realise that it is bigger than me. It has a lot to do with social sciences and spirituality, because when you are laughing, it brings out some spiritual qualities. It makes you happy and more generous hearted so you want to help other people. You become one with other people. It is like oneness. All this makes me feel that Laughter Yoga is not my idea. It is coming from the divine and I am a merely the person from which it has manifested. That is because there is such a huge application, from children to the elderly, to the physically or mentally challenged or in other community or corporate settings.

2.6 My mission with Laughter Yoga

The mission of Laughter Yoga is to promote health, happiness, and world peace through laughter. How can we bring world peace through laughter? It's very simple. War outside in the world is a reflection of war inside us. If we can start Laughter Yoga and multiply its use all over the world, we bring peace within ourselves. So, peace inside is peace outside. The day 1 per cent of the world's population start doing Laughter Yoga the consciousness of the whole globe will change. With everyone I speak to, we laugh together, and I ask them to contribute a one-minute video for world peace. And so, I am asking you to laugh with friends, even with strangers. No one can refuse when people say this is laughter for world peace. I want millions of people to record 1 minute of laughter.

3. Ten questions and ten answers on laughter and mental health

In this section Freda and Ros pose ten questions to Dr. Madan Kataria.

1. What do you see as the key benefits of laughter for mental health?

Laughter has the ability to change our mood within minutes by releasing happy hormones, endorphins, and so you feel good. Mood has the greatest impact on mental health. The number one sickness in the world is depression. 300 million suffer worldwide and depressed people never laugh. If you keep laughing you're less likely to be depressed. The twin sister of depression is anxiety. That's also a big problem in the world. Sometimes depression and anxiety come together and other times not. As a physician I know that there are lots of side effects from tranquilisers and anti-anxiety medication. Then there's also OCD – obsessive compulsive disorder. Patients with anxiety tend to

breathe very shallowly, yet laughter is all about deep belly breathing and belly laughing, using your diaphragm and abs, which helps people suffering from anxiety.

Health is all about your immune system and oxygenation. If your body has enough oxygen it will heal much faster and strengthen immunity. I've been laughing for 27 years non-stop and I've never suffered from coughs or colds, ever! I got Covid and was better in one day.

We need to use laughter to get out of negativity that is stored in our subconscious mind.

Catharsis is one way to release and unconditional laughter is the best way - the best catharsis. You cannot use catharsis with jokes.

2. How does laughter impact our brain chemistry?

All the major chemicals we call "happy hormones", dopamine, oxytocin, serotonin and endorphins, are released as a result of laughter. These are the main chemicals which help change mood states.

3. Do you see laughter as having similar benefits to exercise?

Yes absolutely. It increases your heart rate and it also changes your heart rate variability. A study by Law et al. (2018) from Auckland University, New Zealand found that heart rate variability with laughter increases like any other aerobic exercise activity. It's very important for seniors who don't exercise much. They don't feel motivated to exercise and if they don't exercise they fall sick. A study from Georgia Atlanta, by Celeste Greene et al. (2017) found significant improvements in mental health, self-efficacy for exercise, and aerobic endurance following simulated laughter exercises. If you include laughter

exercises in between other exercises it's much more likely to motivate them to do the physical exercise as well. We also found in Hong Kong in senior centres that combining laughter and physical exercise together makes a good combination. Another study (Wagner et al., 2014) from Germany explored laughter's impact on the abdominal muscles with favourable results.

Also, in laughter yoga sessions we are incorporating different types of exercises like stretching, joint movements, clapping to stimulate acupressure points and also incorporating dancing and laughing to further enhance the cardiovascular effect.

4. Do you have any thoughts on the differences between laughing with and laughing without humour?

There are two models of laughter. One is the humour model which originates from the mind, when you find something funny or amusing you start laughing. That is Mind-body laughter. In Laughter Yoga we understand that not everybody has a great sense of humour and they're not able to laugh because they don't find sufficient number of jokes that are amusing or funny. Laughter Yoga is a model where the laughter first originates in the body and the mind follows.

Who are the best laughers in the world? Children. They don't use humour to laugh, they physically play and laugh. We're actually teaching people how to laugh, how to be like a child and play like a child. Laughter in Laughter Yoga is an outcome of play. When you start laughing as an exercise your mind opens up. You lose your inhibitions and shyness and you start seeing the funny. Laughter and humour run in a circle We cannot separate them – they have a cause-and-effect relationship. In Laughter Yoga, laughter is the cause

and humor is the effect. So you can actually develop your sense of humour through laughter.

5. What are your thoughts on prescribing laughter for health and well-being? Such as with the Laughie.

My intention from the beginning was that laughter has to be prescribed and it should be practiced by anyone. For centuries people knew that laughter is the best medicine and science has proven it. But there was no reliable delivery system available for people. Laughter Yoga is a prescription and can be prescribed so you can get the health benefits on a daily basis. Laughter through clowning or humour is good but it's not reliable or a guarantee as to whether people laugh or how much. In order to get health benefits one needs 10 -15 minutes of sustained laughter. Humour does not help with sustained laughter because it is intermittent. That's why Laughter Yoga is ideal.

I also like the idea of the Laughie one minute laughter prescription. As it's another method to get a guaranteed dose of laughter. However, while one minute is a good introduction to intentional laughter, I do not think it is enough.

In summary, laughter should be prescribed, and it can be practised by anyone.

6. How can social laughter be encouraged in people who feel anxious about social situations?

It is far easier to laugh in groups than laughing individually. Depressed people will not laugh as much from watching comedy or from jokes. There's a greater chance of them

physically laughing when they are with other people. Robert Provine wrote in his book *Laughter: A Scientific Investigation* that people laugh 30 times more often when they're in company.

Our mission of Laughter Yoga is to create laughter communities, so we can laugh more easily. It's like a connection, face-to-face. We are the real Facebook of the world!

Laughing with strangers is for many a vulnerable act. We Laughter Yogis are very welcoming to new people. It's not just about the laughter. It's about connection with people. When people join a Laughter Club they're made most welcome and their anxiety disappears because we are not challenging them to something unusual. We are saying, "Okay. Try as much as you can" and slowly they lose their inhibitions and shyness. They begin laughing easily. And in between laughs there are breaths. Breathing is very important to social anxiety. We don't laugh straight away. We have 4 steps: clapping, warming up, breathing, and saying together, "We are very good, very good. Yay!". So it's not a challenge for people with social anxiety.

7. Is laughing alone, or solitary laughter, important, and why?

First of all, the core philosophy of Laughter Yoga is laughing for no reason. However, it becomes much easier when you laugh in a group because it helps generate contagious laughter through eye contact and playfulness. When you laugh for some time in the group your mind will get the new program of learning to laugh for no reason. So once you've learnt from being with the Laughter Club a few times you can then sit alone and do these laughter exercises by yourself. I begin my day at 4am with laughter. I wasn't always like this, however I learnt this by teaching Laughter Yoga and it has become a part of my program in my head. Now I can laugh, even at the drop of the hat at anything. This is

called the "art of laughing" – learning to laugh for no reason so that you can practice laughter anywhere, anytime. So, you don't have to depend on somebody else or even a Laughter Club. It's important to laugh every day if you want to be healthy and happy. That's what I teach all my students. You laugh with the group once a week (online or face-to-face) but you laugh everyday by yourself.

8. Do you see laughter and humour as a way to personal development and self-help, and how?

Laughing, especially for no reason helps break the barriers of your comfort zone. Learning to laugh on purpose is challenging but it helps break shyness and inhibitions. Once you break those barriers it opens up your perception and you start seeing the world in a different way. This is what we're describing in Laughter Yoga as joy.

Joy is not the same as happiness. Happiness is being happy about something, like how my life has been going the past few years or months, so actually happiness has something to do with your past. At a given time I am happy. What is the context of happiness? Getting what I want out of life. Happiness is not in the present moment. It's actually about what has happened to your life in the past. Present moment happiness is called joy. Joy is your unconditional commitment to be happy in the present moment, no matter what's going on in your life. You can still say, "ho ho, ha ha ha, very good very good – yay". Joy can be created on demand and command involving 4 elements: singing, dancing, playing and laughing. This is what we're teaching in Laughter Yoga.

How you develop your coping skills and emotional skills is important to consider, as when we grow up, laughter shifts from our body to the mind. It becomes intellectual. And we create so many problems in our life.

My advice is therefore that:

- i. If you want to be happy act like a happy person. Acting happy is the cheapest way to be happy.
- ii. Be with happy people. We are the product of our environment. The people we live with we become like them.
- iii. If you want to be happy you have to give happiness out to other people. If you are happy and the people around you are not happy they will not allow you to stay happy so you have to keep on spreading happiness.

9. How can people struggling deeply with illness and depression be motivated to laugh?

First, you have to understand laughter, to know laughter. This is all about the scientifically proven benefits of laughter and assorted studies. When people understand the benefits this is the first level to becoming motivated to laugh. Then, second, is to do laughter. Knowledge alone is not sufficient to get the benefits of laughter. You have to practice it, which is what Laughter Yoga is all about. So how do you get people motivated to join a Laughter Club?

We always say you learn by experience more than by knowledge. A Laughter Club is a community with an activity – laughter. When people see other people getting involved in something, this is another level of motivation to join the group. We say you have to join the group at least once to experience it. When they do, invariably we find 99 per cent get hooked and start laughing in Laughter Yoga groups. So we always encourage people not to look at people laughing for no reason, they look crazy. You have to experience it and

experiencing laughter in a group is much easier. In order to really encourage people to get the benefits we encourage some people to laugh for longer periods, in other words for one to two weeks for three hours a day continuously. This thinking and technique comes from Osho. I'm a fan of Osho. He was a great philosopher. I have replicated some of his techniques. When I started Laughter Yoga, I did not know about his work with laughter. Osho brought us laughter meditation. This includes laughter interspersed with silence, and also crying, over longer periods of time.

10. What are the next steps for the scientific investigation of laughter?

Laughter Yoga became popular long before there were scientific studies about Laughter Yoga. You don't have to go to doctors, nurses or researchers to ask if laughter is good for us. Especially in India there's no problem, people believe in the experience. However in the West people are very logical and analytical. There have been more than 400 research papers on Laughter Yoga worldwide and it would be good to make a summary. Perhaps we need to select some key studies and say here is the proof. Telling people about scientific studies will help motivate people to get involved in Laughter Yoga. We have hundreds of studies now. We all know the physical social and emotional health benefits.

4. Conclusions

In this case study we meet the larger than life Dr. Madan Kataria. Madan's idea to get together with others and "laugh for no reason" in a Mumbai park back in 1995 has had a huge impact. Today Laughter Yoga is a global phenomenon. We also have a wealth of evidence to support his ideas including that laughter without humour is fun, and effective. Besides, in no time at all, due to the infectious nature of laughter, it becomes very real, and funny. Thanks to Madan and his work with many other Laughter Yoga professionals, we now know that laughter can be thought of as an aerobic exercise that can benefit our mental and physical

health. Laughter Yoga is an inclusive practice suited to people of all ages and abilities that can positively impact body, mind and spirit.

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