

Positive Psychology – Lecture 12

Dr.Tal Ben-Shahar: Hi.Good morning. So first of all, are there any junior parents today? Welcome. Welcome. I'm so glad you are here. I'm even gladder you weren't here on Tuesday. So just...just...Just a couple of announcements. Yeah, you know, I was asking myself after Tuesday, "Are they ever going to take me seriously again?" I hope so. Or "will they love me tomorrow?"

So just a couple of announcements. First, there are many emails regarding the response papers, whether the gratitude letters that you write, you also need to submit to your, to your TF, as the response paper. So the answer is yes and no. Alright, next. Yes! You do need to submit it. However, if the letter is too personal or you don't feel comfortable for any reason submitting to your TF as well, just send your TF a note saying "I wrote the letter" and we will take your word for it. And...so you don't have to submit it, though it would be great if you do.

The midterm is coming up in a week and a half. So just a couple of words about the midterm. What we have decided to do is to just have a multiple choice midterm. There'll be - can't remember how many - 50? Five zero. 50 questions on the multiple choices. And you'll have 75 minutes to do it. So we'll allow for the 10 minutes or 15 minutes to get organized here. It's not going to be a difficult, you know... Try to fool you or to catch you. It's going to be pretty straight forward.

I've told you my philosophy about exams during the first class, those of you who remember. In the past, I didn't used to have an exam because I remember I wasn't happy taking exams as an undergrad. And you know do not do unto others. But then, I realize that there was the value to them. Not a value in terms of differentiation, grades and stuff, all that. The value is that the midterm or final gets you to sit down and synthesize all the material. So if it's a take home, you look for the answers where you

are. You take...you just get part of it. With the midterm or final, you sit down and you read everything from lesson 1 to lesson 26. And then that helps you synthesize and hence internalize the material.

Because remember what I mentioned time and again: this class is built around the spiral theory of knowledge, meaning everything we talked about in lesson 1, in class 1, is related to class 3, is related to class 7, is related to class 24. Everything is interconnected. And it's when you sit down, you know when I talk about the material, I know it's going to come three weeks from now and I know the connection. You still don't, but when you sit down and study for the exam, that's when you get to make the connection, and that's when you really internalize the material at a much higher level. So this is why we have it. I know it's not fun however I think it is pedagogically. It is important to sit down and have a run through, whether it's the midterm and again, for the final. Again, won't be difficult, but do study for it. It would be very straightforward, fact-based. The midterm, as you can imagine, is not about showing creativity. Our goal is that you go over the material and synthesize it. If you have any questions, please email your TFs and they'll be able to answer. If not, then email me.

OK. So where were we last time? Actually can't remember. I think I repress the whole lesson. But I was told that I skipped a few things so that I could get to the show at the end. And one thing that I skipped and I want to talk about goes back to, after we talked about the body feedback hypothesis. You remember the body feedback hypothesis? How you shake your hand, how you carry yourself. With the facial feedback hypothesis, with your smile, your frown. That communicates certain message to other people, who then reflect back to us and at the same time, we are also communicating to ourselves.

Am I confident? or am I proud? Or am I afraid and scared? And very often we need to, as we talk about "fake it till we make it". Because our body, our behavior sends

messages to our mind, to our emotions and affects them.

There was a wonderful research done by Haemmerlie and second author, Montgomery. Haemmerlie and Montgomery did the following research. They recruited shy heterosexual men. Recruited them for the study. Shy, heterosexual men. And the study was run as follow: these men were told that the study was about taking certain test and they were invited into the equivalent of William James Hall, and they were told "unfortunately we were running behind, so you have to wait. You have to wait until the study actually takes place. In the mean time, you know here is a waiting room and there are other people waiting for the same test. And we'll come and get you. It may take a while. Sorry. We'll pay you for it for the time you have to wait extra." So they ended up waiting in a waiting room. And with them was waiting another person. A female, who unbeknownst to them was actually a confederate, was actually a part of the study.

But they thought she was just like them, waiting, also waiting in line for the study to take place. So they were sitting there for 12 minutes with a woman, whose instruction was to strike up a conversation with this shy heterosexual man, and to express a lot of interest and excitement about what they were saying. So they were listening and they were asking questions. "Wow." "Really?" They were laughing at what they were saying for 12 minutes. And then, that, the woman went into the experiment or so they thought. Another woman comes in. Again, for 12 minutes, she sits down with the shy heterosexual man and seems very interested and laughs at what he has to say, and asks questions. And so on and so...for 12 minutes. And the next woman comes in, as she goes into the experiment. And so on. Six times. Six women sitting with the shy heterosexual men, being very interested in what they have to say, striking a conversation. 72 minutes total. And then they go into the real experiment, whatever it was. And then next day, they are invited for the same experiment again.

And once again, they go through the exact same procedure. For 72 minutes, they sit down with 6 women who are very interested in what they have to say.

And of course, what really the experiment was interested in was what effect does this have. What effect does this behavior have on their shyness? And it had radical effects. So over the next 6 months, when they followed upon these, these men suddenly became far less anxious. In general, and specifically around women. They became less shy. These men often for the first time in their lives, initiate relationships and start to date after 144 minutes of intervention. Radical difference.

But there was a problem. What's the problem with many of these psychological experiments? That you have to debrief. Exactly. You have to debrief. So six months later, the study was over. The researchers invite the men in and tell them this was just a study. And these women were actually part of the experiment- they were told to seem interested. Cruel, right? Well, less than they thought. It made no difference to these men. Because by this time, they were much more outgoing. They were doing well with the opposite sex. They were going on dates. They were less shy. It started a positive spiral. It didn't matter at all. 144 minutes changed their lives, as far as the dating was concerned at least, if not more. Why?

Think back to Bandura's work on self-efficacy. Nothing breeds success like success. When they succeeded, they did well, they saw themselves doing well- self-perception theory. Certain conclusions about who they are, what they are and that led to an upward spiral, and continued that upward spiral. Yeah, we talked about 'fake it till we make it', then watch Marva Collins. Chapters of the Fathers. Pirkei Avot. One of the seminal Jewish texts: "Those whose deeds exceed their wisdom, their wisdom shall endure but those whose wisdom exceeds their deeds, If we just- remember what I talked about- if we just go to a workshop or a class, and understand it on the cognitive level, even have an ah ha moment, a break through, nothing will happen, unless we

follow our new found wisdom or understanding with deeds, with action. Why?

Because we first make our habits, and then our habits make us. And if we are before the workshop or class here, and then our attitude changes but our behavior doesn't, our attitude will be pulled down over time by our habits. So it's only, if we also change our habits over time, if we start doing things, if we, for example, put ourselves on the line- cope. Or if we start doing the gratitude exercise or writing letters on the regular basis, or starting physical exercise- arguably being most powerful intervention, to deal with anxiety, depression as well as the ADHD. And that's when we start doing these things right after the change is going to be ephemeral we are going to go back to where we were before. Lasting, permanent change- attitude change has to be matched by deeds, by behavior.

Dan Millman- I mentioned him in class a couple of weeks ago, The way of peaceful warrior, talks about the importance of action and change. He says, quote," To change the course of your life, choose one of two basic methods. One. You can direct your energy and attention toward trying to fix your mind, find your focus, affirm your power, free your emotions and visualize positive outcomes so that you can finally develop the confidence to display the courage to discover the determination to make the commitment to feel sufficiently motivated to do what it is you need to do. Two. Or you can just do it." You know, sometimes, easier said than done. However, very often, you know, jumping into the water, just doing it, taking action has the same effect as all the preparation, or even the better effect, and leads to an upward spiral.

OK. Then we talked about coping and exiting your comfort zone. Parents, please close your eyes at this point. Alright. And I ended by talking about attaining your 'optimum levels of discomfort'. What does this mean? What does this mean? So we can look at approaches to change or reactions to change, behavioral change along the continuum of tension. Most of us most of the time are in our comfort zone. It's great.

It's wonderful. However, when we are in the comfort zone, very little change happens. If you go beyond that, we get to our stretch zone. This is what we call the optimal discomfort zone. This is where change actually happens. Beyond that is the panic zone. This is where we have anxiety and difficulty. This is the place that is usually unhealthy. Unhealthy for change. Because very often, we can go back on where we were before. You can think about this with a metaphor: the comfort zone would be freezing water. The stretch zone would be flowing water. The panic zone would be boiling water. Again, a lot of movement, but out of control and potentially dangerous. The best way to be usually is in the stretch zone.

You'll read about it next week when you read about flow. Flow is when you have optimal level of arousal, optimal level of tension. When the task that you are doing, or whatever you are doing, is not too difficult nor too easy. See what I did at the end of last class was certainly, as I said, as you saw I hope, out of my comfort zone. However, it wasn't enough- well, maybe- but probably not in the panic zone. Why? Because I already know you- we have been together for over a month. It's already passed at the drop date- so, too late for you. So I wasn't taking that much of the risk. It was just stretching. And it was important for me to do... I mean, really personally important for me to do it. Because it does stretch me and get me more in touch with my humanity. Or for example, let's say you want to start an exercise in gym. You realize how important it is. You read the research. You are exposed to that research and you see it really has an important effect. And you start exercising. Well, if you have an exercise for 5 years and you got to start running 8 miles a day. That's a problem. You are over-stretching. You'll probably get injured. If you continue sitting in front of the TV or playing gameboy, that's also not good for change. That's the comfort zone perhaps not good. Stretch will be "OK, let me start with walking for two miles a day and build it up gradually." Stretch myself, but not too much. Or if you think about starting to give lectures to others, paying it forward, in positive psychology or biology, whatever

your topic is, and you get anxious in front of an audience. You don't start giving a lecture in Sanders Theatre. You start initially with your friends, teammates. This is how I start with my squash teammates. I gave the first lecture to them and then I gave it to my family.

Gradually out of the comfort zone. A little bit of stretch and then build it over time. This is the health way of approaching change. Sometimes though, sometimes though, we have to go to the panic zone. why? Because something cannot be changed, or almost impossible to change gradually. For example, addiction. If I'm addicted to drugs, it's very difficult to say, "well I'll just have a little bit less, inject a little bit less today. A little bit less tomorrow." It usually has to be abrupt. And then we are in the boiling realm. Then we are in the panic zone. Quite literally at times, which is why we need help. In this area, we need someone to hold us. Someone to comfort us. Someone to protect us. Because it is such a volatile zone. And potentially dangerous. But generally, if you want to change, the healthy approach to change would be along the stretch zone. It's impossible to change in theory.

Now I have said it so many times and yet very often people who take the class, as you know, many of them do change. Many of them do say, "well my life is better today for having taken it." And other people say, "well I took the class and it didn't make a difference in my life It was a fun experience at times- the pink shirt and others. But it didn't make a real lasting difference in my life." In every...almost all- not in all cases, but in almost all cases, it's because it wasn't behavioral change associated with the attitudinal change or with the insides or understandings or recognition. There has to be a bias for action.

And that bias for action- just name a few examples: to increase confidence- we do it by taking risks, not by talking and thinking about, or standing in front of the mirror and say to myself: "I have a lot of confidence. I have self-esteem. I'm great. I'm

terrific. I'm gorgeous." Not enough. How do we reduce stress in our lives? And we'll talk about it next week. By simplifying, by doing less rather than more. We'll talk about how actually doing less at times doesn't just lead to more happiness, it also leads to more success, more creativity as well as productivity. But we can't reduce the stress in theory. Chipping away through the gratefulness, creating more positive channels, becoming more of a benefit finder over time. It takes time. Doesn't happen overnight. The nice thing though is that when we are afraid, when we think it's too much for us to take certain action, we can use our internal simulator.

Remember the mind doesn't know the difference between the real thing and the imaginary thing? And if we imagine something, if we are in the CBT language, if we engage in exposure, either through the imagination or through actual action, when we engage in exposure, over time, we become confident, which as I told you, what I do, preparing for lectures, seeing myself, doing it in my mind's eye, and the mind doesn't know the difference, in the real and in the imagined. And overtime, we'll become more confident. It's a good start. It's not enough. But certainly goes hand in hand and a very useful technique to explore and to try. So all this is well and good. I'm sure some of you are thinking about, and actually some came after class last time and talked to me about it and said, "OK, so we know action is important, but there is a problem. And the problem is that I don't or many people don't have enough discipline to engage in this action, to get out and run three times or five times a week. We are lazy. It's much more fun playing with our Nintendo than going and doing yoga for an hour, at least initially. So I don't have enough discipline for change.

I just want a quick show of hands. Be honest. Put up your hand if you believe that if you had more self-discipline- now you may have a lot of self-discipline or very little self-discipline, but if you had more self-discipline, you could potentially be happier and/or more successful. If you had more self-discipline? Be honest. I mean my hand is

very much up. OK, so it's most people think that. So I have good news for you and bad news for you. I'll start with the bad, because I'd like to finish on the positive. So the bad news is you aren't going to get any more self-discipline. What you have is what you got and what you will get. That's it. Sorry. Tough luck. Most people, most people, overwhelmingly majority of people think they need or want more self-discipline and believe that they don't have enough.

And most, just about all people cannot get any more self-discipline. Nature. That's it. So that's the bad news. The good news: it's actually not that important, neither for success, nor for happiness. You can be more successful and happier with the self-discipline that you currently have. How? If you change your focus from relying on self-discipline for bringing about change to introducing rituals. Changing your focus from self-discipline to rituals.

I am going to talk about an idea now that is part of... that is talked about in greater length in *The Power of Full Engagement* by Jim Loehr and Tony Schwartz. An excellent, excellent book. And what they are talking about is essentially a paradigm shift. A paradigm shift, where we need to stop trying to get more self-discipline, because that, in and of itself is not enough for success, for well-being, for change. And it's because people rely on self-discipline for change. That is the reason why most organizational as well as individual change efforts fail.

So let me share with you a fun study. This was done by Roy Baumeister, one of the leading social psychologists of the 20th and the beginning of the 21st century. Great researcher. Here was what he did. He brought in a group of people individually. So the person walks into the experiment. And they are told, once again, "you have to wait in this room, waiting room for the experiment to start. So the person sits down. There is a table right next to that person. And on the table, there's a bowl. And in the bowl, there are freshly baked chocolate chip cookies. Just came out of the oven. Smell the

aroma, engulfing them. You know like those cartoons, going into their nose. Phenomenal smell. They are sitting there, next to the chocolate chip cookies that are in a bowl. The experimenter puts and says, "I'll come and pick you about 10 minutes for the experiment." They walk out. And as they are walking out, they tell them, "oh just by the way, these chocolate chip cookies, they are for the next experiment. So if you don't mind, don't touch them." So you are sitting there, almost dying, but you are not touching it. And ten minutes later, the experimenter does come in, takes you to the experiment. The experiment is very difficult. Very difficult. Very difficult test that you need to take. A test that most people don't solve and requires a lot of perseverance and hard work. But most people, even with perseverance and hard work do not solve it. So the outcome measure, what the researcher is interested in is mostly how much did you persevere before giving up on that test. How much did you persevere before giving up on that test? That was the outcome measure, the dependent variable. Second group, randomly picked, come into the same room, sitting on the same chair, have the same bowl on the table. But instead of chocolate chip cookies, what they have in the bowl are red beetroots. Freshly baked. Just came out of the oven. And they are sitting there. And the experimenter is about to walk out, says, "just one more thing. If you don't mind, don't touch those beetroots. They are for the next experiment." OK. Fine. So you are sitting there for 10 minutes. 10 minutes later, the experimenter comes in, takes you to the "real" experiment. Sitting down, you take the exact same test. The exact same puzzle. And once again, how long will you persevere before giving up? Think about for yourself for a second. Who do you think persevered more? The chocolate chip cookies group? Or the beetroots group? Think for yourself for a second. By the way, I guessed wrong when I answered this question. OK. Significantly more perseverance- significantly more, wasn't close- the group that had the beetroots persevered a lot more.

Why? I wouldn't understand. The mechanism- and he did some more experiment to

explain the mechanism. It's because the chocolate chip cookie group had used self-discipline not to touch the cookies, though (inaudible) they really wanted to touch it. But they couldn't. So they used their quota of self-discipline. And when they went into the "real" experiment, what happened was that they had little or no self-discipline left. And that, that maze, that experiment, that test required a lot of self-discipline. The point of this study is we all have limited amount of self-discipline. And the question is what do we used it on.

Another question for you. How many people here have, those of you who did set new year resolutions? Put your hand up if you fulfilled every single one of the new year's resolutions that you ever set for yourself. Put your hand up. Every single new year's resolution, if you did set new year resolutions. A bit higher, please. Well, I certainly didn't. But here's another question for you. How many people here...this is an important question, so please, please put your hand up if the answer is affirmative. How many people here brush their teeth this morning? Put your hand up high. hew! I'm glad to see this. You can all talk to me after, real close. So let me just imagine what happened this morning, this scenario. So you got up in the morning. You were tired. And then you said to yourself, "OK, today is the day. Today is the day. I am going to do it! I am going to brush my teeth this morning!" Right? And to really motivate you as you got out of bed : Here I come now! I mean, here I come to brush... And you brush your teeth, right? Today is the day! Because I have 1504! I'm going to brush my teeth! Yes! No, of course not. You know, you rolled off the bed- you know, barely alive. You probably don't remember you brushed your teeth, because you were asleep still.

You know why? Why did everyone, I think, I hope everyone brush their teeth this morning, whereas no one, no one person out of more than 600 students fulfilled their new year's resolutions? Why? Because new year resolutions rely on self-discipline.

Brushing our teeth relies on a ritual. We do it everyday. It's automatic. Now there are rituals- we know brushing our teeth is important. People won't talk to us if we don't. But we also know that physical exercise is very important. And yet most people in the world, not at Harvard, but in the world, don't do physical exercise and pay very high price for it.

You know it always amazed me when people used to comment on my incredible self-discipline when I was a squash player. It always amazed me because I don't see myself as a person with self-discipline. You know we don't have chocolate chip cookies at home. And if we do, Tommy hides them. Because if there were, they would disappear two minutes later. Zero self-discipline when it comes to these things. And yet, with squash, I did have, well people thought and what I thought for many years- self-discipline. Because I would get up in the morning and go for my run. I would then go to school and after school, straight to the court have a session with my coach- regular session with my coach, then play games, matches, and then as you can see, went to the gym and worked out. Every single day. And I went home, did my homework and went to bed. It was a ritual. That is what athletes do: they have rituals, which is why they are able to maintain what seems from the outside, such high levels of discipline, at times super human's. It's not. It's rituals.

Jim Loehr and Tony Schwartz: "Building rituals requires defining very precise behaviors and performing them at very specific times — Let me give you some personal examples. Physical exercise deeply held value for me. Has always been, and especially now when I know the research, the data on physical exercise. So I have a ritual: three times a week, for 30 and 40 minutes, I run. After that, after that, do my stretching. I know how important yoga and meditation is for me. I have a ritual and I do it. First thing when I wake up in the morning, a few deep breaths- We'll talk about it more after break. It's a ritual. Every time when I teach here, every time when I get

up in front of the audience, I run before. This morning, I ran. On Tuesday, I ran twice as hard. Why? Because it releases anxiety. It helps me. Globally, generally and specifically for the class. Another very important value for me: my wife- our relationship. See the movie? Hitch? Fantastic movie. It's a very important value for me. And therefore, my wife and I have rituals. And we have two ritual dates a week. Now when people hear it, they say, "Come on! where is the spontaneity of love?" Well, there is a lot of spontaneity in terms of what we do during these dates. But the dates are set in stone. And if I'm travelling or my wife is travelling, we miss the date, we make up for it after. Why? Because if we didn't have this ritual, then we have two dates a decade, as opposed to a week.

And a deeply held value for both of us is our relationship. In our modern world, there are so many conflicting demands in our time. Rituals are not just important- they are absolutely necessary. If we are to do the things that are important for us, that we care about. Other examples of rituals: writing a thank you note. Once a week, once a month. Making a gratitude visit. Once a month, once a month, once every two months. Doing the gratitude exercise on a daily basis. These are rituals that we can introduce and can actually make an important difference. We also have ritual dinners with the family as a whole. So every shabbat dinner, Friday night dinner, we have together with the family. It's a ritual. It's a wonderful ritual. During the week, we also have dates when we are together, because family is an important value to us. Now sometimes, for example, because of travel or other reasons, rituals are broken. Then you can make up for it later. They can also be negative rituals. Three hour of not checking email. I know it's hard. But it's an important ritual. And we'll talk about the effect of having our email on constantly Because when we are constantly connected to technology, we are often disconnected from the important things in our lives. We'll talk about that after break.

Rituals. Introduce rituals. One of the fears that people have when they hear about rituals is they say "well that will take away from my productivity. And if not productivity, creativity." Not so. In fact, the exact opposite is the case. If you look, - yeah, this is a historical research- if you look at all the great artists, whether it's writers, the Hemingways, whether it's the Davincis- they had a ritual in their life. And the ritual was, for example, "from 7 to 10 am in the morning, I write, no matter what", "6 to 10 at night- if I am more of a night person, I paint". They had rituals. And it's because of these rituals that they were able to be creative. Because then they could think about their subject materials as opposed to million other things: "Well, maybe I should be doing something else and there are other distractions"- no! There was a ritual. That's what I did now. Almost mindless getting there- just like we brush our teeth. But when they were there, there were space, openness to be creative.

Now the key is to give yourself time to create the ritual. You see, maintaining a ritual, requires some self-discipline, but not a lot. Creating a ritual requires a lot of self-discipline. Once again, because we go back to our old habits. Let's do a quick exercise. So I want you to just take your hands and just fold them. Fold your hands for a minute. Alright. Now continue folding your hands- only this time, in the opposite direction, meaning this hand below and this hand above. Yeah. Yeah. I see especially the men are not really getting it. But it's OK. Now how does that feel? Not comfortable right? Now this is such a simple movement. You know, folding hands! And yet we feel very uncomfortable- something is wrong here. And we want to go back to our folding before. Much more comfortable. We first make our habits and then our habits make us. OK. So the key is, here we are talking about a very simple change- folding hands. How much more difficult is it when we have had habits that we cultivated for many years and are much more significant in our lives? Very difficult to go...to change them. It takes time.

William James, as I mentioned before, says it takes 21 days to change a habit. Loehr and Schwartz in their book, *The Power of Full Engagement*, talk about 30 days to change it. And of course it depends on what habit. So give ourselves 30 days to start the gratitude. Give ourselves 30 days to build the new ritual of exercising regularly. And the key is to give yourself no more than one or two rituals each 30 days. Why? Because as we mentioned earlier, it takes a lot of self-discipline to create a ritual and we don't have much self-discipline, which is why when we have a list of 10 changes that we want to introduce in our lives today, we end up doing none. We end up doing none. Because we are over-extending our self-discipline and we break down. It takes a lot of discipline to start a ritual, but once we start it, after a month when it's habituated, when it's grooved in, when the neural pathway has begun to form, then we can move onto the next ritual and introduce it, if we are ready.

No more than two. Ideally one ritual. Next week in your response paper, you are going to choose a ritual, two rituals for this month that hopefully you will, you will also introduce. Because there cannot be change without behavioral change. Loehr and Schwartz: "Incremental change is better than ambitious failure. Success feeds on itself." We see it on individual level. We see it on organizational level. John Carter from the business school does a lot of work on change in organizations in the realm of leadership. What he talks about a lot is how you need small successes and then build them these successes. The Dalai Lama: "There isn't anything that isn't made easier through constant familiarity and training. Through training we can change; we can transform ourselves."

You know, one thing that happened to me when I was an undergraduate. It happened in my sophomore year. I didn't...I played at the Varsity team. Didn't have a good season. My sophomore year was burned out- got injured. And couldn't wait for the 1st of March. March 1 is the last, and March 2 sometimes, is the last day of the

season. And I couldn't wait, because after that I could stop playing squash and focus on my studies. Then I could get a lot of work done- because with squash, we were at the courts, you know trained physically for two hours but total three hours a day. Weekends- we were travelling mostly or had matches at home. Mornings- at least two mornings a week we were lifting weights or in the gym. So it was rough. A lot of work and I said I can't wait to have the freedom without squash, especially giving that I wasn't enjoying that much at that point. Can't wait. Not to do anymore and just to focus on my classes. Catch up on all the readings and writings and stuff. March 1 came. I stopped playing completely. And instead of becoming more productive. I became far less productive.

Now I see a lot of you nodding. The athletes know what I am talking about. Why? Why did I become more, or rather less productive? Procrastination- wow! Skyrocketed. Why? Because for years I've been told I'm a person with self-discipline. And I started to believe it. Yeah, I have a lot of self-discipline. Look at me! I trained so hard. I worked, you know, when I played on the circus six hours a day. That's a lot of self-discipline! And suddenly, the squash season ended. And I said, "alright, let's see this discipline at work!" And I wasn't getting any work done. Why? Because I gave up my rituals. You see, during the season, those of you who played varsity or very involved in music or club know that- when you are investing a lot in a certain organization, your time has to be ritualized. So you know you are in practice then or you are ? in these hours, or you are having meetings at these hours. And after that you have to go back and work. Because you only have two hours to do. And you want to get an OK night sleep. You have rituals. And you are productive and you are creative. And suddenly the rituals go away. You said, "OK now I'm gonna work more". The exact opposite happens. Because we have a limited amount... It was only when I came to terms of fact that I have a limits amount of self-discipline. It's only when I came to terms with the human nature- nature should be commanded must be obeyed. It was

only then that I actually became productive. Because I created new rituals in my life after that. Rituals- very important and significant. The only way for lasting change. Let me talk about cognition now.

The C. So we talked about affect- the emotions; we talked about behavior how important that is both acute and gradual. Let's talk about cognition. We'll talk again about cognitive reconstruction which is the gradual way of bringing about change. And then we'll talk about the fast way of bringing about change, which is the Eureka experience, the ah ha moment. So first, cognitive reconstruction. As we mentioned before, an interpretation is a neural pathway. If I interpret the world as a fault finder, the fortified neural pathway in my brain are the negative ones, these in experience and I go immediately to the negative interpretation and that gets reinforced over time. If I'm a merit finder, I would look the exact same experiences and interpret them very differently. Because I have very different neural pathways in the brain. Of course, there are consequences to how we interpret our experiences. Not necessarily that things happen for the best, but as a merit, as a benefit finder- sorry, I change that.

As a benefit finder, looking more at the, at the positive with each experience. Now remember the study on the identical twins and how much genes actually matter. That only account for 55% of the variance. So here is the story that's told in many intro to psych textbooks And it's about twins who were raised in a same home and their father was abusive toward them, toward their mother. He was very often drunk, very often on drugs, and really an awful, awful childhood- the worst you can imagine. And these twins grow up in that home with that father. And they go off. They leave their home, run away from home later on in life and they reach the age of 30. And then at the age of 30, a psychologist who is doing research on twins goes and visits them. And he goes to the first twin. And what he sees there: the twin is in a relationship. He's abusing his family, very often drunk, very often on drugs. Then the psychologist is able to find

him in a moment of soberness and says to the twin, "what's going on? What are you doing? What's happening here?" And the twin who knows that the psychologist is doing research on the effect of genes and the effect of upbringing, says, "you know my father. You know the kind of childhood that I endured. How do you expect me to be any other way?" And the psychologist who knows the effect of upbringing shrugs. And then he goes to the second twin. The second twin happens to be at the exact same age as the first one. He goes to the second twin- also 30 years old, walks into the house and cannot believe his eyes. Such peace. Such equanimity. Such love. Between him and his wife, and the kids. He's doing well in his career, doing well with his family. He comes back again after a while- see maybe there was a fluke; maybe he's putting on a show, but no- it's the real thing. Phenomenal family life. Phenomenal professional life. And he goes to him and says, in disbelief, "how?" Now the twin also knows that he's doing research and he says, "what do you mean 'how'? You know my father. You know how I was raised. You know what he did to us. How do you expect me to be any other way? I know how much he hurt us. How do you expect me to be any other way like him?"

Same experiences. Monozygotic twins. Same genes. Radically different interpretation: one continuing the hell that he endured as a child; the other creating a heaven. All because of interpretation. What do you do with it? Well, I have no choice. This is the way I was raised. This is the model- passive victim. The other- I'm not going to be like that. I'm not going to be like my father- active agent. So much of it is a matter of interpretation. Happiness, wellbeing, as we mentioned many times before, is not so much contingent on external circumstances, not so much contingent on our status or the status of our bank account. It's contingent on our state of mind. The thing that you'll remember though is that there are no shortcuts unfortunately. There are no quick fixes unfortunately. If there were, I promise you I would've told you. If I find out next week about a shortcut, even if it's over spring break, you'll get an email from

me. But I don't think there are.

And very often, the hope of finding a quick fix leads to more unhappiness. Here are some examples of cognitive reconstruction. This is work done by Tomaka on whether we perceive activity as a challenge or as a threat. Because we can perceive the exact same activity and cognitively reconstruct our understanding of it. So let me give you an example. When I, after being thrown out of Cambridge, I applied for PHD programs. One of the programs I applied to is here. I was hoping to get in. And when I got in, I wanted to come back, because overall, I had a very good experience here as an undergrad, with all the difficulties and hardship, I was glad, wanting to be back. And when I got in, you know suddenly I became a little bit concerned. Because I said- you know I experienced a lot of anxiety as an undergrad. A lot of anxiety as an undergrad. And I said, I don't want to relive that again. Maybe I should go else where. And then I turned around and I said, "OK. Instead of looking at Harvard as a threat, to me, to my calm. I'm going to look at it as a challenge." And my challenge became explicitly- I mean I wrote it in my journal, wrote about it, thought about it explicitly. My goal over the six years that I got my PHD was to maintain calm Because I said to myself, "if I can maintain calm at Harvard, I can maintain calm anywhere." And I worked on it. I really worked on it. And it became a challenge and just that change helped me get so much more out of my experience here as a graduate student. Even through the hardships, the generals and the failures, and the anxiety. But overall- a much better experience.

Recently I just did it. So you know, once in a while I travel right after class. So three weeks ago, I travelled to Florida. And I have a very important talk there with the company that I really wanted to work with. It was my first event there. Company that I cared about. And I think it is doing fantastic things around the world and I really want it to do well. And I felt a lot of anxiety before that talk. And I cognitively

reconstructed it. I said, "OK. It's anxiety inducing, permission to be human experience, but let's look at it as a challenge." That I have this wonderful opportunity to speak to such a great company, such wonderful people. I'm going to make the best of it. Turned it from a threat into a challenge, into opportunity. And that made a big difference in my approach to it.

Think about as in your life. What is it? Is it a play you want to try out for? Is it someone you want to ask out? Is it speaking up in section? This is a study those who take Psych 1 or Psych 15 have encountered that, the work of Schachter & Singer, back in early 60s. Today it would never be able to get this past the ethics committee. Just like Mailgram wouldn't be able to get his study passed. Here was what they did. So they brought people into the experiment and injected them with epinephrine. Epinephrine arouses the body. It...shots of adrenaline. But they thought it was just vitamin C. They didn't know it's epinephrine.

And then they were sitting in the experiment, waiting again for the "real" experiment. They were sitting in the waiting room. And while they were sitting they were asked to fill out a questionnaire. Now remember, they just got a shot of adrenaline, but they didn't know they got a shot of adrenaline. So they were sitting, filling in a questionnaire. And in the first condition, the questionnaire had very provocative questions, to say the least. For example, one of these questions was so "how many men did your mom sleep with before she got married to your dad?" That's one of the que...You know they would never be able to get away with this study today, but you know, back in the 60s. So they were answering this. Now next to them, next to them, there is a confederate- someone who they don't know is part of the study. And this guy is going ballistic. "How dare they" You know...Really getting angry. And you get angry too. And you get even angrier than the control group who went through the exact same thing, except for the fact that they didn't get the injection. So what they

did was they looked, they saw their bodies is getting very aroused and they interpreted this arousal as "oh I must be really angry". And they really did get, even angrier than they would have. They got angry in the control group as well but less angry than those who were injected the epinephrine.

Now second condition. Also injected. Had a questionnaire without any provocative questions. And next to them there was again a confederate, whom they thought was also doing the experiment. And that confederate found by happenstance, a hula hoop on the floor and started to shake it. You know, dance and... You know it was going crazy- they are happy and laughing. And the person who was just injected epinephrine went wild. So happy and joyous- much more happy than the control group, who were in the room with a person dancing with a hula hoop, but did not get the injection. In other words, he interpreted the raising in adrenaline "Oh I must be really happy now". And they were really happier. In other words, very often it's the interpretation- in this case, of a physical symptom that determines what we will feel. Joy or anger. Because they are quite similar. In both of them, there is an adrenaline rush. So how do we interpret a situation as an arousal or, as euphoria or as anger?

Here's another study. This is done by Lee Ross and his colleagues. They asked people, college students- he's from Stanford- college students to volunteer their most generous, benevolent friends to name them and their most competitive, cut-throat friends and tell them who they are. And they contacted them to be part of the study. And what they wanted to see was their behavior in a situation in a game where you can cooperate or you can be competitive. The intervention was that these students, randomly divided into two groups. And in the two groups, there were people who were deemed very competitive or people who were deemed very generous and benevolent. And in the second group, same thing- half of the people were very generous and benevolent; half of the people were very, very competitive and

cut-throat, as perceived by their friends. And in the first group, they got a game and the game was called "the community game". And the second group got the exact same game, the game where you have the opportunity either to cooperate or to compete. But instead of a community game, even though it was the exact same game, it was called "Wall Street game". And they wanted to see how many people cooperate versus how many people compete. And they wanted to see what predicts it.

Well, whether the kids, the participants, were deemed cooperative or competitive, predicted nothing. Nothing. Whether or not they would compete or cooperate. What predicted everything was whether they were in the "community game" or in the "Wall Street game". If they were in the "community game", they were much more likely to cooperate. If they were in the "Wall Street game", whether they were generous, benevolent, or cut-throat, competitive, they were much more likely to be cut-throat and competitive. In other words, how we frame a situation- community, Wall Street- can make all the difference. Threat, opportunity- maybe the exact same thing. How we frame it can make all the difference. This is a study done by one...(part missing)...the quest. A very important question which is how can we raise the level of volunteerism, at Harvard and beyond And the wonderful answer that she came up with is let's get students as well as people in society at large to reframe how we look at volunteering, rather than as duty, something I have to do. Why don't I look at it as a privilege? I have the privilege of helping. And it is a real privilege.

Remember the study on kindness? One of the best interventions for wellbeing. It is a real privilege to give, to help. And when people reframe this, they are much more likely to volunteer. This has implications for child rearing. This has implications, of course, for education. It has implications for society as a whole. This is a topic I am going to talk about a lot. I am going to dedicate much time when we discuss relationships. But just very briefly, this understanding for me transformed, literally

transformed my relationship with my wife. It transformed... It is transforming my relationship with my friends, as well as students and colleagues. You see, we go into a relationship. Most people think that important thing about relationship is that we are validated, as we get pads on our back. Now that's important in our relationship. Surely important to be validated in any relationship, whether it's with students/teacher, whether it's with friends, certainly in romantic relationship.

However, what David Schaech talks about is that primarily if we want long-term, successful, thriving, passionate relationships, the first objective, the primary objective is to go into relationship to be known. To be known, rather than to be validated, meaning going in there and saying "OK so how can my partner get to know me even better?" Doing it gradually of course. On the first date, you don't want to reveal all your secrets. Doing it gradually. You know, thinking about it, but opening up more and more. And couples who over time open up more and more are able to sustain the relationship as well as their passion, over time. And again, I am going to talk about much more... I am going to devote two classes at least to relationships. This is going to be one of the central pillars of successful long-term relationships.

Also with the students, the same applies. You know when I initially started to teach, I really wanted the validation from the students. So how can I have my students perceive me as a good teacher? I want them to like me. And you know, that's important for everyone. We all like to be liked. However, when I switched my focus- and yeah, I still want to be liked- but my main focus is I want my students to know me. I want them to know the topic that I'm most passionate about in the world. That really changed a lot. It's no longer to be validated, i.e. to appear perfect, but it was to be known as a human being, of course- permission to be human. And that actually improved my teaching a great deal and I enjoyed it so much more. Because there is so much less pressure on us in a relationship, any relationship, when we go in with the

intention of being known of expressing rather than impressing. We can feel so much lighter. And the wonderful thing is, that it also makes the relationship so much healthier.

But again, much more on it- because it is so important. So important topic. We talked about this a lot. How do we perceive failure, as a stumbling block? A catastrophe? Or as an opportunity? As a growth experience? And that can make all the difference. We'll talk about it after spring break when we discuss perfectionism and the fear of failure.

And finally, the study that you read by Ali Crum and Ellen Langer. So just give you a little bit background about the study and I will briefly mention it, hopefully you've read it already. Ali Crum was my student for, since her freshman year. I was her TF when I taught with Phil Stone. And then I was her thesis advisor with Ellen Langer. And this was the topic of her thesis. When Ellen Langer came up with the idea for the thesis, and she told Ali and me "this is what I think would be a very interesting study", I took Ellen aside after the study- after the meeting, after Ali went away. And I told her "Ellen I don't think it's fair. I don't it's fair that Ali will do her thesis on it." Because the thesis is a very tough experiment- you'll hear about it if you haven't read about it in a minute. "If we take a lot of time from her, she's not going to get any results." Now you can write your senior thesis with getting no result, without getting a result, that's OK. But I said," why waste her time, her senior year?" And she said to me," will work." I said to her," nit won't." And boy, did it work!

Now I've learned since not to argue with Ellen Langer because she has ideas that you would never think would work, but they do like the study we mentioned with the 1979 "I'm going back to 1959" or with the eye test, being simply in the flying simulator improves your eyesight. Again, ideas that seem fantastic, but she proves them right. So the same happened here with this study. The study was Ali went to

hotels and worked with the ladies who were cleaning the hotels. And she went to them to two groups and told both groups the importance of physical exercise. And she said, "this is, you know, something brought to you by your hotel, just to show you how important exercise is." And then she tested them on all these physical measures, whether it was body fat, blood sample- how much fat they had in their blood, weight, psychological measures- depression, anxiety, and so on and so on. And what she did was... to the one group, she just left them after all these tests. The second group, she said to them, and this was the intervention, "you know the work you are doing is actually physical exercise." And she calculated how much calories it takes to pick up sheets, to go like this and then to put it on a bed, how much calories it takes to actually vacuum. She estimated all those things and then she gave them the statistics of how many calories you should expend a day doing exercise. And she says, "what you are doing is working out actually." This was the intervention. And she went back 8 weeks later.

8 weeks later, she ran the exact same tests again. And some of the results that she found- some of them are in the article, others are not. Blood pressure decreased significantly. The fat in the blood decreased significantly. Body weight, after the 8 weeks, for the intervention group, not for the control group. Control group: no change over that period! Body weight decreased significantly. Their self-esteem went up. Depression levels went down. Anxiety levels went down. And energy levels went up. All, as a result. Now, she asked, "did you do anything differently? Or you are exercising more than you did before?" No difference between the control group and the intervention group. The only difference was perception. Now they may have worked harder. We don't know. It may be just the mind over body. We don't know. But the fact is because they reframed, they reconstructed their experience from a chore- "I have to, you know, clean 30 rooms a day" to "this is an exercise; this is good for me". That made all the difference. Physically as well as psychologically. Here is an

example of acute change. This is the change that happens like a sledgehammer. And this is the Eureka experience. There's a lot of talk, a lot of research, a lot of interest in this area of the Eureka experience, the ah ha moment, the insight- so valuable, so important. And there's much misunderstanding about it. Because people think we suddenly have this insight, not so. There's a whole process involved. And the process begins with immersion. This is when we prepare for the insight. This is when we learn.

Howard Gardner has done a lot of work on extraordinary individuals throughout the world. And what he found is that generally for people to become the experts in a field, to become Creative in a field, they have to have invested at least ten years of very hard work. This is the preparation. This is when you immerse yourself in the material. Look for the example of Beethoven. Those of you who listen to his music and know his trajectory: Symphony 1 and 2- Mozart. Sounds very similar to Mozart. 3rd Symphony, Eroica- it's Beethoven. He immersed himself a great deal in the music of the day- studied it and learned it. and then, after many years, was able to become Beethoven and creative, and transformed the whole field of music. Being the first of the Romantics. Second stage, after we prepare- and it takes, again, a lot of hard work, whether it's preparation that was done by Bill Gates when he was skipping class or whether it's Bill Clinton. A lot of preparation before you become an expert in the field and are able to introduce Creativity- have that eureka, the insight. Second stage: incubation. And you see all the creative individuals: after you immerse yourself in an area, you do nothing. You just allow it to marinate. For example, there's no coincidence that we get some of our best ideas in a shower. It's no coincidence that Archimedes got his best idea in the bath Mozart used to spend hours a day, just driving around Salzburg and then suddenly he would have the ah ha experience, the eureka. He said, "I could hear the symphony in a second." In a second, he could hear just about everything. OK. So that's Mozart. But you hear Shakespeare would spend

hours driving around in his carriage and suddenly would have the insight, "OK, this is what the story is about." And then he would go and write it. Incubation is so important.

J.P.Morgan: "I can do a year's work in nine months, but not in twelve." J.P.Morgan understood, you know, arguably be the greatest entrepreneur this country has ever seen, understood the importance for creativity of taking time off. Today, business people, leaders don't take enough time off. Because we think it's a waste of time. We think that if we just sit there and do nothing, we are really doing nothing. Well, no. The mind works. The mind works and the mind needs it for the creative insight. In fact, leaders- and many of you will go into leadership positions- need time off more than anyone else. Because they need to be creative. They need to think about the next thing for the company, for the organization. Taking time in- invaluable. Not just for memory, also for creativity. One of the things I do when I work with, as a consultant in organizations is I just take the management on a retreat with no agenda. We are just going to hang out. And very often, within as little as half an hour or an hour, ideas begin to come out. Why? Because as the first time, they have time, no coincidence that we often wake up with a solution to a problem we had. Because subconscious mind is making connections then.

Joseph Campbell: "You must have a room, or a certain hour or so a day, when you don't know what was in the newspapers that morning, you don't know who your friends are, you don't know what you owe anybody, you don't know what anybody owes you. This is a place where you can simply experience and bring forth what you are and what you might be. This is the place of creative incubation. At first, you may find that nothing happens there. But if you have such a sacred place and use it, it's during this incubation times, it's during these time-ins, during the time when you have the opportunity to reflect, whether it's on the response paper, or just hang out and

listen to music. That's very often when the ah ha moment comes. The eureka experience. The one second "I see the symphony".

You know, in some way, you can think about an analogy of how this happens. You can think about stage one. Or you can think about in a context of a sexual intercourse. Of making love. Preparation and incubation can be the equivalent to foreplay. The eureka experience- the orgasm. Now the important thing to understand about this process is you have to go through preparation, incubation to get to the eureka experience. In other words, you need the foreplay. Did you hear that man? You need the foreplay to get to the next level. It's important. It's part of the creative process. It's significant. It's very significant for love. It's significant also for this process. And then afterwards, after you've come up with the eureka, that's when you evaluate. You ask yourself, "is this a good idea? Does it work? Or is it just something that you know women and..." Most ideas, most eureka experiences actually end up not working.

And therefore, evaluation is important. Is this really a good piece? Is this really a good idea for a story?- Shakespeare asked. Is this really a good idea for a philosophical treatise?- Descartes who spent a lot of time on his own reflecting. Is this a really good idea for a philosophical treatise? Is this a good business plan? Is this the next Facebook? Or is this just something that I had, you know, the idea that I had at 3 in the morning and someone has already done it or it won't work? Evaluation is important. There are many idea out there- not all of them work. Or to go back to our analogy of making love. So you have the first stage- the foreplay. You have the orgasm and afterwards, here's the question that you may be asking when you evaluate it. Song: Will You Still Love Me Tomorrow (Sung by The Shirelles): Is this a lasting treasure Or just a moment of pleasure Can I believe the magic of your eyes Will you still love me tomorrow So tell me now, and I won't ask again, darling Will you still love me tomorrow Will you still love me tomorrow Will you still love me tomorrow

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So do you know who they are? Not the parents. The students, do you recognize them? The Shirelles. The Shirelles. Actually my favorite group. Really. My daughter's name, some of you know, is Shebelle. And we were looking for a name that would make sense in Hebrew as well as in English. And my wife came up with the name Shebelle, which means in Hebrew "song of God" and you have the Shirelles. So it was just, when we found out, which was just the perfect name. You know what I love so much about it? You can see the navy tame the dance. I love that era! Just love it! Just love it. Anyway, go in YouTube and sign and do the Shirelles, you'll see other songs by them. So this is when you evaluate.

We are almost done. This is when you evaluate it. Is this something that will last? Is this something that is real? A really good idea? A really good relationship? For example. After that, and this doesn't have a parallel to love-making- You elaborate. You elaborate on the ideas. So you write out, you write out the symphony. This is when you write out the treatise. This is when you make the business plan. When I put together this course, I went through this process. so I started off by preparing. So even though I had very good preparation before, you know I studied for the generals twice, teaching with Professor Philip Stone as... I was his TA, twice. TF. Even though I studied social psychology for many years and... I took time off, where I immersed myself in positive psychology material. I read the handbook of positive psychology which is a very good weapon to use. If anyone comes close, you can just throw at them. It's about this big. But very good.

I read hundreds of academic journal articles. And then I took time off. And during that time off, I talked about positive psychology, but I didn't work in positive psychology. I had conversation with my wife, with Phil Stone, with my brother about this. And that's when the eureka came. That's when the insights came. I said, "OK so

this is how the course is going to be built. This is the spiral." Then I had the idea of PPEO, Post Peak Experience Order, as an idea, an ah ha moment. And afterwards, I evaluated it. I evaluated myself. I evaluated by talking to other people about it to see if it works and then I sat down and spent hours and hours and hours, writing out the lectures. All my lectures are written out. Obviously I don't read them. But in preparation, when I prepare for the lectures, I do read them a few times. That was the elaboration. That is the creative process, whether it's putting together a class, or putting together a great organization, of writing a great book or creating a great relationship. I'll see you next week.

Have a wonderful weekend.

POSITIVE PSYCHOLOGY 12

Student: Hi. Good, morning. My name is Dana. I'm a freshman. Um, I'd like to tell you about a social program happening here at Harvard next week. My grandfather, who's Holocaust survivor, is coming to give an account of his experiences. I think it'll be a really special opportunity to hear a moving account, a personal account of history. He has spoken at other universities, at the UN. His story is quite incredible. The event will take place at 730 in the Memorial Church, a week from today - Tuesday, March 18. For more information, you can find on the Facebook event. It's called "Surviving Auschwitz: A Holocaust survivor story". You could just Google... You could just check Holocaust under the Harvard network. And it'll be great if you could come. So any questions, please find me. My name is Dana. I always send you the message. I was the creator of the event. Thank you. Thank you, Tal.(Applause)

Dr. Tal Ben-Shahar: Hi. Good morning. So today what we are going to do is finish up the lecture on change, sum it up the ABCs- the affect, the behavior, the cognition, and then move on to a related topic which is setting goals, which will be the last topic that I'll address before we go on break. The... Last time I ended up by talking about the acute change that comes with a Eureka experience, with an ah hah, with an insight. And we talked about these five stages. And a couple of you contacted me after about this and said, "well, It's not that smooth" and it's absolutely right. This is a theory. This is an outline. When you write, when you come up with ideas, when you generate course, when you write a paper or write a thesis.

Some of you are thesis writers, what you do is very often mix them. So you have preparation. Then you write a little bit. And then you take a break. You have an insight. Then you go back to more preparation and on and on. This is just a general outline, which is useful in a few ways. First of all, it is useful in that we can understand by looking at it. There's no quick fix. None of the great creative artists, scientists, business people in history, created in a vacuum. Initially they became experts in their fields. They worked hard. They immersed themselves in the material. So that's the first important element to remember. No short cuts. We have to apply ourselves. Remember the secret of success? It's not just think, imagine, believe. It also has to have the component of hard work as well as passion. So all the successful people... Again, the best self-help books are biographies, good biographies that show you the process, not the "five easy steps". The second important thing beyond the importance of immersion of the preparation is the significance of taking time off. One of the first thing that leaders of today, one of the things they don't have today is time. It's the thing that they need most. Time off to incubate, o reflect, to metaphorically, or literally, sit in the bath and think. That incubation, the idle time stage. Remember J. P. Morgan's quote: And that's when the Eureka comes. That's when the good ideas come. It's actually after a good night's sleep. It's after "we do nothing for a while". It's when

we in the shower. The next important thing, component of this model is the evaluation part. You know, there are many good ideas, but very few ideas come to fruition and actually become a good idea for a business, or a good idea for a scientific paper, or a book, or whatever it may be. That's when the evaluation comes and that's when the elaboration comes. And these are no less important parts of the creative process.

It really is about 1 percent inspiration and 99 percent perspiration. No short cuts. So to summarize: the ABCs- the affect (the emotion), the behavior (action), and the cognition (the thought). I want to talk about a technique, a simple technique- journaling that has remarkable, remarkable consequence. Just get a show of hands: how many people keep a journal or have kept a journal for significant amount of time? OK. That's great. That's great to see. We know from, from this course and research you encountered before how difficult change is. Sometimes programs that have been around for 5 years don't help. Very often interventions were millions and billions. It's about-100-billion-dollars-a year industry that change industries and organizations. Most of the interventions don't work. We know how difficult it is to change. And yet journaling?

Very solid research showing how much it helps. So let me share with you a study. This was done by the person who really brought journaling into the scientific realm. So there'd been people like Ira Progoff and others who had been talking about journaling for a very long time, but it was Jamie Pennebaker from University of Texas, Austin, who brought this idea to the scientific realm and really researched it. And here is what he did. What he did was bringing participants and have them do the following: on 4 consecutive days that they came in, each day, they would spend 15 minutes- that's all, 15 minutes, times for writing about the most difficult experiences. Now they knew that no one would see it. Or if they would see it, it would be without a name- completely confidential. So they were really able to treat it as their own journal.

And here was the instructions that these participants got. It's a little long but worth, I think, worth reading. "Write continuously about the most upsetting or traumatic experience of your entire life. In your writing, I want you to discuss your deepest thoughts and feelings about the experience. You can write about anything you want. But whatever you choose, it should be something that has affected you very deeply. Ideally, it should be about something you have not talked about with others in detail. It is critical, however, that you let yourself go and touch those deepest emotions and thoughts that you have. In other words, write about what happened and how you felt about it, and how you feel about it now. Finally, you can write on different traumas during each session or the same one over the entire study. Your choice of trauma for each session is entirely up to you." Simple instructions. Pretty straight-forward.

If you notice, you see the ABCs in it. So it says "write about what happened", which is the behavior essentially. Write about your deepest feelings- your affect, your emotions. And write about your thought and analyze it. The ABCs in journaling.

So when he did this study, initially the results came in- because one of the first things he looked at was the anxiety level, so when the results came in, disappointment. In fact, thinking of stopping the study, because this is what he found. So if we have this graph ,this would be anxiety level. This would be time. He had a control group and the control group just wrote about anything that they wanted to write about. Show no change over time. So they started here, and they essentially, straight line. The intervention group, the experimental group, after 4 days of writing about their most traumatic, most difficult experiences. They started at the same point. They were randomly divided. And then a rise in their anxiety. After each of the days and during the 4 days- rise in their levels of anxiety. At this point, he was thinking terminating the study- very disappointed. Because he got from personal experience- he knew that journaling helps him and knew other people who talk about it, who swear by

journaling. But then, once the 4 days are over, during the fifth, especially starting 6th, 7th and on days, this is what starts to happen. Their anxiety levels went down. Learning that they reach the same level as before, they continue to go down. And the most important thing is that they stabilized below the previous level. They stabilized below the previous levels of anxiety, when he followed these participants over a longer period of time up to a year. 4 times, 15 minutes- that's total of an hour. That's very little. And long lasting results. Think about it: this is also what we saw before.

Sometimes, brief interventions are extremely effective. Think about the shyness study that I spoke about last week after 12 sessions of 12 minutes with women who were interested in them, these shy heterosexual men change radically. So change can come in a relatively brief period of time if we know how to intervene. And journaling is one of these interventions. Now this is not going to be one of your response paper- it's too personal. I don't think it's appropriate to assign it, but I certainly do recommend that you do it. Follow specifically Pennebaker's instructions. Doesn't take that long. Do it on 4 days, 15 minutes, 20 minutes each time, just write whatever comes to mind. So it was reducing anxiety over time.

Other results of the study- and if you want to read much more about it, he has a wonderful book called "Opening Up". "Opening Up", by Jamie Pennebaker. They became healthier. So over the year of the study, they visited the doctor's office, compared to a control group, far less. In other words, it strengthened their immune system, not just their psychological immune system, their physiological immune system. Generally they were in a better mood. They were happier, more jovial, more benefit finders, after writing about their deepest traumas. They became more outgoing, less repressed, less suppressed. Now why is that? We talked about it often that positive emotions and painful emotions flow through the same pipeline. And if we suppress something, if we stop something, which is painful, we are very often

indirectly, inadvertently also suppressing the positive emotions, whereas here they open up, quite literally open up and allow these emotions to flow through them. They are essentially opening up a clogged channel- a clogged channel through which emotions, painful as well as positive emotions normally flow. And they experience higher levels of happiness. They are more open, more generous, as we saw also when you do the gratitude exercise. Very similar results.

There were gender differences, which is interesting. Now both sexes benefited from it. However, men benefited more than women. Think about it. Why do you think that is? It makes sense, if you think about it. Women benefited significantly got better, but men benefited even more. Why? Because women have, generally speaking- again, this is brush stroke stereotype- but generally speaking, women open up more. They speak more with their girl friends. They have closer friends and they talk about issues. Men still in our culture today are much closer because it's not cool to open up. It's not cool to give yourself the permission to be human, especially when others are listening. so women generally in their lives But still, even women who have strong supports systems still benefit from this exercise, which reminds me of another result of a study I mentioned months ago, the beginning of the course, which said women generally, again these are all averages, but in general, women- or rather men benefit more from marriage than women. For similar reason. Because women already have the supports system in place. Men, very often, for the first time they are with someone, who they feel comfortable enough opening up to. Again, both males and females benefit from a long-term relationship, but men generally tend to benefit more than women. For the same reason that he found gender difference here. Across cultures. This is done in China, in Japan, Mexico, Argentina, United States of course, Europe- replicated across cultures. In all cultures, people benefit from this study.

Here is another study, which took the exact opposite approach. So Laura King was

a student of Pennebaker, took the exact opposite approach and said, "let's study... (inaudible)... to see what happens when the individuals write about their most intensive positive experience. What she did specifically was taking the instructions from Abraham Maslow's work on peak experience. And here are the instructions. Once again, this was three times, 15 minutes, so 45 minutes total on three consecutive days. "Think of the most wonderful experience or experiences in your life, happiest moments, ecstatic moments, moments of rapture, perhaps from being in love, by a book or painting or from some great creative moment. Choose one such experience or moment. Try to imagine yourself at that moment, including all the feelings and emotions associated with the experience.

Now write about the experience in as much detail as possible trying to include the feelings, thoughts, and emotions that were present at the time. Please try your best to re-experience the emotions involved." Essentially the exact opposite of Pennebaker. Results? Identical. Those who wrote about their peak experiences, their best experiences, visited the doctor's office less time- in other words, it strengthened their physiological immune system and experienced more happiness. So both psychological and physiological results. Now when you look at this, some of you may be thinking that "well, what about the Lyubomirsky study?" Remember the Lyubomirsky study? That said when you write about positive emotions. Actually you feel worse. Whereas you write about negative emotions, you do feel better as Pennebaker suggested. Here's the difference. The instructions that Laura King gave were mostly, were mostly about describing and re-experiencing, replaying your experience. It wasn't about analyzing "why did it happen", "how did it"... It was rather how it happen- in other words, replaying it.

When the instructions- and this is the Lyubomirsky study- were analyze the experience: why it happened, how did you get there and so on and so on. That's why it

had the negative consequences over time, but just replaying the experience, just writing about how wonderful it is, re-experiencing emotionally what that was- that actually let you benefit.

Now the interesting question is why. Why are there such remarkable benefits to journaling? Let's understand the process, the mechanism. So there are a few things that are at play here. One of the things for example with positive emotions is that when you are replaying it, you are simply, you are fortifying the neural pathways. You replay, you imagine it again and you make it more likely to happen again. Just like when you have a river, remember the analogy from two weeks ago, you have a river, and the more water go through it, then the wider it becomes, and then the more water is likely to go into it. That's self-reinforcing nature of change. So the first thing, the first reason why writing especially about painful emotions but not just painful emotions, the reason why it helps is because of tension. We talked about ironic processing- Daniel Wegner's work from here And what he talks about is that when we suppress unnatural phenomenon, it often intensifies. Be it thinking about a pink elephant or be it suppressing painful emotions. And when we give ourselves the permission to be human, we are much more likely to release it, to let go, which is why therapy helps, which is why sharing with friends, opening up helps, which is why journaling helps. This is the whole idea of suppression or repression.

The second thing that Pennebaker talks about is coherence. One of the things that he finds is that the individuals who benefit most, and he analyzes the test, confidentially of course, but he analyzes the test. Individuals who benefit most from the study are once introduced a lot of insight words, or insight phrases, meaning by the third day, they are all writing "now I see that" or "I understand that" or "it just dawned on me that" or "I realize that". Those who have many of these words or phrases in their writings are the ones who benefited the most. In other words, they've

created a sense of coherence out of the experience. They make sense out of something perhaps before that was senseless. In other words, they created a story around their experiences. It's no longer dispersed, disjointed, disconnected data. Now it is a coherent whole. It's a story. Now I can deal with it. And if you think about it, what do people mostly remember? People mostly remember stories. Why? Because you remember a story, because it's one unit- it's a whole. If I give you now a collection of ,you know,100 random words, it'll take you a very long time to commit to memory. I mean we all know, we all took the SATs. But if I tell you a story, you are much more likely to remember it. Maybe not word for word, but certainly, the general ideas. Because we can hold it, we can grasp it. Because it has a sense of coherence. I can deal with it. I can handle it, as opposed to some dispersed ideas, disjointed words. The exact same here. We want to feel that our lives have a sense of coherence that we can make sense of them. Pennebaker: "An artifact of our ambiguous and unpredictable world is the anxiety of not attaining completion and not understanding a simple cause-and-effect explanation for traumatic disturbances.

Alas, we naturally search for meaning and the completion of events; it gives us a sense of control and predictability over our lives." Again, that's why therapy helps, because we create coherence out of experience. This is why there was far less post-traumatic stress disorder after the Holocaust after there was the Vietnam War. Because after the Holocaust, they spoke about these experiences. They created a story around it, a tragic one, but still there was a sense of coherence, as opposed to Vietnam where there was just random flashes of experiences without giving themselves permission, or without society, in many ways, giving them the permission to open up and to create a story out of it that they could hand, they could grasp.

The work of Pennebaker to a great extent relies on the work of a psychologist who we mentioned on the very first day of class. And that is Aaron Antonovsky. Aaron

Antonovsky whom I consider to be one of the fathers of positive psychology, if you remember, came up with the notion of "salutogenesis", an alternative to the pathogenic model- pathogenic model, the model that focuses on pathology, on sickness, on illness, where what Antonovsky said is we need to focus on the origins of health. Salute- health; genesis- origin. And what he did specifically was the following. So he was a sociologist and he said the following- he said: look, life is tough. People go through hardship. They go through difficulties- whether we like it or not, we all in life encountered hardships. In relationship, in school, at work- whatever, whichever domain, there are hardships, there are difficulties. Life is hard. Period. We know that. However, there are some people who are able to better deal with the hardship, with the difficulties, who still, despite- they don't do away these hardships- despite these hardships and difficulties are still able to lead a full, fulfilling and overall, happy life not the constant high- that's reserved for psychopaths and dead people. With the same ups and downs, but at a higher level of wellbeing, or of a lower level of anxiety. And he said we need to study those. We shouldn't just study the sick people, whether the sick people who are physically ill- which is mostly the pathogenic model of medicine, or the people who are unwell psychologically- schizophrenia, depression, and anxiety as psychology have mostly studied. He said we need to look at the healthy people and study them, which is exactly the model that led to asking the question in 1980s with at-risk population: "What makes some individuals succeed despite unfavorable circumstances?" It was his question that made all the difference. So he did the same in his research and asked about the general population: "Who are the people who are healthy? And what is the origin of that health? What distinguishes them from other people?"

And he came up with the notion of the sense of coherence that people have the sense of coherence about their lives. What that means is that, he said it has three components that he researched and identified. The first component: sense of

comprehensibility- I understand the world. It makes sense to me. I see. I realize. I get it. The world and event, difficulties and hardships, highs and lows make sense to me mostly. Second, sense of manageability. I can deal with it. I can handle it. I have the internal as well as external resources to deal with it as opposed to being helpless. This is a sense of efficacy, of confidence- being able to deal with the hardships that arise. So that's the second component. The third and the final component that makes up the sense of coherence, according to Antonovsky, is a sense of meaningfulness. This was not in vain- this difficulty. This disagreement with my partner was not for nothing, because we understand one another better now. And we are even close, more intimate. This failure was not in vain. I have learned from it. And I have grown from it. This mistake has reason- again, not necessarily happen for the best, but learning how to make the best of what happens. These three components are what he identified and replicated in later research as the source of mental health. To quote Pennebaker- to quote Antonovsky, a sense of coherence: "A global orientation that expresses the external- the extent to which one has a pervasive, enduring though dynamic feeling of confidence that and external environments in the course of living are structured, predictable and explicable (comprehensible, in other words); (2) the resources are available to one to meet the demands posed by these stimuli (internal resources and external resources: I can deal with it, I can manage); and (3) these demands are challenges, worthy of investment and engagement (it's meaningful)."

Look at these three. For all those who write a journal, I bet you can identify these three in your writings. This is what a journal does to a great extent. When we write and when we really write about our experiences, our difficult experiences, this is very often what comes up - have sense of coherence. I see. I understand. Make sense. I can deal with it. I can handle it. I have just found a path of how to do it. Even if dealing with it and handling it is writing a journal, and finally, it makes sense to me. It's meaningful to me now, whereas before, it didn't as much. So if you don't have a

journal, you don't journal, it is certainly something that I highly, highly recommend.

Let me summarize the whole change lecture: the A, B and C. The three are interconnected. In fact, if we want real change to come about, they have to be interconnected. Why? Because habit is like a flood. And it's not enough if we just create a small? Cranny trying to create a new habit. Because flood would wash it away. What we need is the A, the B and the C. Implement these changes in our lives. And they are interconnected. So let me give you an example. Let's say someone who has low self-esteem. Low self-esteem, the C- cognition: they don't think highly of themselves. Poor self evaluation. When you don't think highly of yourself, you are more likely to be innervated, to feel down, not to be motivated, and as a result of that, that is the Affect, the emotion that you experience- not good feelings; as a result of that, we are much more likely to do nothing- in other words, the B is do nothing. Now through self-perception theory, the behavior then affects my cognition on doing nothing: I'm not dealing. I'm not coping. I'm avoiding. And that lowers my self esteem, even more my evaluation of myself, the C. And that leads to even worse emotions and so on and so on and so on, in a downward spiral, until in some cases, we reach resignation, or in Martin Seligman's words, learned helplessness. Now think of someone who has high self-esteem, high level of self-confidence. I believe in myself. I think I can do well. That leads to high level of motivation.

Remember what Marva Collins does? The model that we talked about under belief, self-fulfilling prophecies- that leads to high levels of motivations, strong emotions. I'm energized. And that in turn leads to more action- the B, the behaviors. Because I act more, I do more, I cope more. I put myself on the line more. I'm much more likely to have more positive evaluation of myself, which leads to more positive emotions and on and on and on, in an upward spiral. The spiral that Barbara Fredrickson talks about in the Broaden-and-build, the spiral that Bandura talks about when he discusses

self-efficacy. When we intervene, it's important to introduce, if possible, all three. And we can start anywhere. So let's take an example- someone with social phobia, someone who is afraid to be out there, in front of people. One way to deal with it- let's begin with the A, the Affect, the emotion. One way to deal with it is through medication that goes directly to our emotions. Another way of dealing with it is meditation, which also affects our emotions directly. Some people benefit more from one, or from the other- depends on how extreme the situation is. But that's the A, the Affect. One way of dealing with it, behavior, is through what's called in cognitive behavioral therapy, exposure which is gradual exposure to stimuli that create that phobia. So initially I'll walk, you know, 10 yards out of my home. Initially exposure through the imagination and I include it under behavior, because the mind does know the difference between the imaginary and the real. So gradually being exposed to it. Over time being exposed more and more, until I can go out to a mall and not experience the same anxiety that I did a year ago. So that's through behavior. Very effective- the exposure technique. And finally, you can also intervene through cognition in therapy, in dealing with irrational thoughts, psychological traps, the three M's- "Am I magnifying? The extent. Am I minimizing something? For example, my successes in working with people. Or am I making up? Imaginary scenarios. My catastrophizing events when I can have a more realistic view." So that's my thinking about it, the cognition. Let me show you a personal example of something that I dealt with So as you know, born through genes- high levels of anxiety.

Very prone to it. Startle very easily- still, less today, but still to some extent today. Used to get very nervous in squash matches. Used to choke often, when I was playing important games. And that's something that in front of, speaking in front of an audience, got very nervous and anxious. And this is something that I decided that I really wanted to deal with. More than any other things that I was facing. The thing anxiety. So what did I do? Let me begin first with the C, Cognition. What I did- I

analyzed the situation in my journal. I used the Bureau of Study Counsel. I learned and studied about the three M's, the irrational thoughts- magnifying, minimizing, making up, catastrophizing. And through cognition, it helped a lot. That wasn't enough. After the C, I went to the A, the Affect.

And the Affect was for me physical exercise. You know, even today, this morning, at home, I ran. I exercise because it significantly lowers anyone's levels of anxiety. And I can tell a significant difference in my talks if I don't exercise. So even three or four weeks ago, David, my son was unwell and I had to take him to the doctor first thing Tuesday morning. Didn't have time to exercise. Actually felt it in the lecture. I was more nervous, more anxious. Makes a big difference. As we'll talk about, after break, it literally has the same effect as taking an anti-anxiety pill. So exercise was certainly there, work directly on my emotion. Yoga. Helped me tremendously in dealing with anxiety and lowering that level. So this was the emotional.

The other thing, music. Relaxing music. You know my taste in music. I don't need to repeat it again. So actually when Tammy and I got married, we moved in together. She couldn't believe my collection of CDs. She said "you don't look that anxious". Because I had, um, "The Most Relaxing Classical Music in the World", "Music for Relaxation", "Music for Dealing with Anxiety", silent quiet music- I mean, a whole shelf of the relax... But they relax me! They really help me.

And finally, behavior. Introducing behavior. So it is through exposure. Initially giving a talk. Because I want to be a teacher. Giving a talk to my squash team. Giving a talk to my family. Places that were safe for me. Giving a talk to anyone who would listen. Initially small groups and gradually building it up. Exposure through the imagination. Once again, the imaginary thing and over time becoming more confident. Another thing that for me was very significant as an undergrad here- speaking up in section. I was terrified of speaking up. And when I decided to do that, I

had no doubt in my mind that everyone in section could hear my heart beat. Because it was in my head. And yet, gradually, I spoke up a little bit more and a little bit more, and then through self-perception theory, it actually got better and better and better. And I still do all these things. I still do yoga. I still do exercise regularly. I still engage in the CBT approach, the 3 M's. I keep a journal, which combines very often all three. And I listen to relaxing music. And it works. It works. Now change is not easy. It is hard. It takes time. However, that doesn't mean that the process itself cannot be enjoyable. It's not OK when I've changed then I'll be happy. The process itself is extremely, potentially, extremely rewarding. Sometimes difficult. Potentially, very rewarding. The journey as well as the destination. The other important thing to remember about change- this is taken from the work of, really the person who took the psycho-analysis and transformed it into a more positive approach.

Karen Horney, who I mentioned before. What she says about neurosis is that neurosis never go away completely. And when she says neurosis, she means it in the most, in the broadest sense. So for example, if I am a perfectionist, I'll always have some perfectionism in me. And we'll talk about it after the break. If I am prone to anxiety, I'll never be, you know, the Dalai Lama, unlikely. It'll always be there. And it'll always be potentially triggered by any event. And she says "that's OK. That's natural. That's human." And we need to accept it. Because if we don't accept it, then we'll be constantly frustrated. Because we want to change completely, or expect our partner to change completely. Very difficult. Unrealistic. It takes time. It's gradual. We need to also learn. And we can learn to enjoy the process. Henry David Thoreau, 1840s: "I know of no more encouraging fact than the unquestionable ability of man to elevate his life by a conscious endeavor."

It is something to be able to paint a particular picture, or to carve a statue, and so to make a few objects beautiful; but it is far more glorious to carve and paint the very

atmosphere and medium through which we look, which morally we can do. To affect the quality of the day, that is the highest of arts." Again, it's the process; it's not the outcome that matters more. The outcome will lead to a spike but will very quickly go back to our base level. It's the process of actually doing those activities, the ant he Bs, and the Cs that will lead to a happier- not perfect, not happiest, but happier life. Over time, It takes time to carve out live statue, chipping away the excess stone, the limitations and building a beautiful life. It is not only the highest of art, it is also- I would argue a high science. And that is the science of psychology.

I want to move on now. Move on and talk about... One second. Here we go. I want to talk about a topic that is related to, very much related to the whole change, to the whole change process. And that is goal setting. Now, question for you: how many people here- put your hand up if this applies to you- do you want to become more efficient and procrastinate less? If it's true for you, put your hand up. One, two, three, four, five, six...OK. Put your hand up now if you want to experience less stress and be calmer, whether it's during an exam period or not. OK. One, two...OK. Now if you put your hand up for one of these questions, you should stay. If you put up your hand for both questions, you should not only stay, you should stay awake. Because what we are going to talk about of the next two classes is the importance of goals and how they can help us deal with stress, how they can help us deal with procrastination, how we can become more efficient- not perfectly so.

By the end of the two weeks, you are not going to a well-oiled machine. You are just going to be a happier human being- just think is a lot. So first of all, the topic that we'll talk about under goal setting- first, understand the theory and the practice of goal setting: the Ivory tower and the Main Street of it; second, how do we deal with stress- we'll talk about this in the next class; and finally, I don't think we have time for this, but I'm still leaving up the power points there just so you can look at it, and I

elaborate on it in the book. Moving from material perception to happiness perception, which is essentially about what I talked about in the last meditation of the book, The Happiness Revolution and the internal revolution that can take place. I know you don't have time for before break, but you still have the material on it. So let's begin with theory and practice. What I want to do now is convince you, very simply, to set goals, convince you that it is important and yet you are going to do it for, your response papers. You have already started doing it, but I really want to convince you, as a way of life, setting goals regularly, whether it's in business, whether in your personal life. First, I'm going to do it by convince, showing you the research on setting goals and performance and second, setting goals and happiness- how it contribute to our success in the conventional. Currency, as well as in the ultimate currency. Quite simply, people who set goals are generally, controlling for other things, more successful. Why? One of the main reasons is because what goals do is they focus us Very often, we are all over the place; we are not sure where we are going. And if we don't know where we are going, we are unlikely to get there .And the focus gets us directed. It brings forth resources- external and internal resources- that are necessary to get there. Abraham Maslow: "Being focused on a task produces organization for efficiency both within the organism and in the environment." Quite remarkable how goals actually work. When we set goals, when we enter something, whether it's privately but even better- publicly, things begin to happen inside us as well as around us. Also, goals contribute to performance and well-being because they strengthen our resilience. Remember the second class when we talked about resilience? One of the things that extinguish those kids who were successful, despite difficult external circumstances, was the fact that they were resilient, and one of the distinguishing characteristics was they set goals for themselves. They were future-oriented. Not only thinking about the past, being "learned helpless"- learning to be helpless, but focusing on the future.

Nietzsche once wrote that if we have a what for, every how becomes possible. When we have the what for, every how becomes possible. And we are much more likely to overcome difficulties and hardships, if we have a goal, a mission, something that we care about, something that we want to attain. Goals make us more successful for the exact same reason that positive beliefs do. What we are doing with goals with declaring that we believe we are going to get something. Roger Bannister declared, said that he would break the 4 minute barrier. Thomas Edison said that by the 31 of December, 1879, he would generate light from electricity. Setting goals makes it more likely to come true. Because our mind does not like when the reason inconsistency between what is inside and what is outside. It wants there to be match. And if I believe in a goal and I declare a goal, the outside is likely to match that. Again, not 100 percent correlation as we've discussed, but certainly making it much more likely to happen, making us much more likely to be successful.

Now what is the knapsack? Imagine the following: you go on a road trip. And you have a knapsack on your back. And you reach a wall, a barrier. What do you do? Well, there are many things that you can do when you reach that wall. And the wall is long and high. One way is to say, "OK, pity" and turn around. In other words, avoid that wall. Another thing we can do is take out our sledgehammer and try to break it down. Another thing that we can do before we do any of the other things is take our knapsack and throw it over the wall. Take our knapsack and simply throw it over the wall. Why? Because the necessity is the mother of inventions. I need my knapsack to continue. I need my knapsack. I want it. And now it's over the wall. I have no choice. But to get over that wall, whether it's by breaking it down, whether it's by finding a way around it, under it or over it. But suddenly, I will come up with solutions that I have not seen before and this is how it works. It's remarkable- how it works- for the exact same reason that when you declare a goal such as "I want to buy a computer". Suddenly you see computer ads all around you, whereas before you didn't see

computer ads. Or let's say you want to buy specific car. Suddenly you see that specific car all around you while you didn't see it before. Why? Because we co-create our reality through our questions to a great extent. Remember the children on the bus were there all along, but you didn't see them until I presented a goal to you which was to count the number of children on the bus. And then suddenly it was so clear that it was right in front your eyes. Before, they didn't exist for you. That's what a goal does. If I declare that I have to get over the wall, and my question is "how do I get over this wall". It's not thinking about "is it possible or is it not possible". It's rather "how can I get over this wall". This question opens up opportunities, many of which I have not seen before. Suddenly the children on the bus are right in front of me. Suddenly a hole in the wall is right in front of me. Suddenly I see a sledgehammer that I didn't see before, right next to me. Necessity is the mother of inventions. If we ask the right questions, it opens up opportunities.

The other thing that's at work here is the power of the word: words create worlds. Let there be light. We've seen it in religion. And there was light. Words create the world. Book of John: in the beginning was the word. But it's not just in religion. Look at this great country. The United States was declared into existence. Words have power. They have meaning, especially when the words are meaningful to us when the goals that we declare are meaningful to us, they are much more likely to come true. The connection between concept and conceive is not just etymological, it is also metaphysical. It is also real. Because when we declare something, when we save something, it is much more likely to become a reality. What words do is essentially create an image in our minds, especially when we imagine the goal. It creates an image in our mind and the mind doesn't know the difference between the imaginary and the real. And the mind wants consistency- that is what goals do. They help us create consistency. I want to read you an excerpt that, I talk about many of these things in the book so for some of you, this may be a repetition.

But I want to read you an excerpt from W. H. Murray, who led the Scottish expedition to the Himalayas, one of those prominent, accomplished climbers of all time, climbed the Everest. Here's what he says, in his writing about the expeditions that he took: "Concerning all acts of creation there is one elementary truth, the ignorance of which kills countless ideas and splendid plans: That the moment one definitely commits oneself, then providence moves too."

All sorts of things occur to help one that would not have otherwise occurred. A whole stream of events issues from the decision, and meetings and material assistance which no man would have dreamed would come his way. 'Whatever you can do, or dream you can, begin it!' Boldness has genius, magic, and power in it." Why it works, how it works- we are not really sure, but it works. Just like when you declare you are looking for computer, suddenly you see all these opportunities, the same with commitments. When we commit, things begin to happen. We begin to identify external resources as well as internal resources. Things that we didn't see before. Because my question becomes "how can I succeed". And then children on the bus or the time on the clock suddenly become visible to us. And we are able to succeed... Much more likely to succeed than before. Words create worlds. So this is about success. Very well documented. Some of your readings are related to this. People who set goals generally, controlling from other factors, are more successful, whether it's in business, whether it's in other personal lives. Goals matter. They don't just matter though for the "hard currency". They also matter for the "ultimate currency"- the currency of happiness. Goals properly understood, goals properly understood, lead to happiness. And I emphasize "properly understood". Why? Because we know that attaining goals, the attainment of goals does not in and of itself lead to happiness. Yes, getting tenure will lead to a spike of my well being, but very quickly I'll go back to my base level. Winning a lottery or making a lot of money, or getting a, or getting promoted at work will lead to a spike in my well being but it will not lead to long

lasting happiness. So that's temporary- we know that. So we know that attainment of goals does not lead to happiness. What does lead to happiness? Understanding the proper role of goals. And understanding that it's not the attaining of a goal that leads to happiness, but the having of a goal that leads to happiness.

So two years ago, when I taught positive psychology, a book came out by very important scholar in the area of happiness, who's the Dalai Lama's right hand man. He's translator, Ricardo Mathieu. Wonderful book on happiness came out. And we, in Williams James Hall 1, engaged in a debate- was an event for Harvard students and faculty. And we engaged in a debate- "Happiness: East and West". And we agreed on many things- as you know, I meditate regularly, and certainly believe in the power of a lot of the Buddhist psychology. However, the one thing that we disagreed on was goals. That's the one thing we disagree. Because in Buddhism, according to many of the interpretations- not all, many of the interpretations, the state we want to reach is a state of non-attachment. A state where we will not have something external that we want, that we desire, that we will be completely present in the here and now. Now I think it's a wonderful ideal perhaps, but what I argued and what I still argue is that it's unrealistic As human beings, I do not believe- maybe after 30 years of meditating for 8 hours a day, possible- but I do not believe that we can reach a state where we are not attached. And setting goals is an example of attachment. Because when I say I want to win this championship or I want to get \Nan A- in this course or I want to get a job in this bank, this is a goal which means by definition that I'm attached to the outcome. If I wasn't attached, if I didn't care then, it wouldn't matter. And I think it's not only important for success, it is also important for happiness. So that's where I differ to a great extent from some of the Buddhist interpretations on non-attachment of being in a desire-less state. However, where we are similar in our understanding is the focus on the present. Goals properly understood their role is to liberate us to enjoy the present. What does this mean? Let's say you go off on a road trip. And you have no idea where

you are going. You don't have a goal. You don't have a destination in mind. You are less likely rather than more likely, less likely to enjoy the journey. Because every minute you'll look left or right or ahead to see if you are not falling over the stage; whereas if you know where you are going, you have a sense of direction. You are liberated. You are much more likely to enjoy the process, the flower on the side as well.

Think about your lives- periods that you have no idea, or for many of you, I know, it's happening right now. You have no idea where you are going next year. Now for a while, for most people, it's OK. It's fine. But after a while, you want to know where you are going. Because when you are immersed in something, you have a clearer sense of direction. You are much more likely to be happy, which explains why so many people, when they retire, become less happy, even though they've been dreaming of being retired for many years. When they actually retire, they become less happy. The ones who are happier when they retire are the ones who actually set goals for themselves, whether it's taking a class, whether it's learning something new, whether it's spending more time with family and friends, but they have a goal, as opposed to "let's just enjoy ourselves; let's just be". We need that goal- this outcome, this future orientation, so that we can enjoy the present more. The goals liberate us to enjoy the here and now. In other words, if you think about it, the role of goals is actually means. They are means toward an end, and the end are the present experiences. Again, the goals in themselves, as we said, as we discussed, will not make us happier, whether attaining of the goal or failing to attain the goal. We'll be on the ups and downs, the vicissitudes. But if we want the base level- the base level is the here and now. The present. It's the process. It's the journey that we're living mostly, not the outcome.

When I start the book, I talk about thinking this rally championship would make me

happy And it did. For 4 hours .And then back again to base level. Professors who get tenures think that is what would make them happy for the rest of their lives- the attainment of that goal. It doesn't. They go back to base level of happiness, whether they get it, or don't get it. The key is to learn, to enjoy the process. And one of the roles of the goals is to liberate us so that we can enjoy the process. Goals are means toward the present end, which is taking a lot of goal theory and turning it around. This explains why so many high achievers are unhappy. This explains why so many high achievers turn to drugs and to alcohol. By the way, today even more so than in the past- maybe today we know about it more than in the past. Going into rehab centers constantly. Coming out and going back. And we ask ourselves, "why? How could it be?" Those people who seemingly have it all. Who seemingly have it all? Fame. Fortune. Beauty. Anyone they want. The life that most people in the world dream about. How come they end up in a rehab center? How come they are unhappy?

Here's the how come. You see, for years, when they climb up the ranks, when they have the dream of becoming a famous person, a person who is admired, revered, a person who can get anything or anyone almost they want, when they dream about it, they may be unhappy. But they say to themselves, "OK. I'm unhappy now, but I'll be happy when I get there." And then they get there. And they realize that there's no "there" there. They think it would make them happy, but it doesn't. And that's when the real problems begin. Because that's when they begin to experience helplessness. That's when they become resigned. That's when they go into- on the Hamburger model, that's when they go into the learned helplessness and resignation and the nihilism. Because everyone has told them that once they make it then they'll be happy. And they told themselves, "once I make it then I'll be happy". And they are not any happier for it. Yeah, initially when the fame begins, and when they start having things in their way as they always dream, of course they are happier. But then they go back to their base level. And when they go to their base level, they are suppressed, they are

upset, they are disappointed, and more than anything, they are scared. Because what now? Until that point, they were sustained by their hope that when they get there, they'll be happy, but they are not happier. And they are scared. And they are lost. And they look for solutions, very often outside of the normal experiences, outside of ordinary life. And where is that? That very often is with drugs and with alcohol. Because that takes us out of our normal day-to-day, ordinary lives. For good and ill. This misunderstanding prevalent and most people live that way. And they think- and this is why so many people go through mid-life crisis for example.

It's not the only reason. But it's one of the reasons. Because there are many people who are pretty accomplished, who have nailed it, and then they say, "What now? Is this all the raise to it?" Yes, this is all the raise to it. And the challenge is to identify the treasure of happiness that are embedded, that are there in the it and that are there all around us. Again, happiness is not contingent on our status or the state of our bank account. It's contingent on our state of mind, of how we interpret our reality, of on what we choose to focus on. And to be happier is the present that matters much more. Quote from my book: "Happiness is not about making it to the peak of the mountain, nor is it about climbing aimlessly around the mountain; happiness is the experience of climbing toward the peak." It is about having a goal. It is about having a destination in mind, and then letting go and enjoying the process. You know there are many people who talk to me about it, and again I went through the exact same experience. So OK "what is going to be the next job that I take?" "What is going to be the path that I take?" And once they take a path, it is very often they regret, "I should've taken the other path." Should've taken this job. Should've gone there. And my response to it is it doesn't matter. It doesn't, in the ultimate currency, it doesn't matter. Because, yeah, let's say I am at a job that I should have taken and I would be very successful there. Fine. I would enjoy a high when I became very successful. But that in and of itself would not make me happy. The key is to have the goal. The key is to have the

commitment to whatever it is that I'm doing. Now that commitment may change every three days and that's OK. It's the having the goals. Having that commitment that matters. So if you chose certain path and now you regret it, remember, it really doesn't matter. You can be as happy in both paths as long as you are committed. Because when we are committed, that's when we can enjoy the journey. Doesn't matter as much what it is that we are committed to, provided of course that is moral and it's not about hurting others, which ultimately doesn't just hurt others- it also hurts ourselves.

David Watson in "The Handbook of Positive Psychology": "Contemporary researchers emphasize that it is the process of striving after goals— rather than goal attainment per se— that is crucial for happiness and positive affectivity." And finally, two of the leading researchers in the field, David Myers and Ed Diener: "Happiness grows less from the passive experience of desirable circumstances than from involvement in valued activities and progress toward one goal." Here is a beautiful poem that I think captures by Gwendolyn Brooks: "Live not for battles won / Live not for the-end-of-the-song / Live for the along." It's not any goals that matter. It's not any goals that...Not all goals are created equal. And here's what we do get to a place where it's important to think about your goals. Yes, the commitment is the most important, but there are certain goals that are better than others: self-concordant goals, very briefly, because -it's in your readings- are essentially goals that are aligned with your personal interests and values- things that you care about. Doing things that are important to you. So for example, doing premed because what you really really want to be is a doctor and treat people. Studying economics because the market fascinates you. And you want to engage in work that relates to it. You are passionate about it. Joining a student organization, because you believe in their mission. Aligned with your personal interests, with your values, with your passion. These are goals that you choose freely, not goals that are imposed from the outside whether it's by someone specific or specific people, or by abstract society. And doing it out of a sense of

obligation or duty. It's to do things that you care about deeply from within. In other words, these are things that you want to do, or that you feel, that you perceive that you want to do, rather than things that you have to do.

My teacher Ohad Kamin, when I graduated from college, and I was debating- I didn't know which direction to go, said to me the following- he said: "here is the advice from a 50 year old." - He was 50 at the time. He said, "Identify the things that you can do. And then out of those, identify the things that you want to do. And list them down. Make a list- long or short, whatever it is. Now out of the things you want to do, identify those things that you really want to do. And then look at them, and out of those things, identify those that you really really want to do and then do them."

One of the best advices that I got. Very simple. But so important. Again it's to take time aside and to think about those things. So what are my self-concordant goals? What is the interest of me? What is valuable to me? What am I passionate about? What do I want to rather than feel that I have to do? And sometimes the answers are not easy answers. Sometimes the answers are not answers that I want to hear. And the implications, the? That are following that path may not be as pleasant initially, because it made me going against the grain. It made me doing something that yields difficulties from other people or from the environment. It may not be the most popular choice.

I think it's such an important component of happiness, is spirituality. Now the dictionary definition of spirituality is- one of the definitions is the real sense of significance of something. So if I see something as significant, as important, as meaningful, I'm having a spiritual experience engaging in it. So what is significant to me? What is important to me? And the thing to keep in mind is that it doesn't matter what I choose, what direction I go in. If I choose something that is self-concordant, that is aligned with my personal goals and mission, I will lead a spiritual life. In fact,

an investment banker who goes into investment banking for the right reasons, because he/she cares about this work. Because they think it's important, because they enjoy it. Because they love dealing with numbers and having the adrenaline rush. And yes, they are people who truly enjoy it. If they go in for the right reasons, they will lead a much more spiritual life than a monk who goes into the order for the wrong reasons.

And of course, vice versa. Whatever we choose, the self-concordant goals- and I truly believe it, that the world will become a better place, not just individualized will become a better place, if people pursue their passions, their self-concordant goals. Easier said than done. "Becoming self concordant is a difficult skill, requiring both accurate self-perceptual abilities and the ability to resist social pressures that may sometimes push one in inappropriate directions." And we need to engage in these activities. Why? Because life is short. Life is short. Life is...Sorry. "Life is too short to do what I have to do; The sooner we start on the want-to, the better. This does not mean that you can't say to yourself like, "well my real passion is starting my own business. And in order to get the foundation, I will work as a consultant or an investment banker for two years." Nothing wrong with that. Perfectly fine. Even though it's not your passion working 80 hours a week in front of an Excel sheet. That's OK. Sometimes we need to delay gratification. The danger is that we enter this delayed gratification state for our entire lives. And that becomes the red-race (?) path. And that is what we need to be aware of. This is what we need to keep in back of our mind. I want to show you a quick video excerpt from one of my favorite movies, Dead Poet Society, where Robin Williams talks about the importance of identifying what it is that we were meant to do with our lives, in other words, our self-concordant goals. (Video clips from Dead Poet Society with captions on the screen) Dr. Tal Ben-Shahar: So carpe diem (seize the day).Do what you want.

To Be Continued