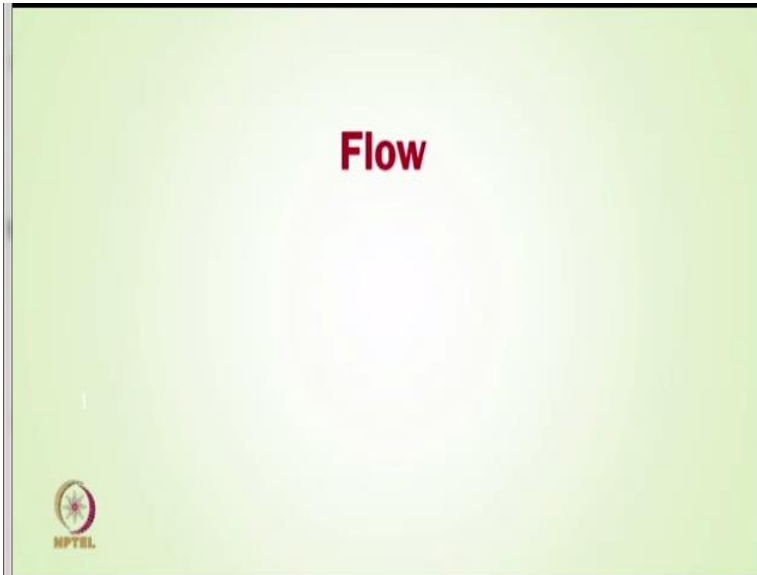


Positive Psychology
Prof. Kamlesh Singh
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Lecture-15
Flow

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Namaskar, in this series our next topic is flow.

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Please read the following quotes:

My mind isn't wandering. I am totally involved in what I am doing and I am not thinking of anything else. My body feels good... the world seems to be cut off from me... I am less aware of myself and my problems.

- *My concentration is like breathing... I never think of it... When I start, I really do shut out the world.*
- *I am so involved in what I am doing... I don't see myself as separate from what I am doing.*
- *I have been challenged but I believe that my skills will allow me to meet the challenge.*
- *I know what I want to achieve, how good I am performing and experience a sense of control during activity.*

Have you ever felt similar experiences??

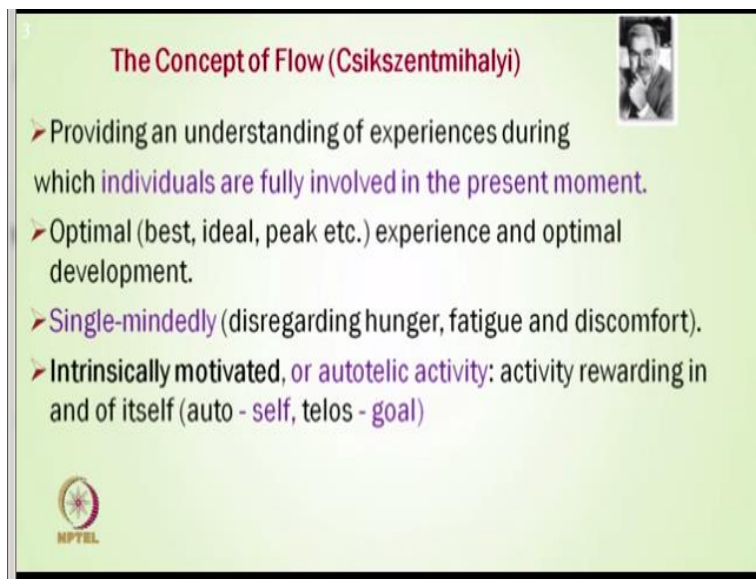
If yes please write the name of that activity _____

Please read the following quotes carefully, my mind is not wandering I am totally involved in what I am doing and I am not thinking of anything else, my body feels good the world seems to be cut off from me, I am less aware of myself and my problems. My concentration is like breathing, I never think of it when I start, I really do shut out of the world, I am so involved in what I am doing, I do not see myself as separate from what I am doing. I have been challenged but I believe that my skills will allow me to meet the challenge, I know what I want to achieve, how good I am performing and experience a sense of control during activity.

Have you ever felt similar experiences? If yes please write the name of the activity and during that activity you were experiencing flow, so let us know what flow is? However, this experience is like describing taste of rasagulla, you know there is difference between taste or experience of rasagulla or description in words of taste of rasagulla.

So that is why these are 2 things these are actually inbuilt or experiential activities and we are trying to address or define these experiential activities with the help of words. So somewhere actually we are not able to describe it exactly.

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The Concept of Flow (Csikszentmihalyi)

- Providing an understanding of experiences during which individuals are fully involved in the present moment.
- Optimal (best, ideal, peak etc.) experience and optimal development.
- Single-mindedly (disregarding hunger, fatigue and discomfort).
- Intrinsically motivated, or autotelic activity: activity rewarding in and of itself (auto - self, telos - goal)

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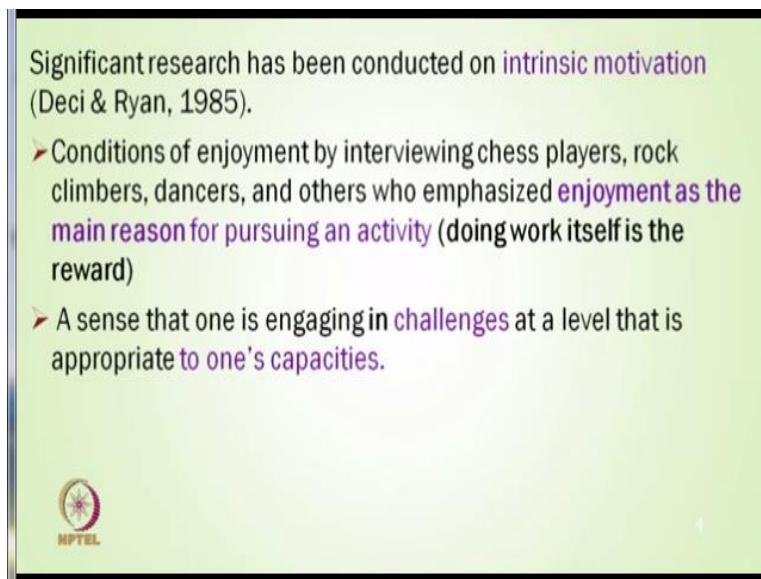
But still there are various scholars who have tried to define the concept of flow, Csikszentmihalyi is leader in this field. His introduction in one of the International Positive Psychology Association conferences was he has 3 sons, 2 sons and 3rd son is flow. So whole life

he has worked on this concept. The concept of flow can be defined with various experiences like providing an understanding of experiences during which individuals are fully involved in the present moment.

So, during this activity you are fully involved in the present moment, at this time we have optimal experience and optimal development means best, ideal or peak level of experiences we have during this process. These activities single mindedly disregarding hunger, fatigue or discomfort during this process or during this activity we feel intrinsically motivated or autotelic activity we count it - activity rewarding in and of itself.


So, it is autotelic activity means goal itself is rewarding activity, it means when we are in the process of flow, we are in the present neither in the past nor in the future. During this process we experience peak level, best level, ideal level experiences. During this period there is no distraction at all due to hunger, thirst, fatigue, discomfort or any other distractors we do not have during this process, activity itself is a motivation.

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Significant research has been conducted on **intrinsic motivation** (Deci & Ryan, 1985).

- Conditions of enjoyment by interviewing chess players, rock climbers, dancers, and others who emphasized **enjoyment as the main reason for pursuing an activity** (doing work itself is the reward)
- A sense that one is engaging in **challenges** at a level that is appropriate to **one's capacities**.

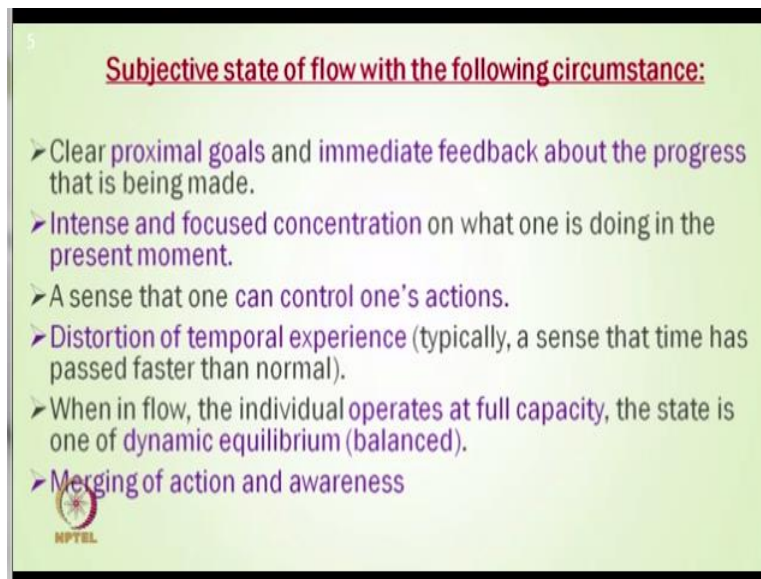
 NPTEL

So, these are the characteristics of flow. Significant research has been conducted on intrinsic motivation and itself it is a goal and it is a process which motivate us to perform certain activities. Conditions of enjoyment by interviewing like chess players, rock climbers, dancers and others who emphasized enjoying as the main reason for pursuing an activity. So, doing work

itself is a reward and they do not need external rewards in doing these activities, activity itself is rewarding for them.

Since one is engaging in challenges at a level that is appropriate to one's capabilities, so they have similar capacities or capabilities which are required for this situation or challenge for this task. So that way your capacities and challenges are well matched here.

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5

Subjective state of flow with the following circumstance:

- Clear proximal goals and immediate feedback about the progress that is being made.
- Intense and focused concentration on what one is doing in the present moment.
- A sense that one can control one's actions.
- Distortion of temporal experience (typically, a sense that time has passed faster than normal).
- When in flow, the individual operates at full capacity, the state is one of dynamic equilibrium (balanced).
- Merging of action and awareness

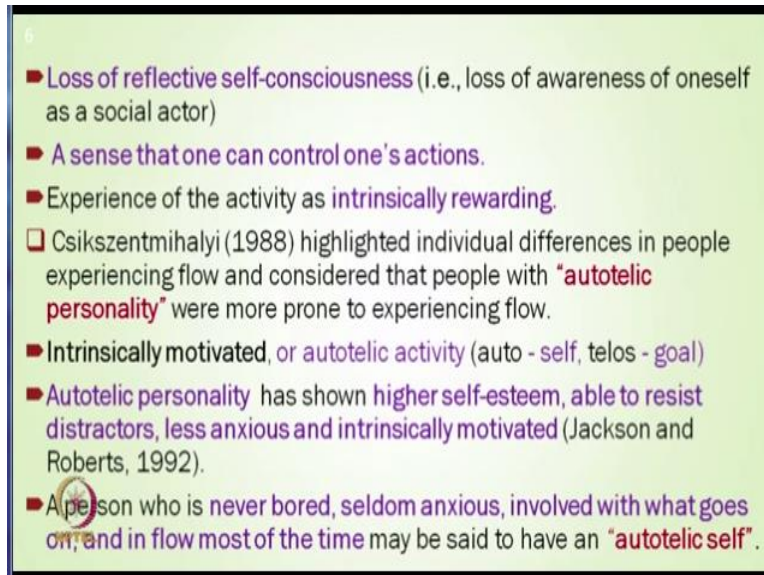
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Next point is subjective state of flow with the following circumstances, during the subjective state of flow you experience clear proximal goals and immediate feedback about the progress that is being made. So, during this period we know what are our goals and we are able to get immediate feedback whenever it is required. So, we know in which direction our progress is going on, intense and focused concentration on what one is doing in the present moment.

So focused concentration we have and full attention in present moment since then one can control one's actions. So, we know in which direction our actions are going on and we are able to control them at that power or that, you know, sense we have during this activity. Distortion of temporal experiences that is next subjective state, typically a sense that time has passed faster than normal or maybe slower than normal.

So somehow, we have distortion of temporal experiences. When in flow, the individual operates at full capacity thus state is one of dynamic balanced activity, merging of action and awareness you do not have separate awareness action itself is part of your awareness.

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- Loss of reflective self-consciousness (i.e., loss of awareness of oneself as a social actor)
 - A sense that one can control one's actions.
 - Experience of the activity as intrinsically rewarding.
 - Csikszentmihalyi (1988) highlighted individual differences in people experiencing flow and considered that people with "autotelic personality" were more prone to experiencing flow.
 - Intrinsically motivated, or autotelic activity (auto - self, telos - goal)
 - Autotelic personality has shown higher self-esteem, able to resist distractors, less anxious and intrinsically motivated (Jackson and Roberts, 1992).
 - A person who is never bored, seldom anxious, involved with what goes on, and in flow most of the time may be said to have an "autotelic self".

So, loss of reflective self-consciousness we have during this period loss of awareness of oneself as a social actor. Sense that one can controls one action, that is another point during this process, experience of the activity as intrinsically rewarding. Csikszentmihalyi highlighted individual differences in people experiencing flow and considered that people with autotelic personality were more prone to experiencing flow.

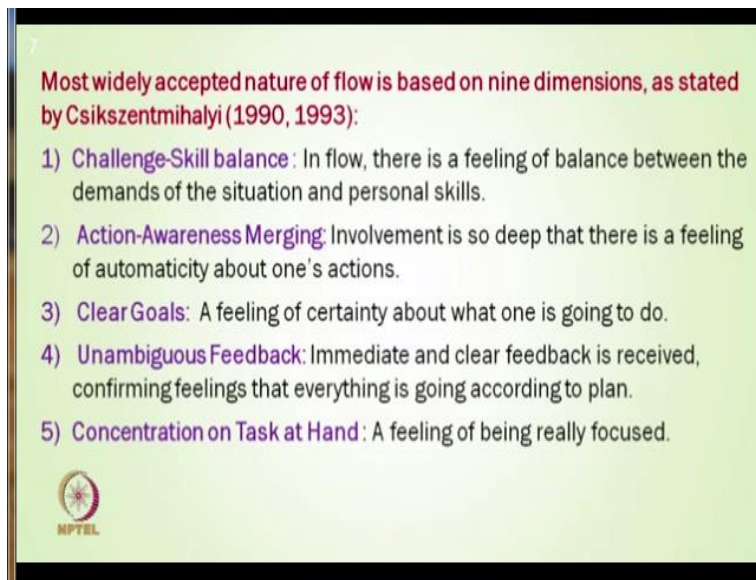
He observed that there are individual differences somehow for higher level of flow because of autotelic personality or we have higher level of intrinsic motivation. And activities themselves are part of our reward or we want to do. So, we have internal locus of control or intrinsic motivation that is why we take interest in such kind of activities. So intrinsically motivated or autotelic activities we like to do.

And some of us like to do more as compared to others and that is why they experience higher level of flow. Those type of personalities are called autotelic personalities, autotelic personality has shown higher self-esteem, able to resist distractors, less anxiety and intrinsically motivated as Jackson and Roberts in 1992 reported in their research. A person who is never bored, seldom

anxious involved with what goes on and in flow most of the time maybe said to have an autotelic self.

So, there are some people who have higher level of autotelic self, autotelic personality or they experience higher level of flow as compared to other people.

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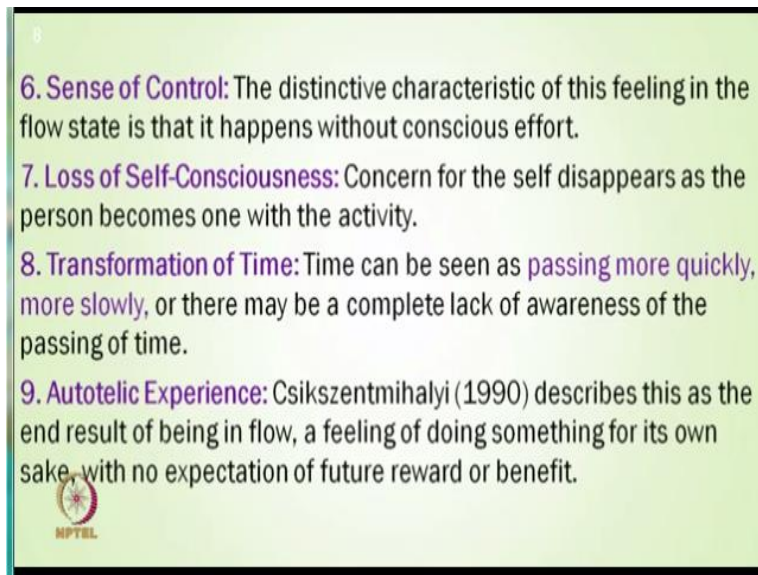
Now next point is most widely accepted nature of flow is based on 9 dimensions as stated by Csikszentmihalyi in 1990 and 1993. So, flow has been described with these 9 dimensions which are being used in its explanation as well as in psychological test.

First dimension is challenge skill balance. In flow there is a feeling of balance between the demands of the situation and personal skills and there is well balanced relationship between these challenges and skills. For example, if you have 120 IQ and demand of this activity is about 120 IQ only, so in this situation your abilities as well as challenges of these situations are matching with each other and that is why you have balanced level.

Second is action awareness merging - involvement is so deep that there is a feeling of automaticity about one's actions. And awareness and actions are merging with each other during this process.

Third dimension is clear goals. A feeling of certainty about what one is going to do, so clear goals direction you have in which direction your activities going on, clear cut feedback about it. So unambiguous feedback is the 4th dimension. Immediate and clear feedback is received, confirming feelings that everything is going according to the plan, 5th dimension is concentration on task at hand. A feeling of being really focused that is 5th dimension.

(Refer Slide Time: 09:24)




8

6. Sense of Control: The distinctive characteristic of this feeling in the flow state is that it happens without conscious effort.

7. Loss of Self-Consciousness: Concern for the self disappears as the person becomes one with the activity.

8. Transformation of Time: Time can be seen as **passing more quickly, more slowly**, or there may be a complete lack of awareness of the passing of time.

9. Autotelic Experience: Csikszentmihalyi (1990) describes this as the end result of being in flow, a feeling of doing something for its own sake, with no expectation of future reward or benefit.

 NPTEL

Sixth is sense of control, the distinctive characteristic of this feeling in the flow state is that it happens without conscious efforts. So, you are not doing extra efforts that is your natural process to have involvement in this activity. Loss of self consciousness is the 7th dimension, concern for the self disappearance as the person becomes one with the activity. So highly connected with the activity and you do not have, you know, separate self-consciousness during this process because you are fully involved in this ongoing activity.

8th one is transformation of time. Time can be seen as passing more quickly or maybe more slowly or there maybe a complete lack of awareness of the passing of time. So, there is distortion or there is transformation of time not exactly you are feeling whatever it is.

9th dimension is autotelic experience, Csikszentmihalyi describes this as the end result of being in flow. A feeling of doing something for its own sake with no expectations of future reward or benefit. So, such kind of experiences automatically or, you know, themselves are rewarding activity and you are not expecting certain rewards from outside or from future or some other benefits for this activity.

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Flow: Assessment tools :

- ▀ **Interviews** - Structured, Unstructured & (semi-structured) Patterned Interviews
- ▀ **Questionnaire or paper-and-pencil measures.**
- ▀ **The Experience Sampling Method (ESM):** The introduction of ESM, with its goal of studying individuals' subjective experiences in their natural settings, made it possible to test the theory of flow (Csikszentmihalyi and Larson, 1987).
 - This method takes samples from the stream of actual everyday experience. Unlike diaries and time budgets, the use of ESM from the beginning focused on sampling not only activities but also measuring the behaviour, thoughts, and feelings of the participants throughout the selected activity.
 - Use of technology

Flow can be assessed with various methods and we have psychological test as well as some other techniques to assess or to measure flow level. Because in psychology our interest is to study individual differences on different constructs, like flow - how it is different in different people; hope, how it is different in different people; optimism how its level is different in different people.

So that is why assessment or measurement of these constructs are really important for us, for assessing or measuring flow there are various ways. One is interviews, one can have interviews as per their research questions and can be used structured interviews and unstructured interviews or maybe semi-structured or patterned interviews as per their research requirement. However, we know semi-structured interviews are highlighted or are supported as compared to structured and unstructured interviews.

Because semi-structured interview is in the middle path and has lesser limitations. 2nd maybe certain questionnaires or paper and pencil measures which I will discuss in next slide. Along with these there is one another technique or another assessment tool that is experience sampling method. The introduction of experience sampling methods with its goal of studying individual's subjective experiences in their natural settings made it possible to test the theory of flow.

And in this method, we take samples from the stream of actual everyday experiences. Unlike diaries or time budgets, the use of ESM or experience sampling method from the beginning focused on the sampling not only of the activities but also measuring the behavior, thoughts and feelings of the participants throughout the selected activity. Unlike diaries and, you know, time budgets, experience sampling data is collected when the activity is going on.

For example, during say coding task at computer some pop-ups are visible to respond for experience sampling. So, in this case the activity is going on and during the activity some pop-ups came up and you have to respond once you see these questions. And during activity without disturbing you there are some questions which you are answering, so during this period we are experiencing or we are collecting data on your thoughts, on your feelings, on your emotions as well as you know other parameters which we want to collect here through questions during the activity.

So not only activity focused information we get but we get information about your behavior, about your thoughts, about your feelings during this activity. And then we try to understand flow process by measuring or by analyzing data on behavior on thoughts and feelings which we have collected during the particular activity. Most of the time we use technology for example mobile, certain ways to collect data on computer or some other gadgets which help us to collect data by using experience sampling method.

(Refer Slide Time: 14:16)

10

Flow Scales, Susan A. Jackson (2010): Multidimensional Scales: The Flow State Scale-2 (FSS-2) and Dispositional Flow Scale-2 (DFS-2) are self-report instruments designed to assess flow experiences from the nine-dimensional flow model:

- Action-awareness
- Merging challenge-skill balance
- Clear goals
- Unambiguous feedback
- Total concentration on the task at hand
- Sense of control
- Loss of self-consciousness
- Transformation of time
- Autotelic experience

➤ State scales: "Please answer the following questions in relation to your experience in the event or activity just completed—" or "During the event of (name event) ..."

When we talk about psychological test, I think let us take example of 1 test which is quite famous in psychology to measure flow that is Jackson's psychological test. She has developed a scale by considering all these multi-dimensions and has developed 2 type of scales one is the flow state scale, and dispositional flow scale is the another one. These are 2 self-report instruments designed to assess flow experiences from the 9 dimensions.

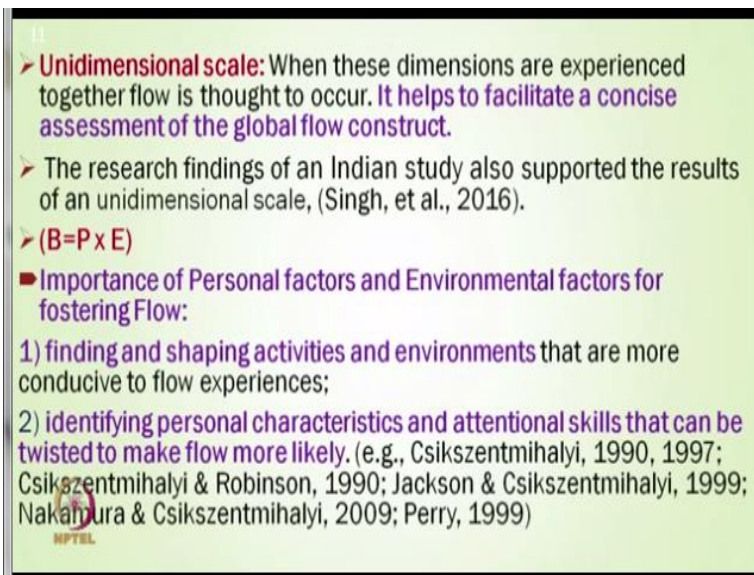
First of all, let us know about these 9 dimensions and then difference between dispositional flow scale and the flow state scale. These 9 dimensions as I discussed previously the same one, these 9 dimensions are action awareness, merging challenge skill balance, clear goals, unambiguous feedback, total concentration on the task at hand, sense of control, loss of self consciousness, transformation of time and autotelic experience.

As I discussed difference between state and dispositional factors you can easily understand difference between two. In terms of flow scale, the flow state scale means in the present situation activities maybe sports activities, you know, music related activities, computer related task or certain other activities. But situation focused flow we are interested to study, on the other hand, when we are saying dispositional flow scale, personal factors/traits or relatively stable patterns in our behavior we are interested to study.

And then the questions are what kind of usual response you have on these 9 dimensions. On the other hand, when we are saying situation oriented or state scales then our instruction would be a little bit different. For example, please answer the following questions in relation to your experience in the event or activity just completed or during the activity and name of that activity. So, in this case when we say the flow state scale then we want to study your flow during particular activity or activity which you have just completed.

And our interest is to study flow in that particular activity, on the other hand, in dispositional psychological test or in dispositional scales we study your usual responses your habitual responses or patterns in your personality to provide certain responses, that is our interest.

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➤ **Unidimensional scale:** When these dimensions are experienced together flow is thought to occur. It helps to facilitate a concise assessment of the global flow construct.

➤ The research findings of an Indian study also supported the results of an unidimensional scale, (Singh, et al., 2016).

➤ **(B=P x E)**

■ **Importance of Personal factors and Environmental factors for fostering Flow:**

- 1) **finding and shaping activities and environments** that are more conducive to flow experiences;
- 2) **identifying personal characteristics and attentional skills that can be twisted to make flow more likely.** (e.g., Csikszentmihalyi, 1990, 1997; Csikszentmihalyi & Robinson, 1990; Jackson & Csikszentmihalyi, 1999; Nakamura & Csikszentmihalyi, 2009; Perry, 1999)

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In some cases, some psychologists have highlighted unidimensional scale, when these dimensions are experienced together flow is thought to occur. It helps to facilitate a concise assessment of the global flow construct, so in this case our objective is to study super factor that is flow and flow has combination of these 9 dimensions. In our study also we observed that flow can be facilitated or can be studied as a **unidimensional factor**.

The research finding of our study supported the results of a unidimensional scale in Indian setting. We know our behavior is interaction of personal factors and environmental factors. Similarly for flow, importance of personal factors and environmental factors we have. And we

know for fostering flow we should give importance to personal factors as well as to environmental factors.

And 2 type of activities or 2 type of programs we could have number 1 finding and shaping activities and environments that are more conducive to flow experiences. So, we want to focus on those activities as well as environmental situations which help us to facilitate flow. Second is identifying personal characteristics and attention skills that can be twisted to make flow more likely. So, we may facilitate such kind of factors in our personality which help us to have higher level of flow.

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12

Results of an Indian Qualitative study on Flow activities:

- ▶ The activities mentioned by participants were coded as:
- ✓ **Creative activities (34.79%)** (listening to music, singing songs, dramatics, dancing),
- ✓ **Sports (24.07%)** (football, swimming, chess, badminton, table tennis),
- ✓ **Academic (19.48%)** (enjoying studying),
- ✓ **Entertainment (3.06%)** (watching T.V.),
- ✓ **Computer related activities (5.25%)** (online games, coding, programming),
- ✓ **and extracurricular activities (13.35%)** (involvement with NGO, participating in various debates, quizzes). (Singh, et al., 2016).

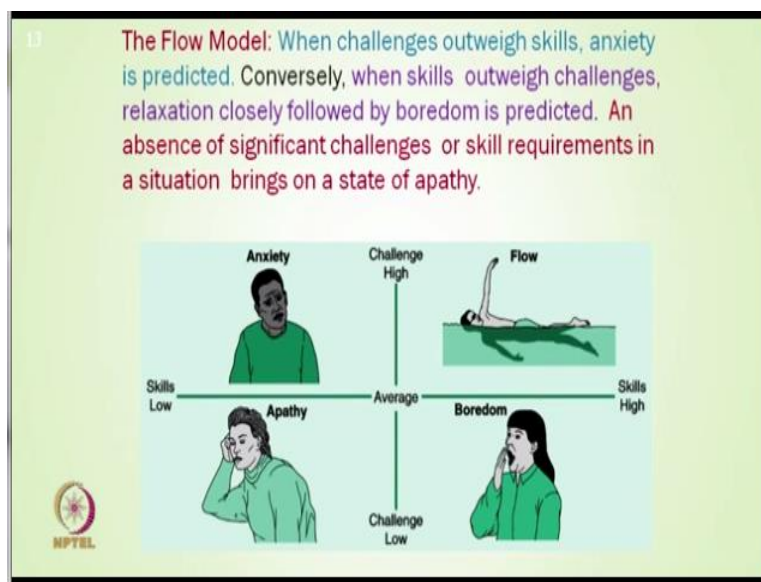
We had one research and had qualitative data we observed participants responses and found that they experience flow in various activities. In this research we observed that they highlighted on creative activities. 34.79% participants observed that during creative activities like listening to music, singing songs, dramatics, dancing they experience flow. In sports activities 24.07% people said that they experience flow during football, swimming, chess, badminton, table tennis etc.

For academic activities some of them 19.48% they said enjoying studying, they actually feel flow during academic activities. Entertainment was highlighted by them - 3.06% said during watching TV they experienced flow. Computer related activities also highlighted by 5.25%

participants they said online gaming, coding, programming such kind of activities bring experience of flow for them.

Extracurricular activities, similarly 1.35% people observed certain extracurricular activities like involvement with NGO activities, participating in various debates, and quizzes they experienced flow. So, when we ask when do you feel flow by a providing explanation of flow, they observed that during creative activities, during sports, during academic, during entertainment, during computer related activities and extracurricular activities they experience flow in these situations.

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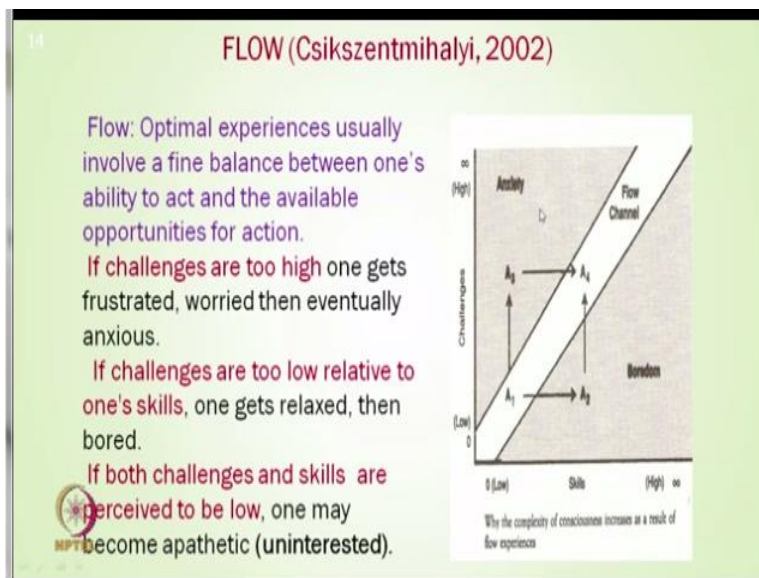
We have certain models for understanding flow. For understanding flow most important factors are challenges versus skills. Are these balanced or are these not balanced. If these are balanced then we have certain kind of patterns in our activities or responses in our activities. On the other hand, in imbalance we may be anxious or bored. Let us understand one by one all these 4 positions when we talk about challenge and skill patterns.

So, when challenge outweigh skills, anxiety is predicted, it means your challenges are high and your skills have low. So, in that situation you will feel anxious, second one is when skills outweigh challenges, relaxation closely followed by boredom is predicted. So, if your skills are too high but challenges are low then this is easy to do and that is why you are not much involved in this activity and feeling bored.

If you have low level of skills as well as challenges then you will experience apathy, uninterested, unconcerned or unresponsive you would feel during this process. On the other hand, the 4th one which is the best one, if you have high level of challenges as well as high skills you have then experience of flow. And during this period that is your best performance you would be having in that activity I think that is quite clear.

So, in some cases we may feel anxious, we may feel bored and if both are low then apathy maybe, on the other hand if both of them are quite high then only we feel flow.

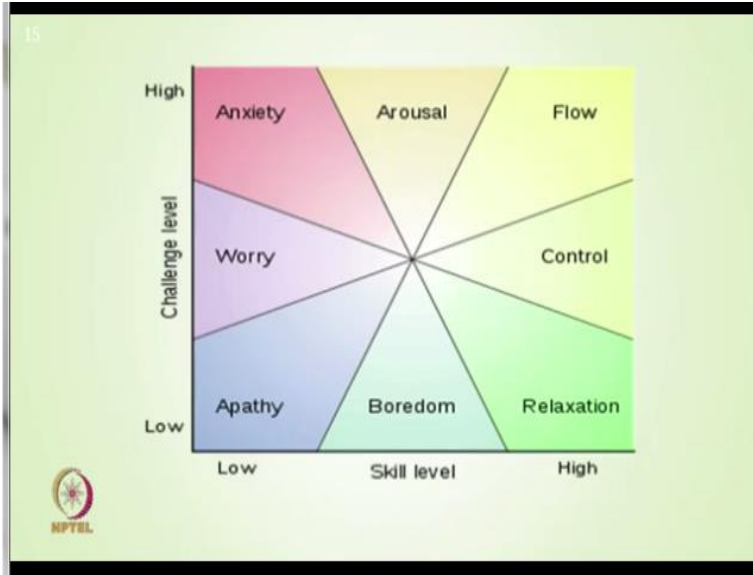
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Similarly, same model with another explanation but it is with the same meaning, this is our flow stream. On the other hand, this side we may have anxiety and this side we have boring or boredom. So, flow optimal experiences usually involve a fine balance between one's ability to act and the available opportunities for action. If challenges are too high one gets frustrated, worried and then eventually anxious.

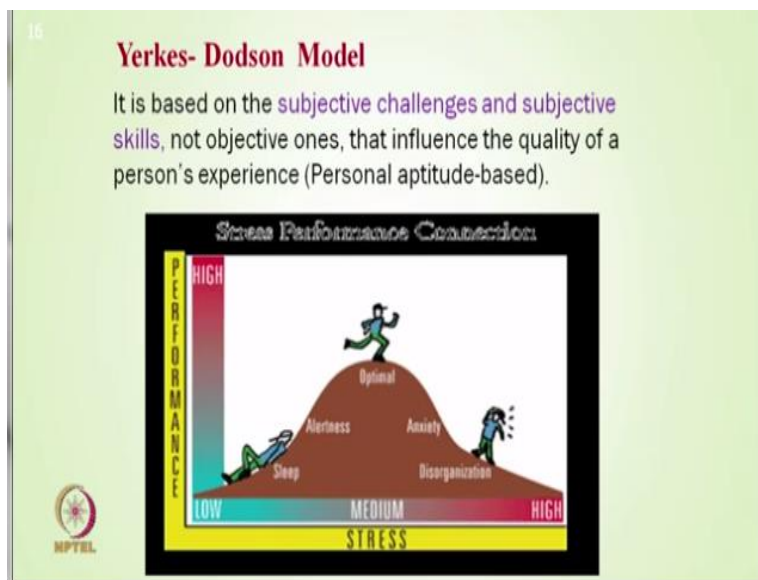
If challenges are too low, relative to one's skills, one gets relaxed then bored, if both challenges and skills are perceived to be low one may become apathetic or uninterested, on the other hand if both of them are high then you experience flow.

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So, like that in combination of skill and challenge you may have various state of mind, Boredom, apathy, worry, anxiety, arousal, relaxation, control and flow.

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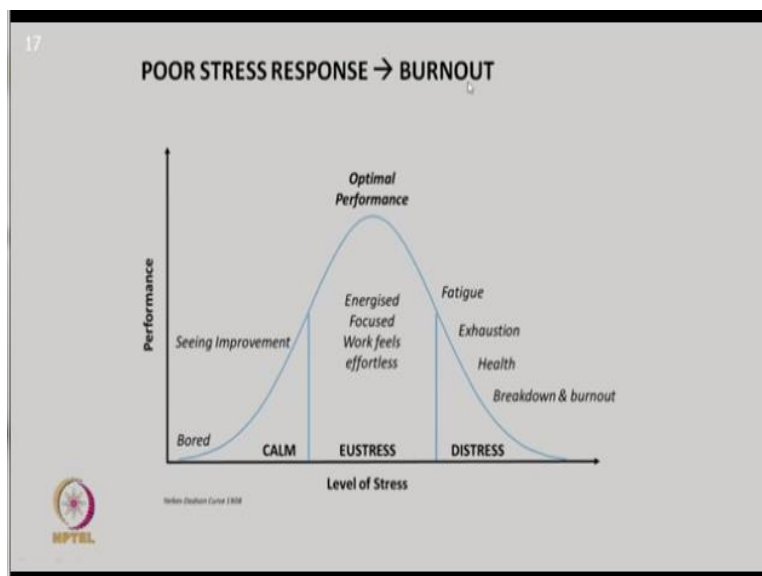
Another very interesting model which is again related to flow as well as our performance and stress, this is Yerkes-Dodson model. And this model is quite relevant here to discuss that is why I have included in this slide, it is based on the subjective challenges and subjective skills not objective one, i.e., what do you think. That is your subjective feeling about it, so your feeling has significant role to understand stress as well as flow, that influences the quality of a person's experience.

So, person's attitude base is there, and in this case if you just see this side, the performance scale and this side that is stress. And this model saying that if you have quite low level of stress or maybe you know achievement motivation then you could feel sleepy and you are not motivated at all to do the work. And you are quite sluggish, so your performance is quite low, on the other hand, if your optimal level is normal, you can see eustress.

Stress level which is required for best performance is available then you have best level of performance. On the other hand, if your stress is increasing and this stress is quite high then you may feel anxious or disoriented and that is why your performance can deteriorate again. So, if your stress level is too high then again, your performance level is low and if you have observed, some people they are not able to even show their own potentiality, their own performance level.

It is because during this process they might choke under pressure because now they have very high level of stress which is hampering their performance and that is why they have quite low level of performance. So, we can actually define this area choked under pressure and person is not able to show his performance because of too high level of stress. So that is why a too high level of stress as well as too low level of stress both are hampering performance. Optimal level of stress is facilitating best level of performance.

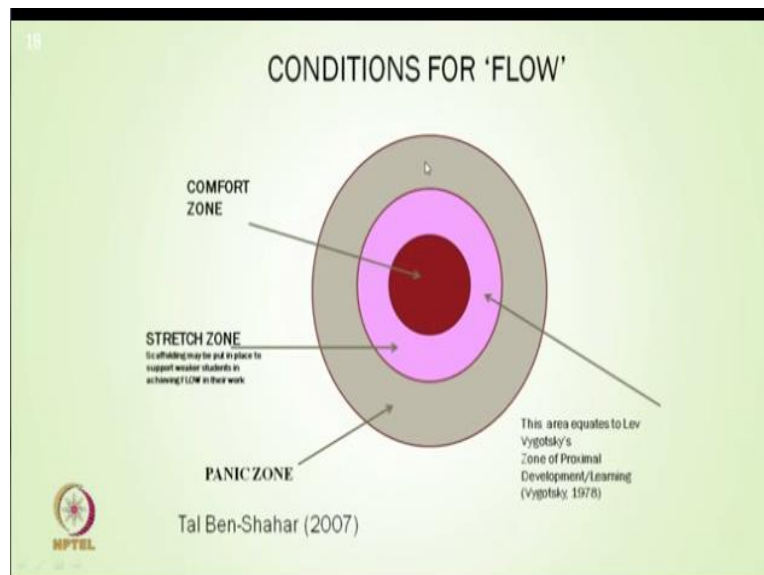
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Similarly, same model, same explanation just to show little bit clear view about it, here is bored because calm as well as you know feeling sluggish not involved in the performance, so because of low level of stress. On the other hand, energized, focused on work, feels effortless, because you have optimal level of stress or stress which is facilitating your performance that level you have and that is why best performance.

On the other hand, if he has too high stress then that is converted in distress and then fatigue, exhaustion, health related problems, boredom and burnout we may experience. So that is why scholars have focused on the U stress optimal level of stress which is facilitating our performance as well as our well-being.

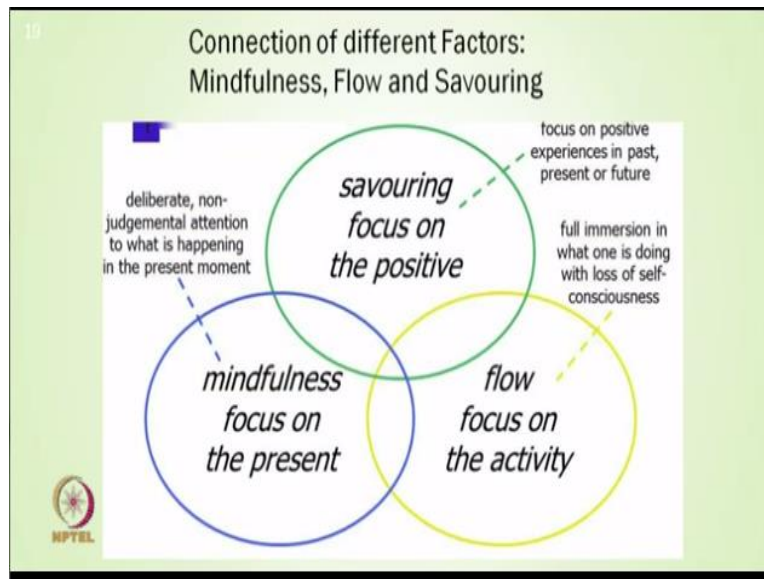
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Another model also talking about 3 levels or 3 zones or conditions for flow, number 1 is the comfort zone where you have comfortable challenge between challenges and skills. Second level is stretch zone, in which you can stretch your skills to meet those challenges and this zone motivates us to perform better. On the other hand, 3rd maybe panic zone, in this zone you are not able to meet your requirements and that is why you may have severe problems.

So, comfort zone where you have best match of challenge and skills, stretch zone your challenges are just above the skills and you can stretch yourself. Panic zone, if challenges level is beyond your skills and it is an alarming stress and maybe harmful for you.

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Next important point here is how flow is correlated with other variables or other constructs or factors, it is quite close to mindfulness as well as savouring. Savouring, focus on the positive. Savouring means when we enjoy a certain activity, focus on positive experiences in the past, present or future and it shares certain percentage of variance - it is correlated with flow, on the other hand, mindfulness - mindfulness means focus on the present.

I will cover this topic in the next class. As well as I will revisit correlation between flow and mindfulness once you would be knowing mindfulness in detail. Mindfulness means deliberate, non-judgmental attention to what is happening in the present moment. On the other hand, flow you know, full involvement in what one is doing with loss of self consciousness and these 3 are correlated with each other but they are not same which I will discuss later in next slides also.

(Refer Slide Time: 28:30)

20

Flow ↔ Mindfulness

<p>FLOW: Total focus on task at hand</p> <ul style="list-style-type: none"> ■ Positive psychology concept dating back to 1970s ■ Clear conceptual model ■ Strong research base ■ A learned experience 	<p>MINDFULNESS: Awareness to one's here-and-now experience</p> <ul style="list-style-type: none"> ■ Long history in spiritual & yoga traditions and included in psychology in 1970s. ■ Clear conceptual models ■ Strong research base ■ A learned experience
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So, flow and mindfulness similarities as well as difference let us discuss one by one and we will talk about similarities. Flow - total focus on the task at hand. And mindfulness - awareness to one's here and now experiences. Similarities are positive psychology concepts, dating back to 1970's we have borrowed this concept from psychological studies. Long history in spiritual and yoga traditions and included in psychology in 1970's.

Mindfulness has long history in spiritual and yoga traditions, it is from Buddhism and included in psychology in 1970's clear conceptual model both side, strong research basis now in psychology we have and both of them are learnt experiences.


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21

Being Mindful, Experiencing Flow

- Instructions such as "live in the here and now" and "focus on the present moment" have been linked to the psychology of peak performance in sport (e.g., Jackson & Delehanty, 1995; Jackson & Csikszentmihalyi, 1999; Orlick, 1990; Ravizza, 2002).
- Being aware of, and accepting of our experience, and staying in the present, creates a mindset that facilitates flow.
- Creating an environment of appropriate challenge-skill balance, & tuning in to feedback, will enhance the potential for being mindful and experiencing flow

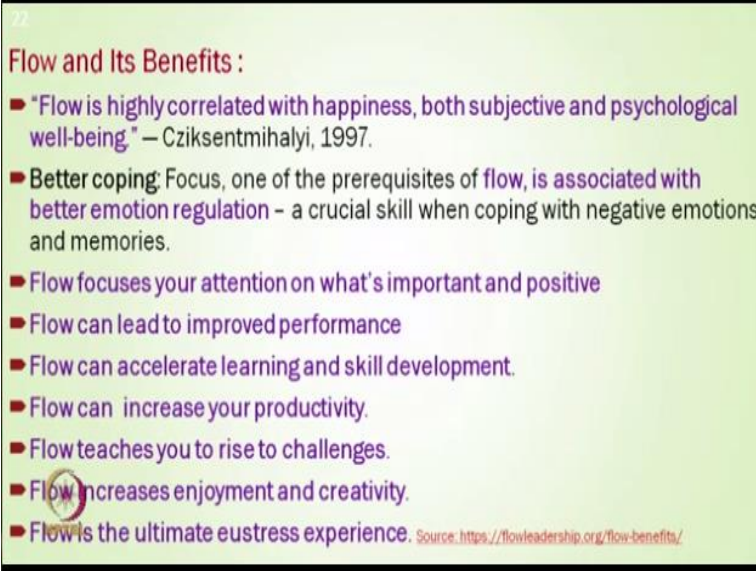
Mindfulness (focus on present) ↔ Flow (focus on activity)



When we talk about their differences, they are highly correlated with each other but still there are some differences between two. Instructions such as live in the here and now and focus on the present moment have been linked to the psychology of peak performances in sports. So, live in the here and now and focus on the present moment, these are instructions for mindfulness and these mindfulness instructions or processes have been highlighted for best performances in the sports.

Being aware and accepting of our experience and staying in the present creates a mindset that facilitates flow. So, mindfulness processes also facilitating flow processes, creating an environment appropriate challenge-skill balance and tuning to feedback will enhance the potential for being mindful and experience flow. So, both of them are highly correlated with each other however if we talk about the differences. Mindfulness focus on the present, on the other hand, flow focus on the activity.

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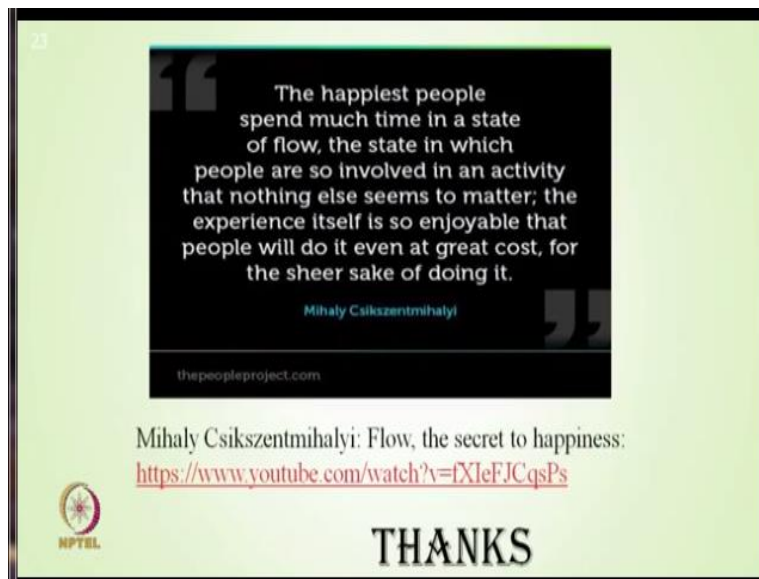
Flow and Its Benefits :

- "Flow is highly correlated with happiness, both subjective and psychological well-being." – Csikszentmihalyi, 1997.
- **Better coping:** Focus, one of the prerequisites of flow, is associated with better emotion regulation - a crucial skill when coping with negative emotions and memories.
- Flow focuses your attention on what's important and positive
- Flow can lead to improved performance
- Flow can accelerate learning and skill development.
- Flow can increase your productivity.
- Flow teaches you to rise to challenges.
- Flow increases enjoyment and creativity.
- Flow is the ultimate eustress experience. Source: <https://flowleadership.org/flow-benefits/>

Now next point is what are the benefits of flow why we are focusing much on flow, flow is highly correlated with happiness both subjective and psychological well-being. At Csikszentmihalyi reported in his study better coping focus one of the prerequisites of flow is associated with better emotion regulation. A crucial skill when coping with negative emotions and memories, so that is helpful to have - emotional regulation.

Flow focuses your attention on what's important and positive, flow can lead to improved performance, flow can accelerate learning and skill development, flow can increase your productivity, flow teaches you to rise to challenges, flow increases enjoyment and creativity, flow is the ultimate eustress experience or optimal level of stress experience. So flow is highly correlated with best performance and that is why we psychologists, we positive psychologists taking interest in these construct.

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Csikszentmihalyi also focused on the flow and the secret of happiness, he stated that the happiest people spend much time in a state of flow. The state in which people are so involved in an activity that nothing else seems to matter. The experience itself is so enjoyable that people will do it even at great cost for the sheer sake of doing it, he has number of Ted Talks to define flow as well as its benefits. I have selected for you, his talk 'flow - the secret of happiness', I hope you will enjoy this talk. Thank you very much.

(Video Starts: 32:16)

I grew up in Europe and world war II caught me when I was between 7 and 10 years old and I realized how few of the grownups that I knew were able to withstand tragedies that the world vested on them, how few of them could even resemble a normal contented satisfied happy life, once their job, their home, their security was destroyed by the war. So, I became interested in understanding what contributed to a life that was worth living.

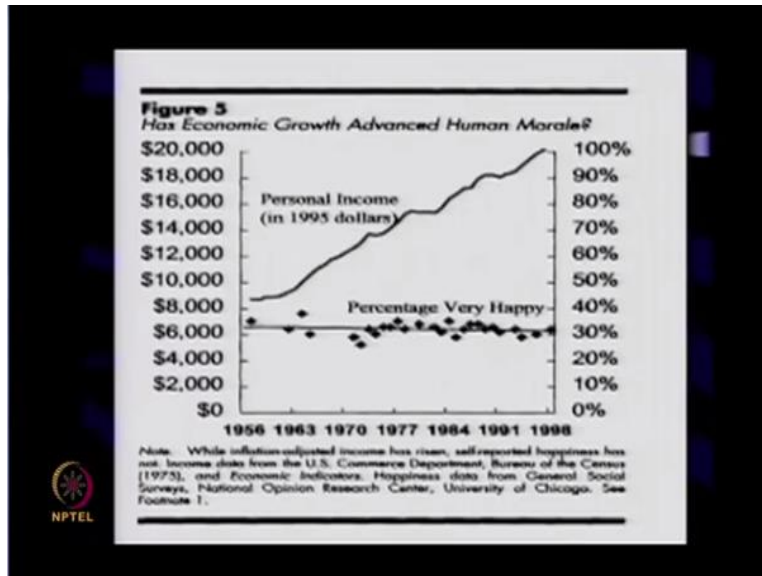
And I tried as a child, as a teenager to read philosophy and to get involved in art and religion and many other ways that I could seek as a possible answer to that question. And finally, I ended up encountering psychology by chance actually. I was at a ski resort in Switzerland without any money to actually enjoy myself. Because just the snow had melted.

And I did not have money to go to a movie but I found while reading the newspapers that there was to be a presentation by somebody in a place that seemed in the center of city. And it was about flying saucers he was going to talk and I thought well since I cannot go to the movies at least I will go for free to listen to flying saucers.

And the man who talked at that evenings lecture was very interesting and actually instead of talking about little green man, he talked about how the psyche of the Europeans had been traumatized by the war. And now they are projecting flying saucers into the sky kind of as he talked about how the Mandalay of ancient Hindu religion were kind of projected into the sky as a attempt to regain some sense of order after the chaos of war.

And this seemed very interesting to me and I started reading his books after that lecture, and that was Carl Jung, whose name or work I had no idea about. Then I came to this country to study psychology and I started trying to understand these roots of happiness, this is a typical resolve that many people have presented and many variations on it..

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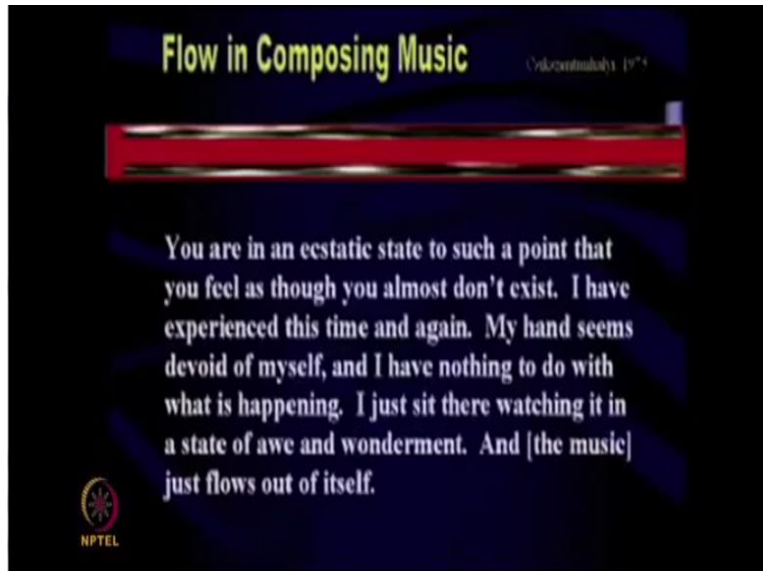


But this for instance, shows that about 30% of the people surveyed in the United States since 1956, say that their life is very happy. And that has not changed whereas the personal income on a scale that has been held constant to accommodate for inflation has more than doubled almost tripled than that period.

But you find essentially the same results namely that after a certain basic point which corresponds more or less to just the few thousand dollars above the minimum poverty level increases in material well being do not seem to affect how happy people are. And in fact, you can find that the lack of basic resources, material resources, contributes to unhappiness, but the increase in material resources do not increase happiness.

So, my research has been focused more on finding out these things that actually corresponded to my own experience, I try to understand now, where in everyday life in our normal experience do, we feel really happy. And to start about those studies about 40 years ago I began to look at creative people, first artists and scientists and so forth, trying to understand what made them feel that it was worth essentially spending their life doing things for which many of them did not expect either fame or fortune but which made their life meaningful and worth doing.

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This was one of the leading composers of American music back in the 70s and the interview was 40 pages long but this little excerpt is very a good summary of what he was saying during the interview. And it describes how he feels when composing is going well. And he says by describing this as an ecstatic state, now ecstasy in Greek meant simply to stand to the side of something.

And then it became essentially analogy for mental state where you feel that you are not doing your ordinary everyday routines. So ecstasy is essentially a stepping into an alternative reality and it is interesting if you think about it how when we think about the civilizations that we look up to as having been pinnacles of human achievement whether it is China, Greece, in Hindu civilization or the Mayans or Egyptians what we know about them is really about their ecstasies not about their everyday life. We know the temples they build so where people could turn to experience a different reality.

We know about the circumstances, the arenas, port arenas, the theatres, these are the remains of civilizations, and they are the places that people went to experience life in a more concentrated more ordered form. Now this man does not need to go to a place like this which is also this place, this arena which is built like a Greek cafeteria is a place for ecstasy also. We are participating in a reality which is different from that of everyday life that we are used to.

But this man does not need to go to there, he needs just a piece of paper where he can put down little marks. And as he does that, he can imagine sounds that had not existed before in that particular combination. So, when once he gets to that point of beginning to create like Jennifer did in her improvisation a new reality, that is a moment of ecstasy. He enters that different reality. Now, he says also that this is so intense and experienced that it feels almost as if it did not exist.

And that sounds like a kind of a romantic exaggeration but actually our nervous system is incapable of processing more than about 110 bits of information per second. And in order to hear me and understand what I am saying you need to process about 60 bits per second. That is why you can hear more than 2 people you cannot understand more than 2 people talking to you, well. In when you are really involved in this completely engaging process of creating something new as this man does.

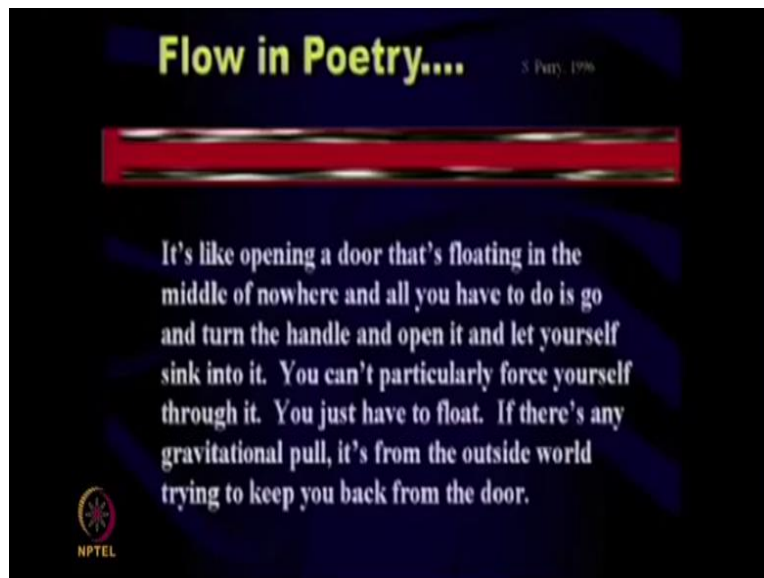
He does not have enough attention leftover to monitor how his body feels or his problems at home, he cannot feel even that he is hungry or tired, his body disappears, his identity disappears from his consciousness. Because he does not have enough attention like none of us do to really do well, something that requires a lot of concentration, and at the same time to feel that he exists, so existence is temporarily suspended, and he says that his hand seems to be moving by itself.

Now I could look at my hand for 2 weeks and I would not feel any odd wonder. Because I cannot compose but so what is that telling you here, but in other parts of the interview is that obviously this automatic spontaneous process that is describing can only happen to someone who is very well trained and who has developed technique. And in it has become a kind of a truism in the study of creativity that you can be creating, editing with less than 10 years of technical knowledge immersion in a particular field.

Whether it is mathematics or music, it takes that long to be able to begin to change something in a way, that it is better than what was there before. Now when that happens, he says the music just flows out and all of these people I had started interviewing this was an interviewee who⁶

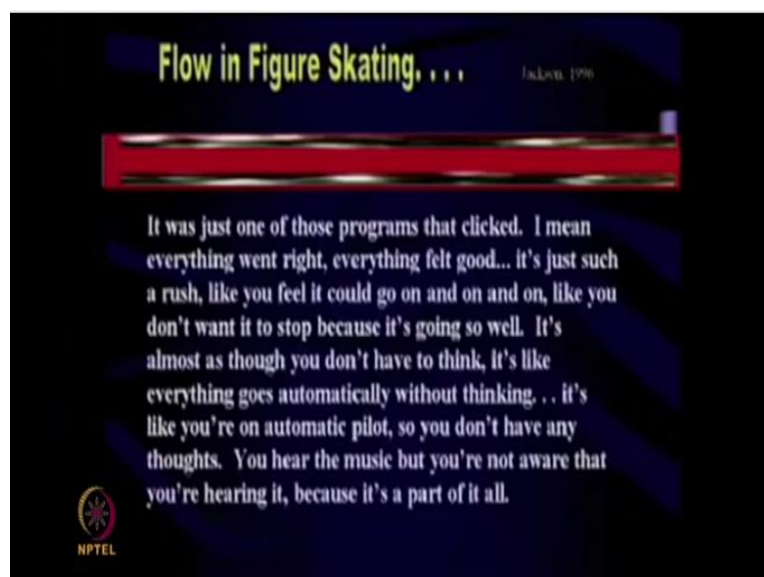
is over 30 years old. So many of the people describe this as spontaneous flow that I call this type of experience the flow experience and it happens in different 3 arm trances.

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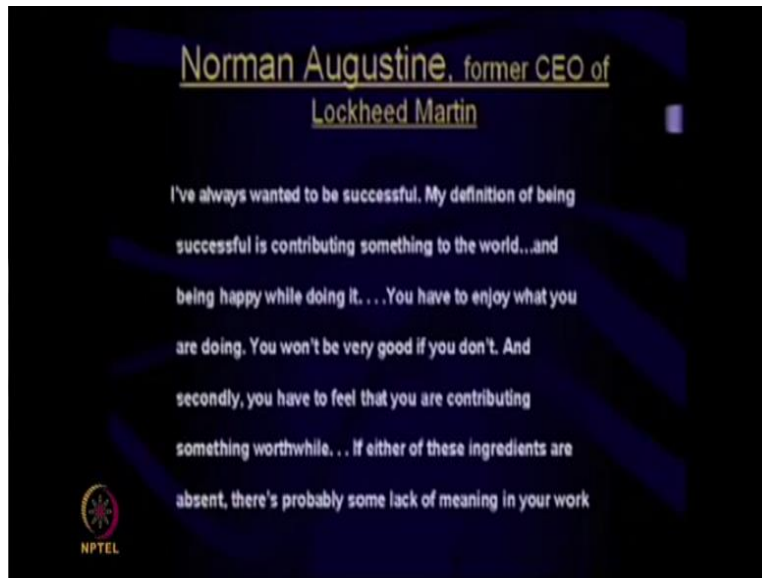
A poet describes it in this form, this is by student of mine who interviewed some of the leading writers and poets in the United States, and it describes the same effortless spontaneous feeling that you get when you enter into this ecstatic state. This part describes it as opening a door that floats up in the sky, very similar description to what Albert Einstein gave us to how he made the forces around relativity when he was struggling with trying to understand how it works.

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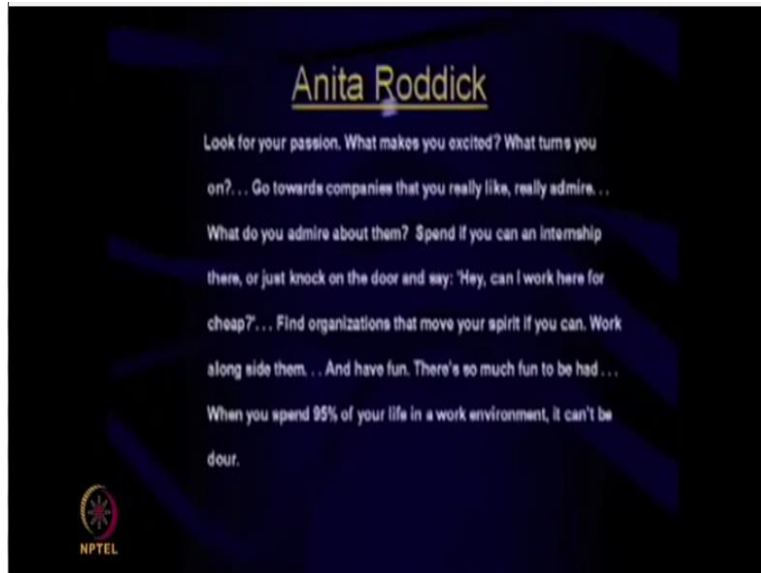
But it happens in other activities, for instance, this is another student of mine Susan Jackson from Australia who did work with some of the leading athletes in the world. And you see here in this description of Olympic scalar the same essential description of the film analogy of the inner state of the person. You do not think it goes automatically you merge yourself with the music and so forth.

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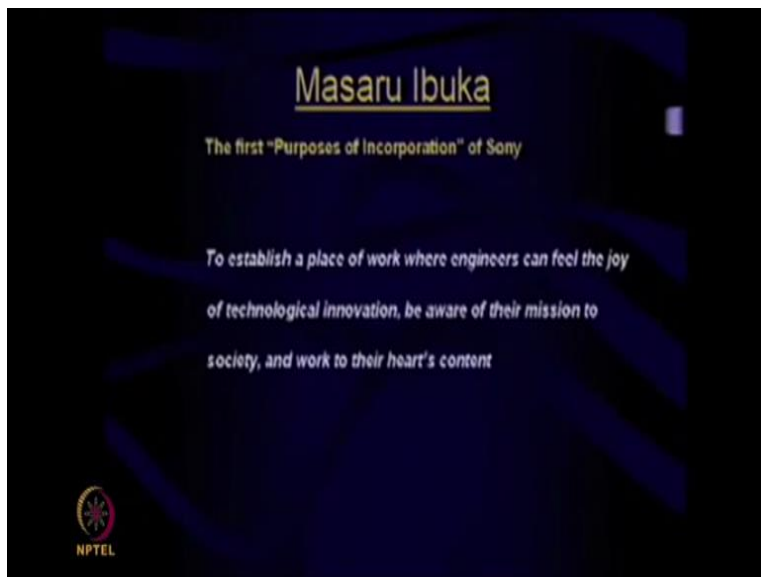
It happens also actually in the most recent book I wrote called good business where I interviewed some of the CEOs who have been nominated by their peers as being both very successful, and very ethical, very socially responsible. You see that these people define success as something that helps adults and at the same time makes you feel happy as you are working at it. And like all of these successful and responsible CEOs say you cannot have just one of these things to be successful. If you want a meaningful job and successful job.

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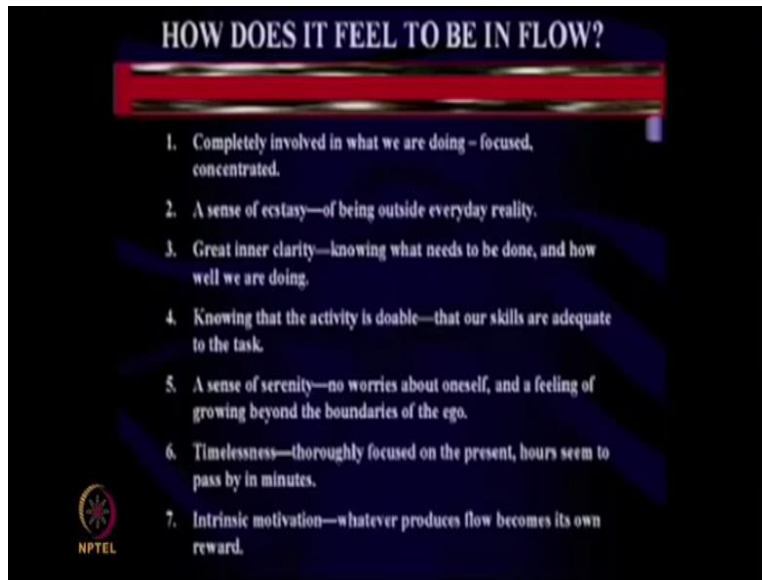
Anita Roddick is another one of these CEOs we interviewed, she is the founder of Body Shop, the cosmetic kind of natural cosmetic thing. It is kind of a passion that comes from doing the best and having flow while you are working.

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This is an interesting little quote from a Masaru Ibuka, who was at that time starting out Sony without any money without a product, they did not have product, they did not have anything but they had an idea. And the idea he had was to establish a place where engineers can feel the joy of technological innovation, be aware of their mission to society, and work to their heart's content. I could not improve on this as a good example of how flow enters the workplace.

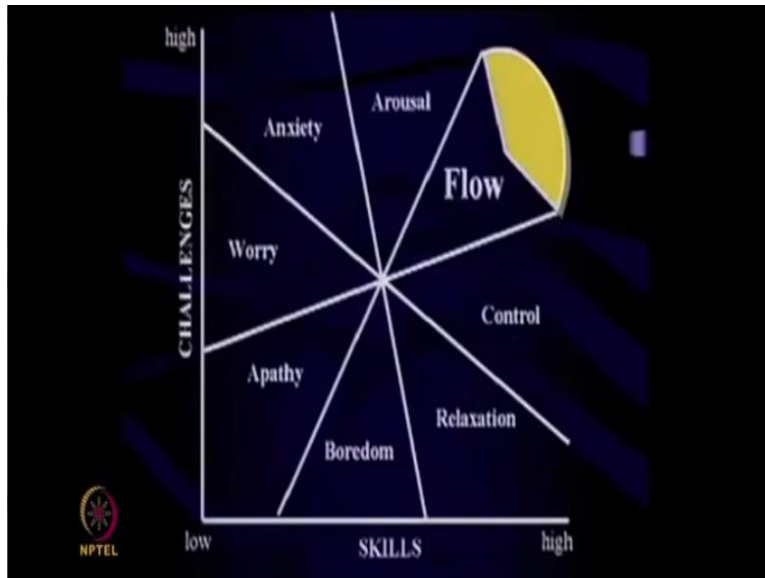
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Now when we do studies, we have with other colleagues around the world done over 8000 interviews of people from Dominican monks to blind nuns to Himalayan climbers to Navajo Sheppard's who enjoy their work. And regardless of the culture, regardless of education or whatever is. There these 7 conditions that seem to be there when a person is in flow state. This focus that once it becomes intense leads to a sense of ecstasy, a sense of clarity, you know, exactly what you want to do from one moment to the other you get immediate feedback you know that what you need to do is possible to do even though difficult. And sense of time disappears, you forget yourself, you feel part of something larger. And once those conditions are present what you are doing becomes worth doing for its own sake.

In our studies, we represent the everyday life of people in this simple scheme. And we can measure this very precisely actually, because we give people electronic pages that go off 10 times a day. And whenever they go off you say what you are doing, how you feel, where you are, what you are thinking about.

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And 2 things that we measure is the amount of challenge people experience at that moment and the amount of skills that they feel they have at that moment. So, for each person we can establish average, which is the centre of the diagram that would be your mean level of challenge and skill which will be different from that of anybody else. But you have a kind of a set point there which would be in the middle.

If we know what that set point is, we can predict fairly accurately when you will be in flow. And it could be when your challenges are higher than average and skills are higher than average. And you may be doing things very differently from other people but for everyone that flow channel, that area there will be when you are doing what you really like to do, play the piano, probably be with your best friend perhaps work if work provides flow for you.

And then the other areas become less and less positive, arousal is still good because you are over challenged, your skills are not quite as high as they should be. But you can move into flow fairly easily by just developing a little more skill, so arousal is the area where most people learn from. Because that is where they are pushed beyond their comfort zone, to enter going back to flow, then they develop higher skills. Control is also a good place to be because there you feel comfortable.

But not very excited, it is not very challenging anymore and if you want to enter flow from control you have to increase the challenges. So those 2 are ideal and complimentary areas from which flow is easy to go into. The other combinations of challenging skill become progressively less optimal, relaxation is fine you still feel ok, boredom begins to be very aversive. And apathy becomes very negative you do not feel that you doing anything you do not use your skills there is no challenge.

Unfortunately, a lot of people's experience is in apathy the largest single contributor to that experience is watching television. The next one is being in the bathroom setting and then even though sometimes watching television about 7 to 8% of the time is in flow. But that is when you choose a program you really want to watch and you get feedback from it.

So, the question we are trying to address and over time is how to put more and more of everyday life in that flow channel. And that is the kind of challenge that we are trying to understand and some of you obviously know that how to do that spontaneously without any advice. But unfortunately, a lot of people do not and that is what our mandate is in a way to do. Ok, thank you.