

Human Adjustment Processes
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Module - 7
Lecture - 4
Facets of Human adjustment: Stress, Resilience and Coping

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Posttraumatic Stress

Well, today we are going to take up another topic, related to stressful experiences, but this time our discussion would be little different, what we have done till now is that we had looked at certain situations, which are otherwise designate as the stressor by the individual. And how that situation that stressor induces certain physical behavioral and psychological changes. And we had talked about know how is stress actually evolves and know over parts an individual. Yesterday what we had done was we had taken certain stressful situation at the work place, which can ultimately make a person feel completely emotionally exhausted that was the state of burn out. Now, the condition for a stress and burn out is that act the given point in time when you develop those symptoms you should be having such situation around you. Today we are going to talk about post traumatic stress or popularly called as post stress disorder PTSD, where the actual stressful situation has already take in place. So, as off now, you exactly do not have the stressful situation in front of you, it has occurred in the recent past and now, you are showing the

certain symptoms. And therefore, it is called post traumatic know.

So, the traumatic state is over, during that stage you did not develop these symptoms, but once that state is over, you starts showing certain types of symptoms. I have deliberately written here post traumatic a stress I have removed disorder, but when we go ahead the next slide onwards, we will be referring it as PTSD basically which refers to disorder, because the classification proposed by the diagnostic can statistical manual consider is to be a disorder. But the last slide pertaining to PTSD would be, where we would talk about the recent arguments, which says that it should be considered only a post traumatic stress and should not be considered as disorder.

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PTSD

- Historically, Posttraumatic Stress Disorder (PTSD) is associated to the “post-Vietnam syndrome” (Young, 1995)
- It was included in DSM-III (Diagnostic and Statistical Manual of Mental Disorders)

Now, historically, if you look at PTSD, it is relatively new edition to the DSM and it is also know popularly called as post Vietnam syndrome. There is a interesting history know as to how PTSD got included in the list of disorders in the DSM. We are not going into that, but it found a place in DSM three the diagnostic statistical manual, which is considered to be a bible of know this diagnosis for physiological different type of physiological disorders. So, this was a special type of know symptoms, which were realize during the Vietnam war in many of the solders and this is how people find the new word called post traumatic stress.

In fact, if you look at the whole know history of clinical psychology and how different type of disorders were identified how their symptoms were identified, you would realize that know two wars have really contributed a lot to the development in the these two areas. One is the Second World War, large number of know psychological disorders and their symptoms were identified during the war and then PTSD, which is the actually by product of the Vietnam War.

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Diagnostic criteria for Posttraumatic Stress Disorder*

A. The person has been exposed to a traumatic event in which both of the following were present:

1. the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
2. the person's response involved intense fear, helplessness, or horror.
(In children, this may be expressed instead by disorganized or agitated behaviour.)

*DSM-IV TR criteria

Now, we directly would jump to the major criteria, that is used to diagnose PTSD, I will recommend that you should not right it, because you are not going to practices clinical physiology just in future. So, there is no point noting it down, will understand it, a brief summary I will again know forward it to you all.

Now, these are the diagnostic criteria for PTSD and what you find written here is actually what has been written in the DSM. When you read it, I will read here now and then will explain it, understand it two, three things know, what place key role interms of identification of the disorder. So, will have A, B, C and then again will have one, two, three likewise. The person has been expose to dramatic event in which both of the following were present means the major important criteria is that the person who is being diagnose with PTSD should have actually been expose to a dramatic event a pre

condition.

Now, this class A has three sections one, two and three, once is the person experienced witnessed or was confronted with an event or events that involved actual or threatened death or serious injury or a threat of physical integrity of self or others. So it has again a very wide spectrum, you should have either experienced it personally one, two, you are not involved somebody else was experiencing it in first time, but then you are a witness to it or was confronted a with an event or events that involved actual death or threatened death or actual serious injury or threatens serious injury. So, finally, what you realize is that somewhere, you realize that you are survival is at stay one, two somebody else a survival was at stake, but then you are a witness to it.

Say somebody has been short death and you are a witness could be power in to that the first class. The second class, which says at the person response involved, so now, when your personal experience it or when you witness it, what actually you should have, what should have been you are response and it includes intense fear helplessness or horror. And it says that, in children know this manifestation could be interms of extremely agitated behavior. So, section A, which basically says that you should have had threatening stimuli in your environment and it says that either you should have personal experienced it or you should have witness it and your personal experience or witnessing the situation should have been accompanied with reaction like horror like intense fear like helplessness.

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Diagnostic criteria for Posttraumatic Stress Disorder*
B. The traumatic event is persistently reexperienced in one (or more) of the following ways:
1. recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. (In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.)
2. recurrent distressing dreams of the event. (In children, there may be frightening dreams without recognizable content.)
3. acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated.) (In young children, trauma-specific reenactment may occur.)
4. intense psychological distress at exposure to internal or external cues that symbolizes or resemble an aspect of the traumatic event.
5. physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

*DSM-IV TR criteria

So, this is the first important denominator. Second important denominator, the traumatic event is persistently reexperienced in one or more of the following ways now comes the know interesting dynamics of this PTSD. The first class that, we discussed was, there is a traumatic event and you are the first and experience of it, you have at personal experience or somebody else is experiencing it and you are a witness to it. Now, it says that whatever you saw at the first place now will yield starts coming back to you. So, you are now persistently reexperiencing it in certain forms.

What forms? One recurrent and intrusive distressing recollection of the event including images thoughts or perceptions, this means that you can know it comes to you as certain flash backs, whatever had happen it comes to you in the form of recurrent. So, periodically that experience come to you, it is intrusive means you are involved some other tasks suddenly this experience intruded your conscious awareness and this recollection of the event very distressing for you. It might come in the form of images suddenly know somebody who has being stabbed at visual comes, you sit in the class, you look at the slide and suddenly that visual comes that intrusive thought intrusive image. It could be intrusive thought know that whole process you thought thinking of it or it could be know intrusive perception. So, that is one.

Two, recurrent distressing dreams of the event, you do not have the conscious recollection, but it is repeatedly comes in the form of your dream. So, you repeatedly have the content that experience, which you had yourself experience or witness in the form of dream. Three acting or feeling as if the traumatic event was reoccurring and this can have many, many, many symptoms know. Four intense psychological distress at exposure to internal or external cues that symbolizes or resemble an aspect to the traumatic event.

Now, you experience that situation or you are a witness that situation anything that comes in the present time, which resembles to any of the cues that was available there, that suddenly know makes you psychologically feel extremely distressful, your reaction changes. I will give an example, real life example of this. And the fifth one, the physiological reactivity on exposure to internal or external cues that, symbolize or resemble an aspect of the traumatic event. Now, you have your entire physiological mechanism also reacts to it. So, basically what it says is first criteria, criteria A was that you should have either experienced it yourself or you should have been witness to it. The second criteria says that the hopelessness the fear the horror that you experience know when you personal experience or witness comes back to you in the form of intrusive thought intrusive images you have perception of a which basically disturbs you.

And if that does not happen, it might come back to you in the form of repeated dreams. Finally, anything, which resembles to the earlier experience of yours, if anything that resembles very much closer to it, again comes back to you your psychological reaction and your physiological reaction matches that of the actual stressful event. I will give you real life example long back there was massive earthquake in Uttarkhand the area, which was, which had which was the primary sufferer and other were many, many casualty you know.

And the major problem basically was that know those in that locality there were many houses, which were basically not cemented properly. So, you had known piles of a stone put over each other and there was no adhesive to put all of them together many people like that. Now, this event happen long after this I think more than two three months after this event, somebody a labor who was working at a constructions sight, suddenly he

started having tremor, his whole hand started shaking, whole body started shaking, he had profuse sweating, what was the event at that time? A truck had come with the bolter that was the construction site. So, some concrete and stone chips were needed for construction. So, this whole truck had come with big bolters, it was truck with the hydraulic facility.

So, the moment it reach the construction site the know the driver had just put one end go little apps, so that the bolters can automatically fall down. This labor, who was working somewhere near by heard this sound and certainly had tremor and profuse sweating. The labors around him thought that perhaps he had know some extreme physical problem. The anticipation was some type of cardiacare or something like that. So, he was taking to a primary health center nothing was diagnosed.

He was taken later on to hospital nothing was diagnosed, later on it was realize that this man happen to be from Pithoragarh and was one of the survivors of the earthquake that had taken place there. He lost his family in the earthquake and therefore, he had to migrate all the way from Pithoragarh to one of the urban area of be far his life be would. This whole sound of know stone chips rolling down from the hill top that sound resembled the sound of the bolters falling from the hydraulic track.

So, the queue he got from here and immediately he associated with the earthquake in Pithoragarh and all that traumatic experience was recollected within fraction of seconds, this is what this image know, that once you have any internal or external cue that resembles to the traumatic event your trauma gets reactivated. You are psychological and physiological mechanism will start reacting the way it had done in the actual scenario. So, this is the criteria B.

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Diagnostic criteria for Posttraumatic Stress Disorder*	
C.	Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
	1. efforts to avoid thoughts, feelings, or conversations associated with the trauma.
	2. efforts to avoid activities, places, or people that arouse recollections of the trauma.
	3. inability to recall an important aspect of the trauma.
	4. markedly diminished interest or participation in significant activities.
	5. feeling of detachment or estrangement from others
	6. restricted range of affect (such as unable to have loving feelings)
	7. sense of a foreshortened future (such as, does not expect to have a career, marriage, children, or a normal life-span)

*DSM-IV TR criteria

Now, we come to criteria C, persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness, as indicated by three or more of the following. Now, you have a less of seven different types of reactions, minimum three or more you should certainly show in behavior to be diagnosed with PTSD. One efforts to a avoid thought feeling or conservations associated with the trauma. So, there is a desperate attempt shown by the individual. To avoid the thoughts and the feelings associated with trauma.

Two; efforts to avoid activities, places, or people that arouse recollections of the trauma, so any person place or any activity that gets associated with earlier experience the percent always would try to avoid and fronting them. Third, inability to recall an important aspect of the trauma, so you are completely conscious in that entire process, but then a significant cue, which is considered to be much more traumatic in nature you deliberately erase it, you said at I am not able to recollect it. Four markedly diminished interest or participation in significant activities. Now, you have a marks decline in know sharp decline in your interest or our participation in activities, which otherwise you considered to be significant and use to participate.

Feeling of detachment or estrangement from others, restricted range of affect means you

show selected emotions only, you do not show the normal range of emotion that normal human being show. Sense of foreshortened future, this means that you cut short on the expectations that you have from certain major things, such as carrier, marriage, children. Usually what happens, we usually know continue keep on keep on thinking and would think of the prospective things that can happen in the future. So, if I marry today then and then you have the whole lot of things that you imagine, if I have children then and then there is lot things that you imagine here what happens the person starts making it much and much shorter.

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Diagnostic criteria for Posttraumatic Stress Disorder*
D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
1. difficulty falling or staying asleep
2. irritability or outbursts of anger
3. difficulty concentrating
4. hypervigilance
5. exaggerated startle response
E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

*DSM-IV TR criteria

Next persistence symptoms of increased arousal in the earlier case here see it was all avoidance know, in this case this whole body arousal is involved. So, persistence symptoms increased arousal which is indicated by minimum of two of these five. One difficulty falling or a staying a sleep, so you cannot sleep or if you sleep then you suddenly know you have frequent wake up sessions. Irritability or outbursts of anger very easily you get irritated know and you burst. Difficulty concentrating, hypervigilance, hyper vigilance is that we are or vigilant about our surrounding, but you do not show hypervigilance.

For example; if you have to come to this room, you would come and very quietly go and

take a chair, but imagine somebody who enters the room and then very suspiciously looks at each and every corner before you sit on your chair know you look it from left, right, front, back, turn the chair, or even shake it, does not fall everything you test and then you sit, that is hypervigilance. That you should be vigilance, but then know that there is no point being know excessively vigilance. So, here one become excessively vigilance, exaggerated startle response, startle response basically is the physiological reaction that the body shows immediately, means it would be few seconds of once the actual stress comes to be...

So, say for example, if I take say you remember we are talked about cortisol, when we talking about stress, two days back. Now, same what wise the cortisol level in your body as off now, what is your blood pressure, heartbeat, pulse rate, skin temperature, skin conductance all these physiological parameter, say I attach senses to have a look at it. The easy thing for measuring cortisol would be you put a cotton ball in the mouth and the saliva that the cotton will soak, you can analyze it certain chemical to find out the cortisol level availability in the blood.

So, very small things, you can just put a cotton ball in the mouth attach sensors and then you said it fine know take in rest, taking place and you go and see the events, this type of typical example, I prayed this is does not happen. And suddenly there is a blast somewhere, once spark and your entire system will show certain reaction the immediate reaction that fractional reaction that your body had shown in terms physiological reaction two such type of extreme situation would be considered as startle reaction. So, what happens if you graphically plot it, it would be something like this and then suddenly there will be a big jerk and then it will know start following steep increase, but before the this steep increase there is suddenly a quantum jump, that is called startle reaction.

And therefore, you would realize that in many situation people would explain to you that, when this event happen for few moments, I could not realize what has happened? I could not realize what actually I should do. So, sudden bomb blast and then you freeze and after sometime is a unique, this is a time for me to run away, this is a time for me to look at others, this is the time for me to sensively know see what actually has happened, but momentary complete closure of all the function and within their process you

suddenly realize that the whole bodily reaction has gone very high that is the startle reaction. So, that is exaggerated startle reaction. So, out of the five minimum of two should be achieved.

And then the most important thing and which is uniformly utilize for know diagnosing each and every psychological disorder, all psychiatric issues is the duration of the problem. Since how long you have been suffering from this type of say hyper vigilance, arousal and a wordiest reaction. And here you see that it is says that total duration of having these symptoms should certainly be more than one month. So, if the event is taken place and after that till one month if you have these symptoms it is considered to be normal, because you had experience know extremely costrapic type of our situation. So, costrapic experience, and therefore you have all these numbing experience, hypervigilance, arousal, wordiest reaction for one month it is fine, but then after one month if you still show these then you would be classified as a sufferer of post traumatic stress disorder.

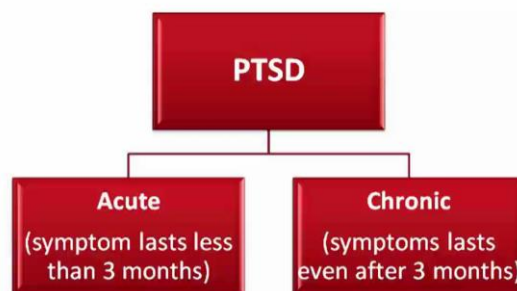
The disturbance cause clinically significant distress or impairment in social occupational or other importance area of functioning. The reason why know psychologist are interested in PTSD one, because of know different type of psychological processer attach to the symptoms. And to because of it impairs your social functioning your occupational functioning and other area is where you could have know done the job much better, but because of these symptoms you refrain from participating in the event and you do not do that. Before I come to something else you remember the very first topic that we were discussing know, were we said that the whole construct of normality can be analyze in terms of statistical averages in your mid sem exam also the first question perhaps was you know, reacted to statistical average.

Now, if you ask that how did psychiatrist realize that these symptoms, if they are available for first thirty days then it is normal and beyond thirty days then it is pathological. What is so sacrosanct about thirty days? This question can be ask know that what is so sacrosanct know, if this is the symptoms then the first day also it is a symptoms, on the thirty first day also symptom, how does one classify that know till thirty days it fine, beyond at it is not fine. It is big change know, because physiatrist will

know considered that post dramatic a stress is a disorder. So, you are no more normal just, because you have know bypass the limit by one day and therefore, you become pathological.

And here comes the whole issue of again the statistical average, people with post traumatic stress symptom they have been examined, there whole process has been carefully looked at and people have seen that those who do not carry on their symptoms beyond, but it is limit are the people it is like say the graph will go up and thirty days it will come down and the person becomes normal. So, that is the reason how know they have computed it, but then again this is a good indicator that again it is a statistical average. And we will once again refer to it little later when we come to the epidemiological data pertain into PTSD. And these are know, interesting intellectual things to think about know, that say if I am on the twenty nine day with same symptom I am normal, I cross the limit and then you say [FL] [fl] this is pathological now.

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Now, PTSD is know, considered as it could be considered as acute and chronic depending on the duration of the symptoms know the avoidance, hypervigilance and the arouse symptoms, if the symptoms less than three month. So, it is between one month and three month then it is concede to consider to be acute, but if the symptom carries

forward even after know, three months period then it is considered to be chronic. Now, it primarily means that this is the exceptional type of life circumstance, exceptional type of a situation that one has experience, and therefore somebody who have the frequent recollection of a, somebody who develops numbness, somebody who become hypervigilance. Now these are considered to be normal range of reaction within one month period one month to three month it is a cute in nature beyond three month it becomes chronic.

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PTSD

- “normal reactions experienced by people in response to stressful and traumatic situations, indicative of need for cognitive-emotional processing, rather than an abnormal state of mind”

– Joseph & Williams (2005)

Now, comes this debate, in 2005 Joseph and Williams, this was known basically the supervisor in the p h d student pay. They said that PTSD symptoms what we talk about are actually normal reactions experienced by people in response to stressful and traumatic situations, indicative of need for cognitive emotional processing rather than an abnormal state of mind. So, this said again the argument at we were taking know that, because the experience that, I had was affably extreme nature and because I saw something of a very extreme nature.

Therefore, it primarily says that it also demands know cognitive emotional processing, which will be of a very extreme order. And therefore, because the situation in extreme in nature, the response is extreme in nature therefore, there is no point saying that this is an

abnormal state of mind. I do not know, if we have ever got a chance to interact with people who had some type of very, very costropic type of experience. I will just share one or two with you and then will move forward.

It was at one of the railway stations in UP only, were a group of students who had come to participate in exam. You know that, we have exams, which are basically for recruitments were large number of students would migrate from different places in India to particular city to appear in the exam, banking, railways, hundreds and hundreds of exams in our country. A group of students had given the exam they were returning back they had come all from small, small places. So, they were not aware of the high tension wire and what it means when you say caution these many volts in the overhead cables of for the railways.

So, they very joyfully tried to go to the top of the train, because the whole train was fladed with students and other passengers and the moment the first person reach and there was a trail of students going trying go to the rooftop there was a big spark and it was moment you know fraction of seconds and the whole body was completely charm. And it was not only one know three four people who are very, very close to that student is entire episode know there was not even a time to know blink know. So, one blink and the event was over. It was the crowded railway platform and many people saw this event.

Somebody I know who saw this event and was know later on his life he became extremely scared of know going by trains pulled by electric engines. And he can see that know all the [FL] are made off metals and he kneed at metals are good conductor of electric currents. How whatever explanations, you give to him it does not work this weekend I was in place very close to Kanpur and I was told at know there is a temple were next day on the occasion of mahashivrathri there would be whole lot of crowd coming a for worshipping lord Shiva, two years back an accident had taken place.

Whole lot of mawos, there are to celebrate this occasion religious festival, some dance event was taking place. And then somebody went to the roof top and once again the high tension wire happen to cross it and because it had rain therefore, the current could know immediately pass on to entire wet rations. And there were two thousand casualty, again

momentary, but what was further told was even worst, many people died they were got their bodies are completely charred know, because of that a high intensity of the current and few who know were either completely shocked and therefore, frozen or those who had still had life in them the police evacuated the entire area know overnight.

And all these bodies were dumped in to the river; Ganga is just one kilometer from there. So, all these bodies were dumped into the river, police did not think of checking or themselves or getting checked by a medical expert, whether x had died or still he has some life. And therefore, there was no point making a distinction who should be cremated and who should be sent to hospital, uniformly everybody was throwing the river. So, those who would did not die out of electric shock died, because of thronging in the river Ganga. Now, if you become witness event like this these are not small events in life know, these would change your life forever. I do not know if you have a seen this clip when twenty six eleven attacks took place in Bombay.

The young worker who was there in shamiyana restaurant in hotel taj, later on he gave his interview, you says know video click for some other course know, where he is explained the whole situation know. He said that I was there in the shamiyana restaurant when this attack took place, I do not remember the number of guest he said some number twenty four, twenty six, some number he said that, these many guests are there in their restaurant. When the terrorist attack took place, but what he beautifully explains and in a very pensive state is that said that know, I had asked everybody to height somewhere because otherwise place to hide and there was a gate little outside the hotel from that area. So, I asked to everybody to hide their ok.

And I told them that once there is a silence I will open that gate you all can go out the hotel from that and at that time a young couple said that no their small child had gone to the toilet, which was on the other side of the corridor and the corridor was where this terrorist were moving. And they said that, we need to go there, we cannot go out of the hotel without taking our child. So, will go to the toilet and then this boy thought, if he goes to the toilet the terrorist will noted at there are there could be few more people in the restaurant hiding here. So, all of them will die. So, he said that do not worry you stay here in the hidden thing and then I will go and bring back your child. He cross that area

that corridor and the movement was in the corridor, he could here that bullet shots came that him.

He could narrowly escape and then suddenly one of the terrorist had thrown that hand grenade the whole area would explode and this man would died. Fortunately that hand grenade did not explode and because of other movements because this boy could manage to go to the toilet, bring them child back and all these people survived. Now, this boy says in that take says at you know since then that sound of the hand grenade falling in the corridor the whole audio effect it comes to me repeatedly know, where ever I am suddenly know the audio comes to me what happened within that fell on the ground and he anticipated death know. So, it just frozen movement and that sound then oh nothing has happened.

And the terrorist anticipated this area will blow and therefore, he also ran away and this boy could manage to go to the toilet and come back with the small baby. Now, these are unique experience is in life know, not many people will have it, but those who would have it, the other campaign psychology, therefore say these are all extreme situations in life. And therefore, when you think of its statistical average he cannot have this statistical average know, because there would be handful of people who would experience it, we are getting my point.

So, why do not you consider this as extreme reaction to extreme situation, rather than saying that this is a pathological state or not, this is a debate there will you find, if you read the literature in psychology import in p hd. You will find know many, many psychologist endorsing this view point that, they should be considered as posttraumatic stress and disorder should be deleted from this time, but when you have the whole camp of psychiatrists still are going that they should be considered as posttraumatic stress disorder. I just thought I will make you aware of both the facts I am not taking a side whether you should go accept this or accept that we should have your, if in case you are interested we details and have your own opinion.

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PTSD

- Prevalence rate of PTSD
 - 55% victims of rape
 - 35% victims of childhood sexual or physical abuse
 - 17% of those experiencing physical and armed assaults
 - 7% survivors of severe accidents

Now, if you look at the prevalence rate. Prevalence rate is once again know you have a data from multiple sources and then you try to fever out the percentage of victims who developed certain types of symptoms after experiencing pates tropic event. It has been realized that fifty five percent of the rape victims they developed PTSD, posttraumatic stress.

Thirty five percent of the victims of child sexual and physical abuse they also develop a posttraumatological stress. Seventeen percent of those who experience physical or armed assaults they also experienced posttraumatological stress and seven percent of the survivors of severe accidents, they also experienced posttraumatological stress. Now, if you look at the prevalence data then again you come forward with the question. So, if fifty five percent of the rape victims know suffer from posttraumatic stress, what happens to the remaining forty five percent? That can be a question, what happens to the remaining say sixty five percent in the case of childhood sexual in physical abuse. What happens to the remaining ninety three percent in the case of the severe accidents and this was something once we have the prevalence data there was the time when know, a group of psychologists started thinking that what happens to the left out percentage.

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Posttraumatic Growth

- Formally introduced by Tedeschi and Calhoun in 1995
- “the positive psychological change experienced as a result of the struggle with highly challenging life circumstances”
– Tedeschi & Calhoun (1995)

And that led to another area of research in psychology, which finally led to a construct what is called as posttraumatic growth, I must tell you that. In the recent years they have been several, several, several development and if you remember the very first topic that, we have discussed as part of this course, were we are talking of the biomedical module you remember that. So, one of the important thing in biomedical model was that, there have been changes in the area of medical practices there has been a changes in the area of psychological sciences also. So, in medical practices you have something like community health services.

Similarly in psychology also a new branch gradually came up what is called as positive psychology. And if you read once again know literature in positive psychology, you will read about posttraumatic growth, resilience, coping, healing this are know the very common topics, it will find in the text pertain to positive psychology. Now, this term was you know formally introduced in 1995 by Tedeschi and Calhoun. And they basically defined a post traumatic with as the positive psychological change experienced as a result of the struggle with highly challenging life circumstances. So, all the life circumstances that we were talking about, the worker in a shamiyana restaurant then twenty six eleven took place, the man in the railway platform who saw four students balding within few seconds, the people who had gone to warship got and saw two

thousand causalities.

So, he says that when you are putting difficult situation and when your life circumstances challenging life circumstances force you to struggle once that page is over you could evolve like a much refined human being. And those positive psychological changes are we find as posttraumatic growth means after the traumatic event has happened at disorder developed that was the first thing at we discussed. Now, we are discussing the opposite side of the continuum that the traumatic event is over, and now you have evolved you have grown up much better, and therefore it is called posttraumatic growth.

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Posttraumatic Growth

- PTG across three broad spheres-
 - interpersonal relationship
 - self-perception
 - life philosophy

Now, there are three broad spheres, where changes have been know, realized after the traumatic event is over. One in the interpersonal relationship, you start valuing relationship, human relationship like anything. So, today your father gives you a call become your mother is hospitalized and when you say coming just this weekend. So, you please manage I wont to able to come and do let we know every day know I will in touch with him and let we know how mother is, but papa please. So, importance is given to take and mother is compromised with there are know, several life situation is know, where know what psychology we called as conflicting choices know you come forward with cases in life were know you have two choices and you can offer only one and both

of them are equally compelling. Now, what to do? Its very difficult know there are conflicting choices what has been witnessed that after know that traumatic event when one develops this posttraumatic growth, when one evolves the major change that takes place is in terms of defining human relationship.

So, now, even you a relationship with a stranger is extremely valuable to you, forget about your own relatives. You start valuing them more, much more to self perception the way you have been defining yourself that also undergoes a big change. And three the philosophy of life changes, so what you initially thought was extremely important. And you should have certainly attended in life, now you think that common yaar those things are just rubbish. Life needs much more. So, broadly the changes have been found under threes spheres ok.

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Posttraumatic Growth

- PTG outcomes—
 - Valuing family and friends
 - Increase in self disclosure
 - Kindness
 - Altruism
 - General openness
- Modification of self-perception augmenting
 - resiliency, wisdom, strength and acceptance of limitations
- Change in philosophy of life with added wisdom

So, you start valuing family and friends you will increase know, self disclosure this things that you always thought retaining with you something, I would never share this with others. Now, you feel there is no point know keeping several things within you take pride in sharing yourself with others, you become much more kind to others. Altruism increases, altruism means selfless type of service that you provide to others. Altruism increases and usually you are gen, you become generally much more open, earlier you

remember we this is again with reference to the frame of reference know. So, the frame of reference suddenly becomes very porous the life philosophy has changed. Modification of self perception also takes place were in you find increase in your resilience your ability to fight back, Wisdom, strength and acceptance of your limitations. So, you are very gladly and very generously said that I am sorry, I do not I cannot do this, something that you were very shy of in the beginning. And change in the philosophy of life also takes place with added wisdom. So, you have more you become more and more wiser in the process.

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Posttraumatic Growth

- Functional descriptive model (Tedeschi & Calhoun, 1995, 1998, 1999, 2004)
- Organismic valuing theory (Joseph & Linley, 2005)

Three different models have been proposed, which defines posttraumatic growth, how it happens, what are the factors that contribute to it the whole cycle of posttraumatic growth, but even though I said at three models have been suggested I have put only two models. I just touch in the third model in brief, I am I will tell you the reason why I am not going to the third model. The first model is called functional descriptive model again it was propose by Tedeschi and Calhoun, you remember this Tedeschi and Calhoun was the first one to propose the concept of posttraumatic growth.

And this model was proposed in 1995 and by this time it has been revised four times, I must tell you that is a theoretical model. At then there is another theory, what is called as

the Organismic valuing theory even why Joseph and Linley, we had refer to Joseph and Linley is work of 2005 saying this was a student supervisor payer. And the third theory is called bio psycho social view point, now this basically has bit of psychology, a bit of biology, bit of sociology, it has also evolutionary angle. So, it is just view point and that is the reason why we are not going to the third one. These two models we would discuss at length tomorrow, but I must tell you that both these models are still theoretical models. And I will also share with you one of my student who did his p h d know of trying to emphatically test the functional descriptive model. So, tomorrow when we assembled we talk about these two models, and then we will move to two remaining topics resilience and coping.