Course on Great Experiments in Psychology Professor Rajlakshmi Guha Centre for Educational Technology Indian Institute of Technology Kharagpur Module 3 Lecture No 15 On Being Sane in Insane Places

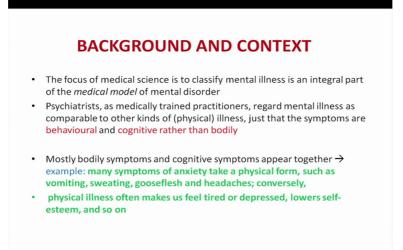
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### On being sane in insane places

Rosenhan D L (1973)

Science, 179: 250–58

Hello everybody. Welcome to the final lecture of this week today's lecture is different little different from the others. So far we studied about multiple personality disorder, obsessive compulsive disorder and play therapy and again condition emotional responses that is who Watson showed that human being could also be conditioned even fearful be learned, so even his fear could be learned and in today's session to the today's lecture we are actually discussing about a therapy or treatment processes and how diagnosis is done so primarily this was an very interesting article that was published in science in 1973 by DL Rosenhan and he showed that actually psychiatric diagnosis does not mean anything, so that psychiatric diagnosis in most of the time are made just on the present information that is available and most of the times they are not correct.



So this based on this, so there was already a movement four which was trying to classify the mental disorders and there was the ICD 10 of the International classification of diseases and all the other signed there was also the diagnostic and statistical manual of mental disorders that was trying to put different diagnosis into place by the classification systems and in spite of all this was also another movement that was coming up that was anti-psychiatry moment.

It was primarily led by famous psychologist namely Thomas Sas and this movement Rosenhan also belong to this movement and he felt that there is the medical practitioners who are trying to diagnose – psychiatric diseases and not doing justice to the individuals and they are actually in the process of diagnosis and treatment, they are actually labeling the patients. So just to show that this was what was happening, Rosenhan studied this idea and put it into an experimental form.

# AIM AND NATURE HYPOTHESIS Rosenhan's study was <u>an experimental test</u> of the hypothesis that psychiatrists cannot reliably tell the difference between people who are sane and those who are insane Rosenhan claimed that if the hypothesis were supported it would follow that the classification system used to make such a diagnosis cannot be valid: →unless we can reliably differentiate the sane from the insane, we cannot be sure that a particular diagnostic label, such as schizophrenia, actually describes a patient's mental disorder

So the primary hypothesis of this study was it was actually an experimental test that Rosenhan wish to carry out and the hypothesis was that the psychiatrists cannot reliably tell the difference between people who are sane and those who are insane. Like imagine if I say this to a psychiatrist today then it definitely uhh, how many of them would agree? Now because there are a lot of classifications systems and you can actually if you follow the car classification systems in order as I talked about the DSM.

When you will go through the slides you will see there is ICD and DSM and they have this very clear as to what are the symptoms that are required to diagnose somebody which say having OCD or say dissociative identity disorder or MPD or specific phobia, then how could this be true, that psychiatrist will not reliably tell the difference between people who were seeing and who are insane but Rosenhan claimed that this was true and he also said that if the hypothesis was supported it would follow that the classification system used to make such a diagnosis is actually invalid.

So unless, so his focus was that unless we can reliably differentiate the same from the insane, we cannot be sure a particular diagnostic label such as schizophrenia actually describes patience's mental disorder. So when you talking about mental disorder and we are actually labeling a patient with schizophrenia, how can we do that out, so its injustice to the patient, unless we are really sure whether this person is sane or insane. So now these are the two hypotheses is that he wished to check, primarily because only one hypothesis and here he tried to do it in two ways, so the were two experiments, the experimental one which was the major experiment involved pseudo-patients.

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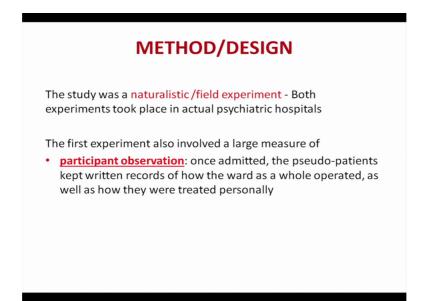
METHOD/DESIGN
The hypothesis was tested in two ways:
<ul> <li>The major experiment involved pseudo-patients (participants complaining of hearing voices – auditory hallucinations) trying to gain admission to various US hospitals</li> </ul>
Independent Variable: Complaints of hearing voices
<b>Dependant Variable :</b> whether or not psychiatrists admitted the pseudo-patients – and, if so, what diagnostic label they used
<ul> <li>A secondary experiment (aim: tendency towards diagnosing the sane as insane) involved misinforming members of hospital staff that pseudo-patients would be trying to gain admission (based on accurate information regarding the first experiment) whom staff subsequently suspected of being pseudo- patients all of whom were genuine patients</li> </ul>
Independent Variable: false information Dependent Variable: the number of patients

So people who were actually acting like patience they were not real patients and they were there were worse to participate means they were individual participants and their work was to complain of hearing voices that is in psychological and psychiatric terms – show that they were having auditory hallucinations and trying to gain admission to various American hospitals, so in this case the independent variable would be complaints of hearing voices and the dependent variable that is the variable that is dependent on the independent variable is, whether or not the psychiatrists admitted the pseudo-patients the hospital and if so, what diagnostic label did they used?

So if an individual turned up at a hospital at mental hospital in this case where psychiatric illness was being treated and complained of hearing voices, what would the psychiatrist do? So are they, so the idea was to see that if sane people actually acted out, can the doctors make the difference and the secondary experiment following this first one was by informing involves the informing the hospital people that there would be pseudo-patients who would we trying to gain admission and in (())(6:39) so they would, the second experiment would be based on the first experiment so after the first experiment could be done.

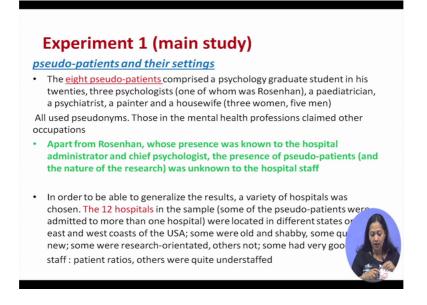
That information would be given the hospital's staff that see there were people trying to gain admission, they were pseudo-patients and now also some other pseudo-patients are trying to take admission in your hospital and then they would see how many, providing a false information, how many patients would be considered as pseudo-patients. So incidentally there were no pseudo-patients the second experiment there were no pseudo-patients, so there was no patients individual who was participating in the study and pretending to be a patient trying to gain admission to hospital, this is for the second experiment, for the first experiment that is what the participants were trying to do, so let us see how he carried this out.

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The study was a naturalistic field experiment and both the experiments took place in actual psychiatric hospitals. So the first experiment also involved a large measure of participant observation so basically the participants work pretending to be patients and once they were admitted, these patients or pseudo-patients kept written records of how the ward as a whole operated as well as how they were treated personally by the staff and the doctors and the nurses.

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So they were eight pseudo-patients this is an experiment 1, there were eight pseudo-patients apprised of a psychology graduate student in his 20s, three psychologists and one of whom was Rosenhan, so Rosenhan himself participated in the study there was a paediatrician, a psychiatrist, a painter and housewife so all in all there were three women and five men.

All use pseudonyms so they did not originally tell their name and those in the mental health profession so there would be psychology students, three psychologists and the psychiatrist, so all of them actually claimed to have other occupations. But apart from this, everything that is said was true so and besides other than Rosenhan, whose presence were known to the hospital administrator and chief psychologist, the presence of the pseudo-patients and the nature of the research was unknown to the hospital's staff, so only the chief administrator and the chief psychologist new that Rosenhan was a psychologist and he was a pseudo-patient. About the rest of the people, nobody was aware.

So there were seven pseudo-patients other than Rosenhan in the hospital in 12 hospitals in US and where they gain admission several times from one hospital to the other and they were really unaware of them that these were pseudo-patients. So in order to be able to generalise results, such that this is not only one hospital and one particular doctor who is actually making the mistake of diagnosing a normal individual is a patient. They tried this out with 12 hospitals. So they moved around USA into different hospitals and they got themselves reported with this in terms of auditory hallucination or hearing voices and then they got themselves admitted.

So these hospitals work different from each other so some for old and shabby, some quite new, some were research oriented, some have very good staff, patient staff patient ratios, others worldwide understaffed. So they actually covered these variables, so whether these variables would also make an impact on the diagnosis, so they tried out so they try to generalise the results and that is why they travel to different hospitals.

## Experiment 1 (main study) After calling the hospital for an appointment, the pseudo-patient arrived at the admissions office <u>complaining of hearing voices</u> (unclear, seemed to be saying 'empty', 'hollow' and 'thud') The voices were unfamiliar and of the same sex as the pseudo-patient Apart from 'the voices' and falsifying their name and employment, everything else they said about themselves was true, including their life history, relationships with parents and siblings, spouse and children, work colleagues and people at school, as well as the things that upset or frustrated them and brought them joy and satisfaction None showed any signs of psychopathology

So then what happened? So after calling how the admission, so after calling the hospital for an appointment the pseudo-patient or in this case the participant of study arrived at the admission office complaining of hearing voices, the voices were unclear seem to be saying empty, hollow and thud. The voices were unfamiliar and of the same sex as the pseudopatient.

So every so for all the eight people including Rosenhan, these are the symptoms they complained off, there was nothing else other than this. Apart from the voices and falsifying their names and employment, everything else they sell about themselves was true, including their life history, relationship with parents and siblings, is house and children, war will be an people at school, as well as the things that upset or frustrated them and bought them joy and satisfaction. So every other thing that they mention and about themselves were absolutely normal, so they were all true and their behaviour after they entered the hospital was also normal, so other than mentioning even when they were talking to the doctor, to the psychiatrist during admission and also to the other nations in the hospitals.

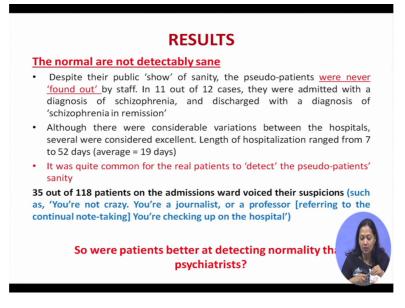
Other than mentioning about this hearing voices about the voices and the voice the characteristics of the voices that they heard, other than that none of them none of the patients showed no patients showed any other psychopathology, so that is any other psychological symptoms that would help to diagnose that they were patients. So what would happen, so there was just one symptom and other than hiding about their identity especially if they were in the occupation of mental health and name, other than that everything they said about

themselves was true. So would they be actually identified as frauds or patients? Let us see what happens?

They were admitted to the psychiatric ward and after that the work was that the patients the pseudo-patients would stop simulating any symptom of abnormalities, so they behave as normal as good, so apart from a brief period of nervousness, many had actually felt that they would be identified as frauds and they would be exposed, so there was this initial anxiety that that was natural even in the participants but after they got admitted they behave normally and he spoke to the other patients commonly and the staff also as if there was nothing wrong with them. When asked by the staff how they were failing, they indicated, they were fine and no longer experience symptoms.

So symptoms had also vanished, so initially just for the admission spoke about the symptoms, so symptoms will that they heard voices, but other than that once they were admitted, they stop talking about the symptoms. They did what was asked to them including taking their medication, which they of course did not swallow and in addition to the activities available on the ward, they spend their time writing down their observation about the ward and the patients. So the normal are not detective seen, so this is the result. So what does Rosenhan have to say? So despite their public show of sanity, so they had displayed sanity in every domain after they got admitted, in fact even during admission, other than speaking about hearing voices, none of their behaviour showed any difference.

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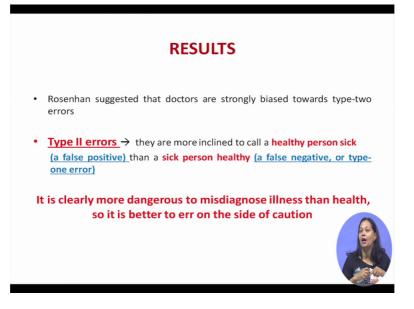


But in spite of that the pseudo-patients were never found out by the staff, so there true nature or that they were pretending to be patient was not found out by the staff. In 11 of the 12 cases, they were admitted with a diagnosis of schizophrenia and discharge with a diagnosis of schizophrenia in remission. So although there were considerable variations between the hospitals, several were considered excellent and the length of hospitalization range from 7 to 52 days with an average of 19 days. So it was quite common for the real patient to detect the pseudo-patient's sanity. So now this is very interesting, so the though the hospital staff saw them as patients, treated them with and were they also given medication and asked several questions, where they apparently bedded behave normally still they were given all the due treatment that was to be given to a schizophrenic.

The real patients identified the pseudo-patients, so 35 out of and 18 patients on admission ward voice their suspicions. You are not crazy. You are a journalist or professor referring to the continuous note-taking and you are checking up on the hospital. So these are things that the real patients told the pseudo-patients, but the hospital staff could not actually identify that these were not the real patients. So that brings us to the question, so were the patients better at detecting normality than psychiatrist?

Are the clinicians, so this is one of the questions that has really perturbed the psychiatry and specially the anti-psychiatric movement that, are the psychiatrist so these are the clinicians, the psychiatrists, the psychologist and the mental health professional so engaged in diagnosing people, that they really rule out normality. So they are not good at texting normality and in fact this study seemed to show seems to show that the patients truly were better detectors of normality than the mental health professionals.

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So Rosenhan suggested that doctors what happens to the doctor is they have they are strongly biased towards the type-two errors. Now what is a type-two error? There is they would if it is a healthy person, they would rather call that person sick instead of missing out so that is than calling a sick person healthy, so that would be a false negative or that would be a type-one error. Now the problem with the doctors is, it is better to be safe than sure.

So Rosenhan pointed out that healthy person, it would be better to diagnose a healthy person as sick and go through the checking procedure, assessment procedure, evaluation procedure rather than diagnosing a sick person as healthy. So this misdiagnosis is really good or the other illness primarily because it makes the doctor more cautious, but with mental health there is a problem because there is also the condition of labelling that individual with a mental illness.

#### **Experiment 2 (secondary study)**

- The staff in a research and teaching hospital, who had heard the results of experiment 1, doubted that such errors could be made in their hospital
- They were informed that at some time during the next three months, one or more pseudo-patients would try to gain admission
- Each member of staff was asked to rate each patient (on a ten-point scale) who presented him/herself at admissions or on the ward, as to the likelihood that s/he was a pseudopatient

So let us see what the second experiment was all about. So after the first experiment was done the staffs in the research and teaching hospital were informed about the research results of experiment 1 and they doubted that such errors could be made in the hospital. So this information was consciously given to each of the hospitals that they were going to visit that they have visited and they were informed that at some time during the next three months one or more pseudo-patients would try to gain admission, so each member of the staff was asked to rate each patient on a 10 point scale who presented him or herself at admission or on the ward, as to the likelihood that he she was a pseudo-patient.

So now you see what has happened the hospital staff, so the mental health professionals they had all been primed, they had been informed that there a pseudo-patient that such an experiment has happened and there was pseudo-patients who were put in the hospitals and they were diagnosed as patients.

So now everybody is very cautious in the second experiment consciously the hospitals were told that now they will be pseudo-patients planted in your hospital and very soon you know within the next three months, so you it is advisable that you actually rate each patient takes admission on a 1 to 10...1 to 10 point scale to to say whether you think that could this could be a pseudo-patient.

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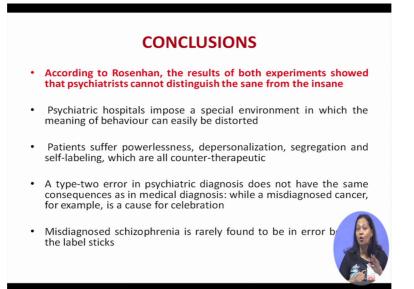
#### **Findings**

- All the staff (attendants, nurses, psychiatrists, doctors and psychologists) were asked to make judgements (on a tenpoint scale) about 193 patients admitted for treatment with whom they had had sustained contact, or for whom they had had major responsibility:
  - 41 patients were confidently judged to be pseudo-patients by at least one staff member
  - 23 were suspected by at least one psychiatrist
  - 19 were suspected by one psychiatrist plus one other staff member

In fact, all patients during this period were genuine

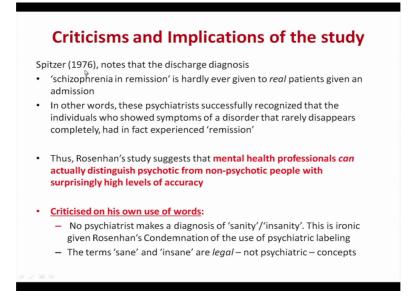
And finding were all the staff that is a tendon, nurses, psychiatrist, doctors and psychologist were asked to make these judgments on a 10 point scale about 193 patients admitted for treatment with whom they had had sustained contact, or for whom they had had made major responsibility. Now what was the result, 41 patients were confidently judged to be pseudopatient by at least one staff member, so they were pretty sure that 41 people all of the 193 patients were pseudo-patients. 23 were expected by at least one psychiatrist, so there was some problem but at least 23 were confirmed.

Now this was done by psychiatrist mind you and 19 were suspected by one psychiatrist plus one other staff member. So now we have 19 people who were where two people were at least sure, so along with the psychiatrist another staff member who was absolutely sure that 19 of them were completely pseudo-patients. Now the case was that none of the patients were pseudo-patients over there, so all word genuine genuinely suffering from some mental illness or the other.



So that just shows that, the results of both these experiments showed that psychiatrist not distinguish the same from the insane. Now if I say this loudly today, I they will be lot of criticism and in fact there were a lot of criticism at that point in time to and there was there was lot of argument and contradiction as to the design of the study and how the diagnosis was done and will just get to that (())(22:09) completing Rosenhan's conclusions he said at the psychiatrist cannot distinguish the sane from the insane. Psychiatric hospital imposes a special environment in which the meaning of the behaviour can easily be distorted. Patients suffer powerlessness, depersonalisation, segregation and self-labelling, which are all counter therapeutic.

A type-two error in psychiatric diagnosis as I mentioned does not have the same consequence as in a medical diagnosis, the problem is that it is misdiagnosed with the mental health disorder mental disorder then the individual is labelled for a lifetime. So all these conclusions as you see I mentioned earlier also that these go by the anti-psychiatry movement. Now let us see what the other psychiatrist had to say, now definitely they showed Rosenhan's study in 1973 which was published in science, showed that yes there were there was something definitely at was going wrong. Now let us see what the other point of view wars. (Refer Slide Time: 23:22)



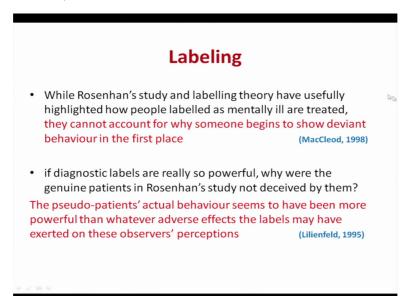
So the Spitzer in 1976 noted that the discharge diagnosis of schizophrenia in remission at was given to the subjects in the pseudo-patients in experiment 1, is hardly ever given to real patients, when they are given an admission. So the psychiatrist, there actually successfully recognize that the individuals who showed the symptom of a disorder that rarely disappeared completely had in fact experienced remission.

So they at this, so when they were talking of remission it means that at this point in time, they were not having any symptoms. So that is why because there was these patients had reported of a symptom that is why the diagnosis at was made was schizophrenia on remission in remission, so because otherwise if an individual, so even when the so what Spitzer try to say is at even when the individual is admitting himself with auditory hallucinations during admission, he would buy no account he discharged the summary of schizophrenia in remission.

So it would be given only when the individual the psychiatrist had diagnosed that, probably at some point in time as the patient reports that he has had auditory hallucinations, so as a patient reports about eight so he could have had some psychotic features but currently he is on remission, so he has no psychopathology, no problems, no mental health problem currently.

So does Rosenhan's study suggest that mental health professionals can actually distinguish psychotic from non-psychotic people with surprisingly high level of accuracy and he was Rosenhan was criticised for his own use of words. So other psychiatrist point out that generally sanity and insanity is not a diagnosis that a psychiatrist would make. So Rosenhan was condemned for Rosenhan condemned others for labelling but he was using the term sane and insane which were legal terms and not psychiatric concepts.

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So other than this there was also another very important thing that came out that is why if we reconsider if we consider the anti-psychiatric government that this labelling is wrong and that the patients should not be what is happening is whatever the person is saying the psychiatrist is labelling as per that the diagnosis is made as per what the psychiatrist is saying and this is actually affecting the individual's lifestyle and also you know the after there are large huge impacts of the labelling, then another criticism was that why would the then why would people exhibit such symptoms on deviant behaviour in the first place.

Now this people who think that that these mentally ill people are the psychiatrist would think that the mentally ill people are labelled and therefore they are treated likewise they cannot account for why someone shows the deviant behaviour in the first place and this was pointed out by MacCleod in 1998 and also another very important thing is that if diagnostic labels are so powerful, why was a genuine patients in Rosenhan study not deceived by them.

So if the actually the pseudo-patients behaviours seems to have been more powerful and whatever adverse effects labels we have exerted on these observers' participation then the abnormal people or I should say the patients were there should have also been fooled, now why were they not fooled by their behaviour, so now this is you know Rosenhan's study is has been criticised both ends so has been supported by the anti-psychiatric moment but criticised from the other psychiatric point of view at it raises a concern for psychiatry and nickel psychology and mental health in general.

So I thought that you know is what gave us an interesting perceptive of house sane are we or you know actually whether insanity is true, but of course as scientific people, we should not be using that term mind you abnormal, sane, sanity and insanity stop that would probably be for legal terms. Thank you.