Forensics (Research) 25/01/25

https://study.com/academy/lesson/the-history-of-forensic-science-timeline-facts.html#:~:text=However%2C%20the%20timeline%20of%20the,was%20 printed%20in%20the%20 peri

Forensic science is a fascinating field that has been overcome for many centuries. Although it was uncertain, many experts pointed to ancient China as the starting point. A book called "Ming Yuen Shih Lu" was written during the sixth century that has evidence of using forensic techniques around that era.

Research Day 2: 26/01/25

https://www.csfs.ca/student-zone/student-zone/#:~:text=So%20what%20is%20forensic%20science,method%20to%20the%20judicial%20system.

What is forensics science?

Forensics plays an important role in the justice system... Forensic which means a public debate or discussion in today's terms it implies a court of law. It uses a scientific method to solve crimes. Forensic scientists use their knowledge of science and technology to analyze evidence from crime scenes, such as fingerprints, and DNA.

Research Day 3: 27/01/24

https://www.alliant.edu/blog/the-different-types-of-forensic-science
https://www.excelsior.edu/article/the-role-of-forensics-in-crime-solving/#:~:text=Forensics%20can%20help%20solve%20a,were%20limited%20to%20the%20senses.

The development of forensic science goes back centuries, and possibly millennia. The first records are of specific, isolated cases. The examination of Julius Caesar's body was one, but there was also the use of fingerprints to catch a debtor in 7th-century China, and many other examples.

Types of forensics

There are 12 types of forensics, a few of them are:

1. Forensic Biology
2. Forensic anthropology
3. Forensic chemistry
4. Forensic engineering
5. Crime scene Technician
6. DNA analysis
7. Digital forensics
8. Entomology
9. Forensic odontology
10. Forensic psychology
11. Toxicology
12. Forensic Accounting
13. Forensic Science Technician
14. Questioned document
15. Fingerprint Technician

Research Day 4: 28/01/25

https://accessdl.state.al.us/AventaCourses/access_courses/forensic_sci_ua_v22/01_unit/01-03/01-03_learn_text.htm

How do forensic scientists investigate?
There are 7 steps to investigating a case

1. Secure the scene: Protecting the evidence by isolating the area.
2. Separate the witnesses: The next step is to separate the witnesses from the other people so they won't talk to each other and make up stories.
3. Scan the scene: Taking a picture of the crime involves taking a general look at the area to get an overall picture of what happened. This can help investigators identify the primary crime scene and any secondary crime scenes.
4. See the scene: They take close-ups of shots of evidence makers and rulers.
5. Sketch the scene: They sketch the object of the room and the location of evidence, as well as direction, date, time, and case number.
6. Search for evidence: Looking for evidence such as gun bullets, knife fingers, hands, etc.
7. Secure and collect evidence: After finding the evidence they collect them by wearing gloves so that they won't get the fingerprints on the evidence. Forensics use a bag to store the evidence without getting damaged and they also label them.

Research Day 5: 29/01/25

https://www.forensicsciencesimplified.org/prints/how.html

After searching for the evidence police found a few fingerprints, But first, where can the fingerprints be found? They can be found on any solid surface, including the human body. Analysts say that the fingerprints can be found on three surfaces, it doesn't matter if it is visible or not. 1) Smooth surfaces like soap, wax, wet paint, fresh caulk, etc. Smooth surfaces are like 3D plastic prints, But the hard surfaces are either patent (visible) or latent

(invisible) prints. Now, let's see what they mean. Visible prints are formed when blood, dirt, ink, paint, etc is transferred from a finger or thumb to a surface. Patents can be found on a variety of surfaces like smooth or rough.

Latent prints are formed from the body's natural oils and sweat on the skin is situated onto another surface. They can be found on various surfaces; however, they are not easily visible and detection often requires the use of fingerprint powders, chemical reagents, or alternate light sources. Generally speaking, the smoother and less porous a surface is, the greater the potential that any latent prints present can be found and developed.

Research Day 6: 30/01/25

How are fingerprints collected?

Collecting Patent prints

Patent prints are collected using a straightforward method: photography. These prints are photographed in high resolution with a forensic measurement scale in the image for reference. Photography can be enhanced by investigators through the use of low-angle or alternate light sources and/or certain chemicals or dyes, but this is usually not necessary.

Collecting latent prints

Latent fingerprints are commonly detected and lifted by dusting a smooth or nonporous surface with fingerprint powder-black granular, aluminum flake, black magnetic, etc. If any prints become visible, they are first photographed as previously described and then lifted from the surface with clear adhesive tape. The lifting tape is transferred to a latent lift card to protect the print.

However, powders can destroy evidence and eliminate any possibility of using other techniques that might reveal a latent print or other evidence; thus, investigators may want to first view the area with an alternative light source or treat with cyanoacrylate (super glue) prior to applying powders. Latent fingerprints are commonly detected and lifted by dusting a smooth or nonporous surface with fingerprint powder-black granular, aluminum flake, black magnetic, etc. If any prints become visible, they are first photographed as previously described and then lifted from the surface with clear adhesive tape. The lifting tape is transferred to a latent lift card to protect the print.

Research Day 7: 31/01/25

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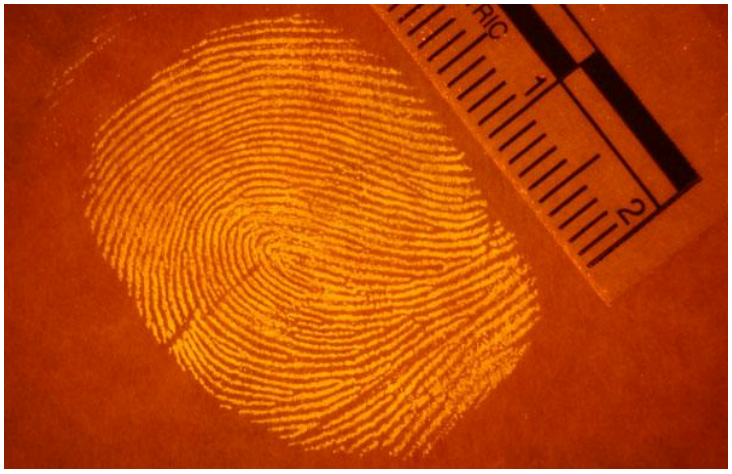
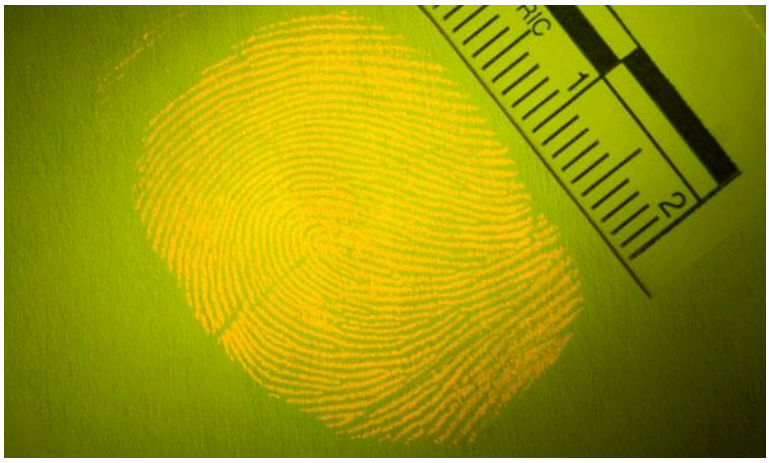
Alternate light source (ALS): It became commonplace for the investigators to examine any likely surfaces (doors, doorknobs, windows, railings, etc.) with an alternate light source. They use LED devices or lasers to see the fingerprints, they are sometimes photographed or further processed with powders or dye stains. Eg the investigators can use a blue light with an orange filter in hopes of finding latent fingerprints on the desks, chairs, computer equipment, or other items present at the site of a break-in. The use of a fluorescent dye stain and an orange alternate light source assists this latent print to be distinct enough to be documented. The use of different alternate light sources may assist in making the fingerprint visible.





Cyanoacrylate: Before applying either powders or dye stains investigators often process an item by applying a cyanoacrylate, commonly known as superglue, fuming of its surface. Done typically on nonporous objects the object being treated is subjected to cyanoacrylate vapors. The vapors or fumes from the application bind to the print(s) present on an object enabling its visualization with either oblique ambient lighting or an illuminated white light source.

A specially designed chamber for exposing latent prints to super glue fumes.

Super glue fumes cling to latent fingerprints on the neck of a glass bottle.

Chemical developers: Porous surfaces like paper are usually treated with chemicals, which include ninhydrin and physical development to make latent fingerprints visible. The chemicals react with the latent print residue's components like amino acids and inorganic salts. Ninhydrin causes prints to turn purple, hence easily photographed. Another chemical applied to identify latent fingerprints on porous surfaces is DFO (1,2-diazafluoren-9-one). It results in fluorescence, or glowing, of the fingerprints when excited by blue-green light.

Research Day 8: 1/02/25

Paper treated with ninhydrin reagent reveals latent prints after being processed with a household steam iron.

Other Collection Methods: Beyond those described above, there are specialized methods for taking prints from skin, clothing, and other challenging surfaces. Amido Black is a nonspecific protein stain that reacts with any protein that is present and is usually applied in the development, or enhancement of bloody impressions on human skin. On clothing, high technology methods are giving hope to the investigator to show prints and include vacuum metal deposition with gold and zinc. Another way of obtaining a patent on a rough textured or curved surface is by using a liquid casting compound called AccuTrans. AccuTrans is, in essence, a very thick liquid that fills in the nooks and crannies of rough or textured areas where conventional print lifting tape encounters difficulty.

Like fingerprint powders, chemical processing can destroy an investigator's capability to use some other techniques, which may lead to valuable information. Any nondestructive examinations are done first before the evidence is subjected to chemicals. An example would be that a questioned documents expert looks at a ransom or hold-up note before processing it with ninhydrin. Some formulations of ninhydrin will cause a certain ink to run, hence destroying the writing. In our case, the fingerprints are found on the wall which was freshly painted so this comes under the Patent prints. After doing all the collecting process they send it to a special lab where trained scientists called fingerprint examiners carefully analyze them and then they have to match them, But how?

Research Day 9: 2/02/25

https://pressbooks.bccampus.ca/criminalinvestigation/chapter/chapter-10-forensic-sciences.

The forensic science of fingerprints has a longstanding history in policing. Fingerprints have been accepted as being individually unique to each person. The courts frequently accept positive fingerprint matches conducted by an expert witness, as proof of identity beyond a reasonable doubt (Jain, 2010).

Prior to the modern advent of DNA analysis and biometric scanning technologies for identification, fingerprints, and dental record, x-rays were the only truly positive means of making a conclusive identification.

Research Day 10: 3/02/25

Fingerprints are unique patterns of lines and ridges that exist on the areas of our hands and fingertips, known as the plantar surfaces. These unique patterns have been classified in categories and features since the late 1800’s (Dass, 2016). The various categories and features allow each digit of a person’s fingers to be catalogued in a searchable system or database. These unique categories and features do not change throughout a person’s life, unless they are subjected to damage through physical injury or intentional abrasion. The impressions of our fingerprints are often left on items we touch because the oils our bodies

Research Day 11: 4/02/24

produce act like an invisible ink adhering to smooth surfaces we touch, thus transferring these fingerprint impressions to those surfaces. These virtually invisible image transfers are commonly called latent fingerprints, and they are easily made visible on most surfaces through the application of colored fingerprinting powder that adheres to the oils left by our fingers. The powder sticking to the oil reveals the image of lines and ridges that make up the fingerprint. It is also possible for a fingerprint impression to be exposed on surfaces, such as plastic, dry paper, or paint through a process of chemical fuming that reacts with the oils of the fingerprint changing their colour, thereby exposing the image. Fingerprints are sometimes also visible when they are transferred to an object because the finger has some foreign material on it, such as ink or blood. Other forms of visible fingerprints can be found as an actual moulded impression of the fingerprint when a person touches a malleable surface, such as clay or cheese.

Research Day 12: 5/02/25

- https://www.fljud13.org/CourtPrograms/ChildrensJusticeCenter/ChildrensAdvocacyCenter/ForensicInterviews/FAQs.aspx#:~:text=After%20the%20interview%20the%20Investigative,to%20the%20State%20Attorney's%20office.
- https://www.forensicsciencesimplified.org/prints/how.html#:~:text=Fingerprint%20examiners%20then%20review%20the,experience%20to%20perform%20the%20task.

- https://www.tps.ca/organizational-chart/specialized-operations-command/detective-operations/investigative-services/forensic-identification-services/photo-section/

Research Day 13: 6/02/25

THE FINGERPRINT ANALYSIS PROCESS

The below is a summary of how a forensic analysis is usually performed- it has stages,

1) Analysis of the fingerprints
2) Comparison of the evidence to determine the source
3) Evaluation to determine if the evidence is valid
4) Verification of the evidence to determine if the evidence is accurate (usually done by another examiner)

Analysis involves assessing a print to determine if it can be used for a comparison. If the print is not suitable for comparison because of poor quality or quantity of features, the examination ends and the print is reported as not suitable. If the print is suitable, the analysis indicates the features to be used in the comparison and their tolerances (the amount of variation that will be accepted). The analysis may also uncover physical features such as recurves, deltas, creases, and scars that help indicate where to begin the comparison. This process is the first step in fingerprint analysis as it helps the examiner to get an idea of who the criminal might be according to the small evidence found at the crime scene.

Research Day 14: 7/02/25

Comparisons are performed by an analyst who views the known and suspect prints side-by-side. The analyst compares minutiae characteristics and locations to determine if they match. Known prints are often collected from persons of interest, victims, or others present at the scene or through a search of one or more fingerprint databases such as the FBI's Integrated Automated Fingerprint Identification System (IAFIS). IAFIS is the largest fingerprint database in the world and, as of June 2012, held more than 72 million print records from criminals, military personnel, government employees and other civilian employees.

Evaluation is where the examiner ultimately decides if the prints are from the same source (identification or individualization), different sources (exclusion), or inconclusive. Inconclusive results may be due to poor quality

samples, lack of comparable areas, or an insufficient number of corresponding or dissimilar features to be certain. This phase is to evaluate the evidence after analyzing and comparing the fingerprints.

Verification is the final step in fingerprinting analysis where another examiner is involved who analyses and compares and finally evaluates the prints to support the conclusions of the original examiner. This person may also verify the suitability of determinations made in the analysis phase (phase one)

Research Day 15: 8/02/25

What are the forensic departments or services that help identify possible suspects of a crime near Calgary or in Canada? The Toronto Police Services has 12 different departments for forensic research and investigation. They include:

Forensic Identification Services (FIS): It analyzes forensic evidence such as fingerprints and traces of blood and identifies individuals objectively and efficiently by recreating crime scenes, comparing photographs, **and analyzing what has been found.**	AFIS: The Automated Fingerprint Identification System is responsible for **maintaining and operating a "computerized fingerprint search and storage system"** One of their main tasks is to **capture the fingerprints of a charged suspect using a "Livescan system" which uses a laser scan machine.** "Livescan is a real-time identification system (RTID) allowing for the **quick examination of fingerprints taken from arrested persons and compared to the known offender database with results returned to the police station printing the person within just <u>5 minutes."</u>** The other main thing that they perform is to determine if the person has previous records with	Biometric section : Respitory for Integrated Criminalistic Imaging (RICI) is an invaluable imaging component used by the Toronto Police Service. RICI is a computer mugshot system which runs on a Windows operating system. RICI Quality Control responsibilities include: ● Operation and maintenance of the RICI mug-shot system throughout the Service ● Create photo line-ups ● Printing of black and white or colour stored images ● Training Service members in RICI and Livescan

	the Toronto Police or other Police stations in Canada. They are capable of searching fingerprints taken from already deceased people. They enter a new set of arrestee finger/palm prints if they aren't in the database already. Beyond the local activities, they are capable of International; fingerprint searches via the RCMP and Interpol to find possible matches in other foreign countries.	
# Research Day 16: 9/02/25 CARES: The Computer Assisted Recovery Enhancement System (CARES) uses state-of-the-art computer graphics working with a forensic artist to contribute to visual enhancement services. In simple words, they are **responsible for producing facial composites, aging, restorations, and skull reconstructions to aid police investigations.**	Crime lab: This department is involved in Cyanoacrylate fuming /Dye Staining /Alternate Light Source Examinations: Carried out on rifles, handguns, ammunition, drug packaging, electronic equipment, currency and a variety of other smooth, non-porous exhibits, etc. • Specialized Dye Staining Chemicals and Techniques: Used on a variety of adhesive	DNA coordinator: The DNA Coordinator is a Civilian member acting as the Toronto Police liaison with the Centre of Forensic Sciences (the provincial crime lab) to investigate hits from DNA submissions. Crime scene DNA samples are sent to the Centre of Forensic Sciences for analysis. The Centre develops profiles from these samples

	tapes, sticky back surfaces etc. ● DFO oven, Indanedione Heat Press and Ninhydrin Incubators: Used on a wide array of papers, boxes, currency, documents and personal identification. ● Vacuum Metal Deposition (VMD): A 2 step process that develops fingerprints on non-porous smooth surfaces. The VMD develops visible prints that do not require alternate light sources.	and uploads them to the National DNA Databank (NDDB) maintained by the Royal Canadian Mounted Police. Research has revealed that about **30% of DNA hits are to suspects not previously known in the investigation.** They are known as cold hits and prove the value of DNA as an important investigative resource.

Research Day 17: 10/02/25

Document section: This section is deeply engaged in **identifying latent fingerprints and palm prints found on criminal writings like hold-up notes, counterfeit money, real money, threatening letters, fraudulent cheques, and hate crimes.**

This section receives documents from different sections of the forensic. They are then chemically prepared for comparison. These developed prints are then photographed and compared. If any positive results are found, they are then compared to the fingerprints of suspects supplied by the investigating units. If no identification is made, the found prints, if suitable, are searched via AFIS.

Photo section :

Services provided to members of FIS and Toronto Police include:

- C-41/ Black & white film processing
- Archiving of negatives and digital, media
- Custom colour & B/W enlargements up to 24 x 30 inch including colour matching and one to one prints
- Reproduction of different media – slides, photos, digital scans input & output
- Data recovery

Plan drawing section :

The Plan Drawing Section employs a single drafting technician responsible for the preparation of drawings, photographs and graphics for investigative and court purposes.

The services provided to Detective Services Squads, Divisional Detective Services and outside agencies.

- Attending scenes of major occurrences to prepare sketches and take measurements in order to precisely record the location of pertinent aspects.

	from portable flash memory ● Digital imaging for internal and external publications ● Digital enhancements for publicity and promotional usage ● Public relations photography & corporate portraits ● Technical photographic support to all units (trouble –shooting camera equipment, processes, purchasing advice) ● Deliver training to	Methods used include both manual (Laser Electronic Distance Measuring [EDM]) and automated (Total Station) systems. ● Preparing scale drawings based on notes taken at the scene using AutoCAD software ● Preparing scale models based on notes taken at the scene using various techniques and materials ● Obtaining and preparing maps, aerial photographs, architectural plans, photoboards and / or other graphics using various software

	SOCOs, surveillance, and special assignments ● Monitor quality control of photographic evidence being submitted for court presentations	● Developing spot measurements and dimensions from photographs and video images using photogrammetric software and techniques (i.e. for suspect height determination) ● Presenting evidence in court as a qualified expert witness
# Research Day 18: 11/02/25 Scenes of crime: This department monitors the **Scenes of Crime Section primarily by police officers trained as Forensic Identification Officers, attending calls for service throughout Toronto, 24 hours a day.**	Training section : The Training Section is responsible for ensuring adequate training for members of FIS and operating the uniform Scenes of Crime Officer program. Member of FIS receive ongoing	FIS Waltz Video : At Forensic Identification Services (FIS) both police officers and civilians use science to solve crimes. Forensic Identification Officers collect evidence over the course of hours and sometimes days in order to paint a

1) **They examine the crime scene mostly physically** 2) **Photographing and videotaping various scenes and victims identified.** 3) **Collecting finger and palm prints from the crime scene along with clothing, blood, and other possible evidence.** 4) **Comparing clothing or footwear to those of the suspects for a match.** 5) **In case of a major crime scene, they submit biological, chemical, and toxicological evidence to the Centre of Forensic Sciences** 6) **Providing efficient assistance and expert advice to investigators either via telephone or in-person** 7) **Involvement of DNA collection from people with a consent or warrant.** 8) **Providing charts & photographs collected from the crime scene to the court and giving expert testimony relating to the examinations conducted and their results.** **Here are the types of equipment they use:** **Alternate Light Sources: Coherent portable laser, Luma, and Poly lights to assist in searching for**	training in their duties from the Ontario and Canadian Police Colleges. Recent initiatives include having accredited Ontario Police College courses held at FIS. This section is also responsible for presentations to police officers, crown attorneys, schools, colleges and universities. FIS currently has an intern program with the forensic science programs of two Ontario universities.	complete picture of a crime for the courtroom. Officers use many tools to capture fingerprints, detect traces of blood, recreate a crime scene and analyze what they have found. Civilian members are employed to compare fingerprints, process photographs, create drawings and models as well as create composite drawings of suspects or victims of crime.

# Research Day 19: 12/02/25 **biological and chemical trace evidence** **Blood Reagents: Amido black, Leucomalachite Green, Leuco Crystal Violet and Luminol** **Casting Material: Variety of casting materials including Accutane, dental stone, Microsil, and sulphur for recovery of footwear and tool-mark impressions** **Digital Cameras: Officers are issued digital SLR cameras** **Electrostatic Lifter: Pathfinder Electrostatic machines for recovery of footwear impressions in dust** **Fingerprint Kit: Powders, tapes, brushes, swabs, measuring devices, seals, and acetates Lighting Systems: Metal Detectors:**		

Research Day 20: 13/02/25

https://www.sciencedirect.com/topics/computer-science/law-enforcement-agency#:

https://www.ontario-criminal-lawyers.com/criminal-records-canada/fingerprints-photographs/#:~:text=Once%20collected%2C%20fingerprints%20and%20photographs,in%20ongoing%20and%20future%20investigations.

As mentioned above, after scanning the fingerprints a person's photo will appear on the computer, this information can be accessed by various law enforcement agencies (like a group of teams who work together to keep everyone safe and make sure that everyone follows the rules) across Canada for identification purposes and further investigation.

Research Day 21: 14/02/25

https://sls.eff.org/technologies/face-recognition

https://rcmp.ca/en/criminal-records/criminal-record-checks

What do they do with the photo?

Once they have obtained a photo, they use it for various purposes like identifying individuals, investigating crimes, or gathering evidence, all within the scope of their lawful authority.

Here's everything in detail:

- Identification: Police have access to face recognition technology through private platforms or other government-designed systems. Police can search this on social media, CCTV, traffic cameras, etc.
- Record keeping: This record shows you whether they have done any crime or not. They might ask you to submit your fingerprint if the name-based is unable to definitively verify your identity. The fingerprint is one of the accurate ones to check a person's identity. They prevent people from being mistakenly linked to a criminal record that is not theirs and guarantee that people cannot avoid their criminal history.
- Investigation: They simply show the photo of the criminal and ask them if they recognize the criminal and they even share the photo on social media and ask them to identify the person.

Research Day 22:15/02/25

https://www.moeenco.com/blog/criminal-law/20-questions-police-may-ask-during-a-v

Then after finding the person through social media and other ways, they interview that person. Here are some questions they ask the criminal:

1. "Can you tell me, in your own words, what happened on [Date/Time]?"
2. "Where were you at [specific time/place]?"
3. "Do you know [Person's Name]? If so, how do you know them?"
4. "Have you ever visited [location related to the investigation]? When and why?" etc.

How do you know if a person has mental health during the interview?

1. Acting very upset or scared.
2. Not understanding what's happening.
3. Saying they have mental health conditions

, etc signals at this time they might ask about the person's medical history. Still, sometimes it is a privacy to someone's medical history, so at this time they call a doctor for a check and if a doctor or the medical history confirms that he has a mental illness what do they do? So it often depends on his stage of disease. If it is really

serious then they might send him to a forensic psychologist. If it is not that serious then he might go to jail or sometimes it depends on the court order but in our case, the person has a serious illness so the court asks the forensics psychologist to take this case. Now what they do.

Research Day 23: 16/02/25

https://www.nu.edu/blog/what-is-forensic-psychology/

https://www.psychology.org/careers/what-is-forensic-psychology/

Testable Question: **How could a forensic psychologist learn about someone's mind?**

What is a forensic psychologist?

It is a complex and interesting field that blends psychology with the legal system. They may work for civil and criminal cases, carrying out several tasks.

A wide part of forensic psychology involves carrying out psychological assessments of people involved in legal cases. This means they interview witnesses, accused, or victims. They also write reports and others.

When a defendant claims they are "insane" or can't understand the court, a brain expert checks their mental state to ensure fairness.

They work closely with the legal system, police officers, judges, etc.

Research Day 24: 17/02/25

Understanding Forensic Psychology

Forensic psychology as a field involves the application of various specialties of psychology, including clinical, developmental,responsible, and social psychology, to legal situations. The application may be in the form of various things, including the assessment of the state of an individual's mind during court appearance, victim counseling, and consultation on civil duty, among many others.

The application of legal cases to psychology is the utilization of psychological principles, theory, and research designs in understanding legal issues. It ranges from the micro-level, like understanding what drives a given crime, to the macro-level, e.g., determining how successful the programs for rehabilitation within prisons are.

Research Day 25: 18/02/25

The Role of Forensic Psychologists

Forensic psychologists perform several important functions within the legal system. Foremost, they tend to work in partnership with legal professionals such as lawyers, judges, and law enforcement personnel. This may entail offering psychological information pertinent to a given case, guidance about possible psychological factors, or in-court experts. A significant function of the work of a forensic psychologist is psychological testing and research. They may have to determine the mental competence of an individual to stand trial, the risk of reoffending, or study the impact of a traumatic incident on the victim's mental well-being. Many of these tasks are conducted through psychological assessment instruments and techniques, along with in-depth knowledge of mental illness and trauma's impact.
Besides, forensic psychologists help in developing intervention programs addressing particular issues within the legal system. These could be offender treatment programs, victim counseling programs, or police training programs. These programs are developed based on psychological theory and research to remediate the causes of criminal behavior, assisting victims in recovery, or improving the effectiveness of the criminal justice system.

Research Day 26: 19/02/25

These are the questions that will be answered.

https://www.mindstatepsychology.com.au/blog/how-forensic-psychologists-make-a-difference#:~:text=Techniques%20and%20Tools%20Used%20by%20Forensic%20Psychologists,-Psychological%20Assessments%20and&text=Common%20tests%20include%20personality%20assessments,support%20their%20evaluations%20and%20recommendations.

What are the different ways a forensic psychologist can gather information to read someone’s mind

Psychological Assessments and Testing

Forensic psychologists rely on a variety of psychological tests to evaluate individuals involved in legal matters. Some of the most common tests include personality assessments, intelligence tests, and evaluations of the risk for violent behavior. These assessments provide objective data that support their evaluations and recommendations.

Interview Techniques used

Conducting interviews is a key technique in forensic psychology. Psychologists often use structured interviews, which follow a specific sequence of questions, as well as unstructured interviews that are more flexible and

Research Day 27: 20/02/25

conversational. The goal of these interviews is to gather thorough and reliable information about an individual's psychological state, their background, and other significant factors.

Behavioural Analysis and Profiling

Behavioral analysis focuses on examining behavior patterns to gain insight into the psychological traits of individuals. This approach is especially valuable in criminal profiling, where psychologists scan crime scenes and behaviors to conclude characteristics and expect future actions. Profiling assists law enforcement agencies in narrowing down suspect lists and solving crimes more effectively.

Research Day 28: 21/02/25

Where do they share the information after gathering the information req

Court: After gathering the information they need to share it to the court with proper evidence but before sharing it they need to do some more research about that person and here the research they will be doing:

First they study their past life : They look at some photos or the school they went to. They try to talk with their close friends and understand how the disease caused them. They even look at the apartment or house they have lived in ,and other things that tell about their past.

Research Day 29: 22/02/25

https://www.mayoclinic.org/diseases-conditions/bipolar-disorder/symptoms-causes/syc-20355955#:~:text=Overview,that%20causes%20extreme%20mood%20swings.

https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961#:~:text=Generalized%20anxiety%20disorder%20includes%20persistent,%E2%80%94%20even%20ordinary%2C%20routine%20issues.

https://my.clevelandclinic.org/health/diseases/9636-personality-disorders-overview

https://www.ncbi.nlm.nih.gov/books/NBK559052/#:~:text=Cognitive%20deficits%20may%20be%20from,%2C%20mental%20illness%2C%20neurological%20disorders.

https://www.mayoclinic.org/diseases-conditions/drug-addiction/symptoms-causes/syc-20365112#:~:text=Drug%20addiction%2C%20also%20called%20substance,control%20the%20use%20of%20a

Research Day 30: 23/02/25

What are the diseases that they look after?

- **Mood Disorders:**
    - Like when someone feels very sad (depression) or very up and down (bipolar disorder).
    -
- **Anxiety Disorders:**
    - Like when someone worries a lot or has panic attacks.
    -
- **Psychotic Disorders:**
    - Like when someone has trouble telling what's real and what's not (schizophrenia).

Research Day 31: 24/02/25

- **Personality Disorders:**
    - These affect how someone relates to other people and can lead to trouble with the law.
    -
- **Cognitive Impairments:**
    - Like when someone has trouble thinking clearly due to a brain injury or other reasons.
    -
- **Substance Use Disorders:**
    - These involve problems with drugs or alcohol, which can affect behavior.

Research Day 32: 25/02/25

What kind of questions do they ask a mentally ill person?

Finding the Right Books:

- Think of research studies as little stories or experiments that scientists have done. The psychologist needs to find the right "books" or studies that talk about memory and scary events (trauma).
- They use special search tools, like library catalogs but for research, to find studies related to their questions.

Research Day 33: 26/02/25

Reading and Understanding:

Research Day 34: 27/02/25

- Just like reading a book, they have to carefully read each study to understand what the scientists did and what they found.
- They pay attention to things like:
    - Who were the people in the study? (Were they kids, adults, or people who went through similar experiences?)
    - What did the scientists do? (What kind of tests or questions did they use?)
    - What were the results? (What did the scientists learn about memory and trauma?)

Connecting the Dots:

- The psychologist doesn't just read one study; they read many! They're looking for patterns and connections.
- They ask questions like:
    - Do most studies agree on this topic?
    - Are there any studies that disagree? If so, why?
    - How does this information relate to the person they're working with?

Research Day 35: 28/02/25

Using the Information:

- After reading all the studies, the psychologist can use what they've learned to help understand the person they're assessing.
- They might say something like, "Based on research, people who experience trauma sometimes have trouble remembering specific details, but they might remember other parts very clearly."
- This helps them explain their findings to the court in a way that's based on science, not just their opinion.

Even though they may ask these questions, they still gather some form of evidence to determine whether a person is telling the truth. Due to their mental health issues, some individuals may not always be trustworthy. Here are some forms of evidence that can be collected: CCTV footage, information from their friends, and other sources.

Research Day 36: 1/03/25

How do they analyze the information?

- **Interview notes:** Like someone's answers to questions.
- **Test results:** Like scores on a puzzle or quiz.
- **Records:** Like a timeline of events.
- **Matching Pieces:**
    - You'd see if the person's answers in the interview match what's in the records.
    - For example, if someone says they were calm, but the records say they were angry, that's a mismatch!

Research Day 37: 2/03/25

- **Repeating Themes:**
    - You'd look for things that keep coming up.
    - Maybe the person keeps talking about feeling scared, or maybe the test results show they have trouble with memory.
- **Cause and Effect:**
    - You'd try to see if one thing seems to lead to another.
    - For example, maybe the records show that every time something bad happens, the person acts out.

Research Day 38: 3/03/25

- **Finding the Odd One Out:**
    - You would look for things that do not match the rest of the information.
    - If someone is very polite and calm during the interview, but all of the other records show them being angry, then that would be an odd one out.
- **Putting it Together:**
    - You'd use all these patterns to create a picture of what's going on.
    - They are trying to see if all the information tells the same story.