

Lecture 1: Overview of forensic psychology

External validity

This form of validity basically refers to the extent to which findings from a study can be generalized to the real world. Many laboratory studies conducted in forensic psychology have low external validity because they are highly artificial. For example, consider the typical study that examines the accuracy of eyewitness testimony. The study will usually be conducted in a laboratory setting (rather than outside), where undergraduate (rather than real eyewitnesses) are exposed to video taped scenarios (rather than real events).

Forensic psychology

A field of psychology that examines issues arising out of the interaction between human behaviour and the law, legal system, or legal process.

Internal validity

This form of validity basically refers to the extent to which we, as researchers, can be confident in stating that observed experimental findings are due to particular variables (that we manipulate as part of an experiment).

Learning theories of crime

Theories of crime that primarily rely on principles of conditioning (e.g., learning from consequences). An example is Bandura's social learning theory.

Personality theories of crime

Theories of crime that primarily rely on the personality make-up of criminals and how their personality make-up differs from law-abiding citizens. An example is Eysenck's bio-social theory of crime.

Psychodynamic theories of crime

Theories of crime that primarily rely on the internal dynamics of the offender and the importance of early childhood experiences. An example is Bowlby's theory of maternal deprivation.

Lecture 2: Police selection and police stress

Police selection:

Assessment Centre

A location where police applicants are tested using situational tests (i.e., simulations of real world policing tasks).

Cognitive ability tests

A selection instrument used by the police whereby an individual is assessed for memory, logic, observation, comprehension, etc.

IPI

The Inwald Personality Inventory is a personality test used to assess specific personality traits and behaviours that are related to law enforcement.

Job analysis

A process whereby the knowledge, skills, and abilities (KSAs) that make a good police officer are defined.

MMPI

The Minnesota Multiphasic Personality Inventory is a personality test used to assess psychopathology.

Performance measure

A measure of police performance, which could include supervisor ratings, commendations, complaints, punctuality, academy success, etc.

Personality tests

A selection instrument used by the police whereby an individual is assessed for various personality traits (e.g., honesty).

Police selection

The process by which police agencies select police officers from a pool of applicants.

Predictive validity

In the context of police selection this refers to the extent to which a measure of KSAs predicts future police performance.

Range restriction

A problem that arises when attempting to validate a police selection instrument, which occurs because of the screening of unqualified applicants as a result of the selection instrument being validated.

Selection interview

A selection instrument used by the police whereby an applicant is asked a series of semi-structured questions that are intended to assess whether they possess particular KSAs.

Police stress:

Acute stressor

A short-term intense stressor.

Adaptive coping skills

Coping strategies that allow an individual to effectively cope when encountered with a stressor.

Chronic stressor

A long-term but often less intense stressor (compared to an acute stressor).

Selye's three stage model

A model of stress that consists of three stages: (1) Alarm - consisting of intense arousal resulting in the body mobilizing for fight or flight, (2) Resistance - consisting of an attempt by the body to adapt and stabilize, and (3) Exhaustion - consisting of physical exhaustion and illness due to the body not being able to cope with demands.

Stress

The automatic state that results when the body must make changes in order to adapt to demand.

Stressor

Events that people encounter that they perceive as harmful, threatening, or challenging. In the policing context stressors fall into one of four categories: (1) occupational stressors, (2) organizational stressors, (3) criminal justice stressors, or (4) public stressors.

Yerkes-Dodson Law

A law dealing with the relationship between stress and performance. According to this law, too little stress or too much stress decreases one's ability to perform (some moderate level of stress is optimal).

Lecture 3: Police interrogations and detecting deception

Police interrogations:

Coerced-compliant false confession

A false confession that is caused by the use of coercive interrogation tactics. Coerced-compliant false confessions may occur to: (1) escape further interrogation, (2) to gain a promised benefit, or (3) to avoid a threatened punishment.

Coerced-internalized false confession

A false confession that is caused by highly suggestible interrogation tactics. Unlike voluntary false confessions or coerced-compliant false confessions, these individuals actually come to believe that they are responsible for the crime in question.

Reid model

An approach to interrogations that is commonly used in North America. In general, it consists of three stages: (1) gather evidence, (2) conduct a non-accusatorial interview, and (3) conduct an accusatorial interrogation. The third

stage consists of 9 steps that are designed to extract confessions from guilty persons.

Voluntary false confession

A false confession to a crime that is given without any elicitation from the police. People usually provide voluntary false confessions for one of the following reasons: (1) a morbid desire for notoriety, (2) the person being unable to distinguish fact from fantasy, (3) the need to make up for feelings of guilt by receiving punishment, or (4) a desire to protect somebody else from harm.

Detecting deception:

Brokaw hazard

In the context of detecting deception, the Brokaw hazard refers to a failure to take into account how people differ in their expressive behaviour (i.e., absence of deceitful signs is not evidence of truth).

Control question test

The control question test is the most commonly used test for detecting deception when employing the polygraph technique. It is made up of irrelevant questions, relevant questions, and control questions. An irrelevant question may be: Do you live in Ottawa? A relevant question may be: Did you stab John Doe on the night of March 18? A control question may be: Before the age of 24 did you ever try to hurt someone to get revenge? The assumption is that guilty people will have larger physiological responses to the relevant questions whereas innocent people will have larger physiological responses to control questions.

Deception

Deception can be defined as those instances when a person intends to deliberately mislead another without having been explicitly asked to do so by the target.

Guilty knowledge test

The guilty knowledge test is a test used for detecting deception when employing the polygraph technique. It is made up of a series of multiple-choice questions, with one alternative always referring to information that would only be known by the guilty party. For example, the question may be: If you did rob the bank on June 2, then you wrote a note to the teller giving her instructions. Was the note written on: (a) a piece of yellow paper, (b) a one dollar bill, or (c) the back of a photograph? (with (c) being the correct answer). The assumption is that guilty people will consistently have larger physiological responses when presented with the 'guilty knowledge' alternative.

Othello error

In the context of detecting deception, the Othello error refers to a failure to consider that a truthful person who is under stress may appear as if they're lying.

Polygraph technique

The polygraph technique is often used in an attempt to detect deception. The polygraph is used to measure a person's physiological response as that person is answering questions posed by the polygrapher. The physiological responses that are measured usually include: breathing, heart rate, blood pressure, and sweating. It is assumed that the measures obtained from people telling the truth will be different from the measures obtained from people who are lying.

Lecture 4: Offender profiling and geographic profiling

Criminal profiling:

Barnum effect

The Barnum effect occurs when an ambiguous personality description is perceived by the receiver of that description as a uniquely accurate portrayal of the self. In the profiling context, the Barnum effect has been examined as one possible explanation for why ambiguous profiles are viewed as accurate and useful by those who use profiling advice.

Deductive (clinical) profiling

A form of profiling where the personality and behavioural features of an unknown offender are inferred from evidence relating to the crimes of that offender.

Inductive (statistical) profiling

A form of profiling where the personality and behavioural features of an unknown offender are inferred from what is known about other offenders who have committed similar crimes.

Offender profiling

A technique for identifying the major personality and behavioural features of an offender based upon an analysis of the crimes he or she has committed.

Trait model of profiling

A model of profiling that is based on the classic trait model of personality. The basic idea is that the behaviours exhibited by offenders at their crimes (e.g., planning) reflects some underlying personality disposition within the offender (e.g., organisation), which in turn can be used to predict how the offender will behave in other aspects of their non-criminal life (e.g., intelligent).

Geographic profiling:

Distance decay

Distance decay refers to the well-established finding that offenders are more likely to commit crimes closer to home.

Geographic profiling

A form of profiling where an attempt is made to predict the most likely residential location of a serial offender based on where they have committed their crimes. Computerized geographic profiling systems are typically used to make these predictions.

Lecture 5: Eyewitness testimony and police interviewing

Eyewitness testimony:

Absolute judgement

Refers to instances where a witness compares their memory of the culprit to each lineup member and asks "is this the person I saw commit the crime".

Estimator variable

A variable that influences the accuracy of eyewitness recall and/or recognition that is not under the control of the criminal justice system (e.g., the age of the witness).

Eyewitness recall

Recollection of actions, people and circumstances involved in a crime by the witnesses of that crime.

Eyewitness recognition

Recognition of the culprit who committed a crime by the witnesses of that crime using a procedure where the suspect is placed among others.

Misinformation effect

The misinformation effect refers to the fact that providing misleading information in the retention interval (between when someone has witnessed an event and when someone is asked to recall the event) can decrease our ability to recall memories correctly.

Relative judgement

Refers to instances where a witness selects a person who most resembles the witness's memory of the culprit relative to the other lineup members.

System variable

A variable that influences the accuracy of eyewitness recall and/or recognition that is under the control of the criminal justice system (e.g., interview style).

Police interviewing:

Enhanced cognitive interview

The enhanced cognitive interview is an interview procedure used by the police where various principles of memory and cognition are drawn on in an attempt to

improve recall accuracy, as well as various principles of social dynamics. The enhanced cognitive interview includes the four features found in the original cognitive interview (context reinstatement, report everything, change perspectives, and reverse order) plus five more features: establish rapport, focus retrieval, compatible questions, transfer control, and supportive behaviour.

Original cognitive interview

The original cognitive interview is an interview procedure used by the police where various principle of memory and cognition are drawn on in an attempt to improve recall accuracy. The original cognitive interview includes four features: context reinstatement, report everything, change perspectives, and reverse order.

Standard police interview

The type of interview police supposedly use if they have not received interview training. The standard police interview is characterized by frequent interruptions, closed questions, inappropriate sequence of questions, negative phrasing, and leading questions.

Lecture 6: Jury decision-making

Adjournment

A method for dealing with biased jurors. Adjournments consist of postponing the trial to a later date. The belief is that the delay in time will reduce biases through a process of forgetting (which is assumed to take place over time) and "cooling down".

Challenge for cause

A method for dealing with biased jurors. Challenges for cause consist of questioning jurors directly to determine if they hold any biases. The belief is that it is possible to identify biased jurors and replace them with more unbiased ones.

Change of venue

A method for dealing with biased jurors. Changes of venue consist of moving the trial to a new location. The belief is that jurors in the new location will be less biased than those in the original location.

Generic prejudice

A form of juror bias that occurs when the juror has attitudes and beliefs about certain groups of people or types of crime (e.g., attitudes towards drug dealers).

Impartiality

Ideally, impartiality is of 1 of 2 features that characterize juries in Canada. Partiality is made up of an attitudinal component (i.e., prejudice) and a behavioural component (i.e., discrimination). The courts attempt to decrease the

extent to which jurors are partial using a variety of methods including adjournments, changes of venue and challenges for cause.

Interest prejudice

A form of juror bias that occurs when the juror has a direct interest in the case (e.g., they are related to the accused).

Juror comprehension aids

A set of procedures that are meant to assist the jury in their function. These procedures include pre-trial instructions from the judge to the jurors, note taking by the jurors, and question asking by the jurors (to witnesses).

Jury selection

A procedure, used mostly in the United States, to identify "ideal" jurors. There are 2 primary methods that are used. One method examines broad attitudes and traits. For example, using surveys such as the Juror Bias Scale a researcher may be able to identify jurors who hold pro-defence versus pro-prosecution attitudes. The second method examines case-specific attitudes and beliefs. For example, in a case involving medical malpractice a researcher may want to develop a survey to examine potential jurors' attitudes towards the medical profession. Using both of these methods, the goal is to identify the "ideal" juror, in terms of their demographic features, personality, and attitudes.

Normative prejudice

A form of juror bias that occurs when the juror is influenced by community sentiment (e.g., logging in British Columbia).

Representativeness

Ideally, representativeness is 1 of 2 features that characterize juries in Canada. Representativeness is obtained by randomly selecting jurors that are representative of the community where the trial is being held.

Specific prejudice

A form of juror bias that occurs when the juror has attitudes and beliefs about the specific case (e.g., as a result of being exposed to pre-trial press coverage).

Lecture 7: Fitness to stand trial and criminal responsibility

Fitness to stand trial:

Fitness interview test (FIT-R)

One tool for determining fitness to stand trial. The first step when using the FIT-R is to determine if the individual suffers from a mental disorder. The 3 criteria found in Section 2 of the Canadian Criminal Code are then assessed (is the individual unable to understand the nature of the proceedings, understand the consequences of the proceedings, or communicate with counsel).

Fitness to stand trial

The determination of fitness to stand trial involves an assessment of the current mental condition of the accused, where the goal is to determine whether it interferes with their ability to perform legal tasks. Typically the legal tasks at issues include: (1) Is the accused able to assist in his defence?, (2) Does the accused understand his or her role in the proceedings?, and (3) Does the accused understand the nature of the proceedings?

MacCAT-CA

One tool used to assess fitness to stand trial (and fitness to plead guilty). This tool examines 3 general issues: (1) the individual's understanding of the legal system, (2) the individual's reasoning ability, and (3) the individual's understanding of their own legal situation.

Criminal responsibility:

ALI standard

A standard for determining criminal responsibility which states that for an offender to be found not responsible they must, at the time of the crime, lack the capacity to appreciate the criminality of the act or conform their conduct to the requirements of the law.

Irresistible impulse test

A standard for determining criminal responsibility, which states that for an offender to be found not responsible they must, at the time of the crime, be unable to control their behaviour.

M'Naghten standard

A standard for determining criminal responsibility which states that for an offender to be found not responsible they must, at the time of the crime, suffer from a defect of reason and must not know the nature of the act or must not understand that it was wrong.

Mental state at the time of the offence screening evaluation (MSE)

One tool for assessing criminal responsibility. It examines three areas: (1) general psychological history, (2) mental state at the time of the offence, and (3) current mental status.

NCRMD standard

A standard for determining criminal responsibility which states that for an offender to be found not responsible they must, at the time of the crime, be suffering from a disorder that rendered them incapable of appreciating the nature of the act or incapable of knowing that the act was wrong.

Lecture 8a: Sentencing

Denunciation

One of the objectives of sentencing in Canada. Here, the goal is to inform the Canadian public that we as a society view a particular act as wrong.

Fundamental principle of sentencing

The fundamental principle of sentencing is supposed to guide judicial decision making when handing down sentences. It states that a sentence must be proportionate to the gravity of the offence and the responsibility of the offender.

General deterrence

One of the objectives of sentencing in Canada. Here, the goal is to show Canadians what will happen to them if they commit a crime in the hope that this will decrease the likelihood that potential offenders in the community will offend in the future.

Parole

Allowing the offender to leave prison before the end of their prison term. Parole can either be on a temporary or full basis. Typically, there are a range of conditions attached to the parole (e.g., the offender must not leave the country). If the offender breaches any of these conditions they can be sent back to prison.

Reparation

One of the objectives of sentencing in Canada. Here, the goal is to repay society for what was lost during the commission of the crime (e.g., the offender will be made to pay back the value of what was stolen).

Sentencing

A sentence is the imposition of a legal sanction on persons convicted of an offence.

Sentencing disparity

Sentencing disparity refers to variation in sentencing patterns due to the influence of factors that are not legally relevant to the case (i.e. extra-legal factors such as the judges personality, philosophy, mood, etc.).

Sentencing guidelines

Sentencing guidelines refer to guidelines that are supposed to limit the degree of discretion that a judge has when deciding on appropriate sentences. In Canada, these often take the form of mandatory minimum sentences (e.g., in Canada, first degree murder has a mandatory minimum sentence of life imprisonment).

Specific deterrence

One of the objectives of sentencing in Canada. Here, the goal is to show offenders what happens to them if they commit a crime in the hope that this will decrease the likelihood that they will offend in the future.

Lecture 8b: Offender treatment

Effect size

The effect size can range from +1.00 to -1.00 and indicates how effective a treatment program is. As an example, you may want to evaluate a new treatment program that is supposed to prevent re-offending. You compare the re-offending rate for kids who do not take part in the program (60%) to kids who do take part in the program (40%) and get an effect size equal to +0.20 (indicating that the program is somewhat effective at reducing re-offending rates).

General responsivity principle

A principle that states: Intervention should match the ability and learning style of the individual offender.

Human services principle

A principle that states: Use effective human service over sanctioning whenever possible when intervening with offenders.

Need principle

A principle that states: Intervention strategies should target individual criminogenic needs (e.g., antisocial attitudes, antisocial associates, antisocial personality, antisocial history).

Risk principle

A principle that states: The offender's level of risk should match the level of intervention (e.g., high risk offenders = intensive intervention, low risk offenders = little or no intervention).

Specific responsivity principle

A principle that states: Intervention should match specific features of the individual offender (e.g., age, ethnicity, gender, anxiety, motivational level, etc.).

Lecture 9: Risk assessment

Actuarial predictions

One approach for carrying out risk assessment, which typically involves the collection of pre-specified risk factors (coded according to explicit rules) that are then entered into a statistical model that combines and weights them, producing an overall assessment of risk.

Dynamic risk factors

One group of factors commonly used in risk assessment. Dynamic risk factors change over time. An example would be impulsivity (that could change as a result of taking part in a treatment program). Dynamic risk factors are often categorized as stable dynamic factors and acute dynamic factors.

HCR-20

An example of a structured professional judgment instrument for carrying out risk assessment. Twenty risk factors are coded across 3 domains - historical (static) factors, clinical (dynamic) factors, and risk management factors. Based on a patient's combined score across these factors the patient is assigned to a general level of risk - low, moderate, or high.

Risk assessment

A concept involving two components: (1) risk prediction - assessing the risk that people will commit violence in the future, and (2) risk management - developing effective intervention strategies to manage that risk.

ROC analysis

Stands for receiver operating characteristics analysis. Used as a procedure for measuring the accuracy of risk predictions. The height of the ROC curve, as measured by the area under the curve (AUC), indicates accuracy. It is calculated by plotting the false positive rate as a function of the true positive rate for each possible cut-off score on the scale. An AUC=1.0 indicates perfect accuracy and an AUC=0.50 indicates chance accuracy. The advantage of using the AUC as a measure of decision making accuracy is that it is not threshold dependent (i.e., it does not depend on the cut-off score that was chosen by the decision maker to define when an individual will be violent).

Static risk factors

One group of factors commonly used in risk assessment. Static risk factors are fixed and unchanging. An example would be a history of substance abuse.

Structured professional judgment

One approach for carrying out risk assessment, which typically involves the collection of pre-specified risk factors while adding in any relevant case specific details. Although the risk factors are specified in advance, how the risk factors are combined into an overall assessment of risk is left to the discretion of the professional.

Two by two contingency table

A method for recording the frequency of possible outcomes that can occur when making two alternative decisions, like predicting whether a patient will be violent or not. The decision outcomes included in this table include hits (true positives), false alarms (false positives), misses (false negatives), and correct rejections (true negatives).

Unstructured clinical judgements

One approach for carrying out risk assessment, which typically involves a clinician using their judgment to determine the overall assessment of risk. This process is done subjectively and it is unclear to determine which risk factors were considered and how they were combined and rated.

VRAG

An example of an actuarial technique for carrying out risk assessment. Twelve static risk factors are coded, and based on a patient's combined score across these weighted factors, the patient is assigned to a specific level of risk.

Lecture 10: Psychopathy

Affective (or reactive) violence

Violence that is emotionally driven (e.g., violence in the heat of passion). Has a high arousal component. Victim injury is often more excessive than instrumental violence (see below).

PCL-R

The PCL-R refers to the Psychopathy Checklist - Revised, which is a method for determining whether someone is a psychopath (developed by Robert Hare). The measure consists of 20 items that tap into 4 features that are thought to define psychopathy: (1) interpersonal features (e.g., manipulative), (2) affective features (e.g., shallow emotion), and (3) lifestyle features (e.g., poor anger control). Each question is measured on a 3-point scale and a score of 30 out of 40 is typically taken as an indication of psychopathy.

Instrumental violence

Violence that is not emotionally driven but goal driven (e.g., to get revenge, to maintain power, to gain financially, etc.).

Startle blink reflex

A reflex that occurs when something unexpected happens (e.g., a loud noise). Typically, the startle blink reflex is magnified if you are in a negative emotional state and reduced if you are in a positive emotional state. However, this does not appear to be the case with psychopaths, indicating that they can be characterized by some hard-wired and generalized emotional deficit.