



**THE ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF
PSYCHIATRISTS**

MOCK WRITTENS EXAMINATION

(from the Auckland New Zealand program)

2014

PAPER II

I hereby verify that I have completed and returned Paper II, Mock Writtens Examination:

CANDIDATE'S NAME:

CANDIDATE'S SIGNATURE:

DATE:

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Citalopram
- B. Clomipramine
- C. Diazepam
- D. Flumazenil
- E. Intramuscular Benztropine 2 mgs
- F. Intravenous Benztropine 2 mgs
- G. Lithium carbonate
- H. Methylphenidate
- I. Naloxone
- J. Naltrexone
- K. Nitrazepam
- L. Nortriptyline
- M. Nortriptyline and lithium carbonate
- N. Olanzapine oral wafers
- O. Olanzapine short-acting injection
- P. Risperidone (Consta)
- Q. Tranylcypromine
- R. Venlafaxine

Which intervention listed above is the MOST appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

1. A woman known to be a sex-worker is brought to the Emergency Department comatose and with reduced respirations.
2. A 61-year old man undergoing endoscopy stops breathing.
3. A 19 y.o. man one week into treatment for first-episode schizophrenia develops a painful, distressing torticollis.

Extended Matching Questions

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Each question is worth 1 mark

- A. Angst
- B. Erscheinung
- C. Gedankenausbreitung
- D. Gedankenlautwerden
- E. Gegenhalten
- F. Gestalt
- G. Schauskrampf
- H. Vergegenwärtigung
- I. Verstehen
- J. Wahnstimmung
- K. Weltschmerz
- L. Wessenschau

Which term listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 4. A whole which is more than the sum of its parts
- 5. Delusional mood
- 6. Thought broadcast
- 7. Unfocussed anxiety or dread
- 8. Thought echo

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Amygdala
- B. Brainstem
- C. Brodman's area
- D. Cerebellum
- E. Circuit of Papez
- F. Corpus callosum
- G. Dominant parietal region
- H. Locus Coeruleus
- I. Meso-cortical pathway
- J. Meso-limbic pathway
- K. Nigrostriatal system
- L. Occipital cortex
- M. Substantia Nigra
- N. Tuberoinfundibular pathway

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

9. Anhedonia

10. Dyscalculia

11. Emotional memory

12. Long-term memory

13. Finger agnosia

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Anosognosia
- B. Command hallucination
- C. Déjà vu
- D. Depersonalisation
- E. Derealisation
- F. Dysaesthesia
- G. Finger agnosia
- H. Formication
- I. Jamais vu
- J. Macropsia
- K. Micropsia
- L. Olfactory hallucination
- M. Palinopsia
- N. Pareidolia
- O. Prosopagnosia
- P. Somatic hallucination
- Q. Tactile hallucination
- R. Third-person hallucination
- S. Visual agnosia
- T. Visual hallucination

Which abnormality of perception listed above is the MOST appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 14. After a suicide attempt Marco describes derogatory voices discussing him amongst themselves. He says: "the voices made me do it".
- 15. Bernie is disoriented and says there are insects crawling on his skin.
- 16. Andrea presents with anxiety and describes constant after-images clouding her vision.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Altruism
- B. Anticipation
- C. Blocking
- D. Denial
- E. Devaluation
- F. Displacement
- G. Distortion
- H. Humour
- I. Idealisation
- J. Intellectualisation
- K. Magical thinking
- L. Projection
- M. Projective identification
- N. Rationalisation
- O. Reaction formation
- P. Repression
- Q. Splitting
- R. Sublimation
- S. Suppression
- T. Undoing

Which defence listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

- 17. Using thinking to avoid feeling.
- 18. Unconscious fantasy in which aspects of the self or an internal object are split off and attributed to an external object.
- 19. Controversial behaviours or feelings are logically justified and explained so as to defend against the underlying emotions and make them consciously tolerable.
- 20. Unconsciously rejection of one's own unacceptable attributes by ascribing them to objects or persons in the outside world.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Agranulocytosis
- B. Constipation
- C. Dehydration
- D. Hypercalcaemia
- E. Hyponatremia
- F. Irritable bowel syndrome
- G. Mitral valve prolapse
- H. Myocarditis
- I. Neuroleptic malignant syndrome
- J. Non-fluent aphasia
- K. Pancreatitis
- L. Petit mal
- M. Pheochromocytoma
- N. Pituitary tumour
- O. Polycystic ovarian syndrome
- P. Pseudocyesis
- Q. Pseudoseizure
- R. Syndrome of inappropriate anti-diuretic hormone secretion (SIADH)
- S. Tertiary syphilis
- T. Torsades des pointes
- U. Water intoxication
- V. Wilson's disease

Which problem listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 21. Roger, who has chronic schizophrenia, has a seizure. He believes he must drink water constantly to purify himself of all sin.
- 22. Moana develops chest pain and dizziness five weeks after commencing clozapine.
- 23. Mark, whose wife is pregnant, develops morning nausea and abdominal bloating

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Acting out
- B. Acute manic episode
- C. Alzheimer's dementia
- D. Antisocial personality disorder
- E. Autism
- F. Borderline personality disorder
- G. Exhibitionism
- H. Frontal tumour
- I. Histrionic personality disorder
- J. Hypomania
- K. Intermittent explosive disorder
- L. Narcissistic personality disorder
- M. Schizophrenia

Which cause of problem behaviour listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 24. A 65 year old man develops memory deficits and is arrested after exposing himself at a local park while urinating.
- 25. A 28 year old man is arrested after running naked down a busy main street shouting that he is Eros the God of Love.
- 26. The probation officer of a 32 year old man is contacted. His client was arrested after lurking in the sand dunes, exposing himself to sunbathing girls at a popular beach.

Extended Matching Questions

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Each question is worth 1 mark

- A. Acting out
- B. Acute manic episode
- C. Alzheimer's dementia
- D. Antisocial personality disorder
- E. Autism
- F. Borderline personality disorder
- G. Exhibitionism
- H. Frontal tumour
- I. Histrionic personality disorder
- J. Hypomania
- K. Intermittent explosive disorder
- L. Kleptomania
- M. Major depressive disorder
- N. Narcissistic personality disorder
- O. Pyromania

Which cause of problem behaviour listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 27. Ruby is charged with shoplifting after stealing clothing from a department store. She has been coping poorly since her marriage broke up and is not sleeping well. She has no prior offences.
- 28. Jolene has been dealing with issues around always feeling she has to please her parents and be a "goody-goody", in her psychotherapy. She has an argument with her mother and is later arrested for shoplifting at the local mall.
- 29. Sharon is arrested after shoplifting a set of drill bits for which she has no use. She says she has been stressed lately and describes a mounting pressure to steal.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Catatonia
- B. Conversion disorder
- C. Coprolalia
- D. Elective mutism
- E. Fluent Dysphasia
- F. Guardedness
- G. Non-fluent dysphasia
- H. Passive-aggressive withholding
- I. Persecutory delusions
- J. Poverty of the content of speech
- K. Psychomotor retardation
- L. Thought withdrawal
- M. Verbigeration
- N. Vocal tic
- O. Word salad

Which problem listed above resulting in a speech abnormality is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 30. Mr Barker's speech is so delayed that he begins to reply only when the interviewer asks the next question. He makes no eye contact and has lost considerable weight.
- 31. Luigi resists arrest after assaulting a man on the bus. He shouts that the police are all "agents of Satan". When assessed he is mute and eyes the registrar with suspicion.
- 32. Mrs Patel suddenly develops an inability to speak during a bitter family dispute over her mother's will. Her family bring her to the GP but she herself does not seem distressed.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. 10 mgs/kg/day
- B. 20 mgs/kg/day
- D. 30 mgs/kg/day
- E. 40 mgs/kg/day
- F. 50 mgs/kg/day
- C. 60 mgs/kg/day
- G. 70 mgs/kg/day
- H. 80 mgs/kg/day

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

33. Loading dose of lithium carbonate for a 75kg acutely manic inpatient

34. Loading dose of sodium valproate for a 75kg acutely manic inpatient

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Adherence therapy
- B. Behavioural therapy – graded exposure and desensitisation
- C. Behavioural therapy – exposure and response prevention
- D. Cognitive behavioural therapy
- E. Cognitive remediation
- F. Dialectical behaviour therapy
- G. Family psychoeducation
- H. Family therapy
- I. Grief therapy
- J. Intensive short-term dynamic psychotherapy
- K. Interpersonal and social rhythm therapy
- L. Interpersonal therapy
- M. Motivational interviewing
- N. Psychodynamic psychotherapy

Which intervention option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

- 35. Joe, aged 27, is admitted for the fourth time in a manic state, after ceasing his mood stabiliser as he "felt too well".
- 36. Penny, aged 25, is insightful about her bipolar disorder, but struggles to remain stable as the relationship with her boyfriend is fraught and her new job involves night shifts.
- 37. Sione, aged 24, has been newly diagnosed with a first manic episode. He says that his family don't understand it and think he was just "being a dick".
- 38. Frances, aged 30, has a bipolar disorder which has been well managed for over two years, on lithium prophylaxis which she is keen to continue. Her serum levels are stable at 0.7-0.8 umol/L. She had a course of CBT and gained some benefit, but describes longstanding issues stemming from childhood, which cause ongoing difficulties in her relationships and self-confidence.

Extended Matching Questions

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Each question is worth 1 mark

- A. 0-1 month post-partum period
- B. 2 weeks post-menstrual period
- C. 2 weeks pre-menstrual period
- D. 2-12 months post-partum period
- E. 23-24 months post-partum period
- F. Binge eating disorder
- G. Bulimia nervosa with bingeing and excessive exercise
- H. First trimester miscarriage
- I. Polycystic ovarian disease
- J. Second trimester miscarriage

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

39. Can cause lower serum lithium levels despite the dose being stable.

40. The highest risk factor for development of acute psychosis.

41. A young woman gains weight, develops acne and has erratic periods.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Acute laryngeal dystonia
- B. Anticholinergic delirium
- C. Fatal carbon monoxide poisoning
- D. Fatal paracetamol overdose
- E. Lithium toxicity
- F. Non-fatal carbon monoxide poisoning
- G. Myocarditis
- H. Neuroleptic malignant syndrome
- I. Heavy cigarette smoking
- J. Stevens-Johnson syndrome
- K. Torsades des pointes

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

42. Serum carboxyhaemoglobin levels of 15%

43. Keratinocyte apoptosis

44. High-dose citalopram

45. Dilated pupils and low-grade fever

46. Polymorphic ventricular tachycardia

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Amitriptyline
- B. Clomipramine
- C. Carbamazepine
- D. Diazepam
- E. Dothiepin
- F. Doxepin
- G. Fluvoxamine
- H. Zopiclone
- I. Imipramine
- J. Lithium carbonate
- K. Midazolam
- L. Olanzapine
- M. Quetiapine
- N. Risperidone

Which drug listed above is the **MOST** appropriate choice for each of the following unwanted effects.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

- 47. Toxicity in combination with thiazides.
- 48. Seizures due to elevated clozapine levels.
- 49. Toxicity due to narrow therapeutic index.
- 50. Galactorrhoea.
- 51. Oral contraceptive failure.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Acting out
- B. Anger turned upon the self
- C. Displacement
- D. Flight into health
- E. Idealisation and devaluation
- F. Identification with the aggressor
- G. Mirroring
- H. Parallel process
- I. Reaction formation
- J. Repression
- K. Suppression
- L. Transference

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

- 52. The patient writes to say he feels fine but that changes at work mean he cannot attend the final ten sessions
- 53. The patient describes anger with his parents for not loving him enough. The therapist feels overwhelmed by the patient's neediness and frustrated with his supervisor for failing to provide adequate guidance on how to manage this.
- 54. The patient announces that she has also begun seeing an acupuncturist, saying: "he's very easy to talk to – such a relief to get some practical advice".
- 55. Following the therapist taking three weeks' planned leave the patient misses two sessions, leaving messages that she has the flu.
- 56. The patient buys a red sports car.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Acute Stress disorder
- B. Amnestic disorder
- C. Anorexia nervosa
- D. Binge eating disorder
- E. Bulimia nervosa
- F. Conversion disorder
- G. Delusional disorder
- H. Depersonalization disorder
- I. Dissociative amnesia
- J. Dissociative identity disorder
- K. Factitious disorder
- L. Hypochondriasis
- M. Malingering
- N. Obsessive compulsive disorder
- O. Post-traumatic stress disorder
- P. Schizophrenia
- Q. Somatization disorder

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 57. Annabel, aged 17 and from a fundamentalist Christian household, is admitted for weight loss. She says she cannot eat as "the demons say they're spitting in my food".
- 58. Gillian, aged 8, is repeatedly admitted with vomiting, diarrhoea and weight-loss. Her mother is asked not to bring in any food and her room is monitored via CCTV.
- 59. Michael, a young practising Catholic, repeatedly seeks confession with his priest as he feels unable to rid himself of sin. He asks the priest to give him prayers to repeat as penance in multiples of seven, saying "sorry, but it seems to work better that way".
- 60. Peter, aged 34, repeatedly visits his dentist, convinced that his bite feels wrong and uneven and demanding this be corrected.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Alcohol
- B. Benzodiazepines
- C. Benztropine
- D. Casino-based blackjack
- E. Cocaine
- F. Codeine tablets
- G. Ecstasy
- H. Greyhound racing betting
- I. Heroin
- J. Horse racing betting
- K. Inhalants
- L. Internet social sites and blogs
- M. Lysergic acid (LSD)
- N. Magic mushrooms
- O. Marijuana
- P. Methadone
- Q. Methamphetamine
- R. Pokie machines
- S. Smartphone use
- T. Tobacco

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 61. Which type of illicit drug has the highest rates of use in New Zealand?
- 62. Which type of gambling is the most rapidly addictive?
- 63. Which type of addiction in Australia has the highest burden of disease in DALYs?
- 64. Which type of addiction in New Zealand has the highest burden of disease in DALYs?

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Benztropine
- B. Buspirone
- C. Clozapine
- D. Cognitive behavioural therapy and fluoxetine
- E. Cognitive remediation
- F. Doxepin
- G. Lamotragine
- H. Lithium carbonate
- I. Mirtazepine
- J. Nortriptyline
- K. Nortriptyline and lithium carbonate
- L. Quetiapine
- M. Risperidone Consta
- N. Tranylcypromine
- O. Trazodone
- P. Venlafaxine
- Q. Zolpidem

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 65. Most effective follow-up therapy after a course of ECT for a patient with serious major depression with melancholic features.
- 66. Major interaction causing raised medication serum levels from drinking moderate daily amounts of grapefruit juice.
- 67. Preferred initial therapy for a first episode of major depression in a 17 year old.
- 68. Treatment for a first episode out-patient with schizophrenia who wants help with cognitive deficits.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Challenging
- B. Close-ended questioning
- C. Education
- D. Empathy
- E. Encouragement
- F. Holding (containment)
- G. Humour
- H. Interpretation
- I. Open-ended questioning
- J. Overidentification
- K. Problem-solving
- L. Reassurance
- M. Reframing
- N. Summation

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

69. Patient: "Men: they're all bastards!" Female therapist: "You got that right!"

70. Patient: "Men: they're all bastards!" Female therapist: "Don't you think you had a role in the break-up as well?"

71. Patient: "Men: they're all bastards!" Female therapist: "It's been a really difficult time for you, hasn't it."

72. Patient: "Men: they're all bastards!" Female therapist: "All? Or the ones you get into relationships with?"

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Catatonia
- B. Catatonic schizophrenia
- C. Cereia flexibilitas
- D. Disorganised schizophrenia
- E. Malignant hyperpyrexia
- F. Malignant hyperthermia
- G. Neuroleptic malignant syndrome
- H. Paranoid schizophrenia
- I. Residual schizophrenia
- J. Serotonin syndrome
- K. Undifferentiated schizophrenia

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

73. Malignant Catatonia triggered by neuroleptic use.

74. Also known as Hebephrenia.

75. Includes the subtype also called Simple Schizophrenia.

76. First described by Kahlbaum.

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Aaron Beck
- B. Carl Jung
- C. Emil Kraepelin
- D. Erich Fromm
- E. Erik Kandel
- F. Fuller Torey
- G. Glen Gabbard
- H. Irvin Yalom
- I. Jean Piaget
- J. John Cade
- K. Karl Jaspers
- L. Kurt Schneider
- M. Margaret Ainsworth
- N. R. D. Laing
- O. Richard von Krafft-Ebbing
- P. Sigmund Freud
- Q. Ugo Cerletti

Which individual listed above is **MOST** linked with each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

77. The "strange situation"

78. Research into memory using *Aplysia*

79. Argued *for* certain types of parenting causing schizophrenia

80. Argued *against* certain types of parenting causing schizophrenia

81. The "Three Mountains" experiment

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Attention deficit disorder inattentive type
- B. Attention deficit disorder with hyperactivity
- C. Chronic motor tic disorder
- D. Conduct disorder
- E. Expressive language disorder
- F. Feeding disorder of infancy or early childhood
- G. Generalised anxiety disorder
- H. Hypochondriasis
- I. Oppositional defiant disorder
- J. Prader-Willi syndrome
- K. Reactive attachment disorder
- L. Selective mutism
- M. Separation anxiety disorder

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

82. Sensory food aversion

83. Sleep apnoea

84. Persistent fears of getting kidnapped or lost

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Competency
- B. Diminished capacity defence
- C. Duty of care
- D. Duty to warn
- E. Enduring Power of Attorney
- F. Fitness to plead
- G. Guardianship legislation
- H. Informed consent
- I. Insanity defence
- J. Mandatory reporting
- K. Mental Health Act legislation
- L. Privacy legislation
- M. Testamentary capacity

Which option listed above is **MOST** relevant to each of the following examples.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 85. A 63 year old man tells his psychotherapist that five years ago he gave his wife who was dying of cancer a lethal morphine dose, at her request. He does not regret it.
- 86. A 55 year old woman has chronic disorganised schizophrenia with considerable negative and cognitive symptoms. She is admitted from a chaotic and filthy flat with a view to arranging long-term sheltered accommodation.
- 87. A 25 year old man has been on a Forensic Unit for four months, after stabbing a delivery man from "Hell Pizza". After starting clozapine a month ago, the patient no longer believes his victim was demon-possessed. His lawyer asks if the case can proceed.
- 88. Mrs Markham leaves all her money to a Cat Rescue organisation as she is angry with her children, saying "I may be bipolar, but they don't have an excuse – they're just straight-up bastards."
- 89. A patient tells her therapist that she and her vicar are "fated to be together". He is married, but the patient says: "Bitch. Her days are numbered."

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Culturally validated third gender
- B. Equally heterosexual and homosexual
- C. Exclusively heterosexual
- D. Exclusively homosexual
- E. Female gender
- F. Female sex
- G. Gender dysphoria
- H. Gender roles
- I. Male gender
- J. Male sex
- K. Paraphilia
- L. Predominantly heterosexual, but more than incidentally homosexual
- M. Predominantly heterosexual, incidentally homosexual
- N. Predominantly homosexual, but more than incidentally heterosexual
- O. Predominantly homosexual, incidentally heterosexual
- P. Sexual dysfunction

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

90. Shoe fetish

91. "I'm a 2 on the Klein scale"

92. XY genotype

93. "I'm a Kinsey 6"

94. Samoan *fa'afafine*

Extended Matching Questions

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Each question is worth 1 mark

- A. BDI
- B. CAGE
- C. EAT
- D. GATES
- E. HDRS
- F. HoNOS
- G. MADRS
- H. PANSS
- I. Stroop test
- J. Mini Mental State Examination
- K. Y-BOCS
- L. YMRS

Which test listed above is the **MOST** appropriate choice to assess each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

95. Negative symptoms

96. Problem drinking

97. Executive functioning

98. Akathisia

99. Obsessional ruminations

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Anankastic personality disorder
- B. Atypical major depression
- C. Borderline personality disorder
- D. Cotard's syndrome
- E. Cyclothymia
- F. Othello syndrome
- G. Dysphoric mania
- H. Intermittent explosive disorder
- I. Melancholic depression
- J. Normal grief
- K. Obsessive compulsive disorder
- L. De Clérambault's syndrome

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

100. "There's a hole in my brain. It's gone."

101. "I have to check all the doors thirteen times. It's a prime number – I don't know why that matters. I know it's stupid."

102. "If anyone criticises me I just fall apart and burst into tears."

103. "I keep thinking I recognise him when I'm out shopping. I miss him terribly."

Extended Matching Questions

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 1 mark

- A. Sleep terror disorder
- B. Primary Hypersomnia
- C. Caffeine induced sleep disorder (insomnia)
- D. Catalepsy
- E. Sleep disorder due to a general medical condition
- F. Periodic Leg Movement Disorder
- G. Insomnia related to an Axis II disorder
- H. Cataplexy
- I. Sleep apnoea
- J. REM Behaviour Disorder
- K. Restless Legs Syndrome
- L. Primary Insomnia

Which option listed above is the **MOST** appropriate choice for each of the following examples.

Please select only **ONE** option, **BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.**

104. Repeated collapses

105. Usually occurs in the first third of the major sleep episode

106. Triggered by laughing

Extended Matching Questions

Questions 107 to 123

THE FOLLOWING QUESTIONS ARE WORTH TWO MARKS EACH.

Questions 107 and 108

**Give one answer only
(two marks for a correct answer)**

Questions 109 – 123

**Give two answers only
(two marks for each correct answer)**

Do not answer questions in this booklet.

Use the separate answer sheet and pencil provided.

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. 5HTT gene L genotype
- B. 5HTT gene S genotype
- C. Apolipoprotein gene (APOE e4 allele)
- D. D-amino acid oxidase activator (DAOA)
- E. Extensive metaboliser genotype of 2D6
- F. Intermediate metaboliser genotype of 2D6
- G. Neuregulin gene (NRG1)
- H. Neurogenic locus notch 4 (NOTCH4)
- I. Reelin gene (REELIN)
- J. Ultra-rapid metaboliser genotype of 2D6

For each of the following examples, select the MOST APPROPRIATE option from the list above.

Please select only ONE option, BUT ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

107. Linked with increased risk of Autism

108. Linked with increased risk of late-onset Alzheimer's disease

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. Circumstantiality
- B. Clanging
- C. Delusion of guilt
- D. Derailment
- E. Echolalia
- F. Idea of reference
- G. Nihilistic delusion
- H. Palilalia
- I. Paraphasia
- J. Perseveration
- K. Poverty of speech
- L. Referential delusion
- M. Rumination
- N. Somatic delusion

For each of the following examples, select the **MOST APPROPRIATE** options from the list above.

Please select **TWO OPTIONS, BUT NOT MORE THAN TWO** correct answers for each question

ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

109. "There are messages in car number plates about the conspiracy. It's to stop the technimords. I have to stop them taking over."
110. "How am I? Grass is green, violets are blue. Blue, roo, gnu. I was a bird, but the rain came."
111. "You don't think they're all talking about me? I don't know – I think they might be. They know it's all my fault. That's why I don't like going out."

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. Amenorrhoea
- B. Blephorospasm
- C. Cogwheel rigidity
- D. Dyesthesia
- E. Festination
- F. Lanugo
- G. Loss of accommodation
- H. Neck stiffness
- I. Piloerection
- J. Presbyopia
- K. Rhinorrhoea
- L. Severe headache
- M. Torticollis
- N. Xerostomia

For each of the following examples, select the MOST APPROPRIATE items from the list above.

Please select TWO OPTIONS, BUT NOT MORE THAN TWO correct answers for each question

ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

112. Clozapine therapy

113. Heroin withdrawal

114. Anorexia nervosa

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. Adherence therapy
- B. Clomipramine
- C. Clozapine
- D. Cognitive behavioural therapy
- E. Consta
- F. Exposure and response prevention
- G. Family therapy
- H. Group CBT with peers
- I. Group therapy with peers
- J. Oral risperidone
- K. SSRI antidepressant
- L. Tranylcypromine
- M. Venlafaxine

For each of the following questions, select the **MOST APPROPRIATE** options from the list above, to be used concurrently.

Please select **TWO OPTIONS, BUT NOT MORE THAN TWO** correct answers for each question

ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 115. Mrs Barker has a disabling preoccupation with germs and constantly cleans. She is unable to go out and the marriage is strained. Trials of high-dose SSRI and SNRI medication have not been effective.
- 116. Milly works as a sales assistant. She shares an apartment with friends and has been referred with bulimia nervosa and depressive symptoms.
- 117. Damien has been admitted for the third time with a relapse of schizophrenia after stopping oral risperidone.

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. Draw a clockface
- B. His eight year old son who speaks English
- C. His wife, via an interpreter
- D. Nausea
- E. Proverbs
- F. Restlessness
- G. Sedation
- H. Similarities
- I. Staff from the refugee centre
- J. The immigration department
- K. Weight gain
- L. Word generation

For each of the following examples, select the **MOST APPROPRIATE** tests from the list above.

Please select **TWO OPTIONS, BUT NOT MORE THAN TWO** correct answers for each question

ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 118. You are reviewing Ali, an Iraqi refugee with schizophrenia. Who would it be best get collateral from?
- 119. You need to do frontal lobe testing. Which tests would you use?
- 120. You persuade Ali to start olanzapine 10 mgs. What are the most likely adverse effects you would discuss with him?

Extended Matching Questions:

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Each question is worth 2 marks

- A. Abnormal short synacthen test
- B. Acanthocytosis
- C. Anaemia with microcytosis
- D. Cholecalciferol deficiency
- E. Cortical atrophy and hypodensities in the basal ganglia
- F. Hypercalcaemia
- G. Hyperglycaemia
- H. Hyponatraemia
- I. Hypokalaemia
- J. Hyponatraemia
- K. Increased urinary catecholamines
- L. Low plasma caeruloplasmin
- M. Raised erythrocyte mean cell volume

For each of the following questions, select the **MOST APPROPRIATE** options from the list above.

Please select **TWO OPTIONS, BUT NOT MORE THAN TWO** correct answers for each question

ANY OPTION MAY BE USED MORE THAN ONCE, IF REQUIRED.

- 121. A young woman presents with lethargy, weight loss, anorexia, depressed mood and some hyperpigmentation.
- 122. A 46-year-old woman has a four month history of headaches, anxiety, panic attacks, sweating and palpitations. Her GP reports a 6-year history of hypertension.
- 123. A GP looks for markers on screening tests ordered as he suspects his patient may be drinking alcohol to excess.



**THE ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF
PSYCHIATRISTS**

CRITICAL ANALYSIS PROBLEMS

MOCK EXAMINATION

**Paper II
2014**

DIRECTIONS

**Do not answer questions in this booklet.
Use the separate answer sheet and pencil provided.**

SELECT ONLY ONE ANSWER PER QUESTION

**Note: in any question, selecting *more* than one answer
will incur a mark of zero for that question**

Critical Analysis Question ① (20 marks)

Please read the following extracts, tables and figures and answer the questions according to this information and your other knowledge.

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Olanzapine vs. risperidone in treating aggressive behaviours in adults with intellectual disability: a single blind study

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Abstract:

Background: Aggressive behaviour represents a frequent symptom in people with intellectual disability (PWID). Despite uncertain evidence of effectiveness, the use of antipsychotics (APs) drugs to treat aggressive behaviour is very common. Antipsychotic medication of aggressivity in PWID has recently become one of the most debated issues in mental health and the need of further research is persistently stressed by most researchers.

Aim: The present study was firstly aimed at evaluating the effectiveness (efficacy on target behaviour, safety and persistence on treatment) of new generation APs, in particular, olanzapine and risperidone in treating aggressive behaviour in PWID for who previous medication with first generation APs (FGAs) were not effective.

Methods: 62 subjects with intellectual disability underwent to a 2-arm, parallel group pragmatic trial of olanzapine and risperidone with balanced randomisation and blind assessment of outcome at 4, 8, 12, 16, 20 and 24 weeks after a switch (cross-tapering) from a 24-week treatment with FGAs. Aggressive behaviours were assessed by Overt Aggression Scale (OAS) and clinical outcome by Clinical Global Impression Scale. Side effects were assessed with Dosage Record and Treatment Emergent Symptoms Scale, other symptom-specific scales, laboratory and instrumental tests.

Results: Both risperidone and olanzapine resulted to be more effective than FGAs in reducing aggressive behaviour. Repeated-measures analysis of covariance revealed that treatment groups differed for cumulative number of aggressive episodes during the FGAs treatment, which was higher for olanzapine.

Conclusion: Our findings seem to confirm that olanzapine and risperidone can be effective in reducing aggressive behaviour in PWID. Both compounds resulted to be well tolerated, with side effects similar to those encountered in other patient populations.

Keywords aggressive behaviour, antipsychotics, atypical, intellectual disability, olanzapine, risperidone

Having regard to the abstract, and your other knowledge, choose the best option from the answers below.

QUESTION 1.11 (1 mark)

Choose the ONE answer from the list below that best describes this study:

- A. A case series
- B. A comparative cohort study
- C. A double blind randomised controlled study
- D. A non-randomised experimental trial
- E. A systematic review
- F. A two-arm parallel group pragmatic trial

QUESTION 1.12 (2 marks)

Choose the ONE answer from the list below that best states what this study was designed to evaluate:

- A. The effects of the second generation antipsychotics on aggressive behaviours in adults with intellectual disability
- B. The effects of olanzapine and risperidone on aggressive behaviours of people with intellectual disability
- C. The effectiveness of olanzapine and risperidone on aggression and psychosis in adults with intellectual disability
- D. The effectiveness of olanzapine and risperidone on aggressive behaviours in adults with intellectual disability
- E. The effects of olanzapine and risperidone on anger in adults with intellectual disability
- F. The effectiveness of olanzapine and risperidone on aggression

QUESTION 1.13 (2 marks)

Choose the ONE answer from the list below which is the most likely reason for performing repeated measures at 4, 8, 12, 16 and 20 weeks:

- A. To accumulate more data to improve statistical power
- B. To be able to draw graphs showing change over time
- C. To be able to perform repeat-measure analysis of covariance
- D. To better analyse outcome
- E. To decrease patient drop out
- F. To improve the strength of any correlations made

Answer the following questions having regard to the extract and table below, the abstract, and your other knowledge. (FGA = First Generation Antipsychotic)

Sample:

Participants in the study were consecutive patients attending a specialist mental health service for PWID (Istituto Ospedaliero 'Fondazione Sospiro' di Sospiro – Cremona) covering an area of 154 677 inhabitants of the North Italy. A total of 62 adults (mean age of 48 ± 12.45 years), of which 17 were female (27.4%) and 45 male (72.6%), were recruited to the study between November 2005 and December 2006 from a catchment area of approximately 800 users. Subjects in the study were in residential care, with Diagnostic and Statistic Manual-IV Edition Text Revision (DSM-IV TR) (American Psychiatric Association 2000) diagnosis of Severe Mental Retardation (Wechsler-Bellevue for IQ; Wechsler 1944) and aggressive behaviours, which had not changed with previous FGAs treatments. All of them had a Clinical Global Impression-Severity (CGI-S) score of 5 (markedly ill).

At the beginning of the study, all patients were receiving a FGAs and after a period of 24 weeks, 31 (50%) were randomised to olanzapine and 31 (50%) to risperidone.

Baseline characteristics (age, gender, level of ID and number of years of previous therapy) were collected at the beginning of the study (see Table 1).

Before the observational period on FGAs, all subjects were not receiving any antipsychotic or mood stabiliser.

Table 1 Baseline characteristics of the sample

Characteristics	
Age (years)	
Mean	48
SD	12.45
Gender, <i>n</i> (%)	
Male	45 (72.6)
Female	17 (27.4)
Level of intellectual disability, <i>n</i> (%)	
Mild	0 (0)
Moderate	0 (0)
Severe	62 (100)
Previous years of therapy, <i>n</i> (%)	
<5	5 (8)
5–20	20 (32.3)
>20	37 (59.7)

QUESTION 1.21 (3 marks)

Choose the ONE answer from the list below that best states which group of patients the findings can be generalised to:

- A. Adult patients with intellectual disability who have not responded to an FGA.
- B. Adult Patients without intellectual disability.
- C. Patients only between the ages of 40 and 60 with intellectual disability and aggressive behaviour who have not responded to an FGA.
- D. Patients between the ages of 40 and 60 with intellectual disability who have not responded to an eight month trial of an FGA.
- E. Patients with intellectual disability between the ages of 40 and 60 whose aggressive behaviours have responded to an FGA.
- F. Patients only between the ages of 35 and 65 with intellectual disability and aggressive behaviour who have not responded to an FGA.

QUESTION 1.22 (2 marks)

Choose the ONE CORRECT answer from the list below regarding the study's inclusion and exclusion criteria:

- A. Patients could be included if they attended the specialist service during 2005.
- B. Patients could be included if they had had a partial response to a previous FGA treatment.
- C. Patients were excluded if they had mild to moderate intellectual disability.
- D. The study recruited only patients attending a specialist mental health service.
- E. To be included in the study patients had to have CGI-S score of 5.

Having regard to the extract below and your other knowledge, select the **SINGLE BEST ANSWER** from the following list, for each of the following questions.

Statistical Analysis:

Data were analysed with spss version 12.0 for Windows. Statistical tests for comparison between the two groups on their characteristics included 2-sample *t*-tests for continuous variables and chi-square test for categorical variables. Multivariate analyses of continuous outcomes were by regression, with adjustment for baseline value of the response variable. Repeated-measures analysis of covariance (ANOVA) was used to examine the OAS scores ante and post switch to the two treatment groups (olanzapine and risperidone).

- A. Abnormal Involuntary Movement Scale – A 12-item, 5-point scale
- B. Age of patients
- C. ANOVA
- D. Fasting Glucose
- E. Gender of patients
- F. Olanzapine
- G. Overt Aggression Scale – rates episodes of aggression in four factors from least to most severe
- H. Regression
- I. Risperidone
- J. Simpson Angus Scale – a ten-item, 5-point scale
- K. *t*-tests
- L. Weight of patients

Please select only ONE option, but any option may be used more than once, if required.

QUESTION 1.31 (1 mark)

For which measure would the chi-squared test be used to compare differences between the two treatment groups.

QUESTION 1.32 (1 mark)

Measures the relationship between a dependent variable and more than one independent variables.

QUESTION 1.33 (1 mark)

The most likely primary dependent variable used for analysis of outcome.

QUESTION 1.34 (1 mark)

Compares three or more means for statistical significance.

Having regard to the extract below, Figure 1 and Table 2, the abstract and any other knowledge, answer the following questions.

Extract from Results – Both olanzapine and risperidone had shown statistically significant reduction on episodes of physical aggression ($p < 0.0001$).

Table 2 Clinical global impression (CGI) improvement by treatment

CGI improvement	Olanzapine n (%)	Risperidone n (%)
Very much improved	9 (29)	19 (61.3)
Much improved	12 (38.8)	10 (32.2)
Minimally improved	10 (32.2)	2 (6.5)
Total	31 (100)	31 (100)

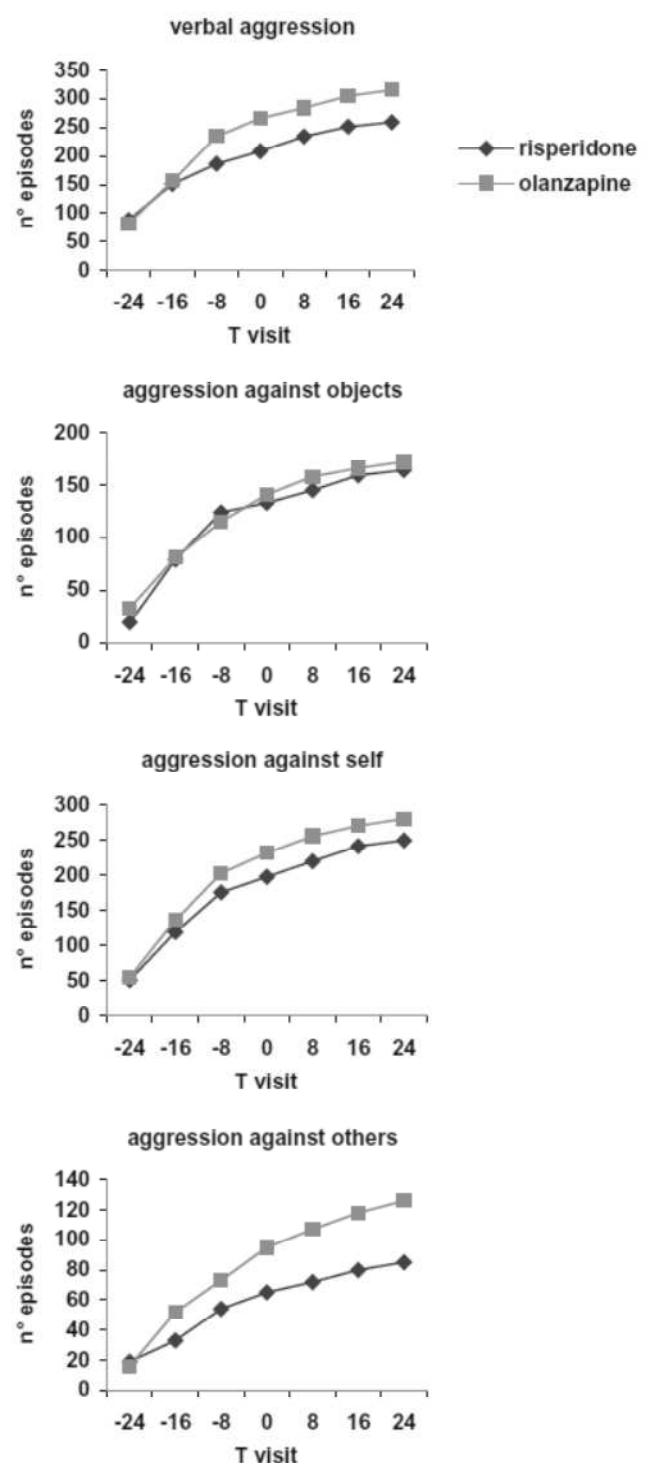


Figure 1 Cumulative number of aggressive episodes by time.

QUESTION 1.41 (2 marks)

Choose the ONE CORRECT answer from the list below:

- A. During the FGA treatment period there was no difference in episodes of aggression between groups.
- B. Episodes of aggression increased over time in both groups.
- C. Risperidone and olanzapine are equally effective at reducing aggression.
- D. Risperidone is more effective than olanzapine on episodes of verbal aggression.
- E. The clinical global improvement is correlated with decreasing episodes of aggression.
- F. There is no differential effect between risperidone and olanzapine on aggression against objects.

QUESTION 1.42 (2 marks)

Choose the ONE CORRECT answer from the list below.

The p value of < 0.0001 tells us there is a 1 in 10000 chance that:

- A. The conclusion is wrong because of a type I error.
- B. The difference is incorrect based on statistical error.
- C. The finding is a fluke.
- D. The null hypothesis is false.
- E. The null hypothesis is true.
- F. The same experiment performed again would give the same result.

QUESTION 1.43 (2 marks)

From the data presented, choose the SINGLE BEST SUPPORTED conclusion with regard to aggressive behaviours in adults with intellectual disability, from the list below:

- A. The dopamine blockade of the newer antipsychotics may reduce aggressive behaviours.
- B. Both olanzapine and Risperidone are well tolerated when treating aggressive behaviours.
- C. olanzapine, risperidone and the FGAs all have a similar effect on aggressive behaviours.
- D. Risperidone has a greater effect than olanzapine on aggressive behaviours.
- E. There is no difference between risperidone and olanzapine on aggressive behaviours.

Critical Analysis Question 2 (20 marks)

Please read the following extracts, tables and figures and answer the questions according to this information and your other knowledge.

Do not answer questions in this booklet. Use the separate answer sheet and pencil provided.

Internet-based cognitive-behavioural therapy for severe health anxiety: randomised controlled trial

Erik Hedman, Gerhard Andersson, Erik Andersson, Brjánn Ljótsson, Christian Rück, Gordon J. G. Asmundson and Nils Lindefors

Background

Hypochondriasis, characterised by severe health anxiety, is a common condition associated with functional disability. Cognitive-behavioural therapy (CBT) is an effective but not widely disseminated treatment for hypochondriasis. Internet-based CBT, including guidance in the form of minimal therapist contact via email, could be a more accessible treatment, but no study has investigated internet-based CBT for hypochondriasis.

Aims

To investigate the efficacy of internet-based CBT for hypochondriasis.

Method

A randomised controlled superiority trial with masked assessment comparing internet-based CBT ($n=40$) over 12 weeks with an attention control condition ($n=41$) for people

with hypochondriasis. The primary outcome measure was the Health Anxiety Inventory. This trial is registered with ClinicalTrials.gov (NCT00828152).

Results

Participants receiving internet-based CBT made large and superior improvements compared with the control group on measures of health anxiety (between-group Cohen's d range 1.52–1.62).

Conclusions

Internet-based CBT is an efficacious treatment for hypochondriasis that has the potential to increase accessibility and availability of CBT for hypochondriasis.

Declaration of interest

None.

Having regard to the abstract above and your other knowledge:

QUESTION 2.11 (1 mark)

Choose the **SINGLE** statement below that best describes this study:

- A. Case control study.
- B. Cohort study.
- C. Pseudorandomised control study.
- D. Randomised controlled trial.
- E. Systematic review.

QUESTION 2.12 (1 mark)

Choose the SINGLE statement below that best states what this trial was designed to measure:

- A. The Cost effectiveness of internet-based CBT for health anxiety.
- B. The Difference between internet-based CBT and treatment as usual for health anxiety.
- C. The Effect of internet-based CBT on symptoms of anxiety.
- D. The Effectiveness of internet-based CBT for health anxiety.
- E. The Efficacy of internet-based CBT for health anxiety.

Having regard to the abstract, the extract below regarding the inclusion criteria, and your other knowledge:

To be eligible for inclusion, potential participants had to meet the following criteria:

- (a) agree to not undergo any other psychological treatment for the duration of the study;
- (b) have no history of CBT in the past 4 years;
- (c) have no serious somatic disease as assessed by a physician based on a review of medical records and the anamnesis from the diagnostic assessment interview;
- (d) constant dosage 2 months prior to treatment if on prescribed medication for anxiety or depression and agree to keep dosage constant throughout the study;
- (e) fulfil the DSM–IV criteria of hypochondriasis as assessed using the Health Anxiety Interview;
- (f) other comorbid disorders according to the Mini International Neuropsychiatric Interview (MINI) were allowed but hypochondriasis had to be the primary concern;
- (g) not currently fulfilling the diagnostic criteria for substance misuse according to the MINI;
- (h) have no history of psychosis or bipolar disorder;
- (i) not score 420 on the Montgomery–Åsberg Depression Rating Scale–Self-Report (MADRS–S) if criteria for major depression were met;
- (j) have a score of less than 4 of 6 on the suicide ideation item of MADRS–S; and
- (k) not meet criteria for any personality disorders within cluster A or B according to the DSM–IV.

QUESTION 2.21 (2 marks)

Choose the ONE CORRECT answer from the list below.

Patients were excluded from this study if:

- A. They had been on a constant dose of prescribed medication for severe depression.
- B. They had ever had CBT in the past.
- C. They had ever had a manic or hypomanic episode.
- D. They met the criteria for avoidant personality disorder.
- E. Any psychotherapy they were receiving had started within the past two months.
- F. They were already currently being treated for anxiety.

The following are extracts from the methods:

Assessments, including diagnostic interviews performed by a clinical psychologist, were conducted before treatment, after treatment and at 6-month follow up...

The clinical psychologists performing the assessments were masked to treatment status ...

...all participants were instructed not to mention assessment.

Following the study the psychologists guessed allocation status for each participant.

QUESTION 2.31 (2 marks)

Choose the ONE CORRECT answer from the list below.

The psychologists were masked to the treatment status of each participant and then guessed the allocation status after the study in order to:

- A. Assist with the analysis of data.
- B. Enable an analysis of the integrity of the masking.
- C. Ensure the allocation of the intervention was random.
- D. Ensure they did not intervene in the therapy.
- E. Improve the validity of the intervention.
- F. Make sure the intervention was unblinded.

Having regard to the information below, the abstract and your other knowledge:

Control condition

The control condition consisted of an online discussion forum where participants could send messages anonymously to each other over a period of 12 weeks. Online discussion forums have been shown to be effective in reducing depressive symptoms and anxiety in people with depression and breast cancer.

QUESTION 2.41 (1 mark)

Choose the ONE CORRECT answer from the list below.

The control condition controlled for:

- A. Attention.
- B. Attention and the possible anxiety-alleviating effect of sharing one's distress with others.
- C. The possible anxiety-alleviating effect of sharing one's distress with others.
- D. The possible anxiety-alleviating effect of the internet.
- E. The possible anxiety-alleviating effect of using a computer.
- F. The possible anxiety-alleviating effect of writing.

The statistical analysis mentions: "power calculations showed that there was a chance slightly lower than 80% to detect a difference, given an effect size of 0.6 and an alpha level of 0.05."

Using this, the abstract and your other knowledge, answer the following questions:

QUESTION 2.51 (1 mark)

Choose the ONE CORRECT answer from the list below.

The effect size is:

- A. Insignificant
- B. Large
- C. Moderate
- D. Sixty percent (60%)
- E. Small

QUESTION 2.52 (1 mark)

Choose the ONE CORRECT answer from the list below.

As the value of alpha increases:

- A. There is decreased type 1 error.
- B. There is increased chance of type 2 error.
- C. The test is more rigorous.
- D. Researchers are more likely to accept the null hypothesis.
- E. Power increases.

QUESTION 2.53 (2 marks)

Choose the ONE CORRECT answer from the list below.

Power may be increased in this study by:

- A. Decreasing the sample size.
- B. Having non–internet based CBT as a third comparison condition.
- C. Reducing the effect size.
- D. Reducing the measurement error in the data.
- E. Repeating the number of measures in the study.

Having regard to the following extract from the Interventions, Fig 2 and Table 2 below, the abstract and your other knowledge:

A central feature of the treatment was a self-help text of 118 pages, divided into 12 modules. Participants gradually gained access to the modules through an internet-based treatment platform. Each module was devoted to a specific theme and included homework exercises. The modules reflected the content of conventional CBT for hypochondriasis. The treatment protocol was developed by our research group and it has been validated in a trial investigating the effects of group CBT for hypochondriasis. A detailed description of each module can be found in Fig. 2. The duration of the internet-based CBT was 12 weeks and throughout this period the participant had access to a therapist via a secure online contact system. The role of the therapist was mainly to provide feedback regarding all homework and to grant access to the succeeding treatment modules; however, the participant could contact the therapist at any time and expect a reply within 24 h. In addition, therapists encouraged inactive participants to continue the treatment work. The participant and therapist had no face-to-face or telephone contact during the treatment. On average, therapists spent 9 min (s.d.=5.6) weekly per participant. During the treatment phase, participants also had access to an online discussion forum that enabled anonymous contact with other participants receiving internet-based CBT.

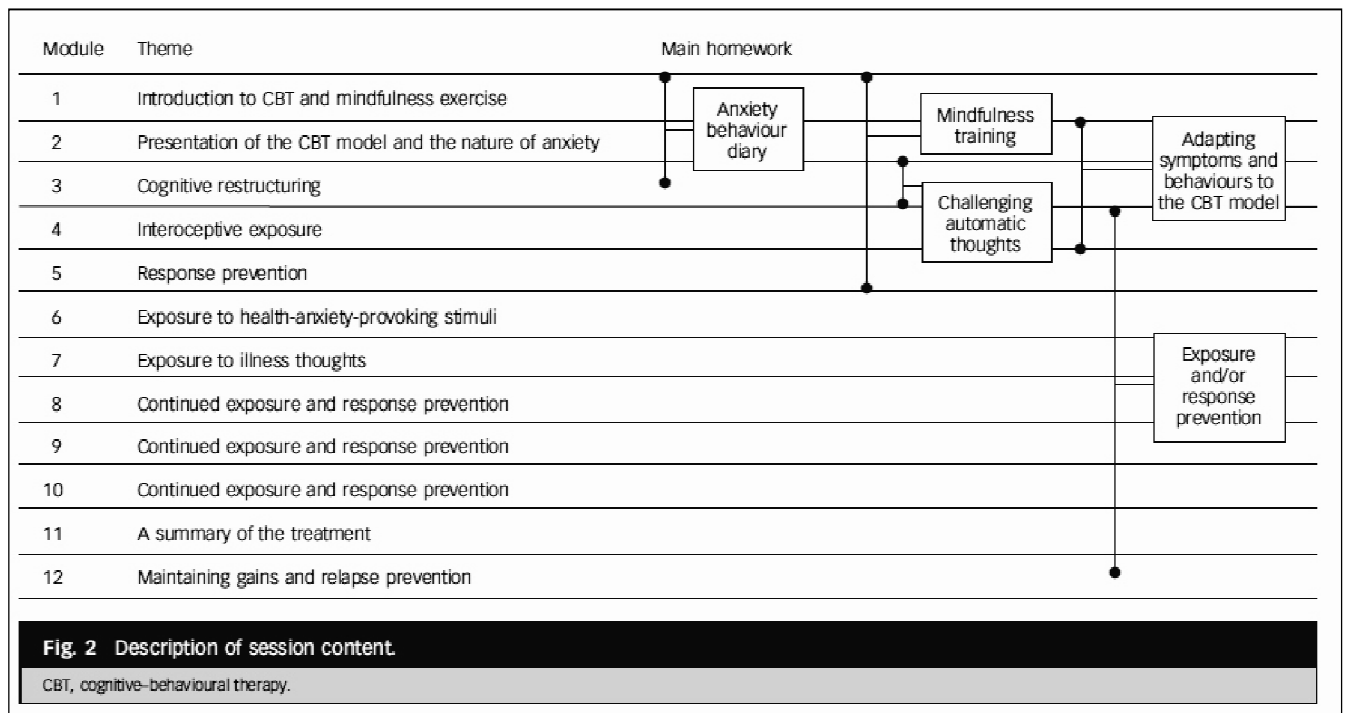


Table 2: Number of participants in the internet based CBT group completing each module

	Number of Completed Modules											
	≥1	≥2	≥3	≥4	≥5	≥6	≥7	≥8	≥9	≥10	≥11	≥12
Internet Based CBT, n (%)	40 (100)	39 (97.5)	39 (97.5)	37 (92.5)	35 (87.5)	33 (82.5)	29 (72.5)	26 (65.0)	23 (57.5)	22 (55)	21 (52.5)	14 (35.0)

QUESTION 2.61 (3 marks)

Choose the SINGLE most accurate statement:

- A. Once patients began exposure and response prevention they were improving.
- B. Over half the patients completed 11 or fewer modules.
- C. Patients who dropped out did not benefit from or respond to therapy.
- D. The average number of completed sessions was about 9.
- E. Three patients did not fully complete mindfulness training.

With regard to Table 3 on the next page, the abstract and your other knowledge:

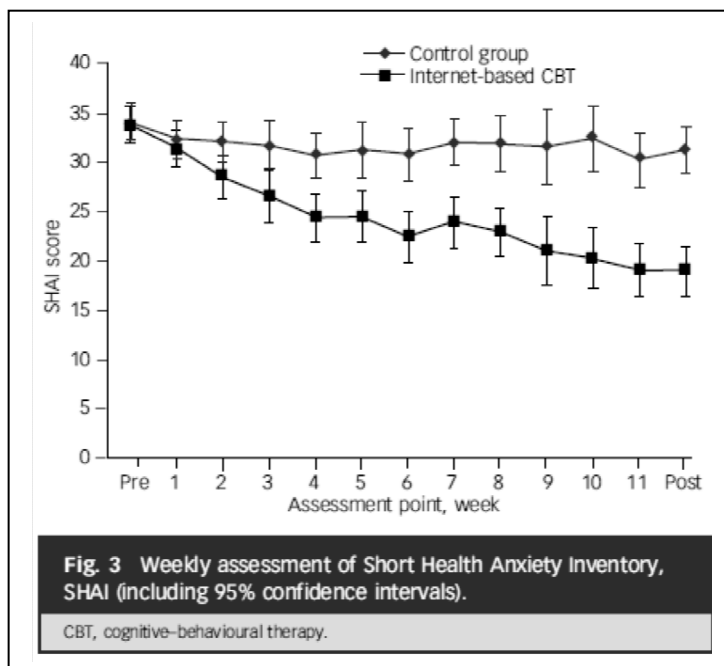
QUESTION 2.71 (2 marks)

Choose the SINGLE most accurate statement:

- A. Effect size is smallest between the groups in Quality of Life scores post-treatment.
- B. GAF scores are negative because these scores dropped the most.
- C. The biggest improvement is seen in HAI scores for the CBT group at 6 months.
- D. The control group became more anxious.
- E. The control group differed significantly from the intervention group at baseline on HAI scores.
- F. There is missing data at 6 months in the control group as they were not followed up.

Measure (scale range)	Mean (s.d.)			Effect size, <i>d</i> (95% CI)		
	Pre-treatment	Post-treatment	6-month follow-up	Between-group, post-treatment	Within-group, pre-treatment-post-treatment	Within-group, pre-treatment-6-month follow-up
Health Anxiety Inventory (0 to 192) Internet-based cognitive-behavioural therapy group Control group	107.0 (22.0) 106.0 (16.6)	60.5 (25.7) 101.8 (25.4)	56.2 (26.4)	1.62 (1.10 to 2.10)	1.94 (1.39 to 2.45) 0.19 (–0.24 to 0.62)	2.09 (1.52 to 2.61)
Illness Attitude Scales (0 to 112) Internet-based cognitive-behavioural therapy group Control group	69.8 (11.7) 67.6 (10.9)	44.6 (16.4) 65.4 (11.8)	41.3 (16.9)	1.46 (0.95 to 1.93)	1.77 (1.24 to 2.27) 0.19 (–0.24 to 0.62)	1.96 (1.41 to 2.48)
Whiteley Index (0 to 14) Internet-based cognitive-behavioural therapy group Control group	10.7 (2.09) 10.5 (2.1)	10.3 (2.1) 6.1 (3.3)	5.3 (3.4)	1.52 (1.01 to 2.00)	1.65 (1.12 to 2.14) 0.09 (–0.34 to 0.53)	1.89 (1.35 to 2.40)
Montgomery-Åsberg Depression Rating Scale – Self-Report (0 to 54) Internet-based cognitive-behavioural therapy group Control group	12.3 (5.9) 13.7 (7.6)	5.6 (4.3) 12.3 (6.6)	6.5 (7.2)	1.21 (0.73 to 1.67)	1.32 (0.83 to 1.79) 0.20 (–0.24 to 0.63)	0.90 (0.43 to 1.35)
Beck Anxiety Inventory (0 to 63) Internet-based cognitive-behavioural therapy group Control group	21.0 (11.4) 21.3 (12.3)	10.7 (9.1) 21.9 (12.0)	9.2 (10.3)	1.05 (0.58 to 1.51)	1.00 (0.53 to 1.45) –0.05 (–0.48 to 0.39)	1.09 (0.61 to 1.55)
Anxiety Sensitivity Index (0 to 64) Internet-based cognitive-behavioural therapy group Control group	26.0 (12.1) 26.8 (11.0)	14.1 (8.0) 25.6 (10.4)	12.6 (10.4)	1.24 (0.75 to 1.70)	1.16 (0.68 to 1.63) 0.11 (–0.32 to 0.54)	1.19 (0.71 to 1.66)
Quality of Life Inventory (–6 to 6) Internet-based cognitive-behavioural therapy group Control group	1.9 (1.3) 1.4 (1.5)	2.4 (1.4) 1.3 (1.6)	2.4 (1.5)	0.74 (0.28 to 1.18)	0.37 (–0.07 to 0.81) 0.06 (–0.38 to 0.49)	0.34 (–0.10 to 0.78)
Global Assessment of Functioning (0 to 100) Internet-based cognitive-behavioural therapy group Control group	54.8 (3.1) 55.0 (4.3)	71.7 (10.0) 58.7 (7.8)	2.4 (1.5)	–1.45 (–1.93 to –0.95)	–2.29 (–2.82 to –1.70) –0.59 (–1.03 to –0.14)	–2.78 (–3.36 to –2.14)

Having regard to Figure 3 below and the following Results extract:



The ANCOVA for HAI difference at post-treatment assessment, holding pre-treatment values as covariates, revealed a significant effect between the internet-based CBT group and the control group ($F=95.90$, d.f. = 1,78, $P50.001$). As illustrated in Fig. 3, the internet-based CBT group displayed continuous within-group improvements throughout the trial on the SHAI. Analysis using the mixed-effects model showed a significant interaction effect of group and time on the SHAI ($F=17.14$, d.f. = 12,823, $P50.001$). *Post hoc* tests showed that participants in the internet-based CBT group had significantly lower scores than those in the control group from the third week onwards ($t=2.39-7.03$, d.f. = 1,60-79, $P50.001$).

QUESTION 2.81 (2 marks)

Choose the **ONE CORRECT** answer from the list below.

Using pre-treatment values as covariates:

- A. Allows for scores to be assessed over time.
- B. Controls for the initial similarities between groups.
- C. Improves the ability to measure changes in scores.
- D. Shows how the scores vary.
- E. Tests the main and interactive effects.

QUESTION 2.82 (2 marks)

Select **ONE** of the following statements which is the **MOST ACCURATE** conclusion that can be drawn from this study:

Internet-based CBT:

- A. Can enhance the delivery of conventional CBT.
- B. Has as the most active part of the therapy, completing online modules.
- C. Is as good as clinician-delivered CBT.
- D. Is better than waiting list control for hypochondriasis.
- E. Reduces health anxiety as well as general anxiety and depressive symptoms.