



EXAMINATION IN BEHAVIOURAL SCIENCE

Medicine 4th year – AOK-KA591

THESIS FOR ORAL EXAM

INTRODUCTION TO PSYCHOLOGY, COMMUNICATION

Medicine 1st year

1. **Perspectives of psychology:** biological-cognitive neuroscience, individual perspective, social psychology
2. **Main approaches of individual perspective:** cognitive-behavior/experimental psychology, psychodynamic, humanistic
3. **Perception 1) recognition-identification** of the objects (bottom-up, top-down processes, gestalt, geons)
4. **Perception 2) constancies** (color, shape, size), bottom-up, top down processes
5. **Perception 3) localization** (distance perception, motion perception, efferent copy)
6. **Perception 4) abstractions-schemas**
7. **Attention: function of attention, relationship of attention and consciousness, theory of signal detection** (signal/noise screening), cognitive resource – cognitive load, conscious attention needed for acquiring new skills. Automatic response out of the control of attention, errors in the medical practice
8. **Stages of memory: Atkinson-Shiffrin theory**
9. **Working memory:** ~ span, function, structure, Baddeley model
10. **Long-term memory 1) explicit memory:** coding, retrieving, theories of forgetting, forgetting and emotions
11. **Long-term memory 2) implicit memory:** priming, classical conditioning, skills, ~ and amnesia
12. **Motivation:** homeostasis, basic drives, incentive theory, the relationship between the drives and incentives, Hebb's optimal arousal theory, Maslow hierarchy
13. **Attitude and attitude change:** cognitive dissonance and attitude change, foot in the door technique, rationalization, levels of attitude change (obedience, identification, internalization), sandwich technique, elaboration likelihood model
14. **Social influence:** social facilitation and inhibition, deindividuation, bystander intervention and diffusion of responsibility
15. **Obedience:** obedience to authority (Milgram experiment), **conformity** (Ash experiment), informational social influence, normative social influence

16. **Group processes:** group decision making, group think, group polarization, reference groups
17. **Emotions 1) James-Lange and followers:** bodily changes and emotions, James-Lange theory, Cannon-Bard's critics, somatic marker theory
18. **Emotions 2) emotional expressions:** facial feedback hypothesis, basic emotions (Ekman), evolutionary role of the emotions in communication (Darwin)
19. **Emotions 3) cognitive component of the emotions:** components of emotion, two-factor theory, Schacter-Singer experiment, misattribution of arousal, cognitive appraisal (Lazarus), regulation of emotion and the marshmallow test
20. **Impression formation:** stereotype and top down processes, schemas, primacy effect, self-fulfilling prophecy, individuation, fundamental attribution error
21. **Nature-nurture debate:** concept of the tabula rasa, maturation, critical periods (example), sensitive periods
22. **Intelligence 1) psychological tests, classification:** performance and personality tests, difference between the Binet and Weschler test, WAIS: verbal IQ - performance IQ
23. **Intelligence 2) general intelligence (g=general): factor analytical process,** what kind of mental processes are measured by the tests?
24. **Intelligence 3) mental retardation, dementia, crystallized scores/ fluid scores**
25. **Psychoanalytic personality theory 1) topographic and structural model:** definition of personality, conscious- pre-conscious- unconscious; id - ego- superego
26. **Psychoanalytic personality theory 2) definition of personality, personality dynamics, defense mechanism** (list min. 6), projective tests
27. **Psychoanalytic development theories 1) Freud:** definition of personality, psychosexual stages
28. **Psychoanalytic development theories 2) Erikson:** definition of personality, psychosocial stages
29. **Behavior personality- and development theory:** definition of personality, tabula rasa, learning processes, role of classical conditioning and instrumental (operant) conditioning in social learning, observational learning
30. **Cognitive personality and development theory:** definition of personality, Kelly's personal construct theory, self-schema
31. **Humanistic personality theory:** definition of personality, Rogers (self-actualizing tendency, client-centered therapy, ideal and actual self, unconditional positive regard, Q-sorting, Maslow's hierarchy of needs
32. **Personality: Big5**
33. **Classical conditioning:** UCR, UCS, CR, CS, extinction, second-order conditioning, generalization, and discrimination
34. **Instrumental conditioning:** law of effect, positive and negative reinforcement, positive and negative punishment, shaping, conditioned reinforcers, partial reinforcement (ratio and interval schedules), escape learning, avoidance learning
35. **Complex learning** cognitive map, observational learning
36. **Levels of communication:** information level, metacommunicational level
37. **Channels of communication:** elements of communication, verbal, and nonverbal channel

The topic list in the final exam will ONLY contain the titles which are written with bold letters!

MEDICAL PSYCHOLOGY I. & II.

Medicine 4th year

1. **Family 1) psychodynamic perspective** (individual, intrapsychic domain: personality, ego-structure, -differentiation, defense mechanism; relational, interpersonal perspective: unconscious messages: projections, expectations, mission, extrusion)
2. **Family 2) communicational interactions** (dyadic, triadic situations)
3. **Family 3) as a system** (hierarchy, boundaries, structure, role of the children; development of the system – life cycles, family therapy – advantages, difficulties)
4. **Definition of suggestion** (definition, criteria) **and factors that increase suggestibility** (altered state of consciousness, fear etc.)
5. **Features of spontaneous trance in disease:** typical forms of negative suggestions, paradoxical intentionality
6. **Rules of constructing effective suggestions** (positive wording, motivation etc.) **and complex strategies** (pacing-leading, yes-set, reframing)
7. **Health:** Classic and actual definition of health by the WHO. Definition of health behavior. Definition of **health promotion**. Some principles of health promotion in primary care. SMART.
8. **Salutogenesis:** concept, sense of coherence and its 3 components, generalized resistance resources
9. **Locus of control:** external, internal and their relationship with health outcomes
10. **Optimism:** concept (~ as trait and as attribution style), optimism as a health protective factor, it's relationship with the coping style. When is it counterproductive?
11. **Health belief model:** concept, components (perceived seriousness/susceptibility/benefits/barriers)
12. **System theory:** circular causality; non-summativity; equifinality; communication; homeostasis; morphogenesis; multilevel hierarchy
13. **Symptom perception 1):** responses to symptoms, accuracy of perception, individual differences
14. **Symptom perception 2):** role of attention, expectations, other influencing factors, signal detection theory, "cyberchondria"
15. **Symptom reporting:** influencing factors, non-specific symptoms, interpretation.
16. **Stress 1) definition:** Cannon flight-flight reaction, Selye: GAS
17. **Stress 2) cognitive model,** Lazarus cognitive appraisal theory
18. **Stress 3) Main characteristics of stressors;** stress and hierarchy
19. **Chronic illness 1) as a challenge in modern medicine:** crisis theory, common emotional reactions, chronic illness and family, recognition of anxiety and depression
20. **Chronic illness 2) psychological treatment, easy to use special interventions** (expressive writing, interventions: creative activity, meditation/relaxation, illness narrative, recovery letter)
21. **Death, dying:** Elisabeth Kübler-Ross: reaction to terminal illness; 5 stages of dying (denial, anger, bargaining, depression, acceptance), delivering bad news
22. **Bereavement 1) definition, dynamic process, communication:** What helps, what doesn't?; communicational obstacles of grief

23. **Bereavement 2) unresolved grief** (complicated: chronic, hypertrophic, delayed grief); consequence of unresolved grief; factors which increase grief: attachment (closely attached person; close, dependent, ambivalent relationship); situation (unexpected exp. suicide); guilt (real/imagined), loneliness
24. **Adherence 1)**: difference between the terminology adherence–compliance, spectrum, data collecting methods
25. **Adherence 2) Factors influencing adherence**: environment, illness, patient, doctor, therapy, **Improving** adherence: social, pharmacotherapy.
26. **Motivational interview 1)** definition, READS (the use, and the role of ambivalence and cognitive dissonance in motivation, developing discrepancy, the significance of change talk and sustain talk) OARS skills
27. **Motivational interview 2)**: Stages of the Transtheoretical model and the aim of the communication strategies in each stage, Brief Motivational Interview (building rapport, raising the subject, action plan, assessing readiness to change), use of the readiness ruler (confidence/importance)
28. **CLASS model**: components and the use of the skills
29. **Burnout 1) high risk population** in medicine, statistics; **multidimensional model** (work related causes, lifestyle causes, personality traits), **stages of burnout** (enthusiasm – stagnation – frustration – apathy – symptoms/psychosomatic as well – intervention (at any stage); **recognition, prevention, professional treatment** (barriers in seeking help)
30. **Burnout 3) symptoms of burnout, coping with burnout, consequences**: Maslach Burnout Inventory (MBI): exhaustion, cynicism – depersonalization, inefficacy; coping: working harder and longer, belief of immunity to difficulties, failure to recognize own mental problems, self-medication; consequences: medical errors, marital problems, psychological problems: substances misuses – abuses, suicide risk...
31. **Attachment 1) antecedents and history**: definition, J. Bowlby, M. Ainsworth, **types** (“strange situation” experiment: types of attachment)
32. **Attachment 2) stages of attachment** (undifferentiated; recognition/differentiation; active attachment; partnership)
33. **Attachment 3) in adulthood** (influence of attachment on patient–physician relationship)
34. **Consciousness 1) disorders/ syndromes/ levels of Consciousness**: vigilance: Somnolence: sleepiness, drowsiness (strong desire for sleep, can fall asleep easily if he is alone)-> Sopor: (Can be aroused by strong stimuli, than fall back to sleep)-> Coma: (Does not respond even strong stimuli) / Glasgow coma scale (eye, motor, verbal responses)
35. **Consciousness 2) syndromes of awareness**: Locked in syndr. -> Minimally Conscious State (Deliberate movements, some minimal deliberate reactions)> Vegetative state (Wakefulness, but only automatic responses) -> Brain death /= human death determined by neurological criteria: 1) loss of all brainstem reflexes and 2) apnea- in a persistently comatose patient. - + 3) Evidence for the cause of coma-> A repeat evaluation in 6h/
36. **Consciousness 3) syndromes of integrity**: Lose Consciousness: absent minded -> Confusion: total disintegration of consciousness
37. **Consciousness 4) Complex disorder of vigilance & integrity**: Tenebrosity: misty (twilight) state-> Delirium: abnormal perceptions, agitation, Fluctuating vigilance, integrity.

38. **Psycho-Neuro-Immunology 1): definition, modern physiology, Solomon postulates** Cannon, Selye, Ader, Solomon
39. **Psycho-Neuro-Immunology 2): CNS influences immune system** Thymus, Spleen, Lymph nodes – direct sympathetic innervation; Noradrenergic terminals – „contact” with lymphocytes; Neurotransmitter receptors on Immune cells
40. **Psycho-Neuro-Immunology 3): Immune system influence on CNS** cytokines, blood–brain barrier, immune mechanism –illness behavior
41. **Psycho-Neuro-Immunology 4): high risk population – Stress and immune system** Type 1 – Type 2 Immunity, Assessing Sources of stress.
42. **Stress pathways and mediators of tumor development** (4 main pathways: behavior, DNA, Immune system, vascular endothelial growth factor. Type C personality-critique, special psychosocial patterns. Coping theory, cognitive appraisals. Oncological patient’s coping strategies (5)
43. **Management of medically unexplained symptoms**
44. **Delivering bad news:** pairing and **SPIKES**. Cognitive readaptation and logotherapy. Forcing positive attitude Posttraumatic growth.
45. **Personality disorders 1): DSM-5 categories** A, B, C clusters
46. **Personality disorders 2): DSM-5 hybrid model** attachment theory – Big-5
47. **Psychological interventions 1): indication, criteria, 3 main trends**
48. **Psychological interventions 2): psychodynamic trend** personality – development of personality model– sickness model – therapeutic model and techniques
49. **Psychological interventions 3): cognitive-behavioral model** classical conditioning, instrumental conditioning, **schema, and negative automatic thoughts**
50. **Psychological interventions 4): Humanistic trend** Logotherapy, Client-centered therapy

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