

This study guide focuses on what I consider to be the important material from the lectures. If you use this you will be in excellent shape for the lecture portion of the midterm.

Stress

1. Distinguish between the four common definitions of stress.
2. Distinguish between stressor, strain, and the stress response.
3. Describe Lazarus's theory of stress. Be sure to distinguish between the three types of negative primary appraisals. What is the difference between primary and secondary appraisal?
4. Describe the Speisman/Lazarus study in which there were four groups of individuals who were shown the gruesome film about genital surgery. What does this study tell us about how individuals respond to a potentially stressful event?
5. In general, what are the characteristics of events that are considered by most people to be stressful?
6. In what way is the idea of 'appraisal' a problem for the Holmes and Rahe Social Readjustment Rating Scale (recall that this was a scale designed to measure stress resulting from major life events)? Are there other problems with this scale?
7. What are hassles? How might hassles interact with major life events to produce stress?
8. At several points during this section of the course, I described research by Andrew Baum, who compared people living near the Three Mile Island nuclear reactor with a set of control individuals. How did these two groups of people differ for the following measures: levels of stress hormones, blood pressure, enumerative measures of immunity, and the role of perceived social support in the hormonal and symptom data?
9. What is post-traumatic stress disorder, and what are the symptoms?
10. Distinguish between the following. Be sure to tell how they relate to each other, as well.
central and peripheral nervous systems
somatic and autonomic nervous systems
sympathetic and parasympathetic nervous systems
11. Describe the sympathetic-adreno-medullary (SAM) response to stress. Be sure to name the hormones and structures (and what they do) that are involved. Why is the SAM response adaptive for the organism?
12. Describe the hypothalamic-pituitary-adrenal (HPA) response to stress. Be sure to name the hormones and structures (and what they do) that are involved.
13. What substance and what structure initiate BOTH the SAM and the HPA responses to a stressor? In what sense are these two stress responses adaptive?
14. Distinguish between releasing hormones and tropic hormones.
15. Name a substance (hint: there are two) that is both a hormone and a neurotransmitter that is associated with the physiological stress response systems.
16. What does cortisol do in the body? Be sure to describe its effects on metabolism (ie, what it does with respect to glucose) and on the immune system. How does cortisol exert its effects (eg, how would a molecule of cortisol result in decreased cytokine production from an immune cell)?
17. What is negative feedback?
18. What is the evidence that early life stress and/or depression might lead to dysregulation of the HPA system? What is the nature of this dysregulation?
19. Contrast hormonal and neural inputs to tissues.
20. In what ways can the brain communicate with the immune system? In what ways can the immune system communicate with the brain?

Psychoneuroimmunology

21. What are the three main types of outcome measures in PNI research? Give examples of each.
22. What are "enumerative measures" in PNI research? Give an example of a result that used such measures. What is the major disadvantage of using enumerative measures of immunity?
23. Describe the Laudenslager et al. study. What is a "yoked control"? What was the outcome measure? What was the important psychological construct that was examined in this study? What is a mitogen?
24. Capitanio studied individual differences in anti-tetanus toxoid antibody among rhesus monkeys in response to a standardized threatening situation. What was the outcome measure and what were the results?
25. Contrast *in vitro* with *in vivo* measures in PNI research.
26. What is the effect on immune function of caregiving for a spouse with Alzheimer's? Be specific.
27. Capitanio did a retrospective study looking at the effect of stress (i.e., cage relocations) on survival in SIV-

- infected monkeys. Describe the result.
28. In the study that looked at Low- versus High-Sociable monkeys in stressful conditions, what were the effects of Low Sociability on behavior, interferon activity, and SIV viral load?
 29. In psychoneuroimmunological research, one often sees differences in immune function between animals or people in a 'stressed' group, and those in a 'control' group. What is the relationship between these immune differences and actual health-related outcomes?
 30. At a couple of different points in this section of the course, I mentioned work by the Glasers, who studied antibody to Epstein Barr virus (EBV, a human herpesvirus) in medical school students during periods of exam stress. Describe this research in terms of the following measures: the antibody response of EBV to exam stress, and how loneliness can affect this response.
 31. In response to an antigen, we would consider a high antibody response to be good. In response to reactivation of a latent herpesvirus, we would consider a high antibody response to be bad. Why the difference?

Coping

32. Define coping. What are the four important points about this definition?
33. Distinguish between emotion-focused and problem-focused coping. In which types of situations would you find emotion-focused coping most useful? How about problem-focused coping? Why?
34. What does it mean to say that coping is a dynamic process?
35. Give an example of 'proactive coping'.
36. Describe the three types of problem-focused and five types of emotion-focused coping that Folkman's (and others') research has found.
37. How are causal attributions related to coping and health? What are the three principal causal attributions, and how do they relate to explanatory style? What is catastrophizing, and how does it relate to mortality? Distinguish between "optimism" and "cheerfulness".
38. What is "negative affect" and "hardiness"? Discuss how negative affect, hardiness, and sense of control relate to coping and health.
39. What is learned helplessness?
40. What is "emotional disclosure" and what is the "learning theory" interpretation of why it might help in coping with stressors?

Social support

41. Distinguish between structural and functional measures of social support.
42. Describe the stress-buffering model of social support. At which points in the process following an encounter with a stressor might social support have an impact on health outcomes, and how might it have an impact?
43. Describe the main effects model, and distinguish between it and the stress-buffering model. How do structural vs functional measures of support relate to the distinction between stress-buffering and main effects models of social support?
44. In Sheldon Cohen's study of social network diversity and occurrence of colds, which of the following factors predicted a greater likelihood of colds? Low network diversity, poor health habits (eg, insufficient exercise, smoking, poor sleep), baseline E and NE levels, NK activity.
45. How does one measure mucus production in people with colds? :-)
46. What was the Alameda County study, and what was the interesting sex difference that was mentioned in class regarding the effects of marital status on mortality risk? What has been given as the reason for this effect?
47. What kinds of things does 'social support' provide an individual?

Cultural influences

48. Does the US have the highest life expectancy? What kinds of things can influence a country's life expectancy rate?
49. What is believed to be the reason for the sharp decline in life expectancy in certain Eastern Europe countries in the mid 1990s?
50. What are some of the processes that have been studied in multicultural health psychology in the US?
51. Describe the study discussed in class that demonstrated cultural differences in social support among women being treated for breast cancer.
52. In the study of menopausal symptoms that was described in class, what were the two clusters of symptoms that were found, and what were the ethnic differences in symptom reporting?