Preparing for the NBCOT Examination (Day 1)

SECTION



 $\ensuremath{\textcircled{\sc 0}}$ Jones and Bartlett Publishers, LLC. NOT FOR SALE OR DISTRIBUTION

Getting Started

CHAPTER

Rosanne DiZazzo-Miller, Fredrick D. Pociask, Joseph M. Pellerito Jr., and Sue Koziatek

INTRODUCTION

Welcome to Day 1 of your study guide. Today we will cover Chapters 1, 2, and 3. In this chapter you will review a brief introduction to your study guide in addition to learning where to locate resources pertaining to your upcoming examination.

Preparing for the Occupational Therapy National Board Exam: 45 Days and Counting is unlike any examination book currently available to occupational therapy students. Through research utilizing a focus group model, we learned what students preparing for this examination need and want to optimize their success.

GUIDEBOOK AT-A-GLANCE

The main theme of this book utilizes chapter outlines on subject matter that is learned throughout occupational therapy curricula using a lexicon (i.e., special vocabulary) taken from the Occupational Therapy Practice Framework. Each chapter is divided into subjects taught throughout occupational therapy curricula in the United States. From those subjects, outlines are provided as a study guide for you to begin the 45-day journey and, at the end, feel prepared and ready to take the National Board for Certification in Occupational Therapy, Inc. (NBCOT) examination. Although this book is structured to complete your studies within 45 days, it is important that you have a sense of confidence and security, which will result from your test preparation, before scheduling a date to take the examination. When you complete (or come close to completing) the 45 days of test preparation, you will have a better idea of when you should schedule your examination. The typical application turnaround time after you send your transcripts to NBCOT is approximately 1 week before receiving your Authorization to Test (ATT) letter. After you receive your letter, you can typically schedule your exam right away.

Additionally, corresponding workbook pages throughout each chapter, along with specific references and page numbers used throughout occupational therapy curricula throughout the United States, enable additional exploration of content that students find challenging or unfamiliar. At the end of each chapter, answers to case studies or specific work sheets can be found.

The CD-ROM accompanying this text consists of two interactive practice examinations in addition to various supplemental materials. The questions cover content as specified in the study outlines in the chapters and are appropriately distributed using the NBCOT domain areas, which can be

located at http://www.nbcot.org/webarticles/anmviewer.asp?a=257. Each exam question provides a rationale for correct answers along with references for you to research. Furthermore, practice test results can be calculated to provide you with specific domain area percentage scores so you will know what areas you need to spend more time on.

OUTLINE

1. CD-ROM Supplemental Resource Materials

- **a.** Answer sheets to various learning aids (e.g., work sheets)
- **b.** Complete and referenced handouts to supplement your existing course material or to address gaps in knowledge
- c. Reference and resource lists with working Internet links
- **d.** Unique instructional materials that provide the learner with a creative means by which to learn and discover the content (e.g., case studies and clinical instruments)
- ${\bf e.}~600$ practice examination questions that can be taken to simulate the actual exam
- **f.** Multiple-step case studies

2. Examination preparation and practice

- **a.** Using the Supplemental CD-ROM
- **b.** Running the CD-ROM
 - **i.** Place the CD-ROM in the CD-ROM drive and close the tray.
 - **ii.** The CD-ROM will autorun (autorun must be enabled).
 - **iii.** If autorun is not enabled on your computer, use Windows Explorer and open Autorun.exe, which is located in the root directory of this CD-ROM.
 - **iv.** After the CD-ROM opens, please click on the Read First tabs for complete instructions about using the Resource CD-ROM.

Each week you are asked to answer the following questions:*

1. What?

What have I accomplished? What have I learned?

2. So what?

What difference did it make? Why should I do it? How is it important? How do I feel about it?

3. Now what?

What's next? Where do we go from here?

*Note: This journaling section, courtesy of Live Wire Media, is provided using a three-question reflective learning approach with which students learn individual areas to focus on and prioritize. Research suggests that reflection "illuminates what has been experienced by [one's] self . . . providing a basis for future action" (Raelin, 2001, p. 11).

Evidence-based practice (EBP) will guide the formation of each chapter outline and work sheet, and the CD-ROM will contain a section for EBP article citations or links to further research in a particular area of study. Furthermore, references used throughout this exam review book feature robust levels of evidence to provide the student with the most current and accurate information available.

The student's health and wellness is another theme addressed throughout this book. Wellness tips and the opportunity for self-assessment reinforce healthy lifestyle choices that are conducive to success. Every week you will be asked to perform a self-assessment in the areas of sleep, nutrition, exercise, and stress. This will be completed using the Stress Vulnerability Scale. You should consider getting at least 1 to 2 *weeks* of restorative or quality sleep (i.e., 8 hours of uninterrupted sleep per day) leading up to the exam. These activities will serve as a reminder of the importance of taking care of yourself and are meant to reinforce key traits (e.g., flexibility, organization, and person-centeredness) that will enable you to become a productive and effective occupational therapist. Additionally, you

will be directed to the NBCOT Web site where you can download the OT Tool, which will assist in the formulation of a personalized study plan to help keep you on track throughout this important process. This not only provides a focus, but it will inevitably guide the identification of your strengths, weaknesses, and personal challenges.

Test-taking strategies and things to do prior to, and directly after, the exam are presented in the following two chapters, with a focus on adult learning and test-taking strategies.

Now, it is time to switch on your computer and visit the NBCOT Web site at http://www. nbcot.org/. You will once again be directed to this Web site after taking the NBCOT examination in Chapter 25.

1. National Board for Certification in Occupational Therapy, Inc. (NBCOT)

- **a.** Make certain to visit http://www.nbcot.org to access and utilize the following documents listed under Exam Candidates:
 - **i.** Frequently Asked Questions
 - **ii.** Candidate Information
 - **I.** Information presented here specifically focuses on the examination handbook and application, in addition to special testing accommodations, code of conduct, and official score transfer request forms.
 - **iii.** International Candidates
 - **I.** All forms and handbooks related to internationally educated occupational therapists and graduates are located here.
 - iv. Online Examination Application and Online Application Status Check
 - **I.** Here you will set up your account with NBCOT online to apply for the exam.
 - v. Candidate Forms
 - **I.** This section includes credential verification forms, confirmation of registration, eligibility, official and duplicate score transfer request, and reissue of authorization to test.
 - **II.** The Special Accommodations Handbook and Application link is located in this section.
 - vi. Examination Preparation Tools
 - **I.** In this section be sure to download the free NBCOT Examination Readiness Tools (OTR Tool). This tool identifies candidates' strengths and weaknesses using a Likert-type survey throughout all four domain areas that are presented in the exam.
 - vii. Score Reports
 - **I.** Examination score reporting is explained here, along with links for the scoring calendar and steps for reapplying for the exam.
 - viii. Getting Licensed
 - **I.** Here you will find information explaining the difference between state licensure and NBCOT certification. Follow the link provided to search for your state regulatory board for any further inquiries you may have.
 - ix. Useful Links
 - **I.** Included in this list of resources is the Prometric testing center Web site, where you can find testing centers throughout the country.
 - **x.** Clinical Simulation Test Questions
 - I. A short clinical simulation tutorial can be found on the Exam Candidates Welcome page (National Board for Certification in Occupational Therapy, 2009). You can access this information at http://www.nbcot.org/simulation/web_ static_sim/index.html.
 - **xi.** Lastly, make sure to click on the Executive Summary for the Practice Analysis Study at http://www.nbcot.org/webarticles/articlefiles/PA_OTR_DTKS_2008.pdf, and download the *Executive Summary of the Practice Analysis Study for the Occupational Therapist Registered OTR*. This will identify all areas covered on the exam along with a chart of the domain areas with each percentage covered in the

exam. For example, after taking the OTR Tool and finding the domain area(s) you need to focus on, locate that domain area in the chart provided in the Practice Analysis so you know what percentage of the exam you might struggle with. The answer to this question will help structure your study skills to focus on specific areas.

2. Focus Group Transcript Results

- **a.** Before planning of this examination guidebook began, we called on our alumni to attend a videotaped focus group to provide us insight that we could implement into our book and pass along to future graduates. The results were as follows, beginning with themes and ending with specific questions:
 - i. Preparation
 - **I.** Prepare for approximately 6 weeks at a minimum, and spend some time alone and some time together in small groups.
 - **II.** Take tests repeatedly.
 - **III.** Don't focus on studying what you already know.
 - **ii.** Materials for preparation
 - **I.** NBCOT materials are popular and similar to exam questions.
 - **II.** Other materials were too vague and concrete, with only one-step questions.
 - **III.** The national review course was helpful but overwhelming.
 - **IV.** Other materials were not helpful for critical thinking.
 - **V.** The rationale for correct answers is very important.
 - iii. Summary
 - **I.** Combine diagnosis with treatment in multistep questions.
 - **II.** Learn how to dissect questions.
 - iv. Test environment
 - **I.** The environment was anxiety provoking.
 - **II.** The room was cold.
 - v. Helpful hints
 - **I.** Most focus group students took off weekends from studying.
 - **II.** Make sure you focus on SCI levels of function related to levels of injury and relevant equipment!
 - **III.** Watch your caffeine intake.
 - **IV.** Go to the bathroom halfway through the test, even if you don't need to go.
 - **V.** Take the clock off the computer screen if it is anxiety provoking.
 - **VI.** Visit the site the day before and walk in to get a feel for the environment.
 - **VII.** Dress in comfortable layers.
 - **VIII.** Don't study the night before.
 - **IX.** Sleep 8 hours the night before.
 - **X.** Choose a time to take the exam that fits your personality.
 - **XI.** Volunteer at a site that you don't feel enough exposure to.
 - **vi.** If a retake is needed visit http://www.nbcot.org/WebArticles/articlefiles/139-2005_ retake_cert_exam_brochure.pdf where you can download *Steps for Re-Applying to Take the NBCOT Certification Examination for Candidates.*

The following are some specific questions that were answered by the students in the focus group:

- **Q:** Are the questions presented one at a time?
- A: Yes
- **Q:** Can you mark them and go back to them, and how does that work?
- **A:** Yes, after you complete the questions, a list comes up of questions you marked to look at again.
- **Q:** After you answer, can you change the answer later, even after you click on a selection? **A:** Yes

- **Q:** What is the best piece of advice you can give a student who is preparing to answer the questions on this examination?
- **A:** Eliminate two answers first from the four presented, and then reread the question to make sure your answer fits exactly what the question asks!
- **Q:** Give your best description of your testing area or environment.
- **A:** There were rows of computers with cubicle dividers, and you can wear headphones to block out sounds. Other people are writing different tests (e.g., SAT). The test room consisted of approximately 30 individuals.
- **Q:** What are you allowed to bring into the testing center?
- **A:** They give you a blank sheet of paper and a pen. You cannot bring water, but you can take a break and leave for water or the bathroom. There were lockers where we had to leave our purses, etc., outside the testing room.
- **Q:** Identify any mnemonics or charts that were helpful during your study preparation.
- **A:** The charts and handouts with a short summary of infant and child reflexes/patterns really helped (e.g., Moro, Babinski, ATNR, STNR). Also, a synopsis of the most common splints was very helpful. It helped to have a page at a glance, with a picture of each splint and a short description, including the name and use for each. In addition, reviewing the Brunnstrum, MMT, Ranchos, Glasgow Coma Scale, and ROM norms/scales was very useful. Any kind of handout or page at a glance is helpful to reinforce the information into memory.
- **Q:** Is there anything else you can remember about the exam and what was and was not allowed?
- **A:** Be able to use clinical reasoning skills in terms of reading a treatment scenario and deciding on the best option. There were always two answers that were definitely wrong and two that seemed to be correct. I remember always having to narrow down out of the two which was the *better* choice.
- **Q:** Did you learn about how to take the test through a tutorial or as you went?
- **A:** There was a tutorial at the beginning of the test with examples, and it did not take up any examination time.
- **Q:** Please provide any additional comments regarding what you found helpful in preparing to take the exam.
- **A:** The most helpful thing for me was to repeatedly take practice exams. I would go back and study the areas on the practice tests that I got wrong. I also spent a lot of time studying the basics and making sure those were embedded in my memory as a knowledge base for any type of question they might throw at me. Know the various scales, norms, reflexes, most common splints, contraindications for certain diagnoses, etc. Spend time studying with a few friends, quizzing one another and discussing why an answer was wrong or right. It helped a lot to have feedback within a small group.

3. Multiple-Step Case Study Example

The new clinical simulation test question requires you to process, integrate, and apply your knowledge to the different domain areas related to a case study. Again, please be sure to visit http://www.nbcot.org, navigate to the Exam Candidates page, and click on the tutorial in the third paragraph. Let's walk through an example:

An OT working in a school setting is asked by a classroom teacher to screen a 7-year-old second grade student. The teacher is concerned that the student is still not able to form letters legibly when printing, even with a model, and even though the teacher has been practicing with the student daily and the student's mother has also been practicing with the student at home. The student cannot color thoroughly or stay in the lines. The student still scribbles colors, fills in only approximately 50% of any picture, and uses only one or two colors. The student cannot cut out simple shapes without chopping them up and drops the paper or scissors several

times during the task. The student is currently certified speech and language impaired and is believed to have normal intelligence, according to the classroom teacher.

Part I

The OT receives parental permission through the classroom teacher to screen this student during her next visit to the school. What should be included in the screening process so the OT can decide if the student should be referred for an initial evaluation?

From the list below, choose the correct answer(s):

- **A.** Ask the teacher for work samples of the student's coloring, cutting, pasting, and printing.
- **B.** Observe the student during a reading group.
- **C.** Observe the student in class during an art activity that combines coloring, cutting, and pasting, or work with the student individually to observe these skills.
- **D.** Work with the student individually and have the student copy basic shapes, including lines, circles, crosses, squares, Xs, and triangles to see if the student has mastered all basic shapes.
- E. Ask the teacher what the student's academic strengths and weaknesses are.
- **F.** Observe the student at recess.
- **G.** Ask the student to trace or copy the upper- and lowercase letters of the alphabet and numbers 1–10.
- **H.** Observe and record the student's pencil grip.
- I. Review the student's school records.
- J. Observe the student during snack and lunch times.
- **K.** Talk to the speech therapist to see what difficulties the student has regarding speech skills.

The correct answers include the following:

- **A.** Ask the teacher for work samples of the student's coloring, cutting, pasting, and printing. This is correct because the therapist can compare the work the student does in a one-on-one screening with the student's work in the classroom environment.
- **C.** Observe the student in class during an art activity that combines coloring, cutting, and pasting, or work with the student individually to observe these skills. This is correct because the therapist needs to observe the student either performing these activities in the classroom or individually working with the student for a brief screening to start developing a hypothesis of why this student is struggling with classroom fine motor tasks. The therapist can observe praxis as well as eye–hand coordination, range of motion, grasp, attention, and persistence simultaneously.
- **D.** Work with the student individually and have the student copy basic shapes, including lines, circles, crosses, squares, Xs, and triangles to see if the student has mastered all basic shapes. This is correct because visual motor skills for copying designs are most highly correlated with handwriting legibility and preparedness, so if the student's handwriting problems are caused by visual motor skill impairments, design copying skills should appear to be delayed.
- **G.** Ask the student to trace or copy the upper- and lowercase letters of the alphabet and numbers 1–10. This is correct because the therapist needs to observe the student while printing to see how the student forms letters and to observe the student's pencil pressure and pencil grip, etc., to identify possible causes for the handwriting difficulty.
- **H.** Observe and record the student's pencil grip. This is important in a screening because handwriting difficulties is one of the teacher's main complaints.

The following answers are incorrect:

B. Observe the student during a reading group. Reading skills are not a concern of the teacher, so they do not need to be addressed at this time.

- **E.** Ask the teacher what the student's academic strengths and weaknesses are. Strengths and weaknesses do not need to be identified during the screening process to determine if the student should be evaluated.
- **F.** Observe the student at recess. Because this is not a concern of the teacher, it is not something that needs to be observed during the screening process.
- **I.** Review the student's school records. This is not necessary for screening; it should be done for an evaluation.
- **J.** Observe the student during snack and lunch times. This observation is not necessary for screening.
- **K.** Talk to the speech therapist to see what difficulties the student has regarding speech skills. This is not necessary for screening but is important if it progresses to an evaluation.

Let's move on to the next step in the occupational therapy process. Using the same information as previously provided, answer the following question:

Part II

Following the screening the OT decides to approve a referral for a comprehensive OT evaluation. Which assessment tools(s) should the OT use as part of the initial evaluation process? From the following list, choose the correct answer(s):

from the following list, choose the contect answer(s).

- **A.** Pediatric Evaluation of Disability Inventory (PEDI)
- **B.** Grip and pinch strength test
- C. Beery-Buktenica Developmental Test of Visual–Motor Integration (Beery VMI)
- **D.** Gross Motor Function Measure (GMFM)
- **E.** The Motor Free Test of Visual Perception Test, Third Edition (MVPT-3)
- **F.** Sensory Profile
- G. Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2)
- **H.** Evaluation Tool of Children's Handwriting-Manuscript (ETCH-M)
- **I.** Vineland Adaptive Behaviors Scales
- J. Functional Independence Measure for Children (WeeFIM)

The correct answers include the following:

- **C.** The Beery VMI is important because research has shown that scores from this test are most highly correlated with poor handwriting.
- **G.** The BOT-2 is recognized as the most valid and reliable standardized test that most highly correlates with fine motor skill deficits in children and teenagers.
- **H.** ETCH-M is correct because it is a handwriting assessment that covers all but the long endurance writing component that experts recommend be tested when evaluating a student's handwriting skills.

The rest of the choices are incorrect because they do not target the areas identified by the teacher as the primary problem areas. Therefore, although they may provide beneficial information to the therapist, they are not the most efficient tools to assess the areas identified as the main problems.

Part III

Based on the results of the student's evaluation, which of the following recommendations should the OT make to the Individualized Education Program team for goals that will help improve the student's educational fine motor, visual motor, and printing skills?

From the list below, choose the correct answer(s):

- A. The student will copy all lowercase cursive letters legibly 80% of the time.
- **B.** The student will read text accurately from left to right at the appropriate grade level 80% of the time.

- **C.** The student will copy all manuscript lowercase and uppercase letters legibly with correct orientation 80% or more of the time.
- **D.** The student will organize math problems legibly on graph paper 80% or more of the time.
- **E.** The student will cut out simple and complex shapes within 0.25 inches of the line with good bilateral coordination.
- **F.** The student will complete classroom written work legibly 80% of the time when allowed to copy dictated answers.
- **G.** The student will type all long multisentence writing assignments with minimal verbal and physical assistance.

The correct answers include the following:

- **C.** The student will copy all manuscript lowercase and uppercase letters legibly with correct orientation 80% or more of the time. This answer is correct because one of the main problems identified by the teacher is that the student is not able to form his or her letters correctly, even with a model.
- **E.** The student will cut out simple and complex shapes within 0.25 inches of the line with good bilateral coordination. This is an important goal because for being in the second grade, the student was greatly delayed for cutting skills. The therapist would hope to improve the student's cutting skills to an appropriate functional level for the student's grade.
- **F.** The student will complete classroom written work legibly 80% of the time when allowed to copy dictated answers. This choice is correct because the therapist would hope that within 1 year of treatment the student would not only learn how to print letters legibly, but hopefully words and simple sentences too, because the student is already in second grade and would be required to answer in sentences for many classroom written work assignments.

The rest of the answers are incorrect because the goals are set too high. The cursive goal would not be pursued until the student's printing skills are functional, the student is in at least third grade, or the student receives intervention for printing skills for at least a year because progress was not sufficient. The copying left to right goal is not necessary yet because that was not described as a concern by the teacher in the initial screening request, so the student's copying skills may be adequate. The typing goal is not needed yet because the student would just be beginning printing intervention skills, and most teachers and parents prefer to try to develop printing skills for at least a year before giving up and teaching word processing skills, especially at age 7 years.

Part IV

Based on the student's Individualized Education Program's goals, the OT will try to improve motor planning of visual motor, fine motor, and printing skills. What specific intervention activities should the OT include to meet these goals?

From the list below, choose the correct answer(s):

- A. Play on the playground equipment, with emphasis on swings.
- **B.** Practice cutting out simple shapes from card stock that are outlined with a bright marker to highlight the cutting line.
- **C.** Have the student do a hidden picture puzzle.
- **D.** Have the student do a few pages in the first-grade level of Handwriting Without Tears workbook after practicing letter formation on the chalkboard with verbal cues.
- E. Do rainbow writing with a vibrating pen or chalk while tracing letters.
- **F.** Have the student go through an obstacle course containing a tunnel, scooter boards, hopscotch, monkey bars, slide, and minitramp.

G. Try different pencil grips, short pencils, and repositioning the student's thumb and fingers into a mature pencil grip while writing on a vertical surface.

The correct answers include the following:

- **B.** Practice cutting out simple shapes from card stock that are outlined with a bright marker to highlight the cutting line. This would help the student see the lines, and if the lines are larger, the student will be more likely to be successful cutting on or near the lines. The types of shapes and complexity should follow the developmental approach, so the easiest shapes are given first and progress to the most difficult shapes; for example, lines, curves, circles, squares, triangles, and other basic shapes.
- **D.** Have the student do a few pages in the first-grade level of Handwriting Without Tears workbook after practicing letter formation on the chalkboard with verbal cues. This is a very good multisensory handwriting remediation program with good research support, and it is an excellent tool to use when remediating handwriting skills.
- **E.** Do rainbow writing with a vibrating pen or chalk while tracing letters. These are appropriate interventions for handwriting remediation. The vibrating pen helps with motor planning because vibration uses a different neurological pathway than the tactile and proprioceptive systems. Rainbow writing helps with making repetition of the same motor plan more interesting, thus enhancing attention to task and motor memory.
- **G.** Try different pencil grips, short pencils, and repositioning the student's thumb and fingers into a mature pencil grip while writing on a vertical surface. This is appropriate for a remediation technique when the student does not have a mature pencil grip. Short pencils help inhibit primitive pencil grips and facilitate a tripod, a more mature pencil grip.

The rest of the activities do not target the particular skills outlined in the goals as specifically as these activities do. The perceptual activities are not needed for this student's goals. The obstacle course activities, although they are good for overall motor planning, are not necessarily needed if the student's motor planning difficulties are limited to visual and fine motor skills. Playing on the swings to stimulate maturation of the vestibular system does not directly affect visual motor and fine motor skills and therefore may not help the therapist reach the student's goals in the most efficient manner possible.

How did you do? Keep in mind that there are three clinical simulation test questions on the exam. This provides an example of how to progress through a multiple-step case study. After each section of this book, make sure you can answer questions in this manner, moving from screening and assessment into implementation and intervention. We offer further multiple-step clinical scenarios on the CD-ROM that is included with this book.

FINAL THOUGHTS

The following outline provides some keys to success as you progress through your 45-day journey:

- 1. Know your facts.
 - **a.** Review, study, and become familiar with the facts presented; that is what this entire book is about!
- 2. Learn how to answer questions strategically.
 - **a.** Keep in mind that the exam questions will contain a lot of information. You will need to focus on some of the information, but other information will not be relevant to the final question being asked. *Remember to read each question statement one last time before selecting your answer.* Don't get tripped up on answer options that make sense for only

certain parts of the question. Make sure the answer you select addresses the central theme of the question being asked.

- 3. Take at least two practice exams on a computer, and remember to time yourself to try to simulate the actual testing environment.
 - **a.** Get used to taking practice exams while being timed. Experience what answering *one question per minute* feels like in an environment where you hear people typing, fidgeting in their seats, and getting up to go to the restroom. Only bring items that are allowed in the testing environment. Complete at least two practice tests in this environment. You will find it very different than taking an exam at your leisure in your pajamas while munching on a snack!
- 4. At the 2009 American Occupational Therapy Association Annual Conference in Texas, the NBCOT reported that test takers who took the full 10-minute tutorials during the exam performed better than students who did not. There are two tutorials, neither of which count against your exam time. Now . . . let's get started!

REFERENCES

National Board for Certification in Occupational Therapy, Inc. (2009). *Welcome, exam candidates*. Retrieved March 27, 2009, from http://www.nbcot.org/

Raelin, J. A. (2001). Public reflection as the basis of learning. *Management Learning*, 32(1), 11–30.

Exhibit 1-1 Stress Vulnerability Scale

In modern society, most of us can't avoid stress. But we can learn to behave in ways that lessen its effects. Researchers have identified a number of factors that affect one's vulnerability to stress—among them are eating and sleeping habits, caffeine and alcohol intake, and how we express our emotions. The following questionnaire is designed to help you discover your vulnerability quotient and to pinpoint trouble spots. Rate each item from 1 (always) to 5 (never), according to how much of the time the statement is true of you. Be sure to mark each item, even if it does not apply to you—for example, if you don't smoke, circle 1 next to item six.

		Always	Sometimes		nes	Never
1.	l eat at least one hot, balanced meal a day.	1	2	3	4	5
2.	l get 7–8 hours of sleep at least four nights a week.	1	2	3	4	5
3.	l give and receive affection regularly.	1	2	3	4	5
4.	l have at least one relative within 50 miles on whom l can rely.	1	2	3	4	5
5.	l exercise to the point of perspiration at least twice a week.	1	2	3	4	5
6.	I limit myself to less than half a pack of cigarettes a day.	1	2	3	4	5
7.	I take fewer than five alcohol drinks a week.	1	2	3	4	5
8.	l am the appropriate weight for my height.	1	2	3	4	5
9.	I have an income adequate to meet basic expenses.	1	2	3	4	5
10.	l get strength from my religious beliefs.	1	2	3	4	5
11.	I regularly attend club or social activities.	1	2	3	4	5
12.	I have a network of friends and acquaintances.	1	2	3	4	5
13.	l have one or more friends to confide in about personal matters.	1	2	3	4	5
14.	I am in good health (including eyesight, hearing, and teeth).	1	2	3	4	5
15.	l am able to speak openly about my feelings when angry or worried.	1	2	3	4	5
16.	I have regular conversations with the people I live with about domestic problems—for example, chores and money.	1	2	3	4	5
17.	l do something for fun at least once a week.	1	2	3	4	5
18.	I am able to organize my time effectively.	1	2	3	4	5
19.	l drink fewer than three cups of coffee (or other caffeine-rich drinks) a day.	1	2	3	4	5
20.	I take some quiet time for myself during the day.	1	2	3	4	5

(continues)

Exhibit 1-1 Stress Vulnerability Scale (continued)

Scoring Instructions : To calculate your score, add up the figures and subtract 20.	Self-Care Plan: Notice that nearly all the items describe situations and behaviors over which you have a great deal of control. Review the items on which you scored three or higher. List						
Score Interpretation: A score below 10 indicates excellent resistance to stress. A score over 30 indicates some vulnerability to stress. A score over 50 indicates serious vulnerability to stress.	those items in your self-care plan. Concentrate first on those that are easiest to change—for example, eating a hot, balanced meal daily and having fun at least once a week—before tackling those that seem difficult.						
<i>Source</i> : Exhibit courtesy Copyright 2009 Stress Directions, Inc., Lyle H. Miller and Alma Dell Smith, Boston, MA www.stressdirections.com							

Exhibit 1-2 Stress Busters

Tips and Techniques for Managing Stress and Introducing Relaxation into Your Life

What Is Stress?

Stress is the physiological and psychological response of the body to some sort of threat to our safety, self-esteem, or well-being. Stressors can be physical (e.g., illness), social (e.g., a relationship breakup or other loss), circumstantial (e.g., a poor exam grade or moving), or psychological (e.g., low self-esteem or worry). Often, transitions or changes, such as a new semester or new job, can bring on stress.

We are all under stress every day. A certain amount of stress helps us all to function better, keep ourselves safe from harm, and get things done during the day. Too much stress, however, can lead to physical illness, difficulty concentrating, or feelings of sadness or isolation.

Did You Know . . .

Most college campuses and communities have counseling and psychological services available for students and community residents at low cost. If the stress you experience interferes meaningfully with your ability to work, study, engage in positive social interactions, or feel okay, having an individual assessment and counseling for stress reduction and relaxation may be helpful. In a supportive environment, clients learn new stress reduction techniques and create an individualized plan to manage stress.

What Are the Symptoms of Stress?

Everyone responds to stress in different ways. What might be stressful for one person may be another person's hobby. In a similar way, everyone reacts differently to stress. Common stress reactions include:

- · Muscle tension or soreness in the back and shoulders
- Stomach troubles or digestive distress
- Difficulty falling asleep or waking early
- Increased heart rate or difficulty breathing
- Fatigue or exhaustion
- · Lack of interest or boredom
- Engaging in destructive behaviors (e.g., drinking too much alcohol, overeating)
- Inability to concentrate
- Avoidance or fear of people, places, or tasks

In addition, stress can lead to more serious problems, such as depression, anxiety, hypertension, and other illnesses. These symptoms may also be caused by medical or psychological conditions other than stress.

Remember, chronic stress can have long-term effects on health and well-being, so if your symptoms are severe or prolonged, get outside support. If stress becomes too much to manage on your own, schedule a visit to see a qualified healthcare provider.

Questions to Ask Yourself About Your Stress

- What are the primary sources of stress in my life?
- What are the signs and symptoms in my body that let me know I'm stressed?
- What have I done that worked in the past to manage my stress?
- What can I do to integrate more relaxation into my daily routine?
- What do I want to do today to resolve my stress and work toward relaxation?

Effective Ways to Manage Your Stress

- Think about possible causes of your stress and be active in reducing stress. Small shifts in your thinking, behaviors, or breathing can make a very big difference.
- Avoid stress-producing situations. Although it is not always possible, many stressful situations can be avoided. Watch for places where you can avoid inviting stress; seek out places to relax.
- Engage in some regular exercise, which has been shown to alleviate the impact of stress. Choose an assortment of tension-building and tension-releasing exercises; remember that even small doses help! Take a quick walk, stretch in your office, even simple stretches help!
- Examine if the way that you are thinking about your life (e.g., perfectionist thinking) is adding to or decreasing your stress. Are there other ways to think about the situation that are less stress inducing? Are there positive thoughts you could integrate into your daily thinking?

(continues)

Exhibit 1-2 Stress Busters (continued)

- Engage in activities that you enjoy and that give you an outlet for thinking about other things besides your stress.
- Increase your social connections . . . find other people who can relate to your experience. Do stressbusting activities together! Talk about the stressor and your plan to resolve your stress!
- Take good care of your body . . . eat well, get enough sleep, and *avoid* alcohol and drugs, which can increase stress.
- Use self-relaxation techniques like deep breathing, muscle relaxation, and visualizing successes or relaxing places (provided later).
- Download soothing music or music that makes you smile, and listen to it when you are feeling stressed.
- Search for meditation podcasts that are specific to your needs (e.g., pregnancy meditation, reducing test-taking anxiety). Many podcasts are available online and free!
- Consider writing a list of your stresses, including ways to address those stresses. Sometimes even the act of writing the list can ease worry. Start checking items off your list!
- Find your own optimal stress relievers. Is it changing your thoughts? A physical activity? A social occasion? Look for the healthy ways that help you to feel less stressed and do them!

From the Expert!

In his research, Stanford professor and expert on stress Dr. Robert Sapolsky has identified four important components of reducing stress, which include:

- 1. Predictive information, such as a sign that the stress is going to be increasing (e.g., knowing a test date). That awareness gives us more control over our stress reactions.
- 2. Finding an outlet for dealing with stress (e.g., exercise, meditation, deep breathing).
- 3. Having a positive outlook or belief that life is going to get better, rather than get worse.
- 4. Having friends. Social support from others is an important component in keeping stress levels down.

Some Relaxation Techniques to Get You Started

- Try deep breathing exercises. Lie or sit in a comfortable position with your muscles relaxed, and take a few deep breaths. With your hand on your belly, feel your belly rise and fall as you inhale and exhale. Work toward breathing in to a slow count to five. 1...2...3...4...5... Exhale slowly. Rely on this technique when you start to feel stressed.
- When your body feels tense, take 3 minutes to sit or lie down quietly and focus on calming all of the muscle groups in your body. Begin with the muscles in your feet and slowly work your way up your body. Relax your legs, back muscles, chest, arms, hands, cheeks, and forehead. You may wish to focus on areas that feel tense or where you are experiencing pain. Breathe air into those areas. Relaxing all of the major muscle groups will help your whole body feel at ease.
- If you are anticipating a stressful event, such as taking an exam or a difficult social interaction, take a few moments to visualize the event going well. See yourself experiencing success. Envision the details of what you might say or do that will result in positive outcomes. If negative thoughts or images occur, take a deep breath and refocus on the positive. Invite a successful outcome through visualization!
- After doing some breathing and muscle relaxation, or just taking time to rest, take a moment to calm
 your thoughts and visualize a peaceful place in your mind, either a place you have been or would like
 to go. Allow your body to relax more and your mind to calm. Take just 10 minutes! Recognize that you
 can go to that peaceful place in your mind and feel relief from life's stressors whenever you need a
 break!

Source: Exhibit courtesy of Shannon Casey-Cannon, PhD, Alliant International University.

Table 1-1 Study Guide Calendar

Day 1	Day 2	Day 3	Day 4	Day 5
Chapters 1, 2, & 3	Chapter 4	Continue Chapter 4	Chapter 5	Continue Chapter 5
				Stress scale & reflection
Day 6	Day 7	Day 8	Day 9	Day 10
Chapter 6	Chapter 7	Continue Chapter 7	Chapter 8	Continue Chapter 8
				Stress scale & reflection
Day 11	Day 12	Day 13	Day 14	Day 15
Chapter 9	Continue Chapter 9	Continue Chapter 9	Chapter 10	Continue Chapter 10
				Stress scale & reflection
Day 16	Day 17	Day 18	Day 19	Day 20
Chapter 11	Chapter 12	Continue Chapter 12	Chapter 13	Chapter 14
				Stress scale & reflection
Day 21	Day 22	Day 23	Day 24	Day 25
Chapter 15	Continue Chapter 15	Chapter 16	Continue Chapter 16	Chapter 17
				Stress scale & reflection
Day 26	Day 27	Day 28	Day 29	Day 30
Chapter 18	Continue Chapter 18	Chapter 19	Continue Chapter 19	Chapter 20
				Stress scale & reflection
Day 31	Day 32	Day 33	Day 34	Day 35
Continue Chapter 20	Chapter 21	Chapter 22	Chapter 23	Chapter 24
				Stress scale & reflection
Day 36	Day 37	Day 38	Day 39	Day 40
Chapter 25	Take Exam 1	Exam 1 Review	Exam 1 Review	Take Exam 2
				Stress scale & reflection
Day 41	Day 42	Day 43	Day 44	Day 45
Exam 2 Review	Exam 2 Review	Review areas of difficulty and Q&A	Continue review until confident with results and REST!	Downtime!

 $\ensuremath{\textcircled{\sc 0}}$ Jones and Bartlett Publishers, LLC. NOT FOR SALE OR DISTRIBUTION