

**National Exercise Trainers Association
NETA-PTCB
Personal Trainer Certification Practice
(Job) Analysis Development & Validation**

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In an effort to certify industry professionals, the National Exercise Trainer's Association - Personal Trainer Certification Board (NETA-PTCB) has undertaken the task of developing and implementing certification examinations for personal trainers. Since its inception, the content of NETA-PTCB's certification examination for personal trainers has been keyed to training program curricula and training materials providing comprehensive instruction for exercise professionals working as personal trainers. More recently, NETA-PTCB decided to change the foundation of the examination from "curriculum-based" to "practice-based". In so doing, the organization seeks to enhance the legal defensibility of the personal trainer certification program and, in addition, make it eligible for national accreditation. A necessary first step in the process of changing to a practice-based examination program is to perform a practice (job) analysis identifying the domains of practice, tasks, and knowledge required for safe and effective performance on the job. Once in place, these Domains, Tasks and Knowledge Statements form the basis for item (question) writing and examination construction.

On August 21st, 2004, a workshop was conducted in Minneapolis, MN wherein a diverse group of six subject-matter experts (SMEs) selected by and representing NETA-PTCB met to conduct the practice analysis for the personal trainer examination program. (The list of workshop participants can be found in Table 1.) Although resources were not available for travel to the Minneapolis area by SMEs currently residing around the country, a representative panel was assembled by selecting individuals who had been educated or trained and who had worked in the various regions of the United States.

Specifically, the purpose of this meeting was to produce a document delineating the knowledge required for the safe and effective performance of the tasks carried out by the entry-level Personal trainer. An additional goal of the workshop was to identify a weighting factor associated with each Domain and Task. The weighting factors represent the pooled judgments of the SMEs of the relative importance of, and time spent on, each of the Tasks typically performed by the entry-level personal trainer.

The product of this role delineation workshop was a draft practice analysis that was subsequently returned to NETA-PTCB staff and selected panel members for final review and comment. The resulting practice analysis document for the personal trainer is presented in Table 2.

Since the product of this workshop represented the work of only eight individuals, six meeting participants and two additional SME reviewers, the decision was made to validate the practice analysis document by submitting it to a randomly selected group of 200 professionals, all personal trainers. In addition to the practice analysis document, participants were provided with an introductory letter from NETA-PTCB, a cover memorandum from Dr. Gerald A. Rosen, Consulting Psychologist, retained by NETA-PTCB to develop the practice analysis, and a packet of materials containing the following: a list of definitions of terms so that participants would become familiar with job analysis terminology; a set of detailed instructions for reviewing and commenting on the practice analysis, and a set of comment sheets containing the survey questions. The respondents recorded their responses to the survey questions directly on the Table 1 comment sheets. The respondents were asked to review the practice analysis document and: (1) identify those Domains, Tasks and/or Knowledge Statements they would like to eliminate, reword, or revise; (2) suggest any additional Domains, Tasks and/or Knowledge Statements that they would like to add to the practice analysis; and (3) confirm or suggest changes to the Domain weights based upon their assessment of the importance of the Tasks and knowledge base underlying each of the Domains.

Table I
PRACTICE ANALYSIS WORKSHOP PARTICIPANTS
 Minneapolis, MN August 21, 2004

Name	Title	Organization	City/State
Lu Herbeck	Program Director Certification Director	NETA-PTCB	Minneapolis, MN
Mike Iserman	Director of Personal Training	YMCA	Minneapolis, MN
Jon Giese	Personal Trainer Personal Trainer	Holiday Spa Mayo Clinic Patient Education	Huntington Beach, CA Rochester, MN
Jeanne Johnson	Personal Trainer	HomBody	St. Paul, MN
Tom Conroy	Personal Trainer Personal Trainer/Owner	Northeastern Illinois Univ HomBody	Chicago, IL St. Paul, MN
Steph Maks	Fitness Director Area Group Fitness Director	Gold's Gym Gold's Gym	Reno, NV Minneapolis, MN
Nick Hudson	Personal Trainer Personal Trainer	Hard Body Lifetime	Santa Monica, CA Maplewood, MN
<i>Not in attendance but contributed to the practice analysis process:</i>			
Amy Stitt	Personal Trainer	NWAC	St Louis Park, MN
Lisa Servais	Personal Trainer	Independent Contractor	Durango, CO

* Please Note: All of these individuals have provided health and exercise training and educational workshops in nearly every state in the U.S. They have a broad prospective on consumer needs across the U.S. and the myriad of niche markets that make up the various regions.

Table 2

PERSONAL TRAINER PRACTICE ANALYSIS

Personal trainers are fitness professionals who promote health. They accomplish this by developing and implementing exercise programs designed to safely and effectively meet the unique goals of the clients they serve. This practice takes place in the context of their unwavering commitment to client safety and service and their adherence to the highest principles of ethical behavior.

(20%) Domain I – Initial Client Intake and Assessment

- (2%) **Task 1** Interview client/administer questionnaire(s) to obtain a health and exercise/activity history.

The successful performance of this task requires knowledge of:

- K-1 Elements of a health history
- K-2 Elements of an exercise/activity history and current activity level
- K-3 Communication styles
- K-4 Active listening skills
- K-5 Risk factors

- (2%) **Task 2** Interview client/administer questionnaire(s) to obtain information about current state of health, lifestyle, and exercise/activity level.

The successful performance of this task requires knowledge of:

- K-1 Elements of a health history
- K-2 Elements of an exercise/activity history and current activity level
- K-3 Communication styles
- K-4 Active listening skills
- K-5 Risk factors

- (12%) **Task 3** Take physical measurements* of client to gather objective data about current health, risk factors, and baselines for measuring future progress.

The successful performance of this task requires knowledge of:

- K-5 Risk factors
- K-6 Fitness-related physical measurements and the procedures for obtaining them and appropriate measurement tools
- K-7 Normal ranges of physical measurements
- K-8 Test/measurement-specific contraindications and precautions
 - * (e.g. vital signs, anthropometrics, body composition, postural analysis, range of motion, strength, and cardiovascular endurance)

- (2%) **Task 4** Review assessment results and establish client goals.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active listening skills

- (2%) **Task 5** Consult with and/or refer client to appropriate health care professional(s) to obtain additional health information, pre-participation and medical clearance.

The successful performance of this task requires knowledge of:

- K-1 Elements of a health history
- K-2 Elements of an exercise/activity history and current activity level
- K-5 Risk factors
- K-7 Normal ranges of physical measurements
- K-9 ACSM Recommendations for Medical Examination and Exercise Testing

(35%) Domain II - Program Design

- (3%) **Task 1** Integrate assessment information to define, set, and clarify safe and realistic client goals.

The successful performance of this task requires knowledge of:

- K-5 Risk factors
- K-7 Normal ranges of physical measurements

- (29%) **Task 2** Select exercise program duration, activities, times, intensities, and frequencies based on client health, activity level, interim and long-term goals, and motivation.

The successful performance of this task requires knowledge of:

- K-1 Elements of a health history
- K-2 Elements of an exercise/activity history and current activity level
- K-5 Risk factors
- K-7 Normal ranges of physical measurements
- K-10 Exercise-related anatomy, kinesiology, basic nutrition and physiology
- K-11 Principles of behavior change
- K-12 Training principles and ACSM guidelines for exercise prescription and their application
- K-13 Activity/exercise-specific benefits, indications, contraindications, risks, and precautions
- K-14 Guidelines, contraindications, and precautions for special populations (e.g. pre and post-natal, adolescents, older adults, and clients with chronic medical considerations)

- (3%) **Task 3** Present the exercise program to client to gauge acceptance and identify barriers to meeting goals.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active Listening Skills
- K-11 Principles of behavior change

(30%) Domain III - Program Implementation

- (25%) **Task 1** Teach exercise techniques to maximize program benefits and effectiveness and minimize health and safety risks.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-10 Exercise-related anatomy, kinesiology, basic nutrition and physiology
- K-12 Training principles and ACSM guidelines for exercise prescription and their application
- K-13 Activity/exercise-specific benefits, indications, contraindications, risks, and precautions
- K-14 Guidelines, contraindications, and precautions for special populations (e.g. pre and post-natal, adolescents, older adults)
- K-15 Common exercise-related injuries
- K-16 Teaching techniques/learning styles
- K-17 Biomechanics and kinesiology

- (3%) **Task 2** Observe and evaluate client performance to assess learning and determine need for modification of types, intensities, frequencies, and/or times of activities.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active listening skills
- K-12 Training principles and ACSM guidelines for exercise prescription and their application
- K-13 Activity/exercise-specific benefits, indications, contraindications, risks, and precautions
- K-15 Common exercise-related injuries
- K-17 Biomechanics and kinesiology
- K-18 Exercise techniques

- (2%) **Task 3** Evaluate on-going client progress toward goals by observing performance, mood, satisfaction, etc. to determine if program adjustments are required

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active listening skills
- K-11 Principles of behavior change
- K-12 Training principles and ACSM guidelines for exercise prescription and their application
- K-15 Common exercise-related injuries
- K-18 Exercise techniques
- K-19 Overtraining syndrome

(10%) Domain IV - Evaluation

- (6%) **Task 1** Assess client's long-term progress toward goals by taking physical measurements and assessing continuing motivation and program acceptance.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active listening skills
- K-5 Risk factors
- K-6 Fitness-related physical measurements and the procedures for obtaining them and appropriate measurement tools
- K-7 Normal ranges of physical measurements
- K-8 Test/measurement-specific contraindications and precautions
- K-11 Principles of behavior change

- (2%) **Task 2** Determine if goals have changed and re-define, set, clarify and expand as appropriate.

The successful performance of this task requires knowledge of:

- K-3 Communication styles
- K-4 Active listening skills
- K-5 Risk factors
- K-7 Normal ranges of physical measurements
- K-11 Principles of behavior change

- (2%) **Task 3** Integrate evaluation data to redesign the program to safely and effectively meet new and/or revised goals.

The successful performance of this task requires knowledge of:

- K-1 Elements of a health history
- K-2 Elements of an exercise/activity history
- K-5 Risk factors
- K-7 Normal ranges of physical measurements
- K-10 Exercise-related anatomy, kinesiology, basic nutrition and physiology
- K-13 Activity/exercise-specific benefits, indications, contraindications, risks, and precautions
- K-14 Guidelines, contraindications, and precautions for special populations (e.g. pre and post-natal, adolescents, older adults)

(5%) Domain V - Ethics and Professional Issues

- (2%) **Task 1** The work of the personal trainer is performed in a manner consistent with the NETA code of Ethics.
The successful performance of this task requires knowledge of:
K-20 NETA Code of Ethics
- (1%) **Task 2** Personal trainers ensure that clients are fully informed of program benefits and risks and that they understand that they may cease participation at any time.
The successful performance of this task requires knowledge of:
K-13 Activity/exercise-specific benefits, indications, contraindications, risks, and precautions
K-21 Elements of an Informed Consent
- (1%) **Task 3** Personal trainers maintain a safe environment for clients.
The successful performance of this task requires knowledge of:
K-22 ACSM Facilities Guidelines
- (1%) **Task 4** Personal trainers maintain accurate and comprehensive client records.
The successful performance of this task requires knowledge of:
K-23 Documentation guidelines

Of the 200 Personal trainers sampled, 40 (20.0%) returned their response documents in time for consideration. The majority of respondents (72.5%) were of the opinion that the Domain weights were an accurate representation of professional practice. Of the 11 respondents who suggested changes in the Domain weights, 6 suggested reducing the weight for Domain II, Program Design from 35% to 30% and adding 5% to either Domain I, Initial Client Intake and Assessment, Domain III, Program Implementation, or Domain IV, Evaluation, 1 suggested reducing the weight for Domain II, Program Design by 10% and adding 5% to Domain I, Initial Client Intake and Assessment and 5% to Domain III, Program Implementation, 1 suggested reducing Domain III, Program Intervention by 5% and adding 5% to Domain I, Initial Client Intake and Assessment, 1 suggested reducing Domain III, Program Intervention by 10% and adding 10% to Domain I, Initial Client Intake and Assessment, 1 suggested reducing both Domain II, Program Design and Domain III, Program Implementation by 5% and adding 5% to both Domain I, Initial Client Intake and Assessment and Domain IV, Ethics and Professional Issues, and, finally, 1 suggested reducing Domain II, Program Design and Domain IV, Evaluation by 5% each and adding 10% to Domain I, Initial Client Intake and Assessment. Averaging in these suggestions with the 29 who suggested no change and the recommendation of the 8 members of the practice analysis panel, the Domain weights were re-calculated at 21%, 34%, 30%, 10% and 5%, respectively. These weights are identical to the original, SME derived weights except that the Domain I weight is 1% higher and the Domain II weight is 1% lower. Given that this breakdown varies only slightly from the weights derived by the practice analysis panel, it is recommended that the five Domain weights remain at 20%, 35%, 30%, 10%, and 5%, respectively.

The following comments were provided by respondents in support of their suggested changes to the Domain Weights:

1. Program Implementation is more dynamic (suggested increasing Domain III by 5%)
2. Initial Client Intake and Assessment - 1st impression very important, a lot of preparation needs to be done before and during this step (suggested increasing Domain I by 5%)
3. Evaluation Domain should get more focus (suggested increasing Domain IV by 5%)

Comments on Domains, Tasks, and/or Knowledge Statements were received from 18 (45%) of the survey respondents. Most of the comments focused on the Knowledge Statements. There was an unusually high degree of attention paid to wording and perceived emphasis of Tasks and Knowledge Statements. Given the number of thoughtful comments made, it is suggested that NETA carefully review them to determine if any changes, however slight, might be warranted. A listing of the comments follows. (Note: Unless otherwise specified, each comment was made by a single respondent.)

Domains:

1. Four respondents suggested removing the word “intake” from Domain I so that it would read “Initial Client Assessment”.
2. Remove the words “and professional issues” from Domain V so that it would read “Ethics”.
3. In Domain V stress that Personal Trainers cannot diagnose medical conditions.

Tasks:

1. Three respondents suggested combining Tasks 1 & 2 in Domain I.
2. Add a Task to Domain I regarding setting up basic nutritional guidelines.
3. Change the wording of Domain I, Task 4 from “Assess client level of motivation and reasons for seeking an exercise program” to “Review assessment results and establish client goals”.
4. In Domain II, Task 2 change the word “interim” to “short-term” so that the Task refers to “short term goals” rather than “interim goals”.
5. In Domain V, Task 4 specify how long client records should be retained.

Knowledge Statements:

1. Reword K-2, Elements of an exercise/activity history to stress current activity level.
2. Remove K-4, Interviewing Techniques from the document.
3. Remove K-4, Interviewing Techniques from Domain I, Tasks 1 & 2 and Domain II, Tasks 2 & 3.
4. Reword K-4, Interviewing Techniques to “Active Listening Techniques”.
5. Reword K-5, Risk Factors so that it would read “Risk Factors and Medical Clearance Requirements”.
6. Domain I, Task 3 add a new Knowledge Statement “Tools (e.g. calipers)”.
7. Domain I, Task 4 add a new Knowledge Statement “Psychological Analysis”.
8. Domain III, Task unspecified, add a new Knowledge Statement “Chronic Medical Conditions”.
9. Domain V, Task Unspecified, add a new Knowledge Statement “Laws and Regulations”.

General:

1. One respondent, a massage therapist and personal trainer, made several comments suggesting bringing relevant information from massage therapy practice in the Personal Trainer practice analysis.
2. Eighteen respondents (45%) made general favorable comments about the practice analysis document and process. There were no unfavorable comments.
3. One respondent made a suggestion for the improvement of NETA training materials.
4. One respondent made favorable comments regarding the improvements in the NETA certification programs since her/his initial certification in 1997.

In reviewing the results of the practice analysis workshop and respondent comments, it is important to remember that the tasks performed, the knowledge required for safe and effective practice, and relative weights are intended to be descriptive of the practice of entry-level Personal trainers as a whole. Consequently, specific job duties/tasks, as reported or commented on by some respondents, may vary from these results due to a more limited perspective based upon the practices at a specific location or the demands of specific jobs/job sites.

In summary, it is recommended that after reviewing this report, NETA SMEs should determine if: (1) any of the task statements should be eliminated or combined; (2) any of the task statements suggested as additions are viable; (3) any of the knowledge statements should be deleted; (3) any of the knowledge statements suggested as additions are viable; (4) the Domain weights should be retained as originally devised.

Changes Made As A Result Of Respondent's Comments

After carefully reviewing the comments made by survey respondents the NETA-PTCB SME's concluded and agreed that the following changes be made:

- There were no changes made to the Domain weights.
- Assessment was added to Domain I to read – Initial Client Intake and Assessment.
- The NETA-PTCB Code of Ethics covers the issue of PT's not diagnosing medical conditions therefore, SME's determined nothing needed to be added to the Domain title
- Kinesiology and basic nutrition was added to K-10
- Domain I, Task 4 was changed to read Review assessment results and establish client goals
- In Domain II, Task 2 – 'short' replaced interim
- 'and current activity level' was added to K-2
- K-4 was changed to read 'Active Listening Skills'
- K-6 was changed to read 'Fitness-related physical measurements, the procedures for obtaining them and appropriate measurement tools'

Note: Some changes were not made because SME's felt the changes would not have been beneficial or necessary.

Relationship Between Practice Analysis and Test Specifications

The test specifications for the NETA-PTCB Personal Trainer examination consists of the “validated” practice analysis document. That is, the examination test specifications are the Domains of Practice, Tasks within Domains of Practice, and Knowledge Statements within Tasks PLUS the relative weights applied to the Domains of Practice and Tasks within Domains of Practice. All examinations will be constructed of items addressing these elements of the test specifications document. The number of items selected to represent each of the weighted elements will exactly reflect the values of the relative weights.