Guide to Administering the PDMS-3

M. Rhonda Folio, EdD
Rebecca R. Fewell, PhD

Overview of the PDMS-3

The *Peabody Developmental Motor Scales–Third Edition* (PDMS-3; Folio & Fewell, 1983, 2000, 2023) is an early childhood motor development program that provides both in-depth assessment and training or remediation of gross and fine motor skills and physical fitness.

The PDMS-3 can be used by occupational and physical therapists, diagnosticians, early intervention specialists, preschool adapted physical education teachers, psychologists and others who are interested in examining the motor skills of young children.

The four principal uses of the PDMS-3 are to:

- Identify children who have motor difficulties and determine the degree of their problems
- Determine specific strengths and weaknesses among developed motor skills
- Document motor skills progress after completing special intervention programs and therapy
- Measure motor development in research studies
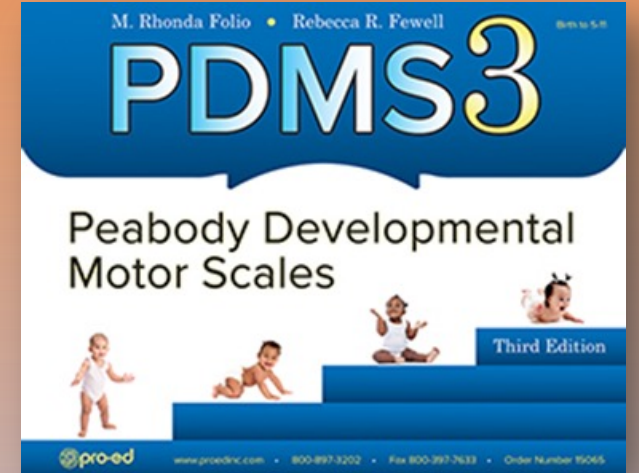
The PDMS-3 Complete Kit includes:

- Examiner's Manual
- Guide To Item Administration
- Motor Activities Program (MAP)
- Object Kit
- Stimulus Cards
- 6 in. x 6 in. Paper Pads
- Scoring Transparency
- 25 Examiner Record Booklets
- 25 Supplemental Subtest Booklets
- Peabody Motor Development Chart
- 25 Peabody Motor Development Parent Charts
- Online Scoring System Access
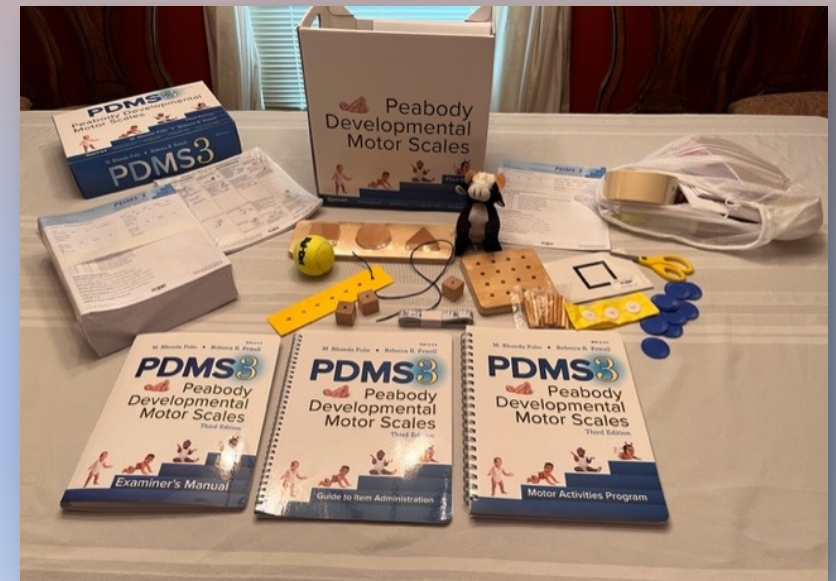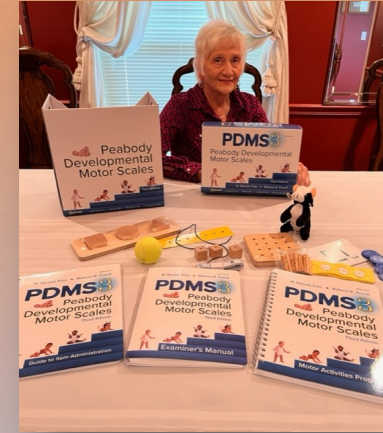
Improvements and Changes to the PDMS-3

Recommendations made by test reviewers, findings of research studies, and ideas resulting from the queries from examiners were merged with our own ideas for improving the test. As a result, several improvements and changes were made in the PDMS-3.

Theoretical Framework

A more detailed explanation of the **theoretical framework** underlying the test was included in the Examiner's Manual:

Initially, we drew on the work of Seefeldt (1989) and Dynamic Systems Theory:

- Motor development is viewed as changes in movement or motor behavior that reflect the interactions of the maturing organism and its environment. Seefeldt proposed the assessment of the outcome and quality of movement.
- Thelen (1989) proposed that movement is produced by interaction of the child's various body systems, the task, and the environment.
- In dynamic systems theory, motor development is not always continuous because of disability or other constraints that might prevent a child from achieving a motor skill.

Next, we examined how Dynamic Systems Theory and constraints impact motor skill production:

- Constraints help to explain the variability in movements among individuals.
- Three constraints are: *requirements of the movement task* (e.g., child preparing to use their hands to grasp and secure a thrown ball); a*spects of the environment in which movement occurs* (e.g., noisy and crowded gym or classroom); and *capabilities of the individual making the movements* (e.g., experience with the task, physical and mental attributes). ***Note:* Constraints can have a positive or negative affect on the child's motor movement.**

PDMS-3 Subtests

The PDMS-3 subtests were re-named to reflect a better understanding of the skills required by these items. The test has **five** core subtests and **one** supplemental subtest. **Three** subtests assess gross motor skills, and **two** subtests assess fine motor skills.

PDMS-3 Gross Motor Subtests:

Body Control – measures the ability to move the limbs and trunk, postural reactions, standing, bending, extending, stooping, balancing, jumping upward. It is an estimate of the child's ability to sustain control of his or her body within its center of gravity and retain equilibrium.

Body Transport – measures the ability to make movements that propel the child from one location to another, such as rolling, crawling, creeping, walking, running, jumping forward or sideward, sliding, hopping and skipping.

Object Control – measures the ability to coordinate movements that require the incorporation of perception and movement, such as throwing, catching, bouncing and kicking a ball.

PDMS-3 Subtests Continued

PDMS-3 Fine Motor Subtests:

Hand Manipulation – measures the ability to move the hands, fingers and arms, as appropriate, to complete tasks and measure dexterity. This includes manipulation of objects such as blocks, cups, and drawing instruments.

Eye-Hand Coordination – measures the ability to interpret visual stimuli in coordination with hand-finger movements. It is an estimate of the child's ability to integrate and use his or her visual perceptual skills to perform complex eye-hand coordination tasks.

A supplemental subtest, **Physical Fitness**, was added to reflect the current literature's interest in overweight, obesity and fitness testing of preschool children:

Physical Fitness – measures the ability to perform activities like push-ups, sit-ups, repetitive jumps, running speed, throwing for distance and sit and reach flexibility.

PDMS-3 Composites

The PDMS-3 provides **three** composite index scores, which have been re-named:

Gross Motor Index – is a combination of results from the Body Control, Body Transport, and Object Control subtests

Fine Motor Index – is a combination of the results of the Hand Manipulation and Eye–Hand Coordination subtests.

Total Motor Index – is formed by a combination of the results of the gross and fine motor core subtests. It is the best estimate of overall motor abilities.

Changes to PDMS Gross Motor Items

Changes to PDMS gross motor items include the following:

- The Reflexes subtest was eliminated, and postural reactions of righting and equilibrium reactions were included in the Body Control subtest.
- The number of head alignment items were reduced.
- The Body Transport subtest includes items from the PDMS-2 Locomotion subtest.
  - The Forward Roll item from the PDMS-2 Locomotion subtest was deleted.
- Combinations of body transport movements were included at the higher age levels (62–71 months).
  - Body Transport Items 62 and 63 reflect these skilled movements of combining running, hopping and jumping.
- Qualitative criteria for scoring items, such as Body Transport Item 41 (Running), Object Control Items 22 (Throws Ball, Underhand), 25 (Throws Ball, Overhand), 32 (Throws Ball to Partner), and 35 (Kicks Ball), are easier to observe by using a checklist format.
- An item requiring striking with an open palm (Item 37), was added to the Object Control subtest.

Changes to PDMS Fine Motor Items

Several factors were considered when making changes to PDMS fine motor items:

- Children are now using their hands and fingers in different ways to engage with items like toy telephones, calculators, and computers.
- We wanted to include items that tap into those skills, but not be dependent on cognition, just primarily the use of vision, hand, and finger movements.
- We wanted the new items to require quick back and forth movements. The idea of using identical tokens and playing cards was appealing as they would not be very costly and could be replaced easily.
- To add these new items, some items had to be dropped (e.g., Coloring Between Lines, Removing Socks, Turning Pages).
- Many of the new items require more advanced skills, which is why several of the new items are in the later portion of the Hand Manipulation and Eye–Hand Coordination subtests.

Additional Improvements

- Both the **Illustrated Guide to Item Administration** and the **PDMS-3 Motor Development Chart** were revised and many illustrations were replaced or updated.

- The **Motor Activities Program** was revised to be more user friendly. The activities of the program are available for printing from the PDMS-3 software and in print form.

- The **Object Kit** was expanded to include most of the manipulatives needed for testing to better ensure a standardized administration.

Materials included in the PDMS-3 Object Kit:

1 Black Lace
1 Lacing Strip
1 Stuffed Toy
1 Washcloth
1 Bottle with Screw On Top
1 Large Button Strip
1 Shape Board
3 Shapes
1 Cup
8-10 Inch Ball
1 Spoon
1 Rattle
1 Roll of 2" Wide Masking Tape

2 Tennis Balls
3 Blackline Masters
8 Stimulus Cards
25 Squares of Paper
20 Plastic Tokens
3 Clothespins
1 Deck of Playing Cards
12 Cubes With Holes
1 Pegboard
16 Pegs
1 Measuring Tape
1 Pair of Blunt Scissors

Note: Lined paper and blackline masters must be printed from the PDMS-3 software.
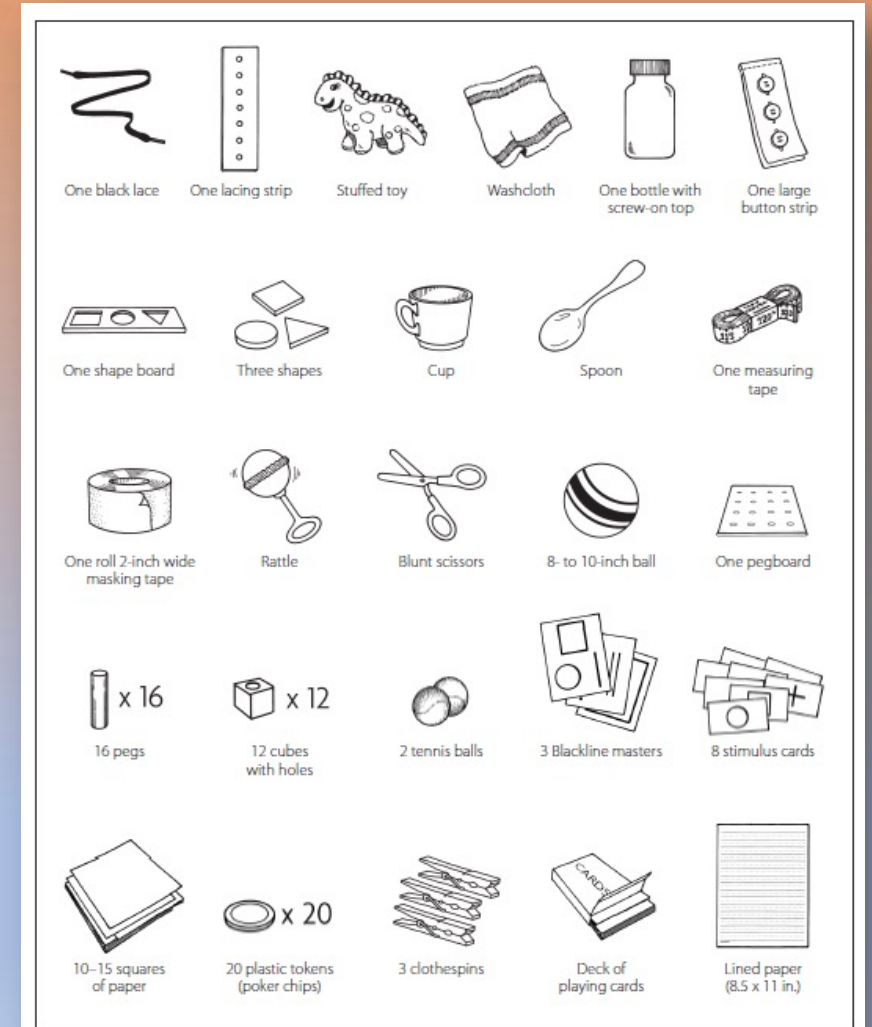

Figure 1.1. Materials included in the PDMS-3 kit.

The following materials must be supplied by examiners:

- **Stopwatch**
- **Cheerios**
- **Pencils and Crayons**
- **White Paper (8.5" x 11")**
- **Stairs with 6–7 Inch Rise**
- **Sturdy Object 24–30 Inches high**
- **1 Yoga Mat (or Similar Mat) or Carpeted Area**
- **6 Feet of Exercise Tubing or Rope**
- **2 Empty Soda Cans**
- **2 Empty 2 Liter Soda Bottles**
- **1 Yardstick**

Stopwatch

Cheerios

Pencils and crayons

White paper (8.5 x 11 inch)

Stairs with 6–7 inch rise

Sturdy object (24 to 30 inches high)

Yoga mat

6 ft. of exercise tubing (or rope)

2 empty soda cans

2 empty 2-liter soda bottles

Yardstick

Figure 1.2. Additional required materials not provided in the PDMS-3 kit

PDMS-3 Normative Sample

- All new normative data were collected. The normative sample includes 1,452 children between 1 month and 71 months.

- The demographic characteristics of the sample were stratified by age to conform to those of the projected population of children under 5 years of age in the United States for year 2021 and thereby representative of the U.S. population.

- The sample sizes for clinical cases (i.e., **developmental delay, intellectual disability, and physical or health impairment**) were increased to improve generalizability.

- New studies of the floors, ceilings, and item gradients for the PDMS-3's subtests and composites were conducted. The floors and ceilings for the three composite scores are shown to be within accepted levels across all ages and ability levels.

- New studies of test bias (both differential item functioning and subgroup comparison studies) were conducted that indicated that the **PDMS-3 possesses little or no bias regarding gender, race and ethnicity.**

Reliability and Validity

- Major efforts were made to demonstrate that the PDMS-3 is both **reliable and valid** for its purposes, including **diagnostic accuracy** and receiver operating characteristics/area under the curve (ROC/AUC). Diagnostic accuracy analyses are rigorous techniques for establishing validity involving the computation of a test's sensitivity index, specificity index, and ROC/AUC. These studies indicated that the PDMS-3 is a **highly valid** measure of early motor abilities.

- New studies of **construct-identification validity**, including studies of age differences, subgroup performance, relationship to language, social emotional development, and adaptive behavior were conducted. These studies indicated that the PDMS-3's internal structure is **sound**. Its results are valid for a wide variety of subgroups, including children with developmental delays, physical or health impairments, autism spectrum disorder, intellectual disabilities, and premature children, as well as the general population.

- For more in-depth discussions of the PDMS-3's reliability and validity, please refer to chapters 5 and 6 in the Examiner's Manual.

Administration and Scoring the PDMS-3

To achieve a valid interpretation of a child's PDMS-3 performance the examiner must:

- Administer the items exactly as specified in the **Guide To Item Administration.** This guide provides a complete description of every item, an illustration of the activity, and the scoring criteria. An abbreviated version of this material is included in the **Examiner Record Booklet** and the **Supplemental Subtest Booklet.**

- Follow the exact procedures for item administration, as some instructions are read, and others are demonstrated. The instructions can be repeated up to **three** times to be sure the child understands the item. **Do not give extra trials unless they are indicated.**

- Only give the test with the **Examiner Record Booklet** and **Supplemental Subtest Booklet** after becoming thoroughly familiar with the **Guide To Item Administration**. Once the examiner becomes proficient in giving the PDMS-3 the **Guide To Item Administration** will not be needed.

Administration and Scoring the PDMS-3 Continued

- Multiple examiners may administer different subtests to the same child. For example, a physical therapist could administer the gross motor subtests one day, and an occupational therapist could administer the fine motor subtests another day.

- Examiners do not have to administer all the core subtests. For example, an examiner may wish to administer only the fine motor subtests.

- It is recommended that the PDMS–3 be given once or twice a year to measure the progress in older preschool children. It can be given more frequently to very young children. Allow enough time in between administrations for remediation and intervention to have a meaningful effect.
  - The PDMS-3 scoring software allows for **four** administrations **per child**. If needed, please divide the score box for the items on the **Examiner Record Booklet** and **Supplemental Subtest Booklet** into quadrants to record scores for the different administrations).

Administering the PDMS-3 to Children with Disabilities

When administering the PDMS-3 to children with disabilities examiners often cannot strictly adhere to the directions provided.

- Make notations on the Examiner Record Booklet and the Supplemental Subtest Booklet to identify the special adaptations made in item administration. Some items may need major modifications or need to be omitted entirely. Any items omitted must be **scored as 0.**

- Adhere to the scoring criteria as closely as possible. If not possible, modify the scoring and note modifications in the appropriate record booklet.

- Ask someone who knows the child well about the impact the disability has on their ability to understand instructions, see objects, and so forth and adapt the administration of the test accordingly. **Do not use standard scores when the administration has been modified without describing how the test was adapted.**

Testing Environment and Materials

- Arrange the testing environment and materials **prior** to administering the PDMS-3.

- Because some of the test items are read aloud to children, the testing location should be free of distracting noises and interruptions.

Figure 2.1. Diagram for setting up measured distances.

- Adequate lighting and a comfortable temperature should be maintained.

- Some items require measured distances, taped lines, or targets that should be created before testing a child who will be given those particular items. ***Note:*** Each item in the **Guide To Administration** will list these distances. Figure 2.1 on pg. 11 of the Examiner's Manual provides a diagram for setting up measured distances.

- Measured distances involving running should a minimum of 5 feet at the beginning and end for the child to start and stop adequately and safely.
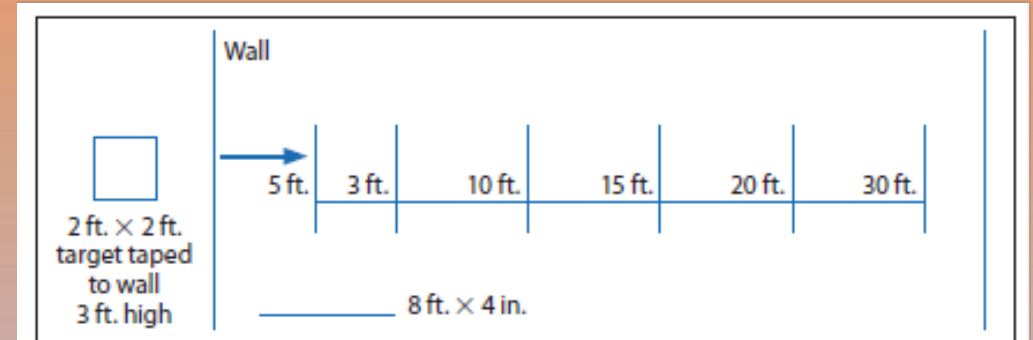
Testing Environment and Materials Continued

- Be sure that children are dressed appropriately for gross motor items:
    - Comfortable clothing that fits properly and is not restrictive of movements
    - T-shirts, shorts, or pants are recommended
    - Athletic type shoes with socks should be worn instead of boots, slick soled shoes, or sandals.

- Although best practices indicate that testing in a natural setting is best, research on testing environments with the PDMS has shown that testing the child out of the classroom yields higher test scores than using the classroom or playground.

- You do not have to give **all six subtests of the PDMS-3.** Some may be interested in only specific subtests. For example, a child may not have the physical capability to take the Physical Fitness subtest. Others may only give the fine motor or gross motor composites.

- The supplemental test **Physical Fitness does not have to be given to calculate the Gross Motor Index**

Testing Time

- Time required to administer the 5 core subtests of the PDMS-3 varies from approximately 45–60 minutes depending on the child's age, knowledge, and motor or other abilities.

- The subtests composing **either** the Gross Motor Index or Fine Motor Index takes approximately 20–30 minutes.

- The Physical Fitness subtest takes approximately 15–20 minutes to administer.

- Subtests may be given in any order.

- Testing sessions can be broken into shorter times if the child has a short attention span or if conditions make it more convenient at different times. We recommend that the subtests in each composite be completed within a **5-day period**.

Entry Points, Basals, and Ceilings

- Entry points, basals, and ceilings are provided to make the administration of the PDMS-3 more efficient.

- Entry Points are based on chronological age of the child being tested.

- Examiners should use their clinical judgement when determining which entry points to use.

- Decisions should be based on the child's chronological age and motor development level.

- For children with physical challenges use their physical ability rather than age.

Basals and Ceilings

To shorten testing time, basals and ceilings are used.

A basal is established when the child earns full credit (a score of 2) on 3 items in a row. If a child does not score a **2** on three items in a row, continue testing backward until a child earns a **2** on three consecutive items or until you run out of items.

Once a basal is established, the child earns a score of **2 for all the items below the basal that were unadministered.**

After establishing a basal, continue testing forward until a ceiling is reached **(score of 0 on three items in a row).**

Entry Points by Age (in months) for the PDMS-3

Table 2.1
Entry Points by Age (in Months) for the PDMS-3

Age (in months)	Body Control	Body Transport	Object Control	Hand Manipulation	Eye–Hand Coordination	Physical Fitness
1–5	Item 1	Item 1	—	Item 1	Item 1	—
6–10	Item 6	Item 5	—	Item 4	Item 4	—
11–15	Item 13	Item 14	—	Item 9	Item 8	—
16–24	Item 19	Item 21	Item 1	Item 12	Item 13	—
25–33	Item 22	Item 27	Item 3	Item 16	Item 18	—
34–42	Item 27	Item 32	Item 8	Item 22	Item 21	—
43–51	Item 32	Item 40	Item 12	Item 25	Item 30	Item 1
52–61	Item 36	Item 45	Item 18	Item 38	Item 33	Item 1
62–71	Item 40	Item 52	Item 24	Item 43	Item 43	Item 5

Scoring the PDMS-3

- The PDMS-3 items are scored as 2, 1, or 0.
- Examiners must score each item based on the specific criteria provided and their judgement of the child's performance.

General Criteria for Scoring Items:

2 – Children earn a score of 2 when their performance matches the criteria specified for mastery

1 – Children earn a score of 1 when their performance shows a clear resemblance to the item mastery criteria **but does not fully meet the criteria.** Specific criteria are described for a score of 1 for each item.

0 – Children earn a score of 0 when they cannot for will not attempt the item or the attempt does not show the skill has developed.

NOTE: **Examiners should base their ratings on what they observe during testing and should not give credit for items based on caregiver or teacher report.**

Recording and Interpreting PDMS-3 Results

The PDMS-3 requires the use of an electronic scoring system, the *PDMS-3 Online Scoring and Report System.* This software is now **included with the purchase of each PDMS-3 Complete Kit** and **with the purchase of every replacement pack of Examiner Record Booklets** and **Supplemental Subtest Booklets.** Each examinee can be scored up to four times.

NOTE: **Inclusion of the software eliminates the need to include normative tables in the Examiner's Manual and ensures accurate application and calculation of basal and ceiling scores.**

Examiners can also print materials needed for test administration (e.g. blackline masters, lined paper) from the test software.

The *PDMS-3 Online Scoring and Report System*

The *PDMS-3 Online Scoring and Report System* is a quick efficient tool for:

A. Entering test session data
   1. Examiners may enter scores for four administrations per child
   2. Multiple examiners can administer different subtests to the same child (e.g., a PT administers the gross motor subtests, and an OT administers the fine motor subtests) and only 1 use will be deducted from the account
B. Converting subtest item scores or total raw scores into scaled scores
C. Generating composite index scores, percentile ranks, and upper and lower confidence intervals
D. Comparing PDMS-3 performances to identify significant intraindividual differences
E. Obtaining a score summary or narrative report
F. Generating treatment goals and objectives based on the item performance of the child

Registering and Activating the System

A **code** to unlock the use of the online scoring system is printed at the top of page 1 on the Examiner Record Booklet and Supplemental Subtest Booklet.

Setting Up a New Account:
- Direct your internet browser to https://proedsoftware.com/activate and follow directions to register your account.

- You will be asked for your code during registration.

- To activate a code on an existing account, log into your account and click the **Activations Tab on the screen.** Enter the included code in the space provided and click the **Add Button.**

- **Codes can be activated only once and do not expire.**

- **Uses will be shared with any examiner you add to your account.**

Accessing Your Account

When you register, the software sends an activation email from PRO-ED Customer Support to the site administrator's email address. The activation email contains your new *PDMS-3 Online Scoring and Report System* account address (e.g., https://www.proedsoftware.com/pdms3/example/index.php).

To log in:

1. Go to the account address included in the activation email.
2. Use the administrator's email as your **Login ID**.
3. Create a password.

Once logged in, you will see the **Examinees** screen. The navigation bar provides links to the main screens:

- **Examinees** (view or add examinees)
- **Examiners** (view or add examiners)
- **Activation Codes** (add a new code or see your remaining uses)
- **Materials** (access the Blackline Masters and Lined Paper PDFs)
- **Motor Activities Program** (access the Motor Activities Program PDFs)
- **Help** (view this User's Guide, License Agreement, Business Associate Agreement, or Privacy Policy)
- **Log Out**

Entering Test Session Data

- Once the child has been entered into the online scoring system, the **chronological age** of a child is automatically calculated, based on birth date. **Examiners should not adjust the child's age for prematurity.**
- You can then enter **individual item scores** or **total raw scores.**
- The software will automatically apply the appropriate start and discontinue rules and calculate the subtest raw score.
- New examiners should enter item-level scores when first using the PDMS-3 because the software checks the data to be sure that the basals and ceilings have been applied properly, thus, ensuring a valid administration.
- Scores for a single subtest or as many subtests as desired may be entered.
- The software automatically converts subtest raw scores to normative scores, and the subtest scaled scores are automatically combined to generate composite index scores, percentile ranks, and upper and lower confidence intervals for the composites.
- The software automatically conducts discrepancy analyses. It displays the results on the screen and prints them in the Detailed Narrative Report.

Normative Scores Provided by PDMS-3

The PDMS-3 yields **four** types of normative scores:

Age equivalents
- Derived from calculating the average normative group's raw score at each 6-month interval. They translate subtest raw scores into motor ages.

Percentile ranks
- On a scale ranging from 0 to 100, these ranks indicate the percentage of the distribution of the standardization sample that is equal to or below any particular percentile. They provide a score that is easily understood by parents and others with whom the test results are to be shared.

Subtest scaled scores
- A type of standard score that provides the clearest indication of a child's subtest performance. They are based on a distribution having a mean of 10 and a standard deviation of 3.

Composite index scores
- These standard scores are based on a distribution having a mean of 100 and a standard deviation of 15.

Composite Indexes

The PDMS-3 has three composites: one global composite **(Total Motor)** and two domain composites **(Gross Motor and Fine Motor).**

- The index scores for these composites are the most useful scores on the PDMS-3 because they are the **most valid and reliable.**

Total Motor Index
- The Total Motor composite is formed by combining the standard scores of all five core subtests. Because This composite incorporates such a broad spectrum of motor skills, it is the **best most comprehensive Estimate** of a child's overall motor ability.

- Scores in the **above average ran**ge indicate that the child's general motor skill development is occurring at a faster rate than that of most other children in the normative sample.

- Scores in the **below average range** suggest the child's acquisition of motor skills is slower than that of most other children in the normative sample. This will indicate whether a child is experiencing difficulties in developing their motor skills.

Gross Motor Index (GMI)

The **GMI** is derived from the scaled scores of **two** subtests for children younger than **16 months of age** (Body Control and Body Transport) and **three** subtests for children **16 months and older** (Body Control, Body Transport and Object Control).

- The GMI represents the child's ability to use the **large muscles** of the body to react to environmental changes, assume a stable posture, move from place to place, catch, throw, kick and strike balls.

- **High scores** are made on this index by children with well developed gross motor skills.

- **Low scores** are made by children who have weak movements and balance skills. They may appear clumsy, uncoordinated or inefficient in their movements.

- **More severe gross motor problems may limit the use of the legs and made need assistance to move from place to place.**

Fine Motor Index (FMI)

The FMI represents the child's ability to use their fingers, hands, and to some extent, arms to grasp objects, stack blocks, draw figures, and manipulate objects.

- **High scores** on this index are made by children with well-developed fine movement skills, such as picking up small objects, drawing figures, stringing cubes, sorting and are described as being good with their hands.

- **Low scores** on this index are made by children who have weak grasping and visual-motor integration skills. They may have difficulty picking up small objects, using hand tools, and drawing designs.

- **Fine Motor deficits can be mild** with skills being inefficient or immature. **Severe deficits** may need **specially designed utensils for feeding, adaptive devices for writing and other self care skills.**

Three Steps for Interpreting the PDMS-3 Results

The **Total Motor Index** is the best estimate of a child's motor skills, but it can mask important strengths and weaknesses. In some cases, notable discrepancies between other composites or among the subtests can occur. We recommend three steps for interpreting PDMS-3 results:

Step 1 – Interpret the Total Motor Composite
Step 2 – Interpret the Domain Composites
Step 3 – Interpret subtest results

Step 1: Interpret the Total Motor Composite – If all subtests were administered, describe the child's performance, **quantitatively** with Index score, percentile rank, confidence intervals and qualitatively with a descriptive term (*below average*, *average*, *above average*, etc.).

Three Steps for Interpreting the PDMS-3 Results Continued

Step 2: Interpret the Domain Composites – When a child's scores on these composites are significantly different, the Total Motor Composite may be masking strengths or weaknesses that are evident when examiners consider the domain composites.

- Once the child's other composite scores have been described quantitatively and qualitatively, these scores should be examined for **statistically significant** and **clinically meaningful differences.**
- Difference scores are calculated by subtracting one domain score from the other.
- Figure 3.1 (pp. 22-23 of the Examiner's Manual) provides and example of how to compare difference scores for test results of a case example (Bethany).
  - Bethany's composite scores for Gross Motor and Fine Motor are 69 and 84 respectively, with a difference score of 15. The contents of Table 3.2 (p. 26) indicate that the difference is statistically significant but not clinically noteworthy.

Step 3: Interpret Subtest Results – Practitioners may choose to probe further and examine the variation among the PDMS-3 subtests. There are two methods for evaluating subtest scaled score discrepancies: pairwise comparisons of subtest scaled scores and ipsative comparisons.

Three Steps for Interpreting the PDMS-3 Results Continued

Pairwise Subtest Comparisons
- The difference scores between each of the five PDMS-3 core subtests scaled scores are tested for significance at the .05 and .01 levels.
- Subtests to subtests comparisons and composite comparisons should be made but not subtests to composites.

Ipsative Comparisons
- The primary purpose of these analyses is to identify relative strengths (scores significantly greater than the child's mean score and fall above the normative average) and weaknesses (scores significantly lower than the child's mean and fall below the normative average).
- This involves comparing the difference score between an individual subtest scaled score and the mean of the child's subtest scaled scores for a particular composite to the values in Table 3.5 p. 31. to see if the difference score is statistically significant.
- To compare the **mean** of the subtests in the Total Motor Composite, first the scaled score mean is determined. The scaled score mean is calculated by dividing the sum of the subtest scaled scores for the Total Motor Composite by **5** (the number of subtest scores in the composite).

Example Case: Bethany

For the pairwise comparisons, Table 3.3 in the Examiner's manual provides the significance at the .05 level of the subtest scaled scores, and Table 3.4 provides the significance at the .01 level of the subtest scaled scores. The comparison allows the examiner to see if the difference score is statistically or clinically significant.

In the tables, the statistically significant difference scores appear above the diagonal, clinically useful difference scores are found below the diagonal.

Bethany's scores in Figure 3.1 in the Examiner's Manual illustrate how difference scores between subtests can be interpreted. Her scaled score of 9 on the Hand Manipulation subtest and 6 on the Eye–Hand Coordination subtest have a difference score of 3.
Table 3.3 shows that the difference is statistically significant but not clinically useful at the .05 level.

Table 3.3
Statistically Significant Versus Clinically Meaningful Difference Scores at the .05 Level for PDMS-3 Scaled Scores

Subtest	Pairwise comparisons of PDMS-3 subtest scores				
	Body Control	Body Transport	Object Control	Hand Manipulation	Eye–Hand Coordination
Body Control	—	3	3	3	3
Body Transport	5	—	3	3	3
Object Control	6	5	—	3	3
Hand Manipulation	6	6	6	—	3
Eye–Hand Coordination	6	6	6	5	—

Note. Statistical difference values appear above the diagonal. Clinical difference values appear below the diagonal.

Table 3.4
Statistically Significant Versus Clinically Meaningful Difference Scores at the .01 Level for PDMS-3 Scaled Scores

Subtest	Pairwise comparisons of PDMS-3 subtest scores				
	Body Control	Body Transport	Object Control	Hand Manipulation	Eye–Hand Coordination
Body Control	—	5	6	6	6
Body Transport	6	—	5	6	6
Object Control	7	7	—	6	6
Hand Manipulation	8	8	8	—	5
Eye–Hand Coordination	8	8	8	6	—

Note. Statistical difference values appear above the diagonal. Clinical difference values appear below the diagonal.

Example Case: Bethany

As for the ipsative comparisons, the sum of Bethany's subtest scales scores in the Total Motor composite is **32,** which when divided by **5** resulted in a scaled score mean of **6.4.**

This score is then subtracted from each subtest scaled score to obtain the difference score. In this example, the difference between Bethany's Object Control score (4) and the mean subtest score (6.4) was -2.4.

The values in Table 3.5 of the Examiner's Manual indicated that is -2.4 difference is statistically different from Bethany's mean subtest scaled score at the .05 level but not in the .01 level. (A positive difference score indicates that the subtest scaled score is above the mean and negative difference, below the mean.

Because her Object Control scaled score is BELOW average and is significantly different from the mean scaled score for the Total Motor composite, it is noted as an area of weakness for Bethany.

Note: For a subtest scaled score to be classified as a relative strength or weakness it must **be significant** and the score is either **above** (strength) or **below** (weakness) the average subtest's mean.

Age of Item Mastery and Instructional Objectives

Age of Mastery

- The software will provide the age of mastery for each item (ages of mastery are also included in the **Guide To Item Administration**).

- The ages of item mastery for the PDMS-3 follow recommendations made by the Centers For Disease Control and Prevention and the American Academy of Pediatrics to use developmental checklists based on 75th Percentile age milestones.

- The age of item mastery is the age in months when 75% of the normative sample demonstrated mastery of a skill.

Instructional Objectives

- The standardized scores provided by the PDMS-3 are used to set reasonable goals that are clearly measurable. The treatment goals and objectives generated by the software are based on the item performance of the child.

- Methods used to determine treatment goals and objectives are described in the **Motor Activities Program.** *Note:* **Item scores must be entered to obtain treatment goals and objectives in the Detailed Narrative Report.**

Generating a Report

The *PDMS-3 Online Scoring and Report System* can generate four reports:

- The **Standard Summary Report** is two pages and contains the PDMS-3 scores and score comparisons. An example can be found on pg. 22–23 of the Examiner's Manual.

- The **Detailed Narrative Report** is multipage; it provides guidelines for interpreting the PDMS-3 results, as well as goals and objectives for intervention. The goals and objectives are taken directly from the PDMS-3 Motor Activities Program. An example can be found in Appendix A of the Examiner's Manual.

- The **Examiner Record Booklet** and **Supplemental Subtest Booklet** provide the test items and the scores for each item.

PDMS-3 Standard Summary Report ➡
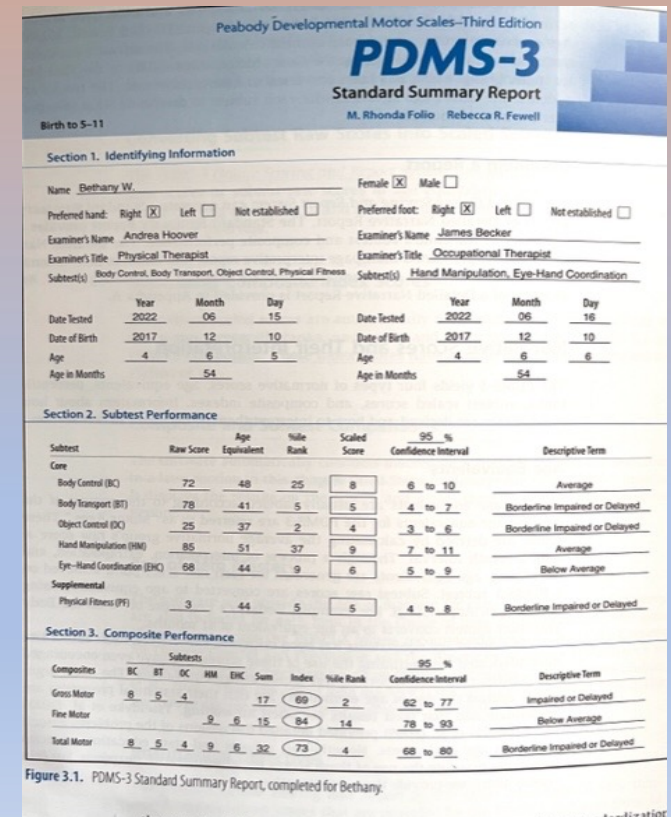
Note: **For more information about the** *PDMS-3 Online Scoring and Report System,* **please refer to the PDMS-3 User's Guide found in the Help menu.**

Figure 3.1. PDMS-3 Standard Summary Report, completed for Bethany.

Reference

- Folio, M. R., & Fewell, R. R. (2023). *Peabody Developmental Motor Scales* (3rd ed.). PRO-ED.