# PFS-2 Scoring Instructions

The Protective Factors Survey, 2nd Edition (PFS-2) is a 19-item tool that measures multiple protective factors to prevent child abuse and neglect. This guide provides instructions to manually score the survey and calculate changes in scores between pre-test and post-test for both individuals and groups. The same instructions should be followed for both the retrospective and traditional versions of the survey. For more information and to download the PFS-2 User Manual, please go to the FRIENDS website (https://friendsnrc.org/protective-factors-survey).

## A. Manually Calculating Individual Mean Subscale Scores

The following are instructions for calculating individual respondents' subscale scores by hand. For each subscale, mean (average) subscale scores should not be calculated if two or fewer items were answered. To be considered a subscale, a minimum of three items is required – calculating the mean for two or fewer items violates the validity of the subscale.

**1** Write the appropriate numeric response for each item using the associated conversions to create individual item scores.

**2** Sum the score for each item in the subscale to calculate the total score.

**3** Divide the total score by the number of subscale items completed (if more than 2 items answered) to calculate the mean subscale score.

*Family Functioning/Resilience.* This subscale is composed of items 1, 2, and 3. Use the following scoring conversion for all of these items:

A = 0     B = 1     C = 2     D = 3     E = 4

Using Item 1 *(The future looks good for our family)* as an example, a response of *D. Quite a lot like my life* would be scored 3.

*Nurturing and Attachment.* This subscale is composed of items 4, 5, 6, and 7. Use the following scoring conversion for all of these items:

A = 4     B = 3     C = 2     D = 1     E = 0

*Social Supports.* This subscale is composed of items 8, 9, 10, 11, and 12. Use the following scoring conversion for items 8 – 11:

A = 0     B = 1     C = 2     D = 3     E = 4

For the checklist item 12, use the following scoring conversion:

None of the above = 0
1 box checked = 1
2 boxes checked = 2
3 boxes checked = 3
4 or more boxes checked = 4

***Caregiver/Practitioner Relationship.*** This subscale is composed of items 13, 14 and 15. Use the following scoring conversion for item 13:

> A = 4    B = 3    C = 2    D = 1    E = 0

For items 14 and 15, use the following scoring conversion:

> A = 0    B = 1    C = 2    D = 3    E = 4

***Concrete Supports.*** This subscale is composed of items 16, 17, 18, and 19. For the checklist items 16 and 17, use the following scoring conversion:

> I was able to pay for all of these/None of these apply to me = 4
> 1 box checked = 3
> 2 boxes checked = 2
> 3 boxes checked = 1
> 4 or more boxes checked = 0

For items 18 and 19, use the following scoring conversion:

> Item 18:   A = 4    B = 3    C = 2    D = 1    E = 0
>
> Item 19:   A = 0    B = 1    C = 2    D = 3    E = 4

## B. Manually Calculating Individual Change in Subscale Score from Pre-test to Post-test

The following instructions are for calculating the percentage change from pre-test to post-test using the calculated mean scores for each subscale. The figures included in the table are provided as an example.

**1** Calculate the raw difference by subtracting the mean pre-test score from the mean post-test score: (3.71 – 3.28 = 0.43)

**2** Divide the raw difference by the mean pre-test score: (0.43 ÷ 3.28 = 0.13)

**3** Multiply by 100 to calculate percent change: (0.13 * 100 = 13%)

In this example, the participant showed a 13% increase in the Social Supports subscale from pre-test to post-test. Programs should take theoretical (e.g. expected program impact) and practical considerations (e.g. participant attendance) into account when interpreting what this change in score means.

| | Mean Pre | Mean Post | Raw Difference | Change | Percent Change |
|---|---|---|---|---|---|
| Social Supports | 3.28 | 3.71 | 0.43 | 0.13 | 13% |

For example, participants attending 2-hour classes weekly for three months (high-intensity, high-frequency) may understandably show a greater percentage change from pre- to post-test than do participants of a parent support group that meets every other month (low-intensity, low-frequency).

## C. Manually Calculating Mean Subscale Scores for a Group

The following are instructions for calculating the mean subscale scores for a group (e.g. class), based on the previously calculated subscale scores for individuals. An example is used to demonstrate the steps staff should follow when calculating group scores by hand.

*Example: 5 parents (Parents A, B, C, D, and E) each responded to all five of the items in the Social Supports subscale (items #8-12).*

**1** Using the scoring conversions for each item, sum each parent's item scores to calculate their individual subscale total.

**2** Divide each parent's subscale total by the number of subscale items completed to calculate the subscale mean score.

**3** Sum the subscale mean scores for all parents in the group to calculate the summed total group score.

**4** Divide the summed total group score by the number of respondents in the group to calculate the group mean subscale score.

| | Item 8 | Item 9 | Item 10 | Item 11 | Item 12 | Subscale Total | Mean Subscale Score |
|---|---|---|---|---|---|---|---|
| **Parent A** | 4 | 4 | 3 | 4 | 1 | = 16 | (16÷5) = **3.2** |
| **Parent B** | 2 | 1 | 1 | 2 | 1 | = 7 | (7÷5) = **1.4** |
| **Parent C** | 4 | 4 | 2 | 3 | 2 | = 15 | (15÷5) = **3** |
| **Parent D** | 3 | 3 | 1 | 2 | 1 | = 10 | (10÷5) = **2** |
| **Parent E** | 4 | 3 | 3 | 3 | 1 | = 14 | (14÷5) = **2.8** |
| **Summed total group score** | | | | | | | **12.4** |
| **Divide by total number of respondents (e.g. 5 parents)** | | | | | | | (12.4÷**5**) |
| **Group Mean Subscale Score** | | | | | | | **2.48** |

In the above example, we can see that the group's mean score for the Social Supports subscale ranges from 1.4 to 3.2, and the overall group mean subscale score is 2.48. Looking at the range of individual mean subscale scores can help to better understand and contextualize the group mean subscale score.

Once the group mean subscale score has been calculated, the same instructions for calculating individual change from pre- to post-test (section B, above) can be followed to calculate the group's mean change in subscale scores.