Scoring and Interpreting T-Scores and Percentiles: Lab #5

**Introduction**

For this assessment we are evaluating Alex, 28 months and female, to follow up our concern on her challenging social-emotional skills. Throughout this assessment we are going to determine if Alex needs to be recommended for evaluation to a child study team which could lead to intervention. The assessment that will be given will be calculated through percentile scores and T-scores. Percentiles are a type of standard score and rank individuals based on their scores (they form an ordinal score). Since percentile scores can rarely tell you if your child is doing bad or good overall compared to other children, we will also be calculating T-scores. T-scores will be able to tell us, after calculations through other scores, the actual distance between Alex and other children her age within these scores. Throughout all of these calculations, T-scores will give us a better understanding if Alex should be recommended for more evaluation.

The domains we will be assessing Alex in are emotionally reactive, anxious/depressed, somatic complaints, withdrawn, attention problems, and aggressive behavior. Some examples of what the scores look at are if she is disturbed by change, clings to adults, has headaches, unable to concentrate, has a temper, etc. We will be able to assess if Alex falls in a normal range, borderline, or clinical range of scores compared to other female and male children.

**Data Summary**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Emotionally Reactive | Anxious/Depressed | Somatic Complaints | Withdrawn | Attention Problems | Aggressive Behavior |
| Percentile | **90** | **96** | **Clinical** | **90** | **Clinical** | **85** |
| Clinical Cutoff | **No** | **Yes** | **No** | **No** | **No** | **No** |
| T score | **63** | **67** | **86** | **63** | **70** | **59** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Internalizing | Externalizing | Total Problems |
| T Score | **69** | **60** | **69** |

**Interpretation**

The following scores are reporting internalizing behaviors exhibited by Alex. Which includes: emotionally reactive, anxious/depressed, somatic complaints, and withdrawn. Alex scores on the emotionally reactive scale correspond to the 90th percentile of the normative sample, this means that 90 percent of children in the normative sample received scored equal to or lower than Alex score. Alex falls in the high end of the normal range for emotionally reactive. Alex scores on the anxious/depressed scale correspond to the 96th percentile of the normative sample, this means that 96 percent of children in the normative sample received scored equal to or lower than Alex score. Alex’s score falls in the borderline clinical range. Alex scores on the somatic complaints scale was high in the clinical range. Alex scores on the withdrawn scale correspond to the 90th percentile of the normative sample, this means that 90 percent of children in the normative sample received scored equal to or lower than Alex score.

The following scores are reporting externalizing behaviors exhibited by Alex. Which includes: attention problems and aggressive behaviors. Alex scores on the attention scale scores low on the clinical range, just past the borderline. Alex scores on the aggressive behavior scale correspond to the 85th percentile of the normative sample, this means that 85 percent of children in the normative sample received scored equal to or lower than Alex score. This score falls in the normal range.

When you add internalizing, externalizing, and other problems (24+22+26) together, you get a total score of 72, which means the T-score is 69. On the graph, this score falls in the borderline clinical range for total problems.

**Recommendation**

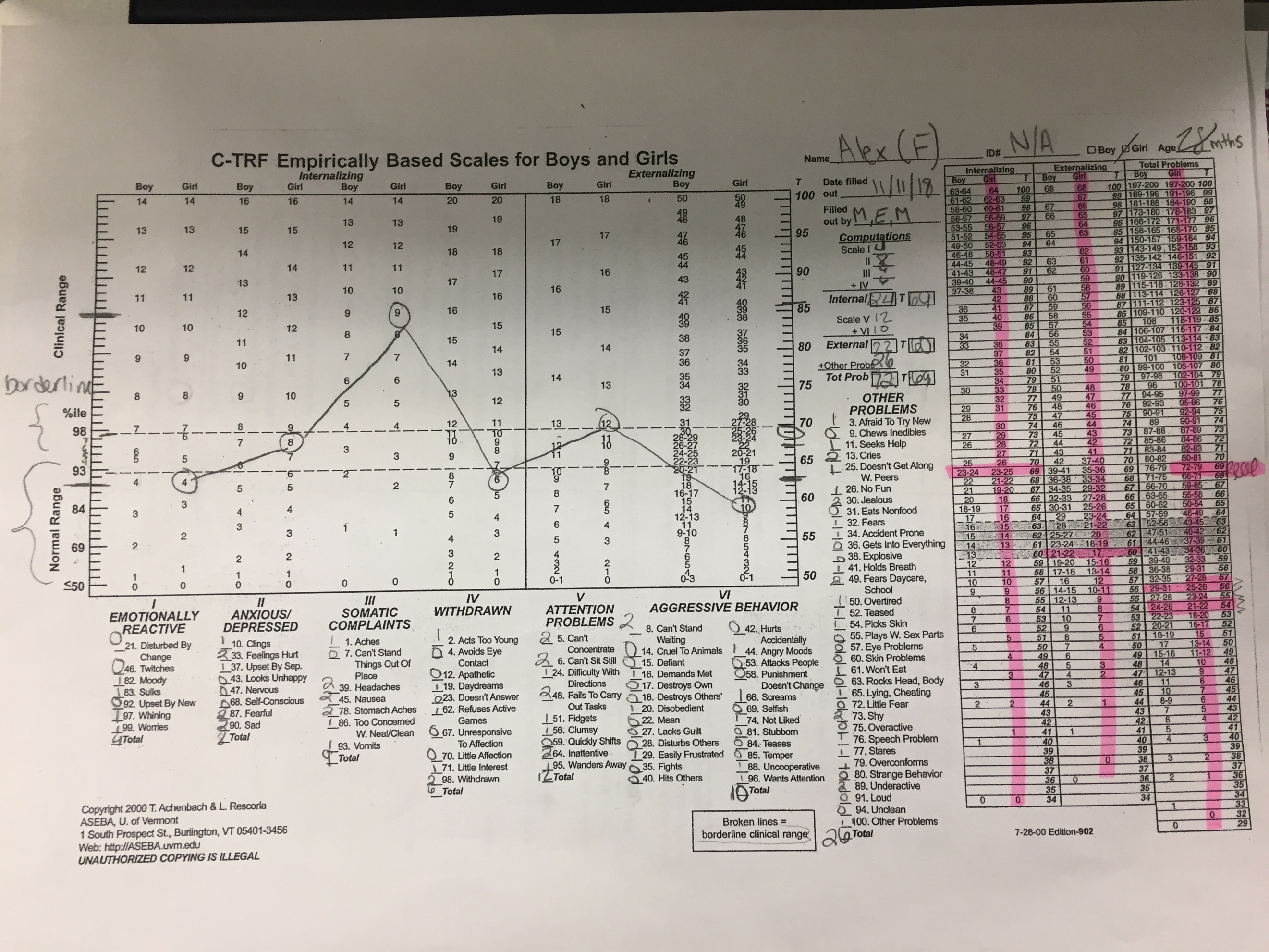
The main purpose of our assessment was to evaluate if Alex’s social-emotional behaviors should be recommended for further evaluation to a child study team. We believe it would be beneficial for Alex to get further evaluation after scoring overall near borderline-clinical range of children her age within social-emotional behaviors (T-score of 69). To get this score we took internalizing, externalizing, and other problem scores and added them together (like said above) to eventually calculate the T-score of 69. A score of 100 would be a severe clinical range score and further evaluation would need to be taken. Alex scored almost in the middle of normal range and clinical range, which we call borderline. Although we observed that Alex fell in all of the ranges and close to clinical range, there is nothing wrong with getting further evaluation. This could lead to hopeful, beneficial intervention for Alex and will better prepare her for the future within the domains we assessed.

**Reflection**

We learned that this assessment is time consuming and not something to be taken lightly. It was complicated to read the charts at first, but once you understand how it works it comes together like a puzzle. We learned how to interpret and critically evaluate a report. We also learned in the recommendation how to communicate this information with parents and families. It can be beneficial because it shows specific information over six different domains. It makes it easy to calculate percentiles and T scores and see all of that information in one place. As a teacher this is a great resource for figuring out the next steps for children and making sure your classroom is a place where diverse learning can happen. Morgan and Emily filled out the “Imperially-Based Scales for Boys and Girls” worksheet and typed the data summary, interpretation, and reflection. Melanie wrote the introduction and the recommendation. We all worked together by taking on different parts of the assignment.

**Appendix**

Figure 1

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