

ABSTRACT

The Levels of Emotional Awareness Scale (LEAS) is an open-ended test of the depth and breadth of understanding of emotion words. The LEAS is usually scored by hand. Training new LEAS scorers can be time consuming. To facilitate the training of new scorers without sacrificing inter-rater reliability, the LEAS Training and Certification Program (LEAS-TCP) was created. The LEAS-TCP has three sections. The first section is the test manual. The manual describes the LEAS and explains the scoring rules. The second section is the Interactive Training Module. This module includes three sets of 100 practice responses. As users score each response, they receive feedback. The third section is the Interactive Certification Module. This module also includes three sets of 100 responses. When users complete a set, a summary of their performance is given to them and emailed to their supervisors. If their performance is unsatisfactory, users can study the scoring rules further and then attempt another set. Future research should examine the inter-rater reliability of scorers who have been trained using the LEAS-TCP.

INTRODUCTION

The Levels of Emotional Awareness Scale (LEAS; Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990) is an open-ended test of the ability to recognize and describe emotions in oneself and other people. Respondents are asked to describe how they would feel in 20 different scenarios. Another person is mentioned in each scenario, and respondents are also asked to describe how that person would feel.

LEAS responses are usually scored by hand. Scoring proceeds in three steps. The first step is to assign scores to each word. Non-emotion words receive a score of 0. Physical reactions to emotions receive a score of 1. General descriptions of emotions receive a score of 2. Distinct emotion words receive a score of 3. The second step is to assign scores for the emotions that were attributed to the self and the emotions that were attributed to the other person in the scenario. The Self Score is equal to the highest Word Score for the emotions attributed to the self, unless two non-synonymous level three words are given, in which case the Self Score is 4. The Other Score is calculated the same way, based upon the emotions attributed to the other person in the scenario. Finally, the Total Score is calculated as the maximum of the Self Score and the Other Score, unless both of those are 4 and the emotions attributed to the self and other are distinct: In that case, the Total Score is 5.

Hand scoring is difficult for four reasons. First, the original scoring LEAS manual (Lane, 1991) contains a Glossary that provides the Word Scores for commonly encountered words, but respondents often use words that are not given in the LEAS Glossary. In that case, the general scoring rules must be used. The original scoring manual was brief. The rules were described succinctly, with no examples. Often, scorers disagree about the score that should be given to a word that does not occur in the Glossary. Second, to assign Self and Other scores, the scorer must determine if an emotion is attributed to the self or other. This subjective decision is not always easy to make. In the response, "I would be so happy that he loved me," does the self feel loved? Does the other feel love? Third, the scorer must determine if emotion words are synonyms. If the self feels "loved" and "cared for", are these synonyms? Finally, the scorer must determine if the self and other feel the same as each other. If the self feels "happy" and "loved" and the other feels "glad" and "cared for", are these the same?

Given that subjective decisions are necessary for hand scoring, inter-rater reliability is crucial. Published studies in refereed journals usually report high inter-rater reliabilities (Bajgar, Ciarrochi, Lane, & Deane, 2005; Lane et al., 1990; Novick-Kline, Turk, Mennin, Hoyt, & Gallagher, 2005). However, adequate inter-rater reliability is a requirement for publication, and thus the high inter-rater reliabilities in published studies do not guarantee that all scorers find these subjective decisions easy or that they make these decisions in the same way as each other. Barchard (2009) asked 18 research assistants to complete 5 weeks of LEAS training, including 360 practice examples. She then calculated the inter-rater reliability between each pair of raters. Although the average inter-rater reliability was high ($r = .92$), some pairs had inter-rater reliability coefficients as low as .79.

Given that most published studies have found high inter-rater reliabilities, it seems that the sometimes low inter-rater reliabilities are not due to inherent problems with the scoring system, but instead are due to how well the scoring system is understood and implemented by particular raters. Hand scoring is complex. The original scoring manual may not provide enough explicit information about how to deal with these complexities. Many scorers successfully figure out

Figure 1

Levels of Emotional Awareness Scale (LEAS) Training Program

Home | Test Manual | Training Module | Certification Module | User Info | Logout

SET 1 - RESPONDENT 1 - SCENARIO 9 | PROGRESS [9 of 100] | GLOSSARY

Scenario 9: This is where one of the scenarios from the LEAS will be placed.

I would feel horrible! Nothing in my life seems to be going well. This would just add to my misery. The other person would feel empathetic. I would appreciate their support.

Your Scores	Correct Score	Feedback
1	2	Horrible (2), Misery (2)
3	3	Empathetic (3)
3	3	Seeing that Self has a total score of 2 and Other has a total score of 3, we would take the highest score as the Total, 3.

Save and Continue | Rule Summary

a duty to	2
aback, taken	2
abandoned	2
abashed	3
absorbed	0
accepted	2
accepting	2
accommodating	2
accomplishment, sense of	2
achievement, sense of	0
acquisitive	2
adequate	0
admiration	2

how the scoring works based upon the brief instructions in the manual and individual mentoring from other LEAS scorers, but some scorers might not be able to understand LEAS scoring from these brief instructions. To ensure that all scorers are able to do high-quality scoring, the first step was to clarify the hand-scoring rules by writing an expanded manual – the Levels of Emotional Awareness Scale Test Manual, Second Edition (Barchard et al., 2010). The second step was to create a computer program that can train new LEAS scorers, providing feedback on numerous examples. The third step was to add a module to the computer program to certify new scorers, ensuring that they reach an adequate level of inter-rater reliability. The LEAS Training and Certification Program (LEAS-TCP; Watson et al., 2010) was developed to provide new LEAS scorers with the tools and knowledge they need to become good LEAS scorers. The purpose of this paper is to describe the LEAS-TCP.

THE LEVELS OF EMOTIONAL AWARENESS SCALE TRAINING AND CERTIFICATION PROGRAM

The LEAS-TCP contains three sections. The first is the Revised LEAS Test Manual, the second is the Interactive Training Module, and third is the Interactive Certification Module. To allow the program to track users' progress through these modules, the first step is user registration.

Registration

Before users learn to score the LEAS using the LEAS-TCP, they are required to create an account. To register, users provide their name and email address, as well as the name and email address of their supervisor. Keeping user accounts is useful for several reasons. First, this allows LEAS-TCP to notify the supervisor that the user has started their training, and to send supervisors information when users complete the certification module. Second, this allows users to review their previous work; they can see what training modules and certification modules they have completed. Third, this allows LEAS-TCP to keep track of user progress. Users will typically take more than one session to complete the training and certification. Users can exit the program at any time without losing their progress. Finally, by keeping a registry of users, the creators of the LEAS-TCP can contact users to let them know about updates to the program.

Test Manual

The first section of the LEAS-TCP is the Levels of Emotional Awareness Scale Test Manual, Second Edition (Barchard et al., 2010). This test manual describes the LEAS hand scoring rules in greater detail than was given in the original Lane (1991) scoring manual. For each scoring rule, it provides detailed explanations and multiple examples. It also explains scoring rules that were ambiguous in the 1990 manual, and which had to be clarified by individual consultation with Richard Lane. Finally, this test manual includes information about the LEAS itself and its reliability and validity – information that was not included in the original scoring manual.

The paper version of the test manual includes three sets of 100 practice examples. For the LEAS-TCP, these practice examples were converted into an interactive training module (see next section). On the LEAS-TCP, only the background information and scoring rules portions of the test manual are given as a pdf document, which is linked to the LEAS-TCP.

Interactive Training Module

After the user has read the test manual, they may begin the Interactive Training Module (see Figure 1). The purpose of the training module is to provide the user practice scoring the LEAS. The training module includes two sets of fake responses. Each set consists of five respondents, who have completed all 20 scenarios. The scenarios are presented one at a time. The user is presented with the scenario and a fake response and is asked to assign Self, Other, and Total scores. The user then clicks the Feedback button to reveal the correct scores, and explanations of the scoring rules that were used to obtain those scores. The user advances to the next scenario by clicking the Continue button.

Three tools are given to help users while they score. First, the Glossary of common emotion words (and their scores) is given on the left side of the screen. Second, a summary of scoring rules is given at the bottom of the screen, when the user clicks the "Rule Summary" button. Finally, the user can access the test manual by clicking the Test Manual button on the navigation toolbar.

Interactive Certification Module

The Interactive Certification Module tests users' skill as LEAS scorers. This section is designed to ensure that all scorers demonstrate strong inter-rater reliability. Similar to the Interactive Training Module, the Interactive Certification Module includes five respondents who have completed all 20 scenarios. After assigning Self, Other, and Total scores, the user clicks the Save and Continue button to advance to the next scenario. Once a set is completed, LEAS-TCP shows the user their percent correct (see Figure 2) and sends an email with this percent correct to the user's supervisor. The supervisor will then decide if the user has met the standard needed for the project they are doing.

FUTURE RESEARCH

The LEAS-TCP should be expanded. Currently, the Interactive Training Module includes two sets of fake responses. A third set is currently being developed to provide users with additional practice. In addition, the Certification Module currently includes only one set of responses. In future, a total of three sets will be provided. If the user receives an unsatisfactory score on one set, they can try the next set. The user will not be allowed to attempt a certification set more than once.

Future research should determine if scorers who have been trained with the LEAS-TCP have inter-rater reliability that is as good as or better than the inter-rater reliability of scorers who were trained using in-person one-on-one training sessions. The advantage of one-on-one training sessions is the personal feedback that is possible. If a new scorer gets confused, the

trainer can address the specific issues that are causing confusion. Most published studies have used one-on-one training, which has likely contributed to the high inter-rater reliability that has been demonstrated in published papers. The advantages of LEAS-TCP training are that the training can be standardized for all new scorers, requires little supervisor time, and can be completed at whatever time and location is most convenient for the new scorers, and that each new scorer can be required to demonstrate high levels of inter-rater reliability. However, this is an untested training method. Future research should ensure that users who have been trained using the LEAS-TCP achieve high levels of inter-rater reliability.

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Figure 2

Levels of Emotional Awareness Scale (LEAS) Certification Program

Home | Test Manual | Training Module | Certification Module | User Info | Logout

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Certification Progress Report

Set	Scenarios	Set Status
1	100 of 100 completed	90 %
2	100 of 100 completed	95 %
3	5 of 100 completed	In Process

Commence Scoring | Click here to review certification instructions

