Guidelines for Using the Liebowitz Social Anxiety Scale (LSAS)

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I Background:

The Liebowitz Social Anxiety Scale (LSAS), formerly called the Liebowitz Social Phobia Scale (LSPS), was developed in the 1980's to permit the quantification of symptomatic distress and impairment caused by social anxiety disorder (Liebowitz, 1987). Widely used in psychopharmacological trials of social anxiety disorder, it has become the common reference for comparing results across trials, the primary outcome measure for measuring improvement in many studies, and the scale used to establish entrance criteria for recent multi-center investigations. As a result the LSAS is the most frequently used clinician-administered instrument designed for the assessment of social anxiety disorder.

In the administration of the LSAS, it is the role of the interviewer to ensure that the subject understands each item, to challenge inconsistencies in the subject's report, and to draw from clinical experience and judgment in determining the correct ratings for each item. Furthermore, research has shown that the fear and avoidance sub-scales of the LSAS are highly correlated in clinical samples (Heimberg et al., 1999). Therefore, the interviewer should pay close attention to situations in which subjects exhibit little avoidance despite severe fear, as this type of discordance may provide important information about the nature of the subject's concerns.

The LSAS total score and sub-scales scores have demonstrated excellent internal consistency (Heimberg et al., 1999). They have also have been found to correlate highly with self-report measures and other clinician-rated measures of social anxiety and avoidance (Heimberg et al., 1999). Furthermore, the fear of social interaction and avoidance of social interaction sub-scales correlate more strongly with measures of social interaction fear than measures of anxiety about being observed by others (Heimberg et al., 1992, 1999). Conversely, the fear of performance and avoidance of performance sub-scales have been shown to be more strongly related to measures of performance fear than to measures of social interaction anxiety (Heimberg et al., 1992, 1999). LSAS scores are more highly related to other measures of social anxiety than to measures of depression (Fresco et al., 2001, Heimberg et al., 1999). In a receiver operating characteristics analysis, an LSAS total score of 30 accurately classified persons with social anxiety disorder in comparison to those without it and a score of 60 accurately discriminated between persons with the generalized and non-generalized forms of social anxiety disorder (Mennin et al., 2002). Importantly, the LSAS has demonstrated sensitivity to change following both pharmacological (Liebowitz et al., 1992, 2002; Stein et al., 1998) and cognitive behavioral treatment (Heimberg et al., 1998).

A version of the LSAS for use with children and adolescents has recently been developed (Masia Warner et al., 2003), and has shown good psychometric characteristics in the initial investigation.

II General Principles:

1. The scale consists of 24 items, which cover a wide range of potential problems that individuals with social anxiety disorder may suffer. The relatively large number of situations that are queried helps insure that the problems experienced by any given individual are elicited. The structured and itemized inquiry format is important because many socially anxious individuals are unaware of the full extent of their impairment and also tend to minimize what they are aware of during initial evaluations.

2. The scale consists of separate fear or anxiety and avoidance sub-scales to permit assessment of both symptomatic experience and functional limitation caused by each problem area. While in clinical samples these tend to be highly correlated, this may be less true in non-clinical samples where individuals endure situations they are uncomfortable with rather than avoid them. This rating system avoids the controversies over whether to focus primarily on anxiety (i.e. panic attacks) or avoidance (e.g. agoraphobia), issues that have characterized discussions of the assessment of panic disorder.

3. The scale consists of 13 performance related and 11 social related items. For the most part, performance items involve situations that individuals can do comfortably when alone, but have trouble completing in front of others, e.g., giving a speech. Social items involve situations that are inherently interpersonal, i.e., being the center of attention. This division allows calculation of separate performance anxiety, performance avoidance, social anxiety and social avoidance sub-scores. Individuals with generalized social anxiety will usually score highly on all the sub-scales, while those with more limited or non-generalized social anxiety disorder will usually score high only on some or many of the performance sub-scales. For this reason, total score is linearly related to severity of generalized social anxiety disorder, but individuals with a very focal problem, e.g., public speaking anxiety, may have low or moderate total LSAS scores but still experience great distress and impairment in or in anticipation of particular situations.

4. Both fear/anxiety and avoidance are rated on 0-3 Likert scales. Fear/anxiety is rated as 0 (none), 1 (mild), 2 (moderate) or 3 (severe). These choices are not anchored, and are left to the judgment of the subject and rater. The levels of avoidance are anchored. Avoidance is rated as 0 (never, meaning 0% avoidance), 1 (occasionally, meaning the individual avoids the situation 1 – 33%, or up to a third of the time), 2 (often, meaning one third to two thirds or more than 33%, but less than 67% avoidance), or 3 (usually, meaning more than two thirds, that is from 67 – 100% avoidance). It is recommended that raters have subjects rate fear/anxiety and then avoidance for a given situation before going on to the next situation rather than rating all the items on fear/anxiety and then proceeding to rate avoidance.

5. The LSAS is an investigator administered scale. It was not intended to be used as a self-rated scale, although it is sometimes used that way. Studies comparing the two modes of administration show reasonable agreement if subjects are given sufficient training on how to use the scale (Fresco et al, 2001), similar to those described for raters in this manual.

6. In either case, for the scale to be used in a manner consistent with its design and with how it has been previously administered, subjects have to be briefed on the conventions governing the scale's use prior to rating each item (see below). As the scale is administered for the first time, the rater should clearly define the situation pertaining to each item (see below for conventions for defining specific situations).

7. To help subjects choose a response, they are given copies of the scoring key. In responding to questions about each item, they are to select the level of fear/anxiety and avoidance that seems most accurate. Subjects who answer with a range ("my anxiety is between a 1 and a 2 in severity") are asked to choose the one number that best fits their severity level for the past week. Therefore, there is no need for a convention about scoring up or down for borderline answers.

8. The time period for rating each item is the subject's experience during the past week. This is true for the initial evaluation as well as all follow-up ratings. If the situation did not occur in the past week, the rater should ask the subject how much fear/anxiety and avoidance he/she would have experienced had the situation been encountered. Thus the subject has to imagine himself/herself confronting any situation that did not actually occur in the past week.

9. It is important to emphasize the need for consistency in the way items are presented to subjects and the way subjects interpret the items. If there is any change in raters from week to week over the course of a multi-week investigation, the different raters for a given subject should be standardized so that subjects' scores do not fluctuate on the basis of rater differences.

10. Also, subjects must conceptualize each item in a standard way across their multi-week participation. For example, if a subject uses a party where he/she knew some of the people as a reference point for the question about going to a party during his/her initial evaluation, then he/she must use a similar party (experienced or imagined) as the reference point during subsequent evaluations. The potential problem is that if a party where the subject knew everyone is substituted during a later evaluation, then, the score might decrease because the latter type party was less anxiety provoking, rather than because the subject had become less socially anxious or avoidant. This is why we standardize as much as possible through the use of conventions (see below) the way situations are presented to subjects.

11. The rater should probe further if the subject's responses are inconsistent. This may be manifested in a number of ways. If a subject has high anxiety and no avoidance, or high avoidance and no anxiety, the situation should be questioned further. The former is possible if the individual endures the situation with dread rather than avoiding the situation. The latter is not really possible unless the individual is avoiding for a reason other than social or performance anxiety, which should not be rated as positive (see below). However, if the avoidance is so successful that there is no opportunity for anxiety to be experienced, the rater should ask the individual to imagine and then rate the anxiety they would experience were they to encounter the situation.

12. A second type of potential inconsistency that should be questioned further would be between items that tap related domains. A third type would be a score that seems inconsistent with data obtained from a recent clinical interview that has been conducted by the rater or by someone else and made available to the rater. However, such collateral information, while desirable, is not essential for completing the scale. The scale can be used as a stand alone instrument to rate the severity of social and performance anxiety symptoms. The bottom line is that the investigator/rater is not supposed to passively

record whatever score the subject gives, but to ensure as much as possible that the scores make sense in the context of whatever information is available about the subject.

13. If a given situation has several possible variants that may produce different levels of anxiety and avoidance, e.g., parties where the subject knows no one except for the host or hostess, we assume the average or most common variant that people in general routinely face in the explanatory conventions for the individual items (see below). An explanation for each item should be described to subjects as the ratings are being conducted. We considered the alternative of selecting the variant that is most problematic for the given subject, thereby allowing the most room for improvement. However, selecting the variant that is common for people in general maximizes standardization of reference points across subjects, allowing inter-subject scores to be most meaningfully compared. For example, one subject had a moderate level of anxiety when eating in public at a regular table, but experienced a higher level of anxiety when seated at the head table where he felt as if he were on display. To rate him based on his head table experiences would make his ratings less comparable with most other subjects who do not usually have the opportunity to sit at a head table. This subject was therefore rated on the basis of his experiences at a regular table.

14. The rater should rate any fear/anxiety or avoidance unless it is clear that it is unrelated to social or performance anxiety. Thus, if a subject avoids urinating in a public bathroom solely because of contamination fears related to obsessive-compulsive disorder, the subject should not be rated as high in anxiety or avoidance on item 13.

15. Scores can be presented as follows:

    1) one global score totaling anxiety and avoidance for all 24 items. This total LSAS is the score most routinely used as a primary outcome measure in psychopharmacological trials of subjects with generalized social anxiety disorder.

    2) separate anxiety and avoidance sub-scores for all 24 items. In clinical samples these have tended to be highly correlated, but we are not ready to recommend use of only total anxiety or total avoidance in lieu of the total LSAS.

    3) separate performance and social sub-scores that combine anxiety and avoidance totals over the relevant items. These have been less highly correlated than anxiety and avoidance. This would be most useful in mixed samples of generalized and non-generalized social anxiety disorder subjects, or where one wanted to assess possible differential treatment effects on performance and social anxiety parameters.

    4) four separate sub-scores for performance anxiety, performance avoidance, social anxiety and social avoidance. Use of the 4 sub-scales allows the most detailed discrimination of symptom patterns before and after treatment, although this may be redundant in samples made up exclusively of generalized social anxiety disorder subjects.

16. The LSAS was not designed as a diagnostic instrument. It can, however, be used as a screening tool, since scores above 50, and especially above 60, on the total LSAS would be suggestive of generalized social anxiety disorder, while high scores on performance anxiety and/or avoidance would be suggestive of non-generalized social anxiety disorder.

III Conventions for Defining Situations on the LSAS:

Illustrate each situation to subjects as follows:

1. Telephoning in public-speaking on the telephone in a public place, such as an airport where pay phones are lined up next to each other and conversations can be overheard by other callers.

2. Participating in small groups - such as having a discussion with a few others at a work or at a social gathering.

3. Eating in public places – the primary concern here is typically trembling or appearing awkward handling food, especially if utensils are involved (as opposed to a sandwich, for example). This should be presented as eating with other people, rather than going to a public restaurant by oneself.

4. Drinking with others in public places – refers to drinking any beverage, not just alcohol. Again, the concern is typically trembling or appearing awkward handling the drink (especially a cup with a handle).

5. Talking to people in authority – such as a boss or a teacher. Symptoms should be judged in terms of mandatory meetings (organizational meetings, performance reviews) as well as optional planned (parties, outings) or chance (elevators, water coolers) encounters. Avoidance of optional encounters (not getting on the same elevator as one's boss) would usually indicate some avoidance.

6. Acting, performing or giving a talk in front of an audience – assume a sizeable audience of 50 or greater.

7. Going to a party – assume the subject knows some, but not all the people at the party.

8. Working while being observed – any kind of work activity (including schoolwork or work around the home) the subject might do.

9. Writing while being observed – for example, signing a check in a bank or credit card receipt in a store, rather than writing an essay.

10. Calling someone you don't know very well – making a telephone call to a casual acquaintance. Assume the call is to someone who is of average importance to the subject, rather than a career making or breaking business call.

11. Talking with people you don't know very well – face to face conversation with casual acquaintances who are of average importance to the subject (not performance reviews).

12. Meeting strangers – face to face conversation with persons previously unknown to the subject. Again, assume these people are of average importance to the subject.

13. Urinating in a public bathroom – assume that others are sometimes present, as might normally be expected. For men, using a stall to urinate when urinals are available reflects avoidance. Do not rate as positive when anxiety or avoidance are unrelated to performance or social fears, e.g., fear of being assaulted in a dangerous place or fear of contamination related to obsessive-compulsive symptoms.

14. Entering a room where others are already seated - assume that nobody has to change seats for the subject to be seated. However, it is likely that people will turn to look at the subject when he/she enters. Always arriving before a meeting starts simply to avoid this situation reflects the presence of anxiety and avoidance, as does not entering the room if one has arrived late.

15. Being the center of attention – such as telling a story to a group of people, or people singing "Happy Birthday" to the subject.

16. Speaking up at a meeting – assume speaking from their seat in a small meeting, or standing up in place in a large meeting, and speaking without preparation.

17. Taking a test – a written test that will be graded.

18. Expressing disagreement or disapproval to people you don't know very well - in an appropriate situation, and not when feeling enraged.

19. Looking at people you don't know very well in the eyes – making appropriate eye contact.

20. Giving a report to a group – an oral report to a small group with advance preparation.

21. Trying to pick someone up – for the purposes of initiating a romantic or sexual encounter. For subjects in a relationship, this may be rephrased as a hypothetical situation. "If you were single . . . ?". This item has been incorrectly translated into other languages as "Trying to lift someone off the ground."

22. Returning goods to a store – where returns are normally accepted.

23. Giving a party – assume an average party. People generally know more of the people attending parties they host, than parties given by others that they attend.

24. Resisting a high pressure salesperson – avoidance might take the form of buying an unwanted product or service, or listening to an unwanted sales presentation for longer than desired even if something is not subsequently purchased.

IV Common Errors Raters Make in Conducting the LSAS:

Not Following the Rules

1. Some raters do not orient the subject to the scale before administering it. The subject has to be oriented as to how to use the scale, in terms of time frame (past week), scoring key, and the need to imagine how he/she would feel and perform in situations not actually encountered.

2. Some raters define the anchor points idiosyncratically rather than by following the guidelines. For anxiety, none, mild, moderate and severe are judgments made by the subject with regard to severity. For avoidance, follow the anchors in terms of percentage of the time a situation is avoided, 0%. 1- 33%, 34-66%, 67-100%.

3. If a subject denies fear or anxiety, but claims to experience discomfort in a given situation, this should be rated as positive, and interpreted in a manner similar to rating fear or anxiety.

4. Each week's inquiry has to focus on the whole range of possible examples for each item, not just a specific instance that transpired in the past week. For example, if a person talked to one authority figure in the past week, a rater should not focus exclusively on that instance. Rather, the rater should also inquire whether any other situations involving authority figures had been avoided. The subject may be giving you their best (or worst) experience rather than the full range.

Being Too Active

1. Do not lead the subject. For example, if a subject has anxiety in a given situation, ask: Is there any avoidance? rather than: Since you have anxiety in that situation, you must also have avoidance, or, How much avoidance do you have?, which assumes that the subject is avoidant of this situation.

Being Too Passive

1. Obvious inconsistencies must be probed. For example, if a subject reports high anxiety but no avoidance in a given situation, or even more striking, no or mild anxiety but high avoidance, the rater should point out the inconsistency and ask for a clarification. Clarifying an apparent inconsistency, either within or across situations, is not leading the subject.

2. If a subject claims no anxiety in a given situation, some raters assume no avoidance and do not ask. In the absence of anxiety, the rater still has to query for avoidance. If avoidance is found, then one has to question the subject again about the absence of anxiety by asking questions such as: "You have indicated avoidance of situation X but no anxiety about it. What makes you avoid it?"

3. Some subjects answer an avoidance inquiry by telling the rater how often they try to avoid a situation. This usually implies avoidance when the cost is not too high, and may yield a higher rating than is justified by the amount of actual avoidance. An example is: "I try to avoid every party I can." It would be a mistake to rate this as usual avoidance, without asking: "How often do you actually avoid going to the parties?" The subject may end up going to most parties that he/she is invited to because they are necessary for work, in which case a rating of occasional might be more accurate. Do not rate what the subject wishes he/she could avoid, but rather what is actually avoided.

4. Subjects sometimes hedge answers, e.g., "my anxiety is mild to moderate." The rater should respond: "please choose the rating that seems to best fit the situation." Subjects may also use the anxiety key for avoidance – do not make the translation yourself, but ask the subject to use the avoidance scale for rating avoidance.

5. Pin the subject down to the convention. For example, if a subject tells you he was terrified to go to a party where he did not know anyone, you must inquire about parties where he would know some but not all of the people.

6. The rater sometimes needs to clarify the difference between talking with someone you don't know very well and meeting strangers. The first involves people with whom there is some slight acquaintance, the latter implies no previous contact of any type.

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