



Guidelines for the Clinician-Administered KSADS-COMP

Overview. The clinician-administered KSADS-COMP assesses present and past symptoms of child psychiatric disorders according to DSM-5 criteria. It is a *semi-structured diagnostic interview that is designed to be administered in a conversational-style*. It includes probes that evaluate specific symptoms using objective criteria regarding symptom intensity and frequency. The probes for each symptom included in the instrument are designed to be used *flexibly*, giving interviewers ample leeway for clarifying questions and probing further as needed to score individual items.

The clinician-administered KSADS-COMP is an integrated parent and youth diagnostic assessment tool. Parents and youth should be interviewed by the same clinician. The parent interview is completed first if the youth is a pre-adolescent; the order is usually reversed if the youth is an adolescent. With the clinician-administered KSADS-COMP, as with the paper-and-pencil version of the KSADS, final diagnoses are based on consensus ratings integrating information derived from the parent and youth interviews. In general, greater weight is given to youth's reports of internalizing symptoms, and caregiver's report of externalizing symptoms, although latitude in clinical judgement is allowed.

Like the paper-and-pencil KSADS, the clinician-administered KSADS-COMP consists of three primary components: 1) an unstructured introductory interview; 2) a diagnostic screening interview; and 3) supplements to finalize the criteria required for each diagnosis. The unstructured introductory interview gathers demographic information, family composition and history of psychiatric illness data, a brief description of the presenting problem, history of prior mental health treatment, and general information about the child's interests and adaptive functioning (hobbies, friendships, behavior and performance at school), with new questions added to the unstructured introductory interview of the KSADS-COMP about bullying, sexual orientation, and gender identification. The introductory interview is a *critical component* of the KSADS because it helps to establish rapport, generate hypotheses about likely relevant diagnoses, and establish a context to elicit symptoms and evaluate the child's functioning. The diagnostic screening interview surveys two to four symptoms of each disorder assessed in the KSADS, with skip out criteria that determine if the supplements for those disorders should be administered. The screen interview is designed to provide a good *diagnostic overview*, and when completed in its entirety before moving to the supplements, greatly facilitates differential diagnoses. Diagnostic supplements are then administered in the chronological order in which probable diagnoses emerged, except when the onset of one disorder (e.g., a substance use disorder) may have influenced the presentation of the other diagnosis (e.g., mood disorder).

In addition to having the three primary components of the paper-and-pencil KSADS – the unstructured introductory interview, the screen interview, and the diagnostic supplements, *the clinician-administered KSADS-COMP also includes computerized youth- and parent- pre-interview self-report ratings of the screen interview items to streamline the administration of the clinical interview*. Figure 1 on the following page depicts a screenshot of the clinician-administered KSADS-COMP interface. This figure shows the screen that appears when the clinician is administering the parent interview. The screenshot shows the youth's interview response in the upper left corner, the parent's pre-interview response in the upper right corner, and the clinician's response options in the center of the screen.

Figure 1: KSADS-COMP Screenshot – Clinician-Administered Interview Interface

Depressive Disorders

Intro 100% Part 0% Part 0%

Teen Response

Nearly every day

Comment:

Pre-Interview Parent Response

Several days

Comment:

1.1.1.Q1

Now I'd like to ask you some questions about your child's mood. In the past two weeks, how often has your child felt sad, down, or depressed, with the down feeling lasting most of the day?

Not at all

Rarely

Several days

More than half the days

Nearly every day

Next →

Positive Threshold

More than half the days

Nearly every day

Comments →

Legend. This screenshot of the KSADS-COMP shows the clinician-administered parent interview screen with teen interview responses in the upper left corner and parent pre-interview self-report ratings in the upper right. The availability of these data help to streamline the diagnostic interview. The red arrow calls attention to the comments section, which can be expanded if the clinician wishes to make notes in response to this item.

The instructions for the clinician-administered KSADS-COMP are similar to the instructions for the paper-and-pencil KSADS. While fewer sample probes are included in the computer version, *clinicians need not recite the probes verbatim*; they are free to make stylistic changes and incorporate language generated by the parent or youth when conducting the interview, and free to include information learned in the unstructured introductory interview to further probe individual items. In addition, the clinician needs only ask as many questions as is necessary to score each item.

The paper-and-pencil version of the KSADS has unique scoring criteria for every item, making training and establishing reliability in administration somewhat problematic. Thus, in creating the KSADS-COMP the scoring criteria for current symptoms were modified so the response options for all current symptoms are scored using the same standardized 5-point rating scale. As noted in the figure above, the frequency of all current symptoms over the past two weeks is now rated on one common metric (e.g., not at all, rarely, several days, more than half the days, and nearly every day). The threshold for clinical significance varies depending upon the item (See Figure 2 on the following page). For example, the threshold for failure to fulfill a major role obligation associated with substance use (e.g., missing school due to substance use) is lower than the threshold for depressive irritability, given that missing school “rarely” or only once during a

two-week period can signal a potential substance misuse disorder, whereas the threshold for irritability in the depressive disorders section is “more than half the days.”

Figure 2:
Rating Current Symptoms: Threshold for Clinical Significance Varies Depending on the Symptom

Irritability Item – Depression Section

In the past two weeks, how often has your child felt annoyed, irritable, or cranky, with the cranky feeling lasting most of the day?

- Not at all
- Rarely
- Several days
- More than half the days
- Nearly every day

Positive Threshold

More than half the days
Nearly every day

Role Obligations Item – Alcohol Use Disorders Section

In the last 2 weeks, how often have you gone to school or work after you had been drinking or when you were hung over?

- Not at all
- Rarely
- Several days
- More than half the days
- Nearly every day

Positive Threshold

Rarely
Several days
More than half the days
Nearly every day

If the child receives a threshold response for a given symptom, he is queried about the next symptom in the KSADS; if the response is sub-threshold he will be asked about the lifetime presence of the symptom.

Figure 3: Past Symptom Rating

1.1.2.Q2a

Was there ever a time in the past that your child felt, annoyed, irritable, or cranky for most of the day, nearly every day, for two weeks or longer?

- No
- Yes

Next →

Positive Threshold

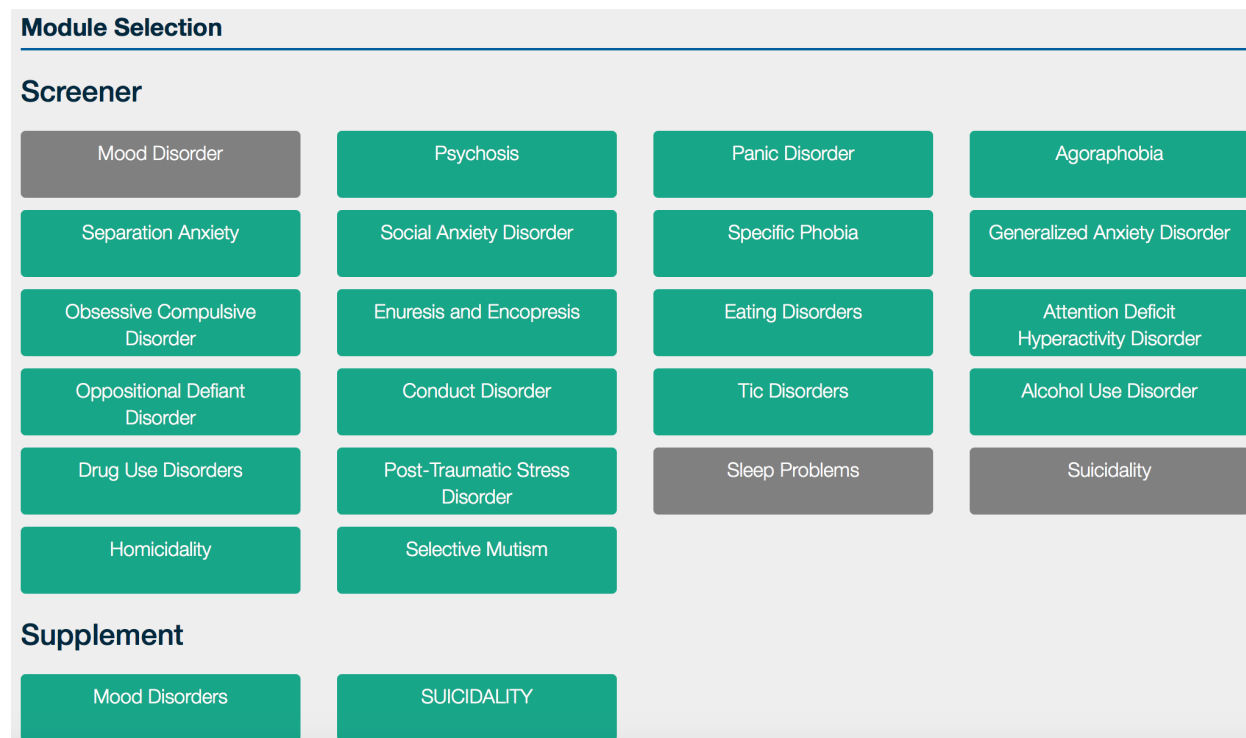
Yes

Comments →

Current threshold level and past ‘ever’ responses will trigger the supplement for a given disorder. As in the paper-and-pencil version of the KSADS, the supplements include the necessary follow-up questions to determine if diagnostic criteria for the disorder are met, if more than one episode of the disorder was experienced, and if the current disorder is in partial remission.

Figure 4 shows a screenshot of the diagnostic dashboard of the clinician-administered KSADS-COMP and highlights several additional features of the user interface. The diagnostic interview dashboard appears once the unstructured introductory interview of the KSADS-COMP has been completed. The top two-thirds of the figure shows the screen modules. Screening modules that have not been administered appear in green; completed modules appear in gray. Thus, clinicians can determine at a glance the screen modules that have and have not been completed. The bottom third of the figure depicts the supplement modules that should be completed because threshold level responses were given in the screen interview, alleviating the need for clinicians to track which supplements should be administered after the screen interview is completed. All modules of the KSADS-COMP do not need to be administered; there is a “choose as you go” option for clinicians. For example, if a clinician has prior diagnostic information for a youth and wishes to assess for only a specific disorder, or if the pre-interview ratings completed by the parent and youth suggest the likely presence of just one disorder, that one module can be selected independently of the other diagnostic modules. This feature greatly enhances the efficiency and versatility of the clinician-administered KSADS-COMP for application in a variety of clinical settings.

Figure 4:
Clinician-Administered KSADS-COMP Dashboard – Screen Modules and Activated Supplements



Legend. This screenshot shows the dashboard of the clinician-administered KSADS-COMP interview. The dashboard appears once the unstructured introductory interview is completed. All the screen interview modules are depicted on the top two-thirds, and a sample of activated supplements are depicted below.

Administration Guidelines: Pre-Interview, Unstructured Introductory Interview, Screen Interview

1. Have the parent and youth complete the pre-interview independently as a self-report before beginning the clinician-administered portion of the assessment. The pre-interview questions can be completed on-site, or sent via a link to the parent and youth to be completed prior to the office visit. (See Clinician-Administered KSADS-COMP Technical Features document for instructions on sending a link to the pre-interview questions to participants.)
2. Review the parent and youth's responses before beginning the clinician-administered portion of the interview. This will streamline your interview and highlight potentially relevant and likely irrelevant diagnostic areas. Having the parent and youth complete the pre-interview self-report items first also allows the clinician-administered KSADS-COMP to maintain more of a conversational style, as there is no need to constantly refer to the 0-4 point rating scale as you move through the interview.
3. The unstructured introductory interview is completed after the self-report pre-interview, before surveying the symptoms included in the screen interview. It provides relevant background information essential in establishing rapport, providing a context for eliciting symptoms, further generating hypotheses about likely relevant diagnoses, getting a sense of a child's life circumstances and functioning over time, and information about the child's prior treatment history. The unstructured introductory interview is essential for enhancing the validity of the KSADS diagnostic assessment.
4. The parent and youth's responses to the self-report pre-interview will show on the top of the screen when you administer the clinician-administered portion of the screen interview, and the scores required for a threshold level response will appear on the bottom of the screen.
5. If there is consensus from the parent and child that a given symptom was not present in the past two weeks, and the pre-interview self-report data is consistent with the information you learned in the introductory background interview, the symptom can just be scored as 'not present' in the past two weeks (e.g., not at all) without any further probing of the symptom. You would then just move on to inquire about the symptom in the past, acknowledging the symptom was not reported as present currently. "You said that you are currently not feeling sad at all (or only rarely feeling sad), was there ever a time that you felt sad most of the day, nearly every day, for two weeks or longer."
6. Likewise, if there is consensus that a given symptom is present, and the threshold level of scoring is consistent with your clinical impressions and the information you learned in the unstructured introductory interview, you can just rate the item as present (e.g., more than half the days, nearly every day) without further inquiry. You can just acknowledge the presence of the symptom and move on to the next symptom surveyed in the KSADS.
7. When there is a discrepancy in the child and parent pre-interview self-report ratings, how much further inquiry is required before rating the individual item in the clinician-administered KSADS is based on the background information provided by the informant you are interviewing, and your clinical impressions. For example, a parent may have rated the child as depressed, but the child's affect is positive when you interview them and they describe involvement in extracurricular activities, positive peer relations, and overall highly adaptive functioning, you can just rate the item consistent with the child's self-report. If the child denied depressive symptoms in the self-report, but has negative affect and describes few interests and a recent decline in school performance, further inquiry would be warranted.
8. If the parent and/or child gave a threshold level response in the self-report pre-interview, and the information you obtained in the unstructured background interview, further probing, and your clinical impressions lead you to believe the symptom should be rated as sub-threshold, the scoring of the item in the clinician interview can be lower than the scoring of the item on the pre-interview, such that the supplement associated with that symptom is not activated.
9. If a child receives a threshold level score on the past two-week rating of a given symptom, the severity of the next symptom over the past two weeks is queried in the interview. The presence of the symptom in the past is only queried in the screen interview if the symptom is not present at threshold in the past two

weeks. There are questions included in each of the supplements to determine if the child has had more than one episode of the diagnosis being assessed, and if the child meets current or past diagnostic criteria, and/or are in partial remission.

10. The screen interview will determine which supplements, if any, need to be completed.

NOTE: Every item of the KSADS-COMP has a comments section. The clinician can write notes as s/he completes the interview, and these comments can be reviewed and printed as part of the symptom level reports available with the KSADS-COMP.

Administration Guidelines; Diagnostic Supplement

1. The screen interview should be completed in its entirety before going to complete any of the supplements to facilitate differential diagnoses.
2. In general, supplements should be administered in the chronological order in which the symptoms associated with the different diagnoses appeared. For example, usually ADHD has an earlier onset than MDD, so the supplement for ADHD should be completed before the supplement for depressive disorders if the child screened positive for both potential diagnoses. When you then complete the MDD supplement, probes will appear on the screen to facilitate differential diagnoses for symptoms that overlap between the two disorders. For example, if the child had long standing concentration problems associated with ADHD, when concentration problems are surveyed in the MDD section, the program will query to see if there was a worsening of the long standing concentration problems with the onset of the mood disturbance. If not, the symptom concentration disturbance is NOT included toward the diagnosis of MDD. Likewise for the symptom of psychomotor agitation.
3. Supplements for disorders that may influence the presentation of symptoms associated with another disorder should be surveyed before the supplements for the other disorder. For example, if the child has a possible substance use disorder, the substance use disorder supplement should be administered before the mood disorder supplement. This way, if the youth is using cocaine, elated mood, decreased need for sleep, and hypersexuality would not be misattributed to mania. If in completing the substance use supplement you learn that the child only experiences manic-like symptoms while using; you do not need to complete the mania supplement. Also, if the child was regularly using cannabis, you should inquire if symptoms of increased appetite and fatigue are uniquely associated with substance use, and therefore not to be rated and counted toward a diagnosis of MDD.

Coding Symptoms Targeted with Medication. Current ratings of symptoms should be used to indicate severity of symptoms on medication. In coding disorders which are effectively treated with medication (e.g. ADHD), use the past/lifetime ratings to describe the most intense severity of symptoms experienced prior to initiation of medication or during ‘drug holidays.’ A child who is asymptomatic on maintenance medication will get a current diagnosis for that disorder and it will be noted that they are in remission while maintained on medication.

Choose-As-You-Go Module Options. As noted in the Overview section of this document, the “choose as you go” modular format of the KSADS-COMP allows clinicians to select a subset of modules of interest rather than completing the entire interview. The self-administered pre-interview screen items of the clinician-administered KSADS-COMP can inform module selection, and the unstructured introductory interview also provides an excellent initial assessment of adaptive functioning that lends greater confidence to the selection of the subset of modules to be administered, as well as providing other relevant information needed for clinical reports (e.g., family, school, treatment history). In addition, if a clinician has prior diagnostic information for a youth and wishes to assess for only a specific disorder, that one module can be selected independently of the other diagnostic modules. This feature greatly enhances the efficiency and versatility of the clinician-administered KSADS-COMP for application in a variety of clinical settings.

Reports. With the KSADS-COMPs, a variety of reports are available to the clinicians in real-time. The Symptoms/Comments Report provides a detailed listing of each symptom item administered and the youth's and caregiver's responses to each item. All comments written throughout by the clinician, parent, or youth can also be printed using this report. This is useful for summarizing information about how individuals describe their symptoms (e.g., "I feel like a volcano sometimes"), capturing information about specific events (e.g., reports of adverse childhood experiences), and details about clinically significant behaviors (e.g., suspensions). The Diagnosis Report provides current and past diagnoses, their associated ICD-10 codes, a list of all threshold level symptoms, and information about whether the diagnosis is current, past, or in partial remission. The Diagnostic Report also provides a comprehensive list of all suicidality items and a rating according to the Columbia Classification Algorithm of Suicide Assessment (C-CASA), as recommended for FDA clinical trials. (See Clinician-Administered KSADS-COMP Technical Features document for complete list of available reports and instructions for accessing the reports.)

The KSADS-COMP demonstrates promising psychometric properties while offering efficiency in administration and scoring. To the best of our knowledge, the KSADS-COMP is the only computer-administered child psychiatric diagnostic interview which use information attained in the introductory interview to guide probing of symptoms (e.g., information about bullying to guide questions about paranoid ideation), and the only assessment tools to include a screen interview that provides a comprehensive diagnostic overview to facilitate differential diagnoses before surveying the full range of symptoms associated with the different diagnoses. The clinician-administered KSADS-COMP is also the only computerized diagnostic interview that includes a parent and youth self-report pre-assessment to streamline interviewing, and the only tool to give the clinician access to the pre-interview responses and the responses of the other informant (e.g., teen) when conducting the interview (see Figure 1). The clinician-administered KSADS-COMP shows utility not only for research, but also for implementation in clinical practice, with self-report pre-interview ratings and choose-as-you-go format which streamlines administration.