

# **MANUAL**

**THOUGHT AND LANGUAGE DYSFUNCTION SCALE  
(TALD)**

## **Introduction**

The “Thought and Language Dysfunction Scale” (TALD) was developed for the operationalized assessment of both objectively observable and subjectively reported dysfunctions in language and thinking. The scale is applicable for any kind of disorder.

The TALD phenomena are evaluated in a 50-minute exploration. The rating is conducted immediately following to the interview. Since some phenomena occur solely under situational stress (delusions, hallucinations, emotional life events etc.), emotional topics should be raised. During the interview the patient should be given sufficient time to speak freely for several minutes. If the patient does not spontaneously report subjective phenomena, the examiner must ask about them directly.

The use of the evaluation sheet requires exact knowledge of the manual. The interviewer must be acquainted with the definitions given in the manual, which are illustrated by statements that are typical for patients exhibiting the phenomenon. In addition, sample questions to determine the presence/absence of phenomena are given. Prior to the use of the scale for scientific or practical purposes, the inexperienced rater must conduct about five training sessions supervised by an experienced TALD interviewer.

The initial part of the interview is open, and is followed by semi-structured questions. The TALD interview is not a standardized interview with mandatory, predetermined sequences of questions. The individual phrasings can be adjusted for each patient and situation. Such variations are necessary since the patient contact is the basis for a good exploration.

A subjective phenomenon may not be judged as present if the patient simply affirms its occurrence. For each phenomenon the examiner should ask for a precise description of complaints and dysfunctions. If necessary, further questions in addition to the mandatory ones should be asked.

The evaluation period for the objective phenomena is limited solely to the duration of the interview. For the subjective phenomena, the period is restricted to the preceding 24 hours, since such phenomena often occur in specific situations and may fluctuate over time.

The graduation of phenomena is explicated in the individual description of each item. In general, the following applies for each coding:

0 = not present

1 = doubtful (not definitely pathological; may also occur in healthy individuals)

2 = mild

3 = moderate

4 = severe

## **1. Circumstantiality (o)**

Thinking is circuitous; minor matters cannot be separated from essential matters.

The main point gets lost in the description of details, without losing the intentional goal completely (long-winded speech). Insufficient capacity to process abstract information might be one of several causes for Circumstantiality, as well as the inability to omit minor matters even when the patient knows them to be inessential.

Example:

”Was it easy to get here?“

”Hm, yes. First, we went by train for a while. Then, the ticket inspector came. We actually wanted to buy one-way tickets, but the ticket inspector told us it's better to get a Companion Ticket, good for two people. If you've got a Rail Card, it's even cheaper, but unfortunately we didn't have one. At the main station, we got off the train and took a taxi.“

”So that must have been a long journey, right?“

”The problem is changing trains so frequently. So unfortunately for us, we missed the connecting train, because our train was behind schedule. Recently, they've started refunding people's money when a train is behind schedule. Can't really imagine that many people are doing this. Most of the time, you try to find a new connection quickly so that you can get going right away. Well, after that we had to wait for a further fifteen or twenty minutes, although now that I think about it, it was actually fifteen minutes, before we went on with another train, or more precisely a backup train.“

Differentiated phenomena:

Dissociation of Thinking (o)

Derailment (o)

Tangentiality (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: Circumstantiality is noticed by the examiner, but the exploration is not substantially affected.

3 = moderate: Circumstantiality is noticed by the examiner and the exploration is affected.

4 = severe: The exploration is severely affected.

**2. Derailment (o)**

A pattern of spontaneous speech in which ideas slip "off the track" onto other thoughts which are clearly but obliquely related. Things may be said in juxtaposition which lack a meaningful relationship, or the patient may shift idiosyncratically from one frame of reference to another. At times there may be vague connections between the ideas. The objective characteristic of Derailment should be coded as if the interviewer were talking to the patient for the first time (unaware of potential personal associative connections between the thoughts). One manifestation of this disorder is a slow steady slippage, with no single Derailment being particularly severe, so that the speaker gets farther and farther off the track with each Derailment without any awareness that his reply no longer has any connection to the question being asked.

Example:

Interviewer: "Did you enjoy doing that?"

Patient: "Um-hm. Oh, hey, well, I, I, oh, I really enjoyed some communities I tried it, and the next day when I'd be going out, you know, um, I took control like, uh, I put, um, bleach on my hair in, in California. My roommate was from Chicago and she was going to the junior college. And we lived in the Y.W.C.A. so she wanted to put it, um,

peroxide on my hair, and she did, and I got up and looked at the mirror and tears came to my n eyes. Now do you understand, I was fully aware of what was going on but why couldn't I, why, why the tears? I can't understand that, can you?"

Interviewer: "No."

Patient: "Have you experienced anything like it?"

Interviewer: "You just must be an emotional person, that's all."

Patient: "Well, not very much I mean, what if I were dead? It's funeral age. Well, I, um? Now I had my toenails, uh, operated on. They're, uh, um, got infected and I wasn't able to do it but they wouldn't let me at my tools. Well."

#### Differentiated phenomena:

Dissociation of Thinking (o)

Tangentiality (o)

Circumstantiality (o)

#### Graduation:

0 = not present

1 = doubtful: Connections between the sentences are still obvious. Overall, the thoughts have a connection to what has been said before.

2 = moderate: Connections are still obvious but are sometimes not directly related to what has been said before.

3 = severe: The patient slides slowly from one idea to another without any meaningful connection between them. He stops at a peripheral association or a thematically irrelevant aspect of the sentence, and doesn't conclude his line of thought.

4 = extreme: The interview is incomprehensible.

### **3. Tangentiality (o)**

Ideas do not follow a straight path. Within longer speech passages, content slowly drifts away from where it originally started. The patient does not return to the initial topic.

#### Example:

Interviewer: "What city are you from?"

Patient: "Well, that's a hard question to answer. I was born in Marburg, but my parents met in Cologne. This was a hard time, they had to go through many financial difficulties. It was during the war and we had to flee from the city..."

Differentiated phenomena:

Dissociation of Thinking (o)

Derailment (o)

Circumstantiality (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: The patient deviates slowly from the initial topic, and in a few instances fails to return.

3 = moderate: The patient deviates quickly from the initial topic, and occasionally fails to return.

4 = severe: The patient deviates immediately from the initial topic and never returns.

**4. Dissociation of Thinking (Incoherence/ Distraction) (o)**

The content of a phrase, sentence or thought has no reference to what has been said before. In contrast to *Derailment* (Item 2) where associative bridges are still recognizable, Dissociation of Thinking refers to the state in which words, sentences and thoughts have no relation to each other. In less severe occurrences, single sentences may still make sense; however, coherence between sentences is absent. In the severest occurrences, coherence within a sentence or even within individual words is absent (scattered speech).

Example:

"You have possibly heard that they peel off the brain... One will try to stop me the Armageddon.... skywind and weather and that the people will change their mood. That's what I call segmenting. Also the housewind, the energy-segmenting.....I say the murder, I should have produced hypnosis."

Differentiated phenomena:

Circumstantiality (o)

Derailment (o)

## Tangentiality (o)

### Graduation:

0 = not present

1 = doubtful

2 = incoherence: Single sentences still make sense; however, the relation between them is missing.

3 = disjointed speech (Fragmented Speech, *Zerfahrenheit*): Within one sentence, only parts are related to each other.

4 = Scattered speech: Syntax is absent (paragrammatism, parasyntax), resulting in an incomprehensible, meaningless word and syllable mixture ("word salad").

## 5. Crosstalk (o)

The response of the patient misses the point at hand, although he has understood the question. The evaluation of this item does not depend on whether the answer to the question is wrong or not (like a wrong answer in an examination), but that the patient is talking past the question. If the interviewer has any kind of suspicion with regard to the presence of Crosstalk, it must be verified that the patient has understood the question correctly. Therefore, the patient should be asked to repeat the question. Intentional ignoring of the question ("beating around the bush") should not be considered.

### Example:

"Why did you come to the psychiatric unit?"

"My brother had surgery on his appendix."

### Differentiated phenomena:

Restricted Thinking (o)

Dissociation of Thinking (o)

### Graduation:

0 = not present

1 = doubtful

2 = mild: Crosstalk occurs several times during the exploration.

3 = moderate: Crosstalk occasionally occurs, often enough that the exploration is hindered.

4 = severe: Crosstalk occurs to most questions. As a result, the exploration is considerably hindered.

## 6. Perseveration (o)

Adherence to previously mentioned ideas and topics that no longer fit the current context.

Example:

A patient repeats certain sentences or clauses even if he is expected to give his name or to describe objects.

Differentiated phenomena:

Verbigeration (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: During the interview, Perseverations occur several times.

3 = moderate: Perseverations occur occasionally and adversely affect the exploration.

4 = severe: Perseverations occur so frequently that the exploration is considerably hindered.

## 7. Verbigeration (o)

Unnecessary repetition of a single word.

Example:

*"I am a philosopher, philosopher, I am a philosopher, who composed great literature. I have a calling for this work, a calling, calling. You don't have to believe me, believe me, not believe, not believe. I don't care, care, care, care."*

Differentiated phenomena:

Perseveration (o)

Echolalia (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: Verbigeration occurs several times during the interview.

3 = moderate: Verbigeration occurs occasionally and complicates communication.

4 = severe: Persistent stereotyped repetition of single words and syllables. As a result, the exploration is considerably hindered.

**8. Rupture of Thought (o)**

Objectively observed sudden interruption of a previously fluid line of thought. The phenomenon may occur in the middle of a sentence and for no apparent reason.

Example:

The patient says: "I'm feeling fine. My mood is much better because I've.....(pause)."

Questions:

"You've suddenly stopped speaking. What was the reason for that?"

The patient explains that he suddenly lost his train of thought.

Differentiated phenomena:

Blocking (s)

Thought Interference (s)

Graduation:

0 = not present

1 = doubtful

2 = mild: communication is barely affected

3 = moderate: communication is moderately affected

4 = severe: communication is substantially affected

## **9. Pressured Speech (o)**

The speed of speech production is increased.

Differentiated phenomena:

Pressure/Rush of Thought (s)

Logorrhoea (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: The speed of speech production is increased.

3 = moderate: The speed of speech production is considerably increased.

4 = severe: The speed of speech production is extremely increased.

## **10. Logorrhoea (o)**

An excessively strong urge to speak. Logorrhoeic speech itself may be coherent and logical. Accelerated speech production need not be present. Communication with the patient is hindered. The patient is either not able to recognize when he is being interrupted or simply ignores such interruptions.

Example:

“What is your current profession?”

“Actually, I am an electrician, but for the last few years I’ve had different jobs from the temporary employment agency. Factory work, construction work, and so on. But soon, I want to work as an electrician, because you earn more money and you don’t have to be away from home that often. That’s important to me...”

“Okay, and for what...”

“Wait a second..., because I can be with my family in the evenings. That’s not possible when you’re away on a construction job. Family life suffers...”

“Mr. K. Now, I would like to ...”

“Family life suffers enormously from that. Moreover, construction jobs always last for a few weeks, then they send you somewhere else.”

### Differentiated phenomena:

Pressured Speech (o)

### Graduation:

0 = not present

1 = doubtful

2 = mild: It is possible to interrupt the flow of words. With some exceptions, the patient is able to focus on the examiner.

3 = moderate: It is hard to interrupt the flow of words. The patient is not able to focus on the examiner.

4 = severe: The communication with the patient is considerably hindered. Attempts to interrupt the patient are either not noticed at all or are deliberately ignored.

### **11. Manneristic Speech (o)**

For the observer, speech (word selection, sentence structure, articulation or prosody) seems affected and ornate, eccentric, unnatural, pompous, overblown, fancy, stylised or flowery.

### Example:

"Could you tell me what you did last weekend?"

"But of course, madam. In the first instance, I betook myself to the grocery store, since the obtainment of comestible goods appeared to be necessitated. This effort, however, proved to be fruitless from my point of view, since the opening hours unfortunately proved a hindrance with regard to my intended purchase."

### Differentiated phenomena:

Neologisms (o)

### Graduation:

0 = not present

1 = doubtful

2 = mild: Speech usage is Manneristic several times.

3 = moderate: Speech usage is Manneristic occasionally.

4 = severe: Due to Manneristic Speech, the patient is difficult to comprehend.

## **12. Semantic Paraphasia (o)**

Substitution of an inappropriate word (the word is semantically related to the appropriate word). The speaker may or may not recognize his error and attempt to correct it.

Example: (see graduation)

Differentiated phenomena:

Phonemic Paraphasia (o)

Neologisms (o)

Graduation:

0 = not present

1 = doubtful: A few times, the patient uses a word that is inappropriate, but comprehensible in the context ('jacket' for 'coat').

2 = mild: The patient uses inappropriate words several times. The semantic distance to the appropriate word is larger ("sausage" instead of "cheese", "grandpa" instead of "man").

3 = moderate: The patient uses inappropriate words occasionally. In some cases the semantic distance to the desired word is so great that a connection is hardly recognizable ("training" instead of "workout"), enough that the intended meaning is not clear.

4 = severe: The patient frequently uses inappropriate words. As a result, the exploration is considerably hindered. ("flower" instead of "aquarium", "cream" instead of "tiger")

## **13. Phonemic Paraphasia (o)**

Mispronunciation (with regard to phonetic articulation) of a word. Milder forms may occur as "slips of the tongue" in everyday speech. The speaker usually recognizes his error and may attempt to correct it.

Example: (see graduation)

Differentiated phenomena:

Semantic Paraphasia (o)

Neologisms (o)

Graduation:

0 = not present

1 = doubtful: In the course of the interview, Phonemic Paraphasias may occur a few times.

2 = mild: In the course of the interview, Phonemic Paraphasias occur several times. (“manana” instead of “banana”)

3 = moderate: The patient uses Phonemic Paraphasias occasionally.

4 = severe: The patient uses Phonemic Paraphasias frequently. The exploration is considerably hindered.

**14. Neologisms (o)**

New word formations, which do not correspond to lexical conventions. Most Neologisms are not directly intelligible. In extreme cases a new artificial language can be formed or used by the patient.

Expressions or slang words used in particular groups or subcultures (e.g. youth culture, the drug scene) are not to be classified as Neologisms. Insufficient language abilities (e.g. in a non-native speaker) should be excluded as well.

Example: (see graduation)

Differentiated phenomena:

Semantic Paraphasia (o)

Phonemic Paraphasia (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: One Neologism definitely occurs during the interview.

3 = moderate: Several Neologisms occur during the interview.

4 = severe: Communication with the patient is hindered. In extreme cases cryptolalia is present (glossolalia, private symbolism), e.g. “Ak mersku na armabs voligent”.

## **15. Clanging (o)**

A pattern of speech in which sounds, rather than meaningful relationships, appear to govern word choice, so that the intelligibility of the speech is impaired and redundant words are introduced. In addition to rhyming relationships, this pattern of speech may also include punning associations, so that a word similar in sound (polysemy/homophony) brings in a new thought.

### Example:

"I'm not trying to make noise. I'm trying to make sense. If you can make sense out of nonsense, well, have fun. I'm trying to make sense out of sense. I'm not making sense [cents] anymore. I have to make dollars".

### Differentiated phenomena:

Derailment (o)

Dissociation of Thinking (o)

Manneristic Speech (o)

### Graduation:

0 = not present

1 = doubtful

2 = mild: Clanging occurs several times during the interview.

3 = moderate: Clanging occurs occasionally during the interview. The exploration is not significantly limited.

4 = severe: Clanging occurs frequently and largely dominates the conversation. As a result, the exploration is considerably hindered.

## **16. Echolalia (o)**

Senseless repetitions of words and sentences with no regard to their meanings and semantic functions. The patient echoes the words or sentences of the interviewer.

**Exclusions:**

Some people habitually echo questions, apparently to clarify the question and formulate their answer. This is usually indicated by rewording the question or repeating the last several words.

**Example:**

*"I would like to speak to you for a few minutes."*

*"Minutes, minutes, minutes, speak to you for a few minutes."*

**Differentiated phenomena:**

Perseveration (o)

Verbigeration (o)

**Graduation:**

0 = not present

1 = doubtful

2 = mild: Several times, the patient repeats single words or parts of the preceding question, but then answers the question.

3 = moderate: Occasionally, the patient repeats single words or parts of the preceding question, but then generally answers the question.

4 = severe: Frequently, the patient repeats single words or parts of the preceding question. Additional information is not given.

## **17. Poverty of Content of Speech (o)**

Although replies are long enough that speech is adequate in amount, it conveys little information. Language tends to be vague, often overly abstract or overly concrete, repetitive, and stereotyped. The interviewer may recognize this finding by observing that the patient has spoken at some length but has not given adequate information to answer the question. Alternatively, the patient may provide enough information, but require many words to do so, so that a lengthy reply can be summarized in a sentence or two.

**Example:**

Interviewer: "Ok. Why do you think people believe in God?"

Patient: "Well, first of all. As we all know, and as it has always been, he is a spiritual power, a religious force of particular strength, a personal message, which is here now. He talks with me and walks with me. And, ah, the understanding, which I have, ah, many people, they don't really know who God is. Because, ah, what I mean is, they all don't really know what it is about. Many of them don't understand that he walks with them and talks with them."

Differentiated phenomena:

Poverty of Speech (o)

Poverty of Thought (s)

Restricted Thinking (o)

Slowed Thinking (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: Several times, replies are vague or could be abbreviated.

3 = moderate: Occasionally, replies are vague or convey little information.

4 = severe: Most of the interview is vague, empty of content or could be substantially abbreviated.

### **18. Restricted Thinking (o)**

Restriction in the range of content, adherence to one topic or a few topics, or fixation on a few key ideas. During the conversation, the patient experiences difficulties in switching from one topic to another, or constantly returns to the initial topic. For a successful exploration, it is necessary that the examiner offers the patient a variety of topics. This is important since the topic of illness always forms part of a psychiatric exploration, but this should not automatically be treated as resulting from Restricted Thinking. When exploring the topic of illness, it is only possible to refer to Restricted Thinking when the patient is fixed on single aspects of his illness, and when he is not able to detach from these aspects despite being offered other topics of discussion (e.g. a depressive patient who is preoccupied with his indigestion).

Example:

"How would you describe your mood right now?"

"At the moment I feel better, but in the morning I had a terrible backache. This started when I was divorced from my husband. I can hardly sleep and I don't move a lot during the day."

"Has it become more difficult for you to concentrate on pleasant activities in the last month?"

"If I didn't have this backache all day, I might be able to think about other things much more often."

"Which hobbies and activities do you like?"

"In the past I did a lot of sports with my ex-husband. Since the divorce I don't like doing them anymore, and I've always got this terrible back pain."

Differentiated phenomena:

Poverty of Speech (o)

Poverty of Thought (s)

Graduation:

0 = not present

1 = doubtful: The patient returns to one topic a few times.

2 = mild: The patient sticks to a few topics, so that a conversation about other topics is fairly difficult.

3 = moderate: The patient is constrained to just a few topics. A conversation about other subjects is almost impossible. The patient has to exert effort in order to change the topic.

4 = severe: The patient sticks to one specific idea. Although other topics are offered, he constantly and immediately returns to the same idea.

## **19. Slowed Thinking (o)**

From the observer's perspective, the patients' thought process seems to be slowed down (objective). As a result of this sluggish thinking process, the conversation is languid and torpid.

Example:

"Could you please tell me why you've come to the hospital?"

"(pause) I've been having a bad time.... (pause) So my sister brought me here."

"You said that you've been having a bad time. What do you mean?"

"(pause) I've been so tired.....(pause) and it's hard for me to get up in the morning."

"Ok, but that wasn't the real reason why your sister brought you here, right?"

"No (pause). I'm always in a bad mood. (pause)"

"Have you been losing weight?"

"No...(pause) I don't think so."

Differentiated phenomena:

Inhibited Thinking (s)

Poverty of Speech (o)

Graduation:

0 = not present

1 = doubtful: A possibly Slowed Thinking process; however, the flow of conversation or exploration is not affected.

2 = mild: The examiner notices the Slow Thinking process, and the flow of conversation or exploration is slightly affected.

3 = moderate: The examiner notices the Slow Thinking process, and the flow of conversation or exploration is considerably limited.

4 = severe: Due to the patient's sluggish train of thought and the long pauses within the conversation, the flow of conversation is limited so much that an exploration is not possible, or proceeds only with great effort.

**20. Poverty of Speech (o)**

Restriction in the *amount* of spontaneous speech, so that answers to given questions tend to be brief, concrete and unelaborated. Unprompted additional information is rarely provided. Replies may be monosyllabic, and some questions may be left unanswered altogether. When confronted with this speech pattern, the interviewer

may find himself frequently prompting the patient in order to encourage elaboration of replies. To elicit this finding, the examiner must allow the patient adequate time to answer and to elaborate his answer.

Example:

Interviewer: "Do you think there's a lot of corruption in government?" Patient: "Yeah, seems to be."

Interviewer: "Were you working at all before you came to the hospital?"

Patient: "Yes."

Interviewer: "What kind of jobs did you have in the past?"

Patient: "Oh, some janitor jobs, painting."

Interviewer: "What kind of work do you do now?"

Patient: "None."

Interviewer: "How far did you go in school?"

Patient: "Eleventh."

Differentiated phenomena:

Inhibited Thinking (s)

Slowed Thinking (o)

Poverty of Thought (s)

Graduation:

0 = not present

1 = doubtful

2 = mild: Several replies do not include appropriately elaborated information.

3 = moderate: Answers consist of a few words. Occasionally, questions may be left unanswered. Replies are monosyllabic or very brief ("Yes", "No", "Maybe", "Don't know", "Last week").

4 = severe: The patient is predominantly mute.

## **21. Concretism (o)**

Concretism refers to difficulty in the comprehension of abstract (figurative) sentences or phrases (e.g. the understanding/interpretation of proverbs, metaphors, jokes). The patient adheres to the concrete meaning of the words/utterances.

Example/Question:

*"Would you please explain the proverb 'Hawks will not pick out hawks' eyes.'"*

*"Well, hawks are wonderful birds. If there are two hawks together, they won't pick out each other's eyes."*

Graduation:

0 = not present

1 = doubtful

2 = mild: The comprehension of figurative meaning is limited.

3 = moderate: Only concrete meaning is expressed.

4 = severe: Even concrete meaning is expressed at best vaguely or not at all.

## 22. Blocking (s)

Perceived and reported blocking of an ongoing line of thought, also known as "losing one's train of thought". Blocking is subjectively noticed by the patient. Included is the phenomenon of "Fading", which refers to a slow dimming away of a thought, as opposed to a sudden termination (in the sense of "Rupture of Thought," Item 1). Fading can also occur in a fluctuating manner, which means that the thought becomes weaker at first, then becomes clearer again, then fades away once more. In contrast to a loss of thought, Fading can only be assessed if the patient himself reports this phenomenon. Blocking and Fading may occur either with or without Thought Interference (Item 22, infiltration of a new thought).

Examples:

Pure Blocking:

*"I don't have any thoughts anymore, as if something is cut off."*

*"Sometimes, my thoughts stop suddenly."*

*“Sometimes, I want to say something and it’s suddenly gone. Sometimes I can remember it and sometimes I can’t.”*

Pure Fading:

*“When I watch TV, it seems like my thoughts gradually fade away without being replaced by other thoughts.”*

Question:

*“Do you sometimes feel like your line of thought suddenly stops as if it were blocked, or as if your thoughts gradually faded away?”*

Differentiated phenomena:

Rupture of Thought (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports several occurrences of Blocking. The patient must not feel impaired as a result.

3 = moderate: The patient reports occasional Blocking. It is possible that the patient suffers due to Blocking and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports frequent Blocking. It is required that the patient suffers due to Blocking and/or that communication is impaired from his point of view.

### **23. Rumination (s)**

The patient is constantly occupied with mostly unpleasant topics. These thoughts center around the same topics without leading to any conclusion. For the patient, it is hard to interrupt these negative thought processes. Rumination is experienced as unpleasant and in some cases even torturous.

Example:

*"I can't pay the rent anymore. I'm always worried that I can't pay the bills. I really don't know how this can go on. I don't know how to think of anything else."*

Questions:

*"Do you feel like you have to think about certain subjects more often than you used to?"*

*"Do you sometimes feel driven to think of one particular subject, even though you want to think of something else, or want to fall sleep?"*

Differentiated phenomena:

Restricted Thinking (o)

Poverty of Thought (s)

Graduation:

0 = not present

1 = doubtful

2 = mild: Rumination occurs and the patient is slightly affected, but he is still able to manage his everyday responsibilities.

3 = moderate: The patient is troubled by his Ruminations. His everyday responsibilities and his well-being are affected.

4 = severe: The patient is markedly tormented by his Ruminations. His everyday responsibilities and his well-being are severely affected.

## **24. Poverty of Thought (s)**

The patient has the sense that his thinking is unimaginative and restricted to just a few themes. This may or may not be accompanied by unpleasant feelings.

Example:

*"I don't have any ideas anymore. Nothing new comes into my mind...."*

Questions:

*"Does it seem to you that nothing new is coming into your mind?"*

*"Do you have the feeling that your thinking is less imaginative than it was in the past?"*

Differentiated phenomena:

Restricted Thinking (o)

Rumination (o)

Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports occurrences of Poverty of Thought, but the patient must not feel impaired as a result.

3 = moderate: The patient reports frequent Poverty of Thought. It is possible that the patient suffers due to Poverty of Thought and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports almost constant Poverty of Thought. It is required that the patient suffers due to Poverty of Thought and/or that communication is impaired from his point of view.

## **25. Inhibited Thinking (s)**

The process of thinking is experienced by the patient as being slowed down, braked or inhibited, as if he is thinking against an internal resistance. The patient is not able to overcome this inhibition of his thoughts. Inhibited Thinking can extend to the point that the patient has the subjective experience of not being able to think at all anymore.

Example:

*"I don't get anywhere with my thinking anymore. My thoughts slow down and sometimes it seems to me as if I don't have any thoughts at all.... and no memory either... and I can't concentrate on anything."*

Questions:

*“Does it seem to you that your thinking is inhibited or slowed down, compared to how it was in the past?”*

Differentiated phenomena:

Restricted Thinking (o)

Rumination (s)

Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports occurrences of Inhibited Thinking, but the patient must not feel impaired as a result.

3 = moderate: The patient reports frequent Inhibited Thinking. It is possible that the patient suffers due to Inhibited Thinking and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports the presence of almost constant Inhibited Thinking. It is required that the patient suffers due to Inhibited Thinking and/or that communication is impaired from his point of view.

## **26. Receptive Speech Dysfunction (s)**

The meanings of words, word sequences or sentences (for example, in conversations, movies and radio programs) can only be grasped or understood incompletely, with effort, or not at all. In some instances, the phenomenon may only occur after some time of mental strain. However, in other instances, the rate of verbal processing may already be reduced from the start. As a result of the disordered receptive speech abilities, the patient may have problems with interpersonal communication.

Examples:

*“Sometimes I’m not able to follow conversations anymore, because I’m suffering from this illness.”*

*“Sometimes I feel like I’m not catching the meanings of the words I’m hearing. Someone is speaking to me and I hear the words, but I’m not able to understand the*

*context precisely, or how they hang together. When I'm watching TV, it's very hard for me to follow the conversations."*

**Questions:**

*"Are you still able to understand conversations with other people in the same way you did in the past?"*

*"Do you feel you are able to follow conversations and movies like you could prior to the illness?"*

*"Do you have the feeling that you are sometimes unable to understand the meaning of single words or sentences?"*

**Graduation:**

0 = not present

1 = doubtful

2 = mild: The patient reports Receptive Speech Dysfunction that is mild and/or has occurred several times, but he must not feel impaired as a result.

3 = moderate: The patient reports occasional and/or moderate Receptive Speech Dysfunction. It is possible that the patient suffers due to Receptive Speech Dysfunction and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports marked Receptive Speech Dysfunction. It is required that the patient suffers due to Receptive Speech Dysfunction and/or that communication is impaired from his point of view.

## **27. Expressive Speech Dysfunction (s)**

The patient notices that it is difficult for him to find the right words. While the patient is speaking, he notices that word choice, linguistic precision and word fluency are affected. Appropriate words are not quickly accessible or are completely unavailable. In some cases only imprecise and unclear formulations come to mind. In severe manifestations of this phenomenon, self-experienced Crosstalk phenomena can occur, which may result in tactless or inappropriate utterances. Some patients may try to compensate for the disorder by repeating empty phrases and verbiages, or they may even avoid conversation altogether.

### Examples:

*“My speech is at a very basic level. Words and sentences are not as precise and appropriate. I can’t find words and it’s difficult for me to link them together correctly.”*

*“My answers are not as clear as they were before. I hem and haw until I find the right word.”*

*“Since I got this illness, my vocabulary is very restricted.”*

### Differentiated phenomena:

Crosstalk (o)

Perseveration (o)

Manneristic Speech (o)

### Questions:

*“Are you still able to express yourself as skilfully and accurately as you could in the past?”*

*“Do you have the feeling that your speech is not as precise and fluid as before, that you can’t find the right words, or that you always repeat certain words or phrases?”*

*“Do you sometimes have the feeling that you can’t express yourself like you want to anymore?”*

### Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports Expressive Speech Dysfunction that is mild and/or has occurred several times, but he must not feel impaired as a result.

3 = moderate: The patient reports occasional and/or moderate Expressive Speech Dysfunction. It is possible that the patient suffers due to Expressive Speech Dysfunction and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports marked Expressive Speech Dysfunction. It is required that the patient suffers due to Expressive Speech Dysfunction and/or that communication is impaired from his point of view.

## **28. Dysfunction of Thought Initiative and Intentionality (s)**

The patient subjectively experiences a lack of thought initiative, “thought energy” and intentionality; he is aware of the dysfunction. The impairment in initiating or structuring the thought process may result (due to the lack of an overarching concept) in the inability to perform activities of daily living (e.g. making coffee).

### Examples:

*“I’ve totally lost the mental power to think.”*

*“I don’t have the strength that is needed for thinking anymore.”*

*“I’m not able to talk to other people anymore. I’ve become too lazy to speak. I have to force myself to say anything at all.”*

*“The continuity in my thinking and speaking processes has gone, you know, the natural gliding from one thought to the other. There is always a gap in between. I can only think in small, repeatedly interrupted steps. I don’t have the overview anymore. The context is always getting lost.”*

### Questions:

*“Do you sometimes lack the strength or energy to think?”*

*“In comparison to the past, do you have the feeling that you’ve lost the initiative to think and the ability to participate in conversations?”*

### Differentiated phenomena:

Poverty of Thought (s)

Inhibited Thinking (s)

Blocking (s)

### Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports Dysfunction of Thought Intentionality that is mild and/or occurs several times, but he must not feel impaired as a result.

3 = moderate: The patient reports occasional and/or moderate Dysfunction of Thought Intentionality. It is possible that the patient suffers due to Dysfunction of

Thought Intentionality and/or that activities of daily living are slightly impaired from his point of view.

4 = severe: The patient reports marked Dysfunction of Thought Intentionality. It is required that the patient suffers due to Dysfunction of Thought Intentionality and/or that activities of daily living are impaired from his point of view.

## 29. Thought Interference (s)

Interfering thoughts or ideas that do not belong to the current line of thought. Thought Interference may or may not be triggered by or linked to external stimuli. The interfering thoughts are more or less neutral in terms of their affective weighting.

### Examples:

*"I always have to think about other things that distract me."*

*"I can't concentrate anymore. I'm so confused because every noise distracts me."*

*"My ability to concentrate is gone. It is easy to distract me."*

*"If I concentrate on something, other thoughts push their way into my mind. They don't have anything to do with what I'm concerned with at that moment."*

### Questions:

*"Are you easily distracted by events happening around you, such as noises for example?"*

*"Does it sometimes seem like you can't concentrate on conversations because your thoughts keep running astray?"*

### Differentiated phenomena:

Crosstalk (o)

Derailment (o)

Blocking (s)

Pressure/Rush of Thoughts (s)

### Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports several occurrences of Thought Interference. The patient must not feel impaired as a result.

3 = moderate: The patient reports occasional Thought Interference. It is possible that the patient suffers due to Thought Interference and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports frequent Thought Interference. It is required that the patient suffers due to Thought Interference and/or that communication is impaired from his point of view.

### **30. Pressure/Rush of Thoughts (s)**

Numerous thoughts with varied content jump into or impose on the patient's mind, alternating rapidly. The patient is able to neither control nor suppress these appearing and disappearing thoughts.

#### Examples:

*"I can't keep my thoughts under control. Sometimes I feel crushed by the variety of my thoughts. I get lost in details completely."*

*"Often, different and senseless thoughts come into my mind. The thoughts whirl around and around. I can't keep my thoughts together."*

#### Questions:

*"Do you sometimes feel that you can't aim your thoughts in the direction you want them to go? So that several or many thoughts come into your mind at the same time, and that you're unable to block the appearance of new thoughts?"*

*"Do you sometimes feel that so many ideas come into your mind quickly, one after the other or even at the same time, that you lose control of your thoughts?"*

#### Differentiated phenomena:

Pressured Speech (o)

Logorrhoea (o)

Thought Interference (s)

Graduation:

0 = not present

1 = doubtful

2 = mild: The patient reports several occurrences of Pressure/Rush of Thoughts. The patient must not feel impaired as a result.

3 = moderate: The patient reports occasional Pressure/Rush of Thoughts. It is possible that the patient suffers due to Pressure/Rush of Thoughts and/or that communication is slightly impaired from his point of view.

4 = severe: The patient reports frequent Pressure/Rush of Thoughts. It is required that the patient suffers due to Pressure/Rush of Thoughts and/or that communication is impaired from his point of view.