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Abstract:
Integrating information on voice hearing from multiple disciplines and perspectives, we review current explanatory models and their implications for intervention strategies. Far from always signifying a mental illness, voice hearing may result from other causes, including drug side effects, brain lesions, and culturally-sanctioned phenomena. Accordingly, a wide range of assessment, intervention, and self-management strategies are available and appropriate. We conclude that by offering a diversity of treatment options, eliciting patients' causal theories, and incorporating these into an individualized treatment strategy, clinicians are likely to help clients control the distressing aspects of the voices, minimize stigma and discrimination, and make meaning of the experience.

Hearing Voices: Explanations and Implications

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Integrating information on voice hearing from multiple disciplines and perspectives, we review current explanatory models and their implications for intervention strategies. Far from always signifying a mental illness, voice hearing may result from other causes, including drug side effects, brain lesions, and culturally-sanctioned phenomena. Accordingly, a wide range of assessment, intervention, and self-management strategies are available and appropriate. We conclude that by offering a diversity of treatment options, eliciting patients' causal theories, and incorporating these into an individualized treatment strategy, clinicians are likely to help clients control the distressing aspects of the voices, minimize stigma and discrimination, and make meaning of the experience.

> During the days when I was living alone in a foreign city—I was a young man at the time—I quite often heard my name suddenly called by an unmistakable and beloved voice…"
>
> —Sigmund Freud (1901/1966)

It has long been known that individuals sometimes hear voices that no one else can hear. Examples in historical records and traditions date back several millennia. Some of the best-known historical figures who heard voices include Socrates, Moses, Jesus, Mohammed, and Joan of Arc (Romme & Escher, 1993). More contemporary examples include Mohandas Gandhi, Martin Luther King, Jr., Adolf Hitler, Carl Jung, and Sigmund Freud (Liester, 1996). (Here we treat "voice hearing" as synonymous with "verbal hallucination," although this may be debatable in some cases, such as regarding religious experiences).

Epidemiologic research spanning a century shows that auditory hallucinations are experienced by a large number of people in the general population as well. In both the 1890s and the 1980s, the incidence of auditory hallucinations was about 2% within 10-year age groups (Sidgewick and Epidemiologic Catchment Area studies, reanalyzed by Tien [1991]). About a third (31%) of homeless adolescents and 27% of incest survivors report a history of auditory hallucinations (Mundy, Robertson, Robertson & Greenblatt, 1990). Even higher rates

of 37 to 71% have been found among college students (Barrett & Etheridge, 1992; Posey & Losch, 1983). Among people with psychiatric diagnoses, auditory hallucinations occur among 53% of people with schizophrenia, and 28% of people with major affective disorders (Haddock & Slade, 1996). Thus, although the majority of people with schizophrenia may hear voices, the vast majority of voice hearers do not have schizophrenia.

The characteristics of the experience vary greatly. Many people hear only their own name, and only during a time of stress. Leudar and colleagues (1997) posit that voices are rarely as richly individuated as people are, and that what they say is typically mundane, such as commenting on ongoing activities. However, many experience their relationship with the voice as a relationship with another person (Benjamin, 1989). Although voices typically seem just as real and just as loud as a real external voice, they do not seem *more* real than actual voices, and they are not always perceived as external to the head (Junginger & Frame, 1985). The basic qualities of the voices are the same among patients and non-patients (Barrett & Caylor, 1998; Honig, et al., 1998).

Voice hearing is often considered to be one of the most pathognomonic symptoms encountered in mental health settings. Someone hearing a voice typically receives a diagnosis of schizophrenia or another serious mental illness and is treated with psychiatric medications. Although a purely psychiatric paradigm may be appropriate in a given case, other causal possibilities include drug side effects, brain lesions, the unconscious, spiritual experiences, and other culturally sanctioned phenomena. Other intervention possibilities include cognitive-behavioral therapy, self-management strategies, meaning exploration, and the option of no intervention. Integrating information on voice hearing from multiple disciplines and perspectives, in this paper we review current explanatory models and their implications for intervention strategies.

Voices May Indicate a Non-Psychiatric Medical Condition

Voice hearing may indicate a non-psychiatric medical condition. A range of factors has been documented, from brain abnormalities to medication side effects, with varying causal pathways, ease of assessment, treatment implications, and supporting research. Note that since the base rate of voice hearing in the general population is relatively high, some of the case studies in the literature could be reporting associations between voice hearing and other conditions that are purely coincidental. We hope that the present review will spur further research and encourage critical thinking about these topics.

Left temporal lesions. Lesions or seizures in the left temporal lobe of the brain, particularly in the superior gyrus, can produce hallucinated voices, typically in the right ear (Tanabe, Sawada, Asai, Okuda & Shiraishini, 1986). Additionally, people with auditory hallucinations have been found to have reduced metabolism in brain regions associated with language and speech processing (Cleghorn, Franco, Szechtman, Brown, et al., 1992), smaller left superior temporal gyri (Barta, Pearlson, Powers, Richards & Tune, 1990), and deficits in attentional tasks requiring the involvement of the left temporal cortex (Carter, Robertson, Nordahl, Chaderjian & Oshora-Celaya, 1996). Brain regions connecting to the temporal lobe have also been implicated. For example, there are reports of acute-onset auditory hallucinations involving lesions in the left frontal lobe (Hall & Young, 1992), the caudate nucleus (Fernandez Pardal, Micheli, Asconape & Paradiso, 1985), and the brain stem (Baurier & Tuca, 1996).

Speech-related cognitive deficits. At a level of analysis more proximal to the experience of voice hearing, neuropsychologists and cognitive scientists have focused on speech processing and attentional deficits, many of which would be consistent with left temporal pathology. For example, hallucinators may misperceive their own normal subvocalizations, or inner speech, as external (Stein & Richardson, 1999). Others have characterized the faulty cognition as poor source monitoring (Morrison & Haddock, 1997), impaired discrimination of local targets (Carter, Mackinnon & Copolov, 1996), underconstrained perception (Behrendt, 1998), and poor metacognition (Baker & Morrison, 1998).

Hearing loss. Turning to a very different causal pathway that may also involve temporal functioning, hearing loss has also been known to precipitate auditory hallucinations. This can be triggered by middle ear infection (Carroll & Milnes, 1998), otosclerosis (Marneros & Beyenburg, 1997), perforated eardrum (Aizenberg, Dorfman-Etrog, Zemishlany & Hermesh, 1991), or other insults. Hallucinations connected to hearing loss are typically musical, but can also be verbal. One study reported an instance that progressed from tinnitus to musical hallucinations to voices carrying on a running commentary—ostensibly a pathognomonic symptom of schizophrenia—all of which immediately disappeared after ear surgery (Marneros & Beyenburg, 1997).

Psychoactive substances. Furthermore, many commonly ingested substances can cause auditory hallucinations. In addition to intentional hallucinogens (such as LSD [Miller & Gold, 1994]), causal agents include psychiatric medications (benzodiazapines [Chinisci, 1985], imipramine [Terao, 1995]), other medications (pentoxifylline [Gilbert, 1993], propranolol [Fernandez, Crowther & Vieweg, 1998]), drugs of abuse (methamphetamine [Matsuoka, Yokoyama & Yamauchi, 1996], ecstacy [Miller & Gold, 1994], cocaine [Siegel, 1978]), and traditional medicinal plants (datura [Goates & Escobar, 1992], khat [Pantelis, Hindler & Taylor, 1989], mabi bark tea [Hassiotis & Taylor, 1992]). Some substances produce tinnitus first, suggesting a similar mechanism to that involved in deafness-precipitated auditory hallucinations.

Other somatic conditions. Finally, many other somatic conditions have been identified as causes of auditory hallucinations. Most are clearly related to the more proximal brain and auditory dysfunctions outlined above. For example, tuberous sclerosis, which causes cerebral calcification, has been reported to cause hallucinated voices carrying on a running commentary (Okura, Kawabata, Egawa, et al., 1990). Additionally, tuberculosis can produce tumor-like lesions in the brain, as some have speculated caused Joan of Arc's voices (Ratnasuriya, 1986). Auditory hallucinations have also been reported in conjunction with Parkinson's disease (Inzelberg, Kipervasser & Korczyn, 1998), migraine headaches (McAbee & Feldman-Winter, 1999), and thyroid conditions (Pearce & Walbridge, 1991).

In some instances, these various biological factors may cause auditory hallucinations in the absence of other symptoms, thereby opening the door for a wide variety of causal and meaning attributions by the individuals, others around them, and healthcare professionals.

Voices May Be Present in Healthy Individuals

It is important to note that healthy people sometimes hear voices when no one is present. For example, Posey & Losch (1983), found that more than a third of college students reported having clearly heard their name called when no one was present, and 5% reported having held conversations with absent or deceased people. Approximately 10% reported having heard a comforting or advising voice. Most people who report auditory hallucinations in population-based studies do not report clinically significant distress or impairment (Haddock & Slade, 1996). Such statements may sound surprising because mental health professions have an exposure bias that leads many of us to use exclusively pathological models of voice hearing. Only those in distress typically come to our attention in research or clinical work (Cohen & Cohen, 1984). Liester (1996) presents a helpful continuum describing the level of pathology of the voice hearing experience, which ranges from hallucinations to illusions to imagination to revelations. In other words, the level of pathology may be independent of the level of intensity of the experience.

Published work about voice hearing among people without illness labels focuses on several different explanatory frameworks, which we refer to below as cultural influences, situational stress, inner voice, and spiritual communication. These are not mutually exclusive categories.

Cultural influences. Regardless of the explanatory framework used by the hearer or observers, culture and context shape the experience. For example, the voices heard by Saudi Arabian psychiatric patients tend to have religious and superstitious content, whereas those of British patients tend to emphasize commentary on present actions and instructions or commands (Kent & Wahass, 1996). In other cultures, spiritual experiences such as vision quests and long meditations deliberately use physical exertion and deprivation as tools to open consciousness so that messages from the creator or spirits may be received in the form of a vision or voice (Liester, 1996). Culture also greatly mediates the circumstances under which voices may be experienced, such as those described below.

Situational Stress

One of the most common normative contexts for hearing voices is extreme stress such as bereavement, trauma, and fatigue. In one survey 70% of voice hearers reported that their voices began after an emotionally traumatic or stressful event (Romme & Escher, 1989).

Bereavement. It is normative in some cultures and communities, and not uncommon in many others, to "hear" and "see" those who are recently deceased (Grimby, 1998). Hearing the voice of a deceased loved one is also sometimes reported by individuals as they are dying or having a near-death experience (Watkins, 1998).

Trauma. The concept of posttraumatic stress disorder (PTSD) has roots in psychodynamic theory, which posits that very difficult emotions and memories may be isolated from usual consciousness. Their intensity and meaning may then cause them to manifest in non-volitional representations, including voices. Some of the clearest examples of trauma-induced voice hearing may be found among those who have experi-

enced military combat (Wilcox, Briones & Suess, 1991).

Fatigue. In the Posey and Losch study (1983) of college students, some of the most common voice-hearing situations were those associated with fatigue, such as driving alone at night. Brugger et al. (1999) reported on the common occurrence of voice hearing among world-class mountain climbers during high-altitude climbs. Sleep researchers also posit that auditory hallucinations can be manifestations of REM sleep intruding into the waking consciousness (Douglass, Hays, Pazderka & Russell, 1991).

The power of suggestion. Voices can also be induced or triggered by hypnosis (Watkins, 1998). There is even a report of *folie a deux* in which exposure to someone with voices caused voice hearing in a second party (Dantendorfer, Maierhofer & Musalek, 1997).

Inner Voice

One idea that cuts across many nonmedical explanatory frameworks is that voices may deliver personally relevant messages. From a psychodynamic viewpoint, this phenomenon represents repressed unaccepted wishes or poorly integrated parts of the self, and there is evidence that hallucinated critical voices are often reduced after psychotherapy (Cullberg, 1991). In this model, voices should therefore be analyzed for their personal significance and integrated into the hearer's self rather than silenced (e.g., through medication) in order to reach the healthiest outcomes (Heery, 1989). Many models conceptualize voices as one's mind or soul "trying to tell you something," providing an opportunity for personal growth (Liester, 1996).

Spiritual Communication

Still others understand voice hearing as communication with spirits or beings other than one's self. Some posit that we all have "spirit helpers" of some sort—and that hearing voices reflects openness to their help (Romme & Escher, 1993). Others discuss these experiences as chance encounters with spirits of recently deceased strangers (Romme & Escher, 1993).

Jung (1961) viewed voice hearing as contact with deceased ancestors through the collective unconscious. Similarly, some voice hearers describe their experience as "channeling"—that is, temporarily becoming the mouthpiece for another being (Roberts, 1989). Often such experiences are described as surprising and sometimes frightening at first, but then becoming benign or transcendent over time, as the person and the spirit/being establish a mutual relationship.

Following a similar line of thought, some religious experiences may be categorized as hearing voices—such as hearing the voice of a deity during prayer or moments of need. In many traditions, it is seen as a healthy spiritual experience (Liester, 1996). In contrast, some Buddhist traditions view hearing the "voice of God" as a stage in spiritual development to be transcended (Watkins, 1998).

Many religions also hold that in hearing voices one may be hearing a spirit or a demon. In a positive light, voices (such as of angels in Christianity) have been credited with guiding individuals to find religion, to spread the words of a religious figure, and to lead people away from danger (Liester, 1996). Conversely, hearing tormenting voices may be understood as a sign that one's self or soul is possessed by a devil or demon. This historically common framework is still in widespread use today and tends to lead to congruent treatments such as exorcism or other forms of faith healing (Al-Krenawi & Graham, 1997).

Many people have found that hearing voices gives them helpful guidance, leading to beneficial behaviors, increased self-esteem, or personal fulfillment (Heery, 1989). For example, it is not typically considered aberrant for a child to report hearing the voice of an "imaginary friend" and many such children therefore do not receive treatment for this (Escher, Romme, Buiks, Delespaul & van Os, 2002).

It bears reiterating that biologically reductionist explanations may not mesh with a voice hearer's spiritual or cultural understandings. For example, while some speculate that temporal lesions caused Joan of Arc's voices (Ratnasuriya, 1986), she died believing that she heard the voices of saints and God, and her persecutors remained convinced she was possessed by demons or lying about hearing voices at all.

Still, even quite divergent explanatory frameworks are not necessarily mutually exclusive. For example, a patient might be able to agree with a doctor that brain dysfunction causes the voices and yet also believe this to be simply the mechanism through which an evil spirit is able to communicate with him. A patient may accept the label of "psychosis" because it facilitates access to medication and/or therapeutic interventions she finds useful, even if the doctor's explanation of the causes of psychosis does not fit her experience. Similarly, life stress might make someone more receptive to the influence of negative messages from hallucinated voices, regardless of their original cause.

Many Types of Interventions Are Available

Many intervention options are available to assist people who hear distressing voices. Whether or not the

voices are classified as being caused by a mental illness, voice hearing can frequently cause clinically significant depression, dangerous behavior, and even suicidality (Soppitt & Birchwood, 1997).

Across intervention models, one robust theme is that people who have active coping skills to deal with their voices fare better in terms of distress and functioning (Romme & Escher, 1989). Coping well may or may not include taking medications. What is most important is that the voice hearer is able to arrive at an understanding of the experience that fosters the development of effective management skills and personal growth (Haddock & Slade, 1996).

Assessment. A first step in intervention is assessment. Empirically validated assessment tools have recently been developed for key nuances of the voice-hearing experience (reviewed in Drake, Haddock, Hopkins & Lewis, 1998). These may be used to inform treatment plans, to establish baseline functioning, and to evaluate the outcomes of a wide range of interventions (Haddock & Slade, 1996). For example, Chadwick and Birchwood (1995) found that beliefs about voices directly affect clients' affective and behavioral reactions.

During assessment, it is particularly important to ascertain whether the voice hearer believes that the voices are in control, because this has been shown to increase the risk of violent behavior, particularly when coupled with a sense of threat and hallucination-related delusions (Link, Stueve & Phelan, 1998; Link, Monahan, Stueve & Cullen, 1999). The perceived power and authority of the voices are especially consequential and therefore important to assess (Birchwood & Chadwick, 1997). Voice hearers who can "set limits" with their voices are less distressed by them and less likely to allow voices to lead them into harmful behaviors (Haddock & Slade, 1996).

Assessment may be an intervention in itself as it encourages clients to reflect on their experiences, can help to establish the therapeutic alliance, and implicitly shows that there are people who have had similar experiences. Moreover, going over a long check-list of coping strategies that others have found useful may give clients and clinicians new ideas to consider, and underscores that they are far from having "tried everything" (Carter, Mackinnon & Copolov, 1996, also see Table 1).

Medication. For most clinicians, medication is the first treatment of choice for auditory hallucinations. Pharmacologic intervention figures prominently in standards of care for schizophrenia and other diagnoses associated with hearing voices (e.g., Lehman & Steinwachs, 1998). The most successful medication trials report positive effects in some 60-70% of participants (e.g., Kennedy, Jain & Vinogradov, 2001). This is substantial, but also means that up to a third do not experience significant symptom relief. Although clinicians and voice hearers know that finding the right medication at the right dose often brings eventual relief, side effects can be considerable and even a "good response" may not silence the voices (Sayre, Ritter & Gournay, 2000).

Adherence to prescribed medications varies for many reasons, including the stigma of needing ongoing medication, significant side effects (Worrel, Marken, Bechman & Ruehter, 2000), and financial costs. While many people who hear voices welcome medication, others—advocates, seasoned clinicians and researchers among them—conclude that the benefits of psychotropic medications do not necessarily outweigh the risks and costs, and so they advocate drug-free interventions for themselves personally, or even as a first line treatment for distressing voices (Mosher, 1999).

Cognitive-behavioral therapy. Cognitive-behavioral therapy and techniques have been successfully used to reduce voice hearing and its distressing effects (Dickerson, 2000). Most of these models explicitly incorporate humanistic, collaborative, and existential (meaning-making) elements. Their techniques have found very positive results even with chronically ill people whose symptoms were non-responsive to medication.

Transcranial magnetic stimulation. A recent report of a double-blind crossover trial of transcranial magnetic stimulation of the left temporoparietal cortex found very encouraging results, but in a pilot study of only three patients (Hoffman et al., 1999). Two reported almost complete absence of voices for at least two weeks after treatment, and the third reported a great reduction in voice activity, while changes were much less dramatic in the placebo treatment. While in the beginning stages, this could represent a promising new treatment.

Active coping and self-management. The first-person accounts of voice-hearers and cognitive-behavioral therapy models both emphasize the importance of taking an active stance in managing one's own voice-hearing experiences (Romme & Escher, 1989; Haddock & Slade, 1996). The empirical literature shows that the intensity of hallucinatory experiences can be altered via changes in behavior or environment (Delespaul, deVries & van Os, 2002). Psychiatric consumer/survivor and other voice-hearers' groups have gathered a wide range of personal-management tools, from behavioral tactics to holistic health-promotion, advocacy, and coping with stigma. For example, the National Empowerment

Center offers several self-help books, videos, and a well-respected training module for clinicians on hearing voices (Deegan, 1996). Handsell Publishing also has an expanding selection of consumer-oriented publications about voice hearing. Internet self-help resources are expanding at a rapid pace (e.g., hearingvoicesnetwork.com, hearingvoices.org.uk, voicesforum.org.uk), and some mutual aid groups for voice hearers are available, such as the Hearing Voices Network in Britain.

We have compiled a list of pragmatic strategies for coping with voices (Table 1) from these various sources. Many of even the most widely effective strategies may initially seem far-fetched, such as putting an earplug in one ear (Deegan, 1995). Although each may only work for a minority of people, most people will find relief with at least one of them (Carter et al., 1996). It is difficult to predict which will work for any given individual, so it is important to persevere with experimentation. This need for experimentation highlights the importance of education, as most individuals spontaneously think of trying only a few strategies, and fail to generate more even if their initial strategies do not work (Carter et al., 1996). It is typically recommended that voice hearers use a graded approach, first practicing the strategies while not hearing voices, then using them in situations when voices typically occur, then achieving maximum control over the voices by deliberately inducing voices and then using their favorite techniques to stop them again.

Intervention is Not Always Appropriate

Intervention options should include the possibility of not intervening. Although it is an understandable reflex to subdue symptoms, this is not always appropriate. Some people value their voice-hearing experience and want help with other problems, and some may not want or need mental health care at all. When someone reports that the voices cause no distress or impairment, or that they do not want to stop hearing the voices, clinicians should not jump to the conclusion that the person has poor insight or is minimizing real problems.

Conclusion and Clinical Implications

Auditory hallucinations have many causes that must be distinguished because they can lead to radically different treatment options and programs of research. At the same time, there are many pragmatic strategies for coping with voices that people can use regardless of their explanatory framework.

Professionals have traditionally been trained to avoid discussing the specific content or characteristics of voices with their clients (Haddock & Slade, 1996) under the assumption that doing so will "encourage" them. This needs to be reconsidered, because, when considered in light of the individual's history and background, the specific experience of voices may hold vital clues as to how they developed and how best to cope with them. A detailed understanding of individuals' voice-hearing experience yields more accurate judgments of the degree to which the voices affect their level of distress, impairment, and risk of harm to self or others.

When voices are troubling, it is important to help voice hearing individuals develop effective personalized coping strategies—emotional, cognitive, and behavioral (such as learning not to respond aloud to the voices in public)—that address distress and impaired functioning directly, rather than only focusing on reducing symptoms. Such plans must incorporate the voice-hearer's preferences and consider the individual's personal growth potential. Hearing voices can be a debilitating and stigma inducing experience. Using a multimodal, personalized, collaborative treatment approach can minimize stigma, maximize self-efficacy, and speed recovery. To facilitate such an approach, we close by offering the following points to consider when conducting an evaluation of a person who hears voices, which we wrote based on conversations with voice hearers and service providers during the course of researching the present paper. The acronym "VOICES" may be used as a mnemonic.

V*erify that it is really an auditory hallucination.* (Is it your own thoughts? Is it your own voice?).

O*rigin of the phenomenon.* (Bereavement? Brain pathology? Drugs? Stress? An illness?).

I*mpact of the voices.* (How do they affect you? Are they distressing? Are they telling you to hurt yourself or someone else? Are they helpful? How much can you affect them?).

C*ulture.* (Meaning of voice hearing, psychiatry, medication, etc., to patient's reference groups).

E*ducate the person.* (Many things can cause voices; many coping strategies are available).

S*trategize with the person and relevant others.* (Which interventions will be implemented, how outcomes will be evaluated, when intervention plan will be adjusted accordingly).

Table 1—Strategies for Coping with Voices

Strategy	Representative Citation
No Intervention (If voices are not causing distress or impairment)	1
Clinical Interventions	
Medications	2
Cognitive-behavioral therapy (CBT)	3
Problem solving training	3
Systematic desensitization	4
Psychodynamic or existential psychotherapy	5
Aversion therapy	1
Transcranial magnetic stimulation	6
Behaviors Specifically Targeting Voices	
Earplugs—try just in one ear first	7
Stereo headphones or loud music	7
Watch TV	7
Sing or play an instrument	7
Hum	7
Yawn or gargle	1
Vibrate the tongue	7
Read silently or aloud	4
Repeat short phrases subvocally (e.g., counting, mantra, positive self-statements)	7
Keep track of date, time and frequency of voices	4
Write down what the voices are saying	8
Learn about voices (e.g., reduce fear by learning they are common in general population)	1
Try to ignore or tune out voices	4
Do as the voices say	9
Focus on pleasant and positive thoughts	1
Replace bad voices with good voices	7
Yell or talk back at voices	7
Challenge or reason with voices	7
Act directly in contradiction to the voices	10
Feel bigger and stronger than the voices	4
Set limits to the voices or structure the contact	5
Continued	
Develop a loving attitude toward even the tormenting voices	1
Accept voices as part of one's life/ develop a relationship with the voices	1
Discuss voice hearing experiences openly with others to reduce stress and stigma	1
Adopt certain postures	1
Devise rituals	1
Deliberately go to sleep	7
Change of environment / Get out of the house	1
Avoid "triggering" situations	1
General Approaches to Mental Health That Also Help in Coping With Voices	
Reality checking	7
Avoid being in isolation	4
Interpersonal contact	1
Attend self-help and support groups	11
Mutually respectful relationship with therapist	4
Pay close attention to mental state and keep stress levels to a minimum	11
Temporary social withdrawal in order to regain self-control	1
Focus or concentrate on something	7
Hobbies/handicrafts/gardening/yard work	1
Relaxation or meditation	7
Pray for help	1
Vigorous physical exercise	7
Have sex	7
Play a game	7
Play with animals	7
Eat comfort foods	7
Adjust diet/take vitamin supplements	1
Improve self-esteem	1

1. Watkins, 1998
2. Lehman & Steinwachs, 1998
3. Haddock & Slade, 1996
4. Deegan, 1995
5. Romme & Escher, 1993
6. Hoffman et al., 1999
7. Carter et al., 1996
8. Liester, 1996
9. Frederick & Cotanch, 1995
10. Haddock & Slade, 1996
11. Group for the Advancement of Psychiatry, 2000

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