

# Assessing Malingered Auditory Verbal Hallucinations in Forensic and Clinical Settings

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The gold standard for the detection of malingered psychosis involves expert clinical assessment augmented by standardized psychometric testing. The evaluation of malingered auditory verbal hallucinations is complicated, however, by increasing evidence that voice-hearing is a broadly heterogeneous experience that does not always reflect psychopathology, with atypical features nearly as common as typical characteristics. The detection of malingered auditory verbal hallucinations in clinical settings may be particularly vulnerable to false positives and false negatives due to low suspicion on the part of clinicians, low utilization and poor specificity of psychometric testing, and “iatrogenic malingering” that is less likely to include cartoonish claims and more likely to involve voice-hearing as a sole presenting symptom (i.e., monosymptomatic auditory verbal hallucinations). In both clinical and forensic settings, the detection of malingered auditory verbal hallucinations requires detailed exploration of phenomenologic features along with mediating factors that influence the risk of associated violence or suicide.

**J Am Acad Psychiatry Law 47:448–56, 2019. DOI:10.29158/JAAPL.003867-19**

In a now well-known social experiment published in 1973, the late Stanford University psychology and law professor David Rosenhan and seven confederates admitted themselves to various U.S. psychiatric hospitals based on claims of hearing voices that said “empty,” “hollow,” and “thud.”<sup>1</sup> During an average hospital stay lasting 19 days, the “pseudopatients” were prescribed antipsychotic medications and tricyclic antidepressants, and seven left with a diagnosis of schizophrenia, leading Rosenhan to conclude that “we cannot distinguish the sane from the insane in psychiatric hospitals” (Ref. 1, p 257). Although the study has been cited by some as an indictment against the reliability of psychiatric diagnosis, it would be more accurate to regard it as evidence of the difficulty of detecting malingered voice-hearing.<sup>2</sup>

Unlike malingered physical injuries that might be thwarted by a private investigator armed with a cam-

era, psychiatric symptoms in general and claims of voice-hearing in particular are relatively easy to feign and largely unverifiable. In the absence of the ability to look inside someone’s head for a specific biological marker of auditory verbal hallucinations (AVH), evaluators must often perform what are, at best, probabilistic assessments of malingering. This article reviews challenges faced in the evaluation of malingered voice-hearing, highlighting differences in forensic and clinical settings, as well as the diagnostic conundrum of nonpsychotic AVH.

## Forensic Aspects of Malingered AVH

### Typical Voices

A generation of psychiatrists has relied on published guidelines for the detection of malingered psychosis, most notably those composed by Resnick<sup>3-7</sup> and others following his work.<sup>8-11</sup> These guidelines advise clinicians to be globally vigilant for symptoms reported with vagueness, inconsistency, and evasiveness on detailed questioning, as well as any atypical features of endorsed AVH. It must be noted, however, that what is typical or atypical for AVH has been largely based on older studies with a limited

Published online September 13, 2019.

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Disclosures of financial or other potential conflicts of interest: None.

number of diagnostically heterogeneous patients. The oft-cited 1971 study by Goodwin *et al.*<sup>12</sup> included 116 hospitalized patients with a variety of diagnoses made according to the Diagnostic and Statistical Manual of Mental Disorders, Second Edition (DSM-II),<sup>13</sup> including schizophrenia, affective disorder, organic brain syndrome, alcoholism, and hysteria; the subsequent survey in 1996 by Nayani and David<sup>14</sup> involved 112 psychiatric outpatients with similarly diverse diagnoses. In both of these relatively small samples, typical features of AVH such as clarity and external localization would be more accurately described as trends, with nontrivial exceptions and significant variability being the rule.

Recognizing the limitations of older phenomenologic studies along with increasing evidence of broad AVH heterogeneity,<sup>15,16</sup> McCarthy-Jones and Resnick<sup>17</sup> recently provided an updated list of typical AVH features to guide malingering assessments. Drawing from a larger but still relatively modest survey of 199 patients,<sup>18</sup> 81 percent of whom had schizophrenia, the authors reinforced earlier guidelines suggesting that typical AVHs consist of voices that are clear, repetitive, at least partially controllable, and sound like real speech that is different than the hearer's own voice and is usually identifiable.<sup>17</sup> The authors noted, however, that up to 21 percent of subjects heard voices that sound like gibberish, 44 percent heard "ideas" rather than speech, 34 percent heard a voice that might be their own, and 11 percent heard voices that were experienced as less than real. With these sizeable exceptions in mind, the authors concluded that "the creation of a profile of a typical AVH has significant limitations for use as the sole yardstick to assess the validity of a claimed AVH" (Ref. 17, p 184). Instead, it is recommended that clinicians pay greater attention to atypical AVH features, particularly when clustered together.

Determining the typicality or atypicality of AVH based on surveys of clinical populations must be considered critically because the apparent heterogeneity of AVH may be an artifact of methodologic challenges related to diagnosis. Phenomenologic surveys suffer from what has been described as a tautological dilemma in which the diagnostic relevance of AVH characteristics is limited when the original diagnosis is recursively based on those same characteristics.<sup>19</sup> For example, studies which conclude that internal AVH (i.e., voices coming from "inside" one's head) are atypical but are sometimes found among those

with psychotic disorders<sup>12,14,20,21</sup> are only valid if the original psychotic disorder diagnosis was correct. If instead the diagnosis was incorrectly made based on reports of atypical AVH, any such conclusion becomes merely tautological. DSM-5 skirts this problem altogether, abandoning any historical distinction between or diagnostic relevance of "true hallucinations" and less pathological "pseudohallucinations."<sup>19</sup> This "continuum" approach to the diagnostic heterogeneity of AVH de-emphasizes the value of phenomenology in assessment, forensic or otherwise.

### **Malingered Voices**

An alternative and potentially more reliable approach to distinguishing typical versus atypical AVH has been to survey psychotic symptoms endorsed by known malingerers. Pollack<sup>22</sup> compared reports of AVH by 30 incarcerated offenders with psychotic disorders to 35 nonpsychotic offenders who were instructed to simulate reports of AVH. In contrast to AVH reported by real patients, simulated AVH were typically described as a single, continuous voice that was unintelligible, unidentifiable, and uncontrollable. Notably, the content of malingered voices almost always consisted of commands to commit crimes. Beaber *et al.*<sup>23</sup> administered a questionnaire (the "M Test") that surveyed atypical psychotic symptoms and compared the responses of patients with schizophrenia to those of college undergraduates instructed to simulate symptoms of schizophrenia after reading DSM-III criteria. According to the authors, the M Test was effective in distinguishing between the two groups, correctly identifying 87 percent of patients with schizophrenia and 78 percent of simulators. This approach of querying similarly cooperative simulators about atypical, rare, "blatant," "improbable," "unusual," and "absurd" psychotic symptoms has been the core strategy of validating structured interviews that now represent the psychometric gold standards for detecting psychiatric malingering, including the Structured Interview for Reported Symptoms (SIRS),<sup>24,25</sup> the Structured Inventory of Malingered Symptomatology (SIMS),<sup>26,27</sup> and the Miller Forensic Assessment of Symptoms Test (M-FAST).<sup>28</sup>

If the detection of malingered psychosis relies heavily on the endorsement of highly atypical symptomatic claims, it would logically follow that knowledge about typical symptoms would increase one's ability to avoid detection. Indeed, the most naïve

malingers of AVH sometimes make cartoonish claims that are easily identified as improbable (e.g., not only hearing, but seeing, conversing, and otherwise interacting with fully formed hallucinations as if in a scene from *A Beautiful Mind*<sup>29</sup>; or having a little red devil perched on one's shoulder urging criminal activity while a little white angel on the other shoulder urges restraint). In contrast, malingerers who have received coaching and possess clinical knowledge might be expected to be better at evading detection. This hypothesis has been examined in validation studies of several psychometric tests. Rogers *et al.*<sup>30</sup> performed a study of the SIRS in a forensic population of 51 "psychologically knowledgeable" inmates at the Oregon Correctional Institute, where participants had already undergone psychological assessment and had liberal access to treatment services. The SIRS was judged to have 88 percent sensitivity for distinguishing voluntary simulators from honest responders. In a subsequent study, Rogers and colleagues<sup>31</sup> administered the SIRS to undergraduates who had been coached about how those with genuine mental illness report symptoms. Once again, it was found that the SIRS distinguished coached simulators from a control sample of psychiatric inpatients with nearly perfect accuracy. Similar findings have been reported with the SIMS, in which sensitivity for detecting malingering remained high even among coached and knowledgeable simulators,<sup>32,33</sup> although its sensitivity was reduced with forewarning of symptom validity testing.<sup>27</sup> The M-FAST has also been shown to be resistant to coaching effects in the malingering of posttraumatic stress disorder.<sup>34</sup> Taken together, these findings suggest that, contrary to expectations, textbook knowledge and coaching about psychiatric symptoms do not make one more adept at evading the detection of malingering through psychometric testing due to the persistent over-reporting of symptoms. In short, malingerers often try too hard to appear "crazy."

### Compliance with Command AVH

The relevance of AVH to forensic assessments often relates to defendants' claims that the AVH commanded criminal behavior.<sup>35</sup> As recently as a few decades ago, there was a considerable lack of clarity surrounding the topic of compliance with command auditory hallucinations (CAH). Early studies reported very low rates of compliance,<sup>12,36</sup> and in 1986 the American Psychological Association wrote an

amicus brief for the case of *Colorado v. Connelly* that concluded, "probably less than one percent (1%) of all people who receive command hallucinations actually obey them, and the percentage is likely to be even lower for persons who receive command hallucinations to act in ways that are physically harmful to them, or otherwise contrary to their self-interests" (Ref. 37, p 26). In sharp contrast, other studies found rates of self-reported compliance with CAH of 39 to 88 percent, such that clinical lore has often suggested that individuals with psychotic disorders are highly prone to obey CAH, as if automatons at significant risk for dangerousness.<sup>38-41</sup>

Research over the past 20 years has resulted in a more nuanced understanding of the predictors of compliance with CAH. Braham and colleagues<sup>42</sup> performed a thorough review of studies published from 1990 to 2000 and concluded that the disparate rates of CAH compliance in previous studies could be partially explained by methodologic challenges, including different patient samples, different definitions of compliance (e.g., partial versus full), and reliance on self-report. In addition, a variety of experiential aspects of CAH appear to increase the likelihood of compliance, including voice characteristics (e.g., benevolence, familiarity), command details (e.g., trivial as opposed to dangerous), and beliefs about the voices (e.g., perceived omnipotence, associated delusional thinking). Another critical review of the literature spanning from 1971 to 2005 agreed that existing studies are plagued by methodologic differences that have resulted in CAH compliance rates ranging from 0 to 90 percent.<sup>43</sup> This review concluded that both CAH content and associated beliefs are important in determining the likelihood of compliance. Subsequent studies have since reinforced the conclusion that CAH compliance is not predicted by voice-hearing alone, but by mediating factors such as perceived omnipotence (e.g., social superiority and power), benevolence (e.g., malevolent voices are more likely to be resisted), and other associated delusional beliefs related to the consequences of compliance and noncompliance.<sup>44,45</sup>

For forensic purposes, the potential association between CAH and dangerousness must be examined separately from findings about general compliance. Rudnick<sup>46</sup> reviewed studies from 1966 to 1997 and reported that most did not find any direct relationship between CAH and either violent or self-injurious behavior, and the subsequent review by Barrowcliff

and Haddock<sup>43</sup> echoed this conclusion. In contrast, the review by Braham *et al.*<sup>42</sup> discussed the lack of clarity surrounding this topic. Indeed, a few studies have suggested alarmingly high rates of compliance with violent CAH. Junginger<sup>38</sup> found that 40 percent of a small clinical sample reported compliance at some point with “dangerous” CAH. McNeil and colleagues<sup>47</sup> likewise found that, among a sample of 103 inpatients, those with CAH were more likely to report a history of violence in the two months prior to hospitalization than those without CAH. Other studies have found a differential rate of compliance between CAH related to violence toward others (ranging from 40% to 69%) and violence toward self (ranging from 35% to 92%).<sup>39,44,45</sup> Such high rates of compliance are likely artifacts of biased sampling methodologies related to forensic settings and simplistic, dichotomous self-reports of lifetime compliance that do not necessarily correlate with objective measures of violence. For example, claims of CAH within a forensic sample of 110 incarcerated inmates were correlated with actual episodes of staff-observed self-harm, but not violence toward others.<sup>48</sup> An inpatient study found some of the highest rates of self-reported compliance with harmful CAH in the literature, but no actual increased risk of documented self-harm or aggression in the preceding year for those with CAH compared with those with non-command AVH or no AVH at all.<sup>39</sup> As with CAH in general, reported differences in compliance rates for harmful CAH might also be explained by mediating factors. In addition to the factors associated with general CAH compliance,<sup>42,43</sup> one study using a small clinical sample found anger and impulsivity to be additional predictors of compliance with harmful CAH.<sup>49</sup> Another study found that both a history of severe childhood abuse and comorbid substance use disorder increased the risk of compliance with CAH urging self-harm.<sup>50</sup>

Collectively, these findings dispel the popular myth that those experiencing CAH are automatons having high rates of compliance with malevolent voices urging violence. This has two important implications for the assessment of malingered CAH in forensic settings. First, self-reports of compliance should be viewed skeptically in the absence of mediating factors and should raise significant suspicion of malingering. Second, because CAH alone would not be sufficient to support claims of incompetency to stand trial or to negate *mens rea* for not guilty by

reason of insanity pleas and would therefore not likely impact sentence mitigation, successful malingerers would need to feign mediating factors such as delusions as well. In the forensic setting, malingering CAH as an isolated symptom should therefore be a rarity.

### **False Positives and False Negatives**

Malingering is common in the forensic setting. Estimated rates of malingering vary across different populations, including 65 percent of jail inmates seeking psychiatric services, 18 percent of those found incompetent to stand trial,<sup>51</sup> and 30 to 40 percent of personal injury and disability cases.<sup>52,53</sup> To maximize the detection of malingered psychosis, it is generally recommended that forensic assessment include both expert clinical evaluation and psychometric testing of multiple symptomatic domains.<sup>4,7,25</sup> Ideally, psychometric tests should possess good sensitivity and specificity,<sup>25,27</sup> but even very small rates of false positives and false negatives can present practical problems and ethics concerns. False positives risk inappropriate punishment for those with real mental illness, can result in more severe sentencing,<sup>54</sup> and can leave evaluators liable in malpractice litigation.<sup>55</sup> False negatives risk inappropriate exoneration of malingerers, allowing them to skirt justice and undermining the reliability of forensic psychiatric evaluation.

## **Malingered AVH in Clinical Settings**

### **Challenges in Detection**

Although it has been suggested that the rate of malingered psychosis is low outside of forensic populations,<sup>3</sup> the actual rate of malingering in the clinical setting is unknown and is potentially underestimated due to several factors. To begin with, clinicians often have low rates of suspicion for malingering,<sup>1</sup> with a “physician’s bias” that presumes *a priori* that help-seeking patients have a disease or disorder.<sup>56</sup> Because clinicians tend to be more concerned about inappropriately diagnosing malingering (i.e., false positives) than missing the diagnosis of malingering (i.e., false negatives), they often resolve symptomatic ambiguity by giving patients “the benefit of doubt.”<sup>57</sup> In the clinical setting, malingering and psychosis are also not mutually exclusive. Even patients with schizophrenia are known to over-report and under-report symptoms as convenient to secondary gain.<sup>58</sup>

Malingering may also be underestimated in clinical settings where psychometric testing is rarely used and often unavailable. In addition, although psychometric testing may be useful in detecting coached simulators, malingering may be harder to detect when individuals possess real clinical experience of psychiatric symptoms. In the only study of its kind to test this hypothesis, Pollack<sup>22</sup> surveyed the reported AVH of not only incarcerated patients with psychotic disorders and those simulating psychosis as described earlier, but also a third group of suspected malingerers who had a real history of psychosis, designated as “previously ill/faking” (PIF). As expected, the PIF group reported psychotic symptoms that were phenomenologically more similar to those with active psychosis than those simulating them, with the exception of intelligibility, insight, control, ability to cope, and levels of distress, which were more similar to simulators. This finding suggests that, when malingering, those with clinical experience of psychosis tend to over-report quantitative rather than qualitative features of AVH. Pollack concluded:

The PIF group were able to mimic the genuinely ill offender’s description of the voice(s) reasonably well, making it difficult to decipher accurately whether these offenders are genuinely psychotic and malingering or simply feigning symptoms on the basis of their memory of prior illness. The PIF group present with a mixture of both genuine and simulating patterns. This group of clients is, therefore, most in need of extended assessment to clarify the clinical picture. (Ref. 22, p 322–23)

Other studies of psychometric testing for malingering have examined clinical samples, but have generally limited them to control groups. Of note, the use of clinical control groups results in a narrower magnitude of difference in SIRS scores between simulators compared with nonclinical controls.<sup>25</sup> In addition, the specificity of the SIRS in detecting malingering has been found to be as low as 65 to 80 percent in some clinical populations.<sup>25,59</sup> The SIMS, which lacks items about common symptoms of mental illness, has likewise been found to have low specificity rates in some clinical samples,<sup>27,59,60</sup> with one study finding only 70 percent specificity in patients with schizophrenia.<sup>61</sup> These results suggest a potentially sizeable false positive rate when using psychometric testing to detect malingering in individuals with existing mental illness, limiting its utility in this population. It has been noted that even modest false positive rates may be unacceptably high when base rates

of malingering are low (e.g., outside of forensic settings).<sup>62</sup>

It should also be noted that psychometric assessments such as the SIRS, SIMS, and M-FAST are not specific to psychosis and include a broad range of questions about general knowledge, cognitive abilities, and other psychiatric symptoms. Their utility for detecting malingering is therefore maximized when a variety of symptomatic domains are simulated in aggregate, but may be limited, and especially prone to yield false negatives, if voice-hearing is an individual’s only endorsed complaint (e.g., mono-symptomatic AVH).

### Iatrogenic Malingering

When malingering does occur in the clinical setting, the motivations of secondary gain often differ from those seen in forensic populations. Whereas criminals typically feign psychiatric symptoms to escape or mitigate punishment, malingering in the clinical setting usually occurs in the service of obtaining housing, disability income, medications, or access to other clinical and social services.<sup>4,22</sup> These different motivations may in turn influence symptomatic claims (see Table 1). For example, those malingering psychosis in the forensic setting might be likely to retrospectively claim that “the voices told me to do it.” But because isolated CAH are insufficient to negate *mens rea* and are not independent risk factors for violence in the absence of delusions and other mediating factors, forensic malingerers must provide additional reasons for obeying voices. In contrast, as was illustrated in Rosenhan’s study,<sup>1</sup> monosymptomatic AVH is often more than adequate to access clinical services. Malingerers in the clinical setting, however, don’t typically endorse hearing voices saying “empty” and “hollow” so much as they are likely to prospectively threaten (e.g., “The voices are telling me to kill myself.”). Because many clinicians equate CAH with heightened suicide risk without considering mediating factors in their risk assessments, there is minimal incentive for malingerers to over-report the kind of rare or fantastic psychotic symptoms that are queried in forensic settings and during psychometric testing. Clinical malingerers with real experience with psychiatric symptoms therefore may be less prone to cartoonish simulation.

The term “iatrogenic malingering” was coined in 2003 to describe the perceived increase in “mis-labeled, embellished, or feigned” claims of suicidality

**Table 1** Differences Between Malingered Voice-Hearing in Forensic and Clinical Settings

	Forensic	Clinical
Presentation	Calls attention to voices initially, but vague, evasive, and inconsistent with detailed questioning	Calls attention to voices initially, but vague, evasive, and inconsistent with detailed questioning
Secondary gain	Exculpation from criminal charges	Obtaining services
Voice characteristics	“Atypical,” cartoonishly exaggerated	Overlapping with drug-induced symptoms or nonhallucinatory experiences such as depressive ruminations
Voice content	Commanding violence or other criminal behavior	Commanding suicide (less commonly with violence toward others)
Compliance	Claimed due to malingered delusions	Claimed due to mood-congruence
Clinical course	Persistent while still in a forensic setting	Voices and contingent claims of suicide resolve once services are obtained

and voice-hearing occurring in conjunction with the restriction of inpatient services for substance use disorders within the Department of Veterans Affairs (VA) health care system.<sup>57</sup> With the transitioning of VA substance use disorder services from inpatient programs to outpatient and community residential programs starting in 1995 and the subsequent abolishment of Social Security disability incomes for substance use disorders via the 1996 Contract With America Advancement Act,<sup>63</sup> the malingering of psychiatric symptoms became incentivized for those who would have previously qualified for services and benefits based on substance use disorders alone. In 1997, Resnick<sup>3</sup> predicted that malingered psychosis would increase in kind, noting that “society’s disenfranchised individuals are starting to shift coping strategies from somatic to psychiatric symptoms . . . [as a result of] lack of exactitude in psychiatric diagnosis, widespread availability of mental health services, and the decreased stigma associated with mental illness” (Ref. 3, p 47). Indeed, by 1999 psychiatric disturbances had become the largest single reason for Social Security disability awards, with schizophrenia as the diagnosis in a third of successful mental disorder claims.<sup>64</sup>

Iatrogenic malingering has been defined as “the willful misrepresentation of symptoms to gain access to more comprehensive or higher-quality care” (Ref. 57, p 253). Iatrogenicity refers not only to the structural barriers that incentivize malingering described above, but also to the way that clinical interactions teach patients a medicalized language to voice distress along with the rules to qualify for clinical care. Several authors have noted that patients have a limited vocabulary to describe AVH-like experiences, and this vocabulary is especially susceptible to cueing

on the part of clinicians.<sup>65-67</sup> As inpatient beds have been progressively reduced over the past 20 years,<sup>68</sup> hospital admission criteria have become increasingly narrow such that gatekeepers emphasize queries about severe symptoms like acute suicidality and psychosis.<sup>69</sup> In response, typical claims of iatrogenic malingering include depression, monosymptomatic voice-hearing, and suicidal ideation contingent on hospital admission. Voice-hearing claims may be particularly vulnerable to iatrogenic influence, with evaluators left to sort out whether they reflect true symptoms (e.g., current or past experiences of mental illness or substance use), mislabeled symptoms (e.g., describing depressive ruminations as “voices”), or frankly malingered psychosis.<sup>19,70</sup>

In the absence of a well-established psychotic disorder, an initial claim of “hearing voices telling me to kill myself” can be thought of as an idiom of distress requiring further evaluation by the clinician to clarify the differential diagnosis. In making clinical decisions, gatekeepers must avoid equating the presence of CAH with elevated suicide risk in favor of more detailed questioning about mediating factors and careful management of contingent suicidality.<sup>71</sup> In addition to vagueness and evasiveness when queried about the details of alleged symptoms, the hallmark of malingered psychosis in the clinical setting is rapid resolution upon hospital admission and receipt of desired care. If malingering is suspected, clinical management should therefore emphasize the disincentivization of malingering by listening to patient complaints with compassion, managing countertransference by recognizing iatrogenicity, and providing assistance with substance use disorder treatment and relevant psychosocial problems (e.g.,

housing, etc.) as needed and when possible.<sup>57,62,72</sup> Although clinicians may reflexively prescribe antipsychotic medications for reports of AVH during initial visits, a case series indicated resolution of AVH and malingered AVH in the setting of hospitalization, supportive care, sobriety, and a brief course of sedating medications.<sup>70</sup>

### Nonpsychotic Voice Hearing

It is increasingly recognized that voice-hearing is a heterogeneous phenomenon with personal experience that does not always align with textbook descriptions and conventional constructs.<sup>73</sup> Although the previously reviewed phenomenologic surveys of AVH included some diagnostic variability, most of the surveyed respondents were diagnosed with psychotic disorders.<sup>14,18</sup> More recently, an Internet survey of 157 “voice-hearers,” among whom only a minority had a known or disclosed psychotic disorder, found even greater phenomenologic heterogeneity of AVH-like experiences,<sup>74</sup> supporting a “discontinuous model” in which voice-hearing might be best conceptualized as an umbrella term for a wide variety of distinct experiences.<sup>19</sup> For example, this survey, together with another recent interview-based study of individuals with a “schizophrenia spectrum diagnosis,” found that only 18 to 44 percent of respondents characterized their voices as exclusively auditory in quality.<sup>74,75</sup> When surveying voice-hearers beyond those with clearly defined psychotic disorder, the heterogeneity of voice-hearing includes not only variations in clarity, frequency, localization, multiplicity, and identifiability, but also a range of experiences that might be better categorized as inner speech, inner thoughts, ruminations, thought insertion, ideas of reference, and other phenomena.<sup>15,16,75,76</sup>

These novel findings suggest that the term AVH may be inappropriately applied to some experiences within the broader category of voice-hearing, with implications for both forensic and clinical psychiatry. Foremost, monosymptomatic voices should not be automatically equated with the presence of a psychotic disorder.<sup>19,77</sup> In fact, a sizeable proportion of voice-hearers may have no clinical diagnosis at all.<sup>78,79</sup> For clinicians, the differential diagnosis of voice-hearing therefore includes traditional AVH, malingering, and a range of other AVH-like experiences that may or may not be appropriate targets for pharmacotherapy or other clinical interventions.

Similarly, in forensics, voice-hearing might represent *bona fide* evidence of mental illness with relevance to *mens rea*, malingering, or an incidental finding not necessarily reflective of psychopathology and more consistent with one’s own thought than a hallucination. With this range of possibilities in mind, forensic experts must take care not to conflate the co-occurrence of voice-hearing and the commission of a crime with mental disorder, as lawyers and juries might be prone to do, without much more extensive evaluation.

### Conclusion

In a sidebar to the study by Rosenhan,<sup>1</sup> a hospital was given advance notice that additional pseudopatients would attempt to gain admission by malingering. With such forewarning, staff members rated 21 percent of those admitted as likely malingerers over a three-month period when in fact no such pseudopatients presented for evaluation. This finding is impossible to interpret without knowing the actual rate of malingering of the evaluated patients outside of the study, but it suggests that evaluators can be primed to overdiagnose malingering, just as clinicians are often prone to underestimate it.

The evaluation of malingered voice-hearing is complicated by increasing evidence that voice-hearing is a broadly heterogeneous experience, with myriad exceptions to what constitutes a typical AVH. While psychometric testing can assist in the detection of malingering based on the qualitative over-reporting of cartoonish claims and other types of psychiatric or cognitive impairments, such testing may be vulnerable to false positives in clinical populations and may yield false negatives when endorsement of psychotic symptoms is limited to AVH. Recommendations for the evaluation of malingered psychosis in the forensic setting therefore may not always translate well to the clinical realm.

In practice, the detection of malingered AVH is often not so much about the right or wrong answers to questions about phenomenology as much as it is about having detailed and consistent answers at all. Although the apparent heterogeneity of voice-hearing has disincentivized the detailed evaluation of phenomenology in diagnosis, both clinicians and forensic evaluators would do well to plumb the depths of voice-hearing claims to maximize clinical and judicial outcomes alike, avoid unnecessary interven-

tions, and minimize false positives and false negatives in the assessment of malingering.

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