Bizarre thoughts, magical ideations, and voices from the unconscious: Exploring issues of anomalous experience

Armon Tamatea & Ian M. Evans

Clinical Psychology Research Laboratory, Department of Psychology, University of Waikato

This project was initially concerned with the clinical interpretations of 'bizarre' or 'magical' ideations (i.e., statements considered to have little or no validity in our predominant western culture). The first study explored clinical assessment issues of who determines the validity of expressed beliefs and what kinds of criteria such decisions are based on in the mental health field. The present study examined a particular type of magical ideation, an auditory phenomenon involving claims that forward spoken conversation contains hidden backwards speech embedded in the vocal sounds. Thirty-two participants were invited to listen to various audio samples of the alleged phenomenon and provide interpretations of what was heard. Participants were assigned to four groups, each differing in the level of pre-emptive information. A comparative measure revealed that priming and suggestion could not be dismissed as alternative explanations of the reported effects. Clinical and social implications will be discussed.

Our inquiry began with this question: *What criteria distinguish an authentic spiritual experience from mental illness?*

Historically, the line between spiritual experience (e.g., some forms of religious phenomena) and psychosis is vague (Sanderson, Vandenberg, & Paese, 1999). The resultant effect being that such experiences were regarded by some (for instance Sigmund Freud and Albert Ellis) as irrational, delusional and antithetical to mental health, whereas others had insisted on the salience of spiritual experiences as a major and integral aspect of mental health and self-actualisation (for instance Carl Jung and Abraham Maslow).

Despite the impact of religion on the form and content of mental illness, mainstream psychiatry has tended to ignore, pathologies, or dismiss, such experiences to the fringe of accepted practice with such labels as 'existential' or 'cultural' (Turbott, 1996). Religion centres on existential issues that can have profound psychological importance, but conflicting religious beliefs and experiences can be both a reflection of psychological distress as well as a cause (Exline, Yali, & Sanderson, 2000).

Conceptual, Diagnostic, and Assessment Issues

Concepts of spirituality in Aotearoa are diverse and show enormous variation. Indigenous Māori spiritual concepts (Irwin, 1984) may be largely misunderstood by health practitioners in general, and mental health professionals in particular (Turbott, 1996). Krawitz and Watson (1997) offer the following perspective on the current professional situation: "When a Pākehā health professional sees a Māori patient, it has, in the past, been too easy to ascribe psychological, rather than social or cultural, explanations to the presentation" (p. 475).

Recent psychiatric literature and contemporary sociopolitical developments suggest a need to reconsider the place of religion and spirituality in mainstream psychiatry (Turbott, 1996). The current Diagnostic and Statistical Manual for Mental Disorders (DSM-IV) provides guidelines for discriminating normal and abnormal behaviour, but little guidance is given regarding religious experiences and spirituality. These are generally ignored, with somewhat vague reference given to

'certain cultural contexts' (American Psychiatric Association, 1994). The reliance on 'cultural contexts', for the determination of abnormality, is particularly problematic in a multicultural society where beliefs and practices vary widely among different religions, denominations, geographic locations, and ethnic subcultures (Sanderson et al., 1999).

The DSM-IV raises issues of:

- Who determines whether the experience is culturally congruent?
- What assessment criteria should be used in making the determination?
- What aspects or dimensions of the experience are important in making these kinds of decisions?

Such issues are problematic for mental health professionals who must decide the mental status of individuals reporting ideation and behaviour motivated by spiritual concerns (Sanderson et al., 1999). Furthermore, mental health professionals in Aotearoa continually face challenging clinical situations that involve magical ideations and 'bizarre' thinking, and thus, they need to be aware of the range of belief systems within mental health services (Caldwell & Jorm, 2000).

Magical Ideation

Historically, 'bizarre' ideations have been linked to spiritual experience as well as to mental illness (Eckblad & Chapman, 1983). They may also derive from, and include superstitiousness, clairvoyance, telepathy (American Psychiatric Association, 1980), beliefs in magical influences, the new age, and the paranormal (Roe, 1999). 'Magical Ideation' may be defined as: "The belief in what Western culture would consider invalid causation, such as superstitiousness, clairvoyance, telepathy, and so on" (Lindsay & Powell, 1994, p.335). In other words, a belief in forms of causation that by conventional standards is insupportable.

However, it is interesting that magical ideations have been found to be prominent characteristics of people considered to be at risk for the later development of schizophrenia (Eckblad & Chapman, 1983), and may be related to or manifest as visual and auditory hallucinations (Chadwick & Birchwood, 1994; Close & Garety, 1998).

Magical Ideation Assessment

Eckblad and Chapman (1983) developed a scale of magical ideation as an indicator of 'psychosis proneness', which focused on the unconventional beliefs that were defined above. The instrument is a 30-item, self-response questionnaire designed to measure the magical ideations judged to be characteristic of schizotypal disorders, and it is considered a general measure of proneness to psychosis (Chapman, Chapman, Kwapil, Eckblad, & Zinser, 1994).

The aim of the initial study was to examine how mental health professionals and primary caregivers make judgements and assessments pertaining to the authenticity and mental health of tangata whaiora, where 'magical ideation' is a component of their diagnosis. Examples of magical ideation were presented on the Magical Ideation Scale, as developed by Eckblad and Chapman (1983). Some Māori spiritual concepts were included because tangata whaiora are overly represented in the New Zealand mental health system, and like any spiritual notion, Māori spiritual ideas can be expressed like magical ideation-type assumptions.

The Initial Study

The participants involved in the initial study were three groups of mental health professionals (i.e., seven clinical psychology trainees, three mental health support workers from a community-based mental health-care agency, and five mental health professionals such as registered registered nurses and cultural facilitators). Almost all of the participants were Māori, and most of them shared a deep awareness and understanding of Māoridom, in an experiential sense, and were brought to the field through a desire to serve the needs of Māori.

A modified version of the Magical Ideation Scale (MIS) was used. All of the items inquired about the subjects' interpretations of their personal experiences, rather than belief in the theoretical possibility of magical forms of

causation. Some of these experiences (e.g., superstitiousness, clairvoyance, telepathy, "others can feel my feelings", etc.) may enjoy subc ultural support; other items tap beliefs that receive little or no subcultural support, such as secret messages in others' behaviour or in the arrangement of objects (Eckblad & Chapman, 1983). Higher ratings would indicate that the subject may perceive the expression of such statements from another as indicative of mental health problems. Many supplementary items were devised to reflect culturally (and subculturally) supported ideas in New Zealand.

The questionnaire was administered to the three groups, and upon completion of the questionnaire, the participants in each focus group were engaged in discussions where they were asked to comment on the issues arising from the questionnaire items. The participants in this study made a number of astute observations concerning the relationship of magical ideation type experiences and the current mental health system in New Zealand. They also made recommendations concerning the improvement of service delivery. These included:

- The importance of examining reported strange experiences in the context in which they occurred
- Group collaboration with appropriate persons recognised within the community as having the necessary expertise to provide informed perspective on such issues. The need for information-gathering is central to the clinical interview process (Matthews, 1997), and the inclusion of information of such pervasive constructs as dimensions of spirituality may well be significant knowledge to accumulate
- The consideration for New Zealand-specific diagnostic instruments – not just using the normed data of foreign-based instruments – but psychometric measures to reflect New Zealand's unique psychological needs
- Rethinking aspects of mental illness, as some participants regarded that some anomalous experiences may not actually be indicative of mental illness, but rather possession of positive talents – even if distressing.

The participants identified the necessity for acquiring knowledge of cultural 'norms', and utilising that information in the assessment process. This view supports the Ministry of Health (1995) guidelines. A point of interest that arose from this investigation concerned the 'positive' aspects of psychosis, and that such experiences may be sanctioned in Māori lore, but may be misconstrued as a lesser phenomenon with potentially detrimental consequences. Although 'bizarre' ideations have been linked to mental illness (Eckblad & Chapman, 1983), current trends in popular beliefs may also tend to normalise previously unaccepted ideas. If this is so, how will such social changes affect conceptions of magical ideation and psychosis?

An experiment

In order to investigate the effects of a contemporary magical ideation we decided to test the little-known but interesting controversy that exists concerning claims that backward messages are hidden unintentionally in all human speech, and that the messages can be understood by recording normal speech and playing it in reverse (Newbrook & Curtain, 1998). The aim of this experiment was to investigate the effects of this phenomenon using signal detection methods to observe listener's perceptions of famous and suspect 'reverse speech' samples. The manipulation of suggestibility and priming variables were the focus of this investigation to examine the potential role they may play in reverse speech perception.

The participants in this study were 32 undergraduate students attending a psychology course at a tertiary institution. The experiment utilised a between-groups design, as outlined by Kazdin (1980), where participants were randomly assigned to four groups of eight. Each group was exposed to a different set of procedures. Seven short recordings of alleged reverse speech sequences were selected from the 'Reverse Speech' website and transferred onto analogue tape. The recordings were selected as they were generally regarded as examples supporting popular theories and claims of reverse speech (Oates, 1991; 1996). Examples of the recordings:

JFK assassination radio broadcast

Suspect reversal: "He's shot bad, hold it, try and look up".

Alternative reversal: "She's not bad, mould it, fly and look out".

O.J. Simpson Trial

Suspect reversal: "I fear the dead wife".

Alternative reversal: "I feel the lead pipe"

Neil Armstrong's Moon landing broadcast

Suspect reversal: "Man will space walk".

Alternative reversal: "Bats hit cave walls".

After each participant had been invited into the laboratory, they were exposed to one of each of four conditions that differed in terms of the amount of information given prior to each trial. For instance, the 'suggestion' condition invited participants to listen for 'words or phrases' that may be in the stimulus, the primed conditions involved either the popular interpretation, or a phonemically equivalent alternative as a prompt. A control group were provided with no prompts or leads whatsoever.

Analyses were conducted to test for significant differences between the control, suggestion, and each primed group. A one-way ANOVA revealed significant differences between groups, F (3,28) = 6.2, $p < 0.05$, and a Tukey's post hoc test was conducted to examine where these differences were. The largest differences occurred between the Control and Primed (suspect) groups ($p<0.05$), as well as between the Suggestion and Primed (suspect) groups ($p<0.05$). No significant difference was found between the two primed conditions ($p>0.05$).

Figure 1 shows that participants in all test conditions had "heard something", or interpreted meaning in the target stimuli. The results show that the more information that is delivered prior to exposure to the stimuli, the more likely that participants were to hear apparent perceptions in the target stimuli. Furthermore, the two primed conditions yielded the highest means over the four conditions, these findings also imply that the participants were perceiving what they were instructed to perceive.

The data in Figure 2 clarify the distinguishing effects of suggestion and priming. The Suggestion group reported hearing some 'meaningful' words and phrases after exposure to the stimuli on multiple trials, whereas the Control group made no claims. Both Priming groups more frequently reported hearing each phrase within the target stimulus on fewer exposures. The primed phrase was normally reported to have been present in the target stimuli within the first exposure.

The findings of this investigation indicate that the perceptual effects of reverse speech may be the result of priming and suggestibility. In other words, perception of reverse speech may say more about the listener than it does about the speaker. Consequently, the outcomes of this study do not support the theory of 'speech complementarity' - that human speech has two distinctive functions and modes (Oates, 1996).

Conclusions

In conclusion, the issues raised by these studies sparked thoughtful and concerned commentary from the participants. As can be seen, the discussion went somewhat beyond the original question of comparing spiritual experiences with magical ideations, and how we can separate beliefs that might be judged as "magical" and inappropriate (and thus having possible diagnostic implications), from those that are "magical" but fall within the conventional belief structures of a given group or culture. Various criteria that were relevant to this judgement were suggested, such as considering context, and the acceptability of the beliefs in cultures with strong spiritual values. Caution should be exercised in the use of a US-derived magical ideation scale for research on individuals prone to develop schizophrenia in Aotearoa/New Zealand.

Nevertheless, given the above discussions and laboratory-derived experiment, the notion that conventional spiritual beliefs cannot be separated from unusual thinking patterns of people with, or prone to develop, schizophrenia was not supported.

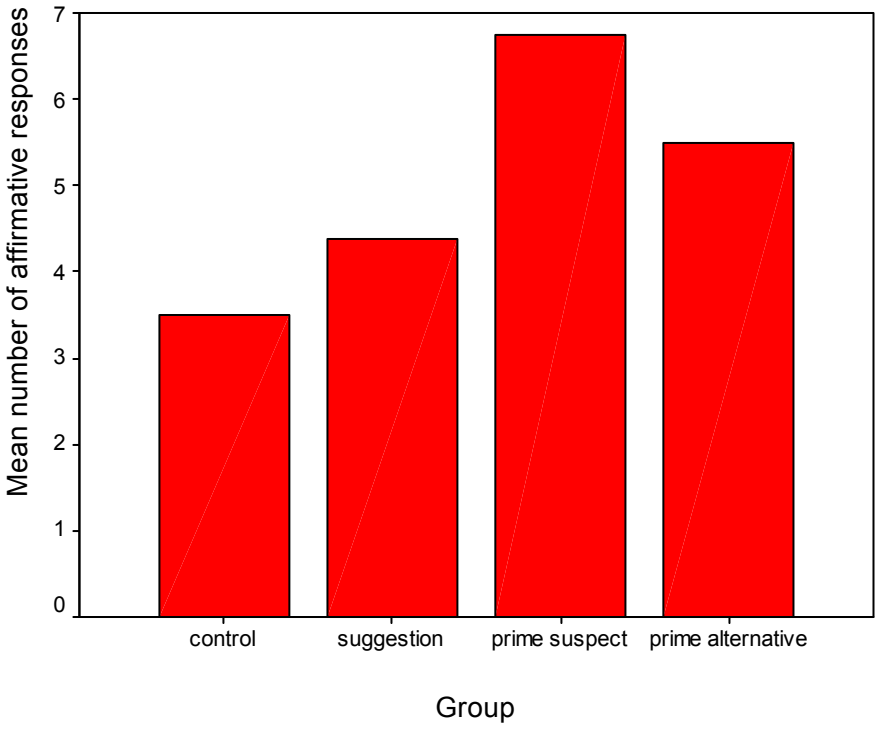

Figure 1. Mean affirmative responses for control, suggestion, and primed groups.

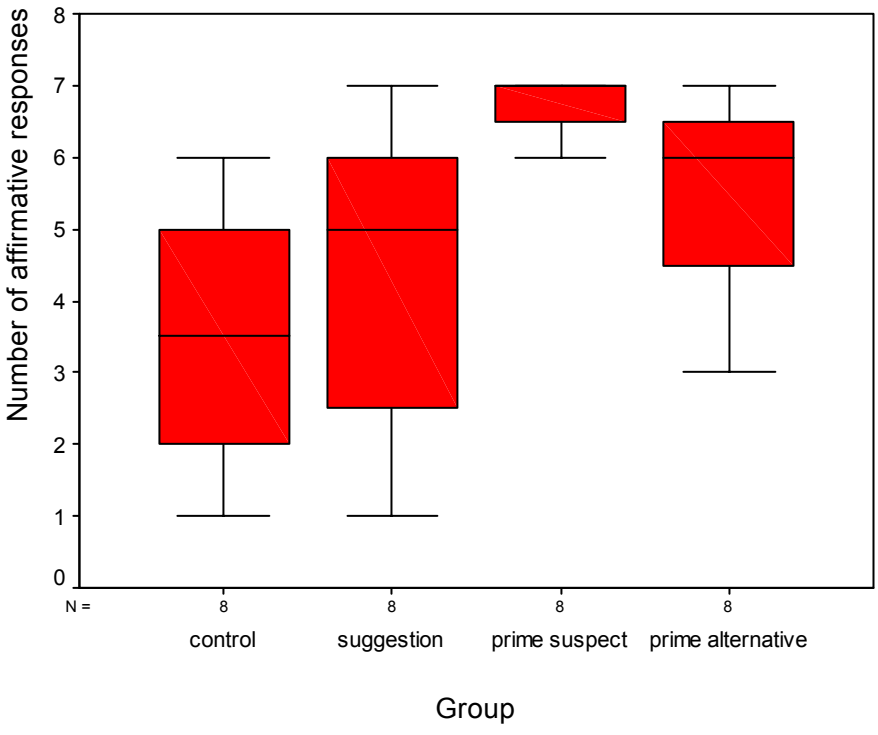

Figure 2. Distribution of affirmative responses for control, suggestion, and primed groups.

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