

Chapter 10

Mindfulness for the Treatment of Psychosis: State of the Art and Future Developments

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Introduction

In conjunction with competencies such as ethical awareness, compassion, and loving-kindness, mindfulness is a key component of the Buddhist path to spiritual awakening (Brito, 2013). In the late 1970s, Jon Kabat-Zinn extracted and synthesised aspects of the Buddhist mindfulness teachings into a secular group intervention, called Mindfulness-Based Stress Reduction (MBSR). Mindfulness has positioned itself in the last decade as a key area of scientific development, and recent meta-analyses indicate that mindfulness can be effective for treating various psychopathologies, particularly anxiety and depression (Hofmann, Sawyer, Witt, & Oh, 2010). There is also growing evidence suggesting that mindfulness leads to immune system improvements and neuroplastic changes in the brain (Hölzel et al., 2011). However, despite growing scientific interest into the health benefits of mindfulness, there is limited research examining the suitability of mindfulness as a treatment for psychosis.

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While current diagnostic manuals of mental disorders, such as ICD-10 or DSM-5, present psychosis as a specific set of symptoms (e.g., hallucinations or delusions), based on the subjective experiences of individuals who have experienced psychosis, the condition can be characterised by the presence of: (1) a deep state of personal confusion regarding what is real in the individual's inner and external world and (2) stress and conflict for both the individual and their families (Hayward, Awenat, McCarthy Jones, Paulik, & Berry, 2014; British Psychological Society Division of Clinical Psychology, 2014). The National Institute for Health and Care Excellence (NICE) advocates the use of cognitive behavioural therapy (CBT) for treating individuals with psychosis and schizophrenia (NICE, 2014). However, given the functional consequences and complexity of the condition, CBT is not an effective treatment for all individuals with psychosis, and relapse is not uncommon (Shonin, Van Gordon, & Griffiths, 2014a).

Consequently, a key direction in treatment-related psychosis research has been the formulation and empirical validation of interventions that advocate and impart new ways of relating to psychotic experiences. Mindfulness-based interventions (MBIs) have assumed an important role in this respect due to the manner in which they target reducing the sources of stress (i.e., rather than eliminate symptoms such as hallucinations) and promote healthy engagement (or reengagement) with meaningful experiences and interpersonal interactions (Chadwick, Taylor, & Abba, 2005; Gaudio & Herbert, 2006).

However, despite encouraging findings concerning the application of MBIs in psychosis, some clinicians are of the view that mindfulness (and/or meditation) can trigger an increase in psychotic symptoms and that it is thus an inappropriate treatment for this target group (Chadwick, 2014). The present chapter focuses on these issues and undertakes a timely appraisal of the role of MBIs in the treatment of psychosis. We evaluate key quantitative and qualitative research findings and make recommendations relating to future research directions and the effective use of mindfulness in psychosis treatment settings.

Mindfulness in the Field of Psychosis

Overview of Key Findings from Quantitative Studies

In one of the first studies investigating the role of mindfulness in the treatment of psychosis, Chadwick et al. (2005) conducted an uncontrolled study in which mindfulness was taught to individuals with current, subjectively distressing psychosis. During the six-session (each of 90-min duration) group intervention, participants practised a range of mindfulness techniques including: (1) a brief body scan, (2) mindfulness of breathing, and (3) 'choiceless awareness'. Prolonged periods of silence were avoided and participants received an audiotape of guided meditations to facilitate at-home practice. The results showed an improvement in ability to

regulate distressing thoughts and images, and participants' levels of general well-being and mindfulness also improved. The same mindfulness techniques were subsequently employed in a small ($n=22$) randomised controlled trial (RCT) in which participants' (all of whom were experiencing psychosis-related distress) levels of subjective well-being and mindfulness skills were improved following the intervention (i.e., relative to participants in the wait-list control group) (Chadwick, Hughes, Russell, Russell, & Dagnan, 2009).

Dannahy et al. (2011) conducted an uncontrolled study to investigate the effects of person-based cognitive therapy (PBCT) on individuals experiencing distressing voices. PBCT incorporates mindfulness and is based on the principle of acceptance of both voices and self in order to enhance well-being and reduce distress. At the end of the treatment, participants demonstrated improvements in general quality of life as well as in their ability to accept and regulate auditory hallucinations. These interventional gains were maintained at 1-month follow-up.

A further uncontrolled study involved 16 patients recovering from a first episode of psychosis (van der Valk, van de Waerdt, Meijer, van den Hout, & de Haan, 2013). Participants were offered mindfulness-based therapy consisting of eight 1-h sessions that were conducted within a 4-week time span. No significant increase in psychotic symptoms was observed, and participants demonstrated a decrease in agoraphobic and psycho-neuroticism symptoms.

In a small RCT, 23 patients with a schizophrenia-spectrum disorder participated in a mindfulness intervention for 8 weeks (weekly sessions of 60-min duration). Participants received a CD of guided meditations in order to facilitate daily self-practice. Compared to the control group, participants demonstrated significant improvements in their ability to accept distressing thoughts and to regulate stressful internal events (Langer, Cangas, Salcedo, & Fuentes, 2012).

A further RCT assessed the effects of a mindfulness-based psychoeducational programme (MBPP) on Chinese outpatients ($n=96$) with schizophrenia. MBPP includes guided awareness exercises and homework practice within a psychoeducational framework (e.g., in order to increase participants' insight into their illness and symptoms). The results showed significant improvements in the intervention group (i.e., compared to the treatment-as-usual control group) in illness insight, severity of symptoms, adaptive psychosocial functioning, and the number and length of re-hospitalisations at 18 months post-treatment (Chien & Lee, 2013).

Although the abovementioned studies suggest that mindfulness appears to ameliorate psychotic symptoms, the generalisability of findings is limited by factors such as: (1) small sample sizes, (2) inadequately defined and inactive control conditions (i.e., not controlling for potential confounding factors such as therapeutic alliance, group interaction, etc.), (3) heterogeneity between intervention types (i.e., differences in treatment duration, facilitator contact hours, use of non-meditative techniques, etc.), (4) fidelity of implementation not assessed (i.e., the extent to which facilitators deviated from the planned delivery format), and (5) adherence to practice not assessed (Shonin, Van Gordon, & Griffiths, 2014b). See Table 10.1 for an overview of key study characteristics and outcomes.

Table 10.1 Characteristics of quantitative studies of mindfulness-based interventions in Psychosis (MBIp)

Study	Sample	Intervention: type and length	Group experimental (dropout) (n)	Study Design (follow-up)	Measures	Statistical significance or effect size
Chien and Lee (2013)	n=96 Schizophrenia Mean age: 29.4 years	MBPP 12 sessions, twice a week, 120 min	48 (3)	RCT Control: Usual Care (18 months follow-up)	- ITAQ - BPRS - SSQ-6 - SLOF - Rehospitalisation (number/duration)	^b ITAQ F=5.80** BPRS F=4.00** SLOF F=3.73* Rehospitalisation Number F=4.03** Duration F=5.75**
Chadwick et al. (2009)	n=22 Schizophrenia spectrum disorders with distressing voices Mean age: 41.6 years	MBIp 5 weeks of group plus home practice (twice a week) and 5 further weeks of home practice	11 (2)	RCT Control: Wait list (no follow-up)	- CORE - SMQ - PSYRATS - SMVQ - BAVQ-r	Within-groups comparison CORE p=0.013 SMQ (thoughts and images) p=0.037
Chadwick et al. (2005)	n=14 Schizophrenia spectrum disorders Mean age: 33.1 years	MBIp 6 sessions, once a week, 90 min	14 (3)	Non-controlled (no follow-up)	- CORE - SMQ	CORE p=0.008 SMQ For distressing thoughts/images, all participants scored higher post group: mean increase of 36.6 %

Dannahy et al. (2011)	<i>n</i> = 62 Schizophrenia spectrum disorders with distressing voices Mean age: 41.1 years	PBCT 8–12 sessions, twice a week, 90 min	62 (12)	Non-controlled (1-month follow-up)	– CORE-OM – Voice distress – Voice control – VAY Voice Intrusiveness – VAY Voice dominance – VAY Hearer Distance – VAY Hearer Dependence	CORE Total: <i>d</i> = 0.57 <i>d</i> = 0.63 (follow-up) Voice distress: <i>d</i> = 0.75 <i>d</i> = 0.95 (follow-up) Voice control <i>d</i> = 0.62 <i>d</i> = 0.52 (follow-up)
Langer et al. (2012)	<i>n</i> = 23 Schizophrenia spectrum disorders Mean age of experimental group: 34.7 years	MBIp 8 sessions, once a week, 60 min	11 (4)	RCT Control: wait list (no follow-up)	– CGI-SCH – AAQII – SMQ	SMQ <i>p</i> = 0.028
van der Valk et al. (2013)	<i>n</i> = 16 Schizophrenia spectrum disorders patients recovery from a first psychotic episode Mean age: 31.8 years	MBIp 4 sessions, once a week, 60 min	16 (3)	Non-controlled (1-month follow-up)	– PANSS – SCL-90 – SMQ – CSQ-8	Agoraphobic symptoms: <i>p</i> = 0.028 Psychoneuroticism: <i>p</i> = 0.025 Satisfied with therapy: 62 % good 23 % excellent

Notes by study: *MBPP* mindfulness-based psychoeducation programme, *ITAQ* insight and treatment attitudes questionnaire, *BPRS* brief psychiatric rating scale, *SSQ-6* social support questionnaire, *SLOF* specific level of functioning scale, *B* 18 months follow-up results, *MBIp* mindfulness-based intervention for psychosis, *CORE* clinical outcomes in routine evaluation, *SMQ* southampton mindfulness questionnaire, *PSYRATS* psychiatric symptom rating scale, *SMVQ* southampton mindfulness voices questionnaire, *BAVQ-r* beliefs about voices questionnaire revised, *PBCT* person-based cognitive psychotherapy, *VAY* voice and you, *CGI-SCH* clinical global impression-schizophrenia scale, *AAQ II* acceptance and action scale, *PANSS* the positive and negative syndrome scale, *SCL-90* the symptoms checklist 90, *CSQ-8* the client satisfaction questionnaire

Overview of Key Findings from Qualitative Studies

Abba, Chadwick, and Stevenson (2008) utilised grounded theory analysis (Glaser & Strauss, 1967) in order to cast light on the process of how people with distressing psychosis learn to respond mindfully to unpleasant experiences. The sample comprised 16 participants (4 women and 12 men; age range 22–58) with chronic, treatment-resistant positive symptoms (including paranoia and hallucinations). The questions administered during the semi-structured interviews addressed the following topics: (1) how participants experienced the group, (2) experience of practising mindfulness, (3) how participants would describe mindfulness, (4) aspects of the programme that could be improved, and (5) general comments about their experiences. Following the mindfulness intervention, findings demonstrated that participants were able to relate differently to psychosis. The authors proposed a key shift, through a three-stage process, wherein participants changed their relationship with their symptoms: (1) centering in awareness of psychosis, (2) allowing voices, thoughts, and images to come and go without reacting or struggle, and (3) reclaiming autonomy through acceptance of psychosis and the self.

In order to address the paucity of research relating to how people with early psychosis respond to mindfulness-based therapy, Ashcroft, Barrow, Lee, and MacKinnon (2012) employed grounded theory to explore the experiences of nine participants recruited from an early intervention for psychosis service. Participants received a group mindfulness intervention based on person-centred therapy. Seventeen themes emerged from the coded data, which were grouped into four categories: (1) making use of mindfulness, (2) making sense of mindfulness (i.e., in the context of improving coping skills), (3) relating to people differently, and (4) greater self-understanding and acceptance. Although participants initially found mindfulness a difficult concept to come to terms with, the learning process and associated salutary outcomes were facilitated by the group-based delivery format.

The specific effects of mindfulness on anxiety in people with schizophrenia were investigated by Brown, Davis, LaRocco, and Strasburger (2010). The qualitative study comprised 15 males (age range, 45–58; mean age, 51 [$SD=4.78$]) with a diagnosis of schizophrenia ($n=5$) or schizoaffective disorder ($n=10$). An inclusion criterion was the presence of anxiety symptoms whilst being in a stable, post-acute phase of schizophrenia. Examples of questions posed during the semi-structured interviews are: ‘*Have you noticed any ways in which you have benefited from practising mindfulness?*’; ‘*Has anything about the program caused you to feel uncomfortable in any way?*’; and ‘*What keeps you coming back to classes?*’ The four most frequent themes to emerge from the data analysis were: (1) relaxation, (2) symptom reduction, (3) ability to focus on the present moment, and (4) cognitive changes. All participants reported relief from hallucinations (and ten reported relief from delusions) following completion of the intervention. Participants also reported improvements with regard to anxiety, depression, paranoia, memory problems, sleep problems, and somatic pain.

Dennick, Fox, and Walter-Brice (2013) utilised interpretative phenomenological analysis (IPA) (Smith, Flowers, & Larkin, 2009) in order to explore participants' 'lived experiences' of mindfulness group practice. The sample comprised three adults (age range, 30–40) who were experiencing distressing psychosis. Four primary themes emerged from the dataset: (1) experiencing distress (i.e., associated with experiences of psychosis), (2) the group as a safe environment to explore experiences of hearing voices (and of practising mindfulness), (3) mindfulness as beneficial (i.e., changing the way participants relate to distressing experiences, including reacting mindfully to voices instead of struggling), and (4) group interaction as part of the process of recovery (involving re-establishing or re-affirming a sense of self).

Consistent with a number of other studies, including that of Abba et al. (2008), mindfulness provided the participants with an 'open space' where they could explore concerns and fears such as societal labelling and feelings of ostracisation. This creation of 'shared meanings' through interaction with others proved to be constructive and positive. The participants of this study also described experiencing a greater intuitive awareness of self, thus developing a sense of agency and a desire to respond mindfully to feelings of distress. It appears that taking part in the mindfulness groups helped participants to cultivate 'metacognitive awareness', allowing them to change how they respond to experiences such as hearing voices. Participants reported being able to make use of mindfulness in various life situations including family struggles and stressful situations. None of the participants reported experiencing difficulty in learning or practising mindfulness (Dennick et al., 2013).

Using a thematic analysis approach, May, Strauss, Coyle, and Hayward (2014) evaluated the experiences of individuals who had enrolled in person-based cognitive therapy in order to alleviate distressing voices. Ten individuals (age range, 36–55; mean age, 47.2) diagnosed with schizophrenia ($n=8$), post-traumatic stress disorder ($n=1$), and non-specified personality disorder ($n=1$) participated in this study. The interview explored participants' experiences across six broad areas: (1) reasons for attending the group, (2) expectations of the group therapy interactions, (3) experience and understanding of the therapeutic process, (4) understanding auditory hallucinations, (5) sense of self, and (6) levels of well-being following the intervention.

The analysis of the data generated three themes that corresponded to how participants changed the way they relate to: (1) voices (i.e., through developing mindfulness skills), (2) the self (i.e., developing a separate and positive identity compared to one dominated and defined by voices), and (3) other people (i.e., empowerment in societal roles and social relationships). Participants reported that they found mindfulness practice to be beneficial, and participants spoke of the voices becoming 'quieter' and 'more distant'. Most participants reported practising and making use of mindfulness outside of the group therapy sessions. These outcomes support Abba et al.'s (2008) earlier finding that mindfulness can change the relationship that individuals with psychosis have with their internal experiences (i.e., by observing and relating to their symptoms with greater perceptual distance).

What Do We Know About the Iatrogenic Effects of Mindfulness?

There is some small-scale clinical evidence to suggest that over-intensive meditation practice can induce psychotic episodes—including in people who do not have a history of psychiatric illness. A summary of the cases extant in the peer-reviewed clinical and scientific literature are as follows:

1. Three individuals with a history of schizophrenia who experienced acute psychotic episodes whilst engaging in meditation retreats (Walsh & Roche, 1979).
2. Two individuals previously diagnosed with schizotypal personality disorder who experienced acute psychosis following meditation (Garcia-Trujillo, Monterrey, & Gonzalez de Riviera, 1992).
3. Three individuals with a psychiatric history who experienced psychotic symptoms following meditation practice (Chan-ob & Boonyanaruthee, 1999).
4. A 25-year-old female graduate student in whom delusional episodes accompanied by violent outbursts and inappropriate laughter were induced by meditation (Yorston, 2001).
5. Two individuals without a history of psychiatric illness who experienced psychotic experiences following meditation practice (Sethi & Subhash, 2003).
6. A male patient who experienced an acute and transient psychotic episode following meditation (Kuijpers, van der Heijden, Tuinier, & Verhoeven, 2007)

Although the above-mentioned studies indicate that meditation can induce psychotic episodes, it is important to examine the quality and reliability of this evidence. In other words, these findings should be considered in light of their many limitations, including the fact that all of these studies: (1) utilised very low participant numbers, (2) did not employ a control condition, and (3) involved participants who in some cases had a history of psychiatric illness (Shonin et al., 2014b).

It is also important to note that in the majority of the studies outlined above, participants were invariably engaging in very intensive meditation retreats (in some cases, this involved 18 h of meditation practice per day that was accompanied by lengthy periods of fasting and/or silence). For these participants, practising meditation for up to 18 h per day—under conditions of silence and/or fasting—most probably reflected a sudden change to their normal daily routine. Within Buddhism, a philosophy of quality as opposed to quantity of meditation is widely advocated, and practising meditation in an extreme and potentially stressful manner is discouraged (Shonin et al., 2014b). This is consistent with the view in Western psychology that stress is a key risk factor for psychosis. Therefore, even for those individuals who did not have a history of psychiatric illness, it is perhaps unsurprising that engaging in intensive meditation retreats led to psychotic episodes.

A further consideration when evaluating the above evidence is that most of the studies provided insufficient information in terms of the exact modality of meditation that was employed (Shonin et al., 2014b). Therefore, it is very difficult to conclusively isolate mindfulness (i.e., as opposed to other forms of meditation) as

the source of the psychotic episodes. This is a particularly important consideration because numerous reports of adverse effects exist for non-mindfulness variants of meditation such as Transcendental Meditation and Qigong. Examples of such adverse effects reported for these types of meditation include panic attacks, musculoskeletal pain, anti-social behaviour, impaired reality testing, dissociation, guilt, uncomfortable kinaesthetic sensations, despair, suicidal feelings, and exhaustion (Perez-De-Albeniz & Holmes, 2000; Shonin et al., 2014b). Thus, although techniques such as mindfulness meditation, Transcendental Meditation, and Qigong can be broadly grouped together as modalities of ‘meditation’, it is important to note that these techniques represent fundamentally different approaches. For instance, Transcendental Meditation is a commercial technique introduced in the 1950s by Maharishi Mahesh Yogi—it includes mantra recitation and derives from Hinduism. Conversely, mindfulness is a 2500-year-old Buddhist practice and does not include chanting or mantra recitation—it primarily focuses on breath and present-moment awareness (Shonin et al., 2014b).

Another related factor that limits the generalisability of findings from the above-mentioned studies is that little or no information was provided on the levels of experience or competency of the meditation instructor. The extent to which a meditation instructor is able to impart an ‘authentic embodied transmission’ of the meditation teachings is a factor that considerably affects outcomes (Van Gordon, Shonin, Griffiths, & Singh, 2015). Indeed, poorly administered meditation training can lead to adverse health effects including: (1) asociality, (2) nihilistic and/or defeatist outlooks, (3) dependency on meditative ‘bliss’ (Sanskrit: *prīti*), (4) a more generalised addiction to meditation, (5) engaging in compassionate activity beyond one’s spiritual capacity (and at the expense of psychological well-being), and (6) spiritual materialism (a form of self-deception in which rather than potentiating spiritual development and subduing selfish or egotistical tendencies, meditation practice serves only to increase ego-attachment and narcissistic behaviour) (Shonin, Van Gordon, & Griffiths, 2015).

Discussion

In the words of the British Psychological Society Division of Clinical Psychology (2014):

It is vital that mental health workers are open to different ways of understanding experiences, and do not insist that people see their difficulties in terms of an illness. This simple change will have a profound and transformative effect on our mental health services (p. 72).

To be in touch with the inner world of people with psychosis is challenging for clinicians, and both skill and experience are required in order to avoid anxiety being introduced into the therapeutic relationship (Fromm-Reichmann, 1960). In the treatment of psychosis, clinician competencies of acceptance, patience, and letting

go should be driven by an understanding of the ‘worldview’ of the individual with psychotic experiences and by an appreciation of how these experiences could be an attempt to make sense and cope—albeit in a maladaptive manner—with significant events in their life. Thus, for treating individuals with psychosis, the importance of establishing a strong therapeutic alliance cannot be over-emphasised (Pinto, 2009). Learning to objectify distressing thoughts and voices is a key objective of psychotherapy, and shorter (i.e., 15 min) rather than prolonged periods of formal seated meditation practice are preferred (Wyatt, Harper, & Weatherhead, 2014).

By practising mindfulness themselves, clinicians can improve their capacity to be fully present, thereby creating an atmosphere that allows the client to freely express their world. Although some therapists have undoubtedly acquired this skill without necessarily engaging in mindfulness practice, mindfulness is likely to help clinicians cope with transferrable emotional distress as well as the various psychological demands placed on the therapist (Siegel, 2010).

Based on an overview of key empirical findings, mindfulness appears to be an effective treatment for individuals with psychosis. Findings demonstrate that mindfulness can lead to improvements in: (1) general psychological functioning, (2) ability to regulate positive and negative symptoms, (3) non-psychotic symptoms (e.g., agoraphobia), and (4) diminution of re-hospitalisations (both number and duration). Qualitative studies demonstrate that mindfulness can help participants relate differently to symptoms and exert greater ‘control’ over how they respond to unpleasant experiences (e.g., Abba et al., 2008). Mindfulness appears to help individuals with psychosis by allowing them to mindfully notice their internal experiences—no matter if these are pleasant or unpleasant—in the context of cultivating a more adaptive sense of self (Dennick et al., 2013; May et al., 2014). Thus, instead of being ‘paralysed’ by voices, hallucinations, or undesirable thoughts, individuals with psychosis can objectify such experiences and use them to foster greater self-understanding and ultimately greater levels of well-being (Ashcroft et al., 2012). Findings indicate that mindfulness taught in the contexts of a group setting is a particularly effective means for eliciting such well-being and for helping participants to successfully integrate mindfulness into everyday life situations (e.g., family, job, etc.).

However, despite promising outcomes, further RCTs that use larger sample sizes are required in order to replicate findings (Shonin et al., 2014b). In addition to addressing this issue, future studies should focus not only on individuals currently experiencing psychosis (either first episode or chronic) but also on individuals: (1) deemed to be ‘at risk mental state’ (ARMS) for psychosis, (2) with distressing psychotic-like experiences (Langer, Cangas, & Gallego, 2010), and (3) those that provide a supporting role in the context of a family member or caregiver (Carmona-Torres & García-Montes, 2010). Future research could also assess the possible impact of mindfulness on cognitive impairments as well as structural and functional brain abnormalities reported in psychosis (Smieskova et al., 2013).

In terms of adverse effects, there is some small-scale clinical evidence that suggesting that meditation can induce psychotic episodes in individuals with or without a psychiatric history. However, the quality of this evidence is highly

questionable—especially when viewed in light of the abundance of more methodologically robust evidence indicating that mindfulness and meditation improve somatic, psychological, and spiritual well-being (Shonin et al., 2014b). Thus, although poorly practiced or poorly taught meditation can actually be harmful to a person's health, where mindfulness and meditation are taught by an experienced and authentic teacher who is aware of all of the risks, we conclude that adverse side effects are unlikely.

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References

- Abba, N., Chadwick, P., & Stevenson, C. (2008). Responding mindfully to distressing psychosis: A grounded theory analysis. *Psychotherapy Research, 18*, 77–87. doi:10.1080/10503300701367992.
- Ashcroft, K., Barrow, F., Lee, R., & MacKinnon, K. (2012). Mindfulness groups for early psychosis: A qualitative study. *Psychology and Psychotherapy: Theory, Research and Practice, 85*, 327–334. doi:10.1111/j.2044-8341.2011.02031.
- British Psychological Society Division of Clinical Psychology. (2014). *Understanding psychosis and schizophrenia*. Available from URL: <http://www.bps.org.uk>
- Brito, G. (2013). Rethinking mindfulness in the therapeutic relationship. *Mindfulness, 5*, 351–359.
- Brown, L. F., Davis, L. W., LaRocco, V. A., & Strasburger, A. (2010). Participant perspectives on mindfulness meditation training for anxiety in schizophrenia. *American Journal of Psychiatric Rehabilitation, 13*, 224–242. doi:10.1080/15487768.2010.501302.
- Carmona-Torres, J. A., & García-Montes, J. M. (2010). Terapia de Aceptación y Compromiso (ACT) para el tratamiento de los síntomas psicóticos. In A. J. Cangas & V. Ibañez (Eds.), *Nuevas Perspectivas en el Tratamiento del Trastorno Mental Grave* (pp. 133–160). Granada: Alborán Editores.
- Chadwick, P. (2014). Mindfulness for psychosis. *British Journal of Psychiatry, 204*, 333–334.
- Chadwick, P., Hughes, S., Russell, D., Russell, I., & Dagnan, D. (2009). Mindfulness groups for distressing voices and paranoia: A replication and randomized feasibility trial. *Behavioural and Cognitive Psychotherapy, 37*, 403–412.
- Chadwick, P., Taylor, K. N., & Abba, N. (2005). Mindfulness groups for people with psychosis. *Behavioural and Cognitive Psychotherapy, 33*, 351–359.
- Chan-ob, T., & Boonyanaruthee, V. (1999). Meditation in association with psychosis. *Journal of Medical Association of Thailand, 82*, 925–929.
- Chien, W. T., & Lee, I. Y. M. (2013). The mindfulness-based psychoeducation program for Chinese patients with schizophrenia. *Psychiatric Services, 64*, 376–379.
- Dannahy, L., Hayward, M., Strauss, C., Turton, W., Harding, E., & Chadwick, P. (2011). Group person-based cognitive therapy for distressing voices: Pilot data from nine groups. *Journal of Behavior Therapy and Experimental Psychiatry, 42*, 111–116.
- Dennick, L., Fox, A. P., & Walter-Brice, A. (2013). Mindfulness groups for people experiencing distressing psychosis: An interpretative phenomenological analysis. *Mental Health Review Journal, 18*, 32–43. doi:10.1108/1361932131131009.
- Fromm-Reichmann, F. (1960). *Principles of intensive psychotherapy*. Chicago: University of Chicago Press.

- García-Trujillo, R., Monterrey, A. L., & González de Riviera, J. L. (1992). Meditación y psicosis. *Psiquis Revista de Psiquiatría Psicología y Psicósomática*, *13*, 39–43.
- Gaudiano, B. A., & Herbert, J. D. (2006). Acute treatment of inpatients with psychotic symptoms using acceptance and commitment therapy: Pilot results. *Behaviour Research and Therapy*, *44*, 415–437.
- Glaser, B. G., & Strauss, A. L. (1967). *Discovery of grounded theory*. Chicago, IL: Aldine.
- Hayward, M., Awenat, Y., McCarthy Jones, S., Paulik, G., & Berry, K. (2014). Beyond beliefs: A qualitative study of people's opinions about their changing relations with their voices. *Psychosis*, *12*, doi:10.1080/17522439.2014.926388
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *78*, 169–183. doi:10.1037/a0018555.
- Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., et al. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, *191*, 36–43.
- Kuijpers, H. J. H., van der Heijden, F. M. M. A., Tuinier, S., & Verhoeven, W. M. A. (2007). Meditation-induced psychosis. *Psychopathology*, *40*, 461–464.
- Langer, Á. I., Cangas, A. J., Salcedo, E., & Fuentes, B. (2012). Applying mindfulness therapy in a group of psychotic individuals: A controlled study. *Behavioural and Cognitive Psychotherapy*, *40*, 105–109.
- Langer, Á. I., Cangas, A. J., & Gallego, J. (2010). Mindfulness-based intervention on distressing hallucination-like experiences in a nonclinical sample. *Behaviour Change*, *27*, 176–183.
- May, K., Strauss, C., Coyle, A., & Hayward, M. (2014). Person-based cognitive therapy groups for distressing voices: A thematic analysis of participant experiences of the therapy. *Psychosis: Psychological, Social and Integrative Approaches*, *6*, 16–26. doi:10.1080/17522439.2012.708775.
- National Institute for Health and Clinical Excellence (NICE). (2014). *Psychosis and schizophrenia in adults: treatment and management*. Available from URL: <http://www.nice.org.uk/guidance/cg178>
- Perez-De-Albeniz, A., & Holmes, J. (2000). Meditation: Concepts, effects and uses in therapy. *International Journal of Psychotherapy*, *5*, 49–59.
- Pinto, A. (2009). Mindfulness and psychosis. In F. Didonna (Ed.), *Clinical handbook of mindfulness* (pp. 339–368). New York: Springer.
- Sethi, S., & Subhash, C. (2003). Relationship of meditation and psychosis: Case studies. *Australian and New Zealand Journal of Psychiatry*, *37*, 382.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014a). Cognitive behavioral therapy (CBT) and meditation awareness training (MAT) for the treatment of co-occurring schizophrenia with pathological gambling: A case study. *International Journal of Mental Health and Addiction*, *12*, 181–196.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014b). Do mindfulness-based therapies have a role in the treatment of psychosis? *Australia and New Zealand Journal of Psychiatry*, *48*, 124–127.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2015). Are there risks associated with using mindfulness for the treatment of psychopathology? *Clinical Practice*, *11*, 389–392.
- Siegel, D. J. (2010). *The mindful therapist: A clinician's guide to mindfulness and neural integration*. New York: W.W. Norton.
- Smieskova, R., Marmy, J., Schmidt, A., Bendfeldt, K., Riecher-Rössler, A., Walter, M., et al. (2013). Do subjects at clinical high risk for psychosis differ from those with a genetic high risk? A systematic review of structural and functional brain abnormalities. *Current Medicinal Chemistry*, *20*, 467–481. doi:10.2174/0929867311320030018.

- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: Sage.
- van der Valk, R., van de Waardt, S., Meijer, C. J., van den Hout, I., & de Haan, L. (2013). Feasibility of mindfulness-based therapy in patients recovering from a first psychotic episode: A pilot study. *Early Intervention in Psychiatry*, 7, 64–70.
- Van Gordon, W., Shonin, E., Griffiths, M. D., & Singh, N. N. (2015). There is only one mindfulness: Why science and Buddhism need to work together. *Mindfulness*, 6, 49–56.
- Walsh, R., & Roche, L. (1979). Precipitation of acute psychotic episodes by intensive meditation in individuals with a history of schizophrenia. *American Psychiatry Association*, 136, 1085–1086.
- Wyatt, C., Harper, B., & Weatherhead, S. (2014). The experience of group mindfulness-based interventions for individuals with mental health difficulties: A meta-synthesis. *Psychotherapy Research*, 24, 214–228.
- Yorston, G. (2001). Mania precipitated by meditation: A case report and literature review. *Mental Health, Religion and Culture*, 4, 209–213.