Group treatment of anxiety-related insomnia using cognitive-behavioural therapy

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Preface

Before undertaking this project my knowledge of insomnia was quite limited; difficulties with sleep were just that. Little did I know how fascinating the fields of sleep and insomnia were. The timing of the Massey University Psychology Clinic's interest in offering a treatment for people "who can't sleep and worry too much" coincided with a shift in the research literature about insomnia. Incidentally, anxiety appears to play a major role in the development and maintenance of insomnia complaints. This project also brought me close to the participants' experience of insomnia. I understood that sleep difficulties were never just that. They affected a person's relationships, work, mental health, and quality of life.

The current project would not have been possible without the support of my supervisors Dr Duncan Babbage and Prof. Janet Leathem. I would also like to thank Prof Philippa Gander for her comments and encouragement along the way. My beautiful family, who had to share me with my work and studies for so many years, it has been a long journey, and now I look forward to being a mum and wife-to-be (and only share you with my work). I also would like to acknowledge John Rutledge, who was like a father to me. I know you would be proud of this moment, John. My dearest family in Brazil, far away from the daily working-on-a-doctorate-life, but nonetheless were always part of this journey. I love you and I miss you. Finally, thank you to all the participants in this study. In receiving help for yourselves, you also helped many others.

This study has received approval from the Central Regional Ethics Committee.

Abstract

Insomnia affects 25% of the New Zealand population and up to 33% of the population worldwide. Untreated it incurs high economical costs to society and takes its toll on the people's mental health, physical health, and quality of life. Psychological treatments for insomnia have developed over the decades to reflect the scientific literature's knowledge about the causal and maintaining factors of insomnia (i.e., maladaptive behaviours and cognitions about sleep and the consequences of insomnia and physiological and cognitive arousal).

The critical review found that although physiological and cognitive arousal play a significant role in the development and maintenance of insomnia and there is some evidence that anxiety disorders predict the development of insomnia, few published treatment programmes targeted all causal and maintaining factors as described in the literature. The current main clinical study investigated the effectiveness of a group therapy programme that targeted all the main factors described in the literature. Twenty-eight participants suffering chronic insomnia and at least subclinical anxiety or stress were randomly assigned to one of two treatment interventions, administered through five treatment groups. Each group had 5-6 participants. Two groups received the *insomnia first* intervention (n = 11) and three groups received the *anxiety first* intervention (n = 17). Within- and between-subjects analyses were performed. Follow-up assessment took place about three months after the end of each treatment group.

The main study found that targeting anxiety (i.e., physiological and cognitive arousal) directly improved participants' insomnia, $t(1708) = 3.574$, p

<.001, *d* = .86. At three months post-treatment, both treatment conditions had large effect sizes on measures of insomnia severity (*insomnia first d* = 3.35; *anxiety first d* = 1.17) and sleep efficiency (*insomnia first d* = 1.09; *anxiety first d* = 1.17). However, in examining the outcome trajectories, the anxiety first intervention produced more consistent improvement across the course of the therapy sessions, which might be more desirable for both clients and clinicians.

This study provided evidence that a cost-effective group intervention is beneficial for symptoms of insomnia and anxiety, and it also significantly improves participants' quality of life. While some findings need replication (e.g., order of interventions), this study showed not only that insomnia can and should be treated, but also that its assessment and treatment must address anxiety as well as sleep. Given the high occurrence and co-morbidity of insomnia, and its detrimental effects for the individual and the society, psychological interventions for insomnia should be more readily available in New Zealand.

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