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CLINICAL PSYCHOLOGY & NEUROPSYCHOLOGY | RESEARCH ARTICLE

Enhanced effects of combined cognitive bias modification and computerised cognitive behaviour therapy on social anxiety

Emma Butler¹, Sirous Mobini^{1,2*}, Ronald M. Rapee¹, Bundy Mackintosh¹ and Shirley A. Reynolds¹

Abstract: This study examines whether combined cognitive bias modification for interpretative biases (CBM-I) and computerised cognitive behaviour therapy (C-CBT) can produce enhanced positive effects on interpretation biases and social anxiety. Forty socially anxious students were randomly assigned into two conditions, an intervention group (positive CBM-I + C-CBT) or an active control (neutral CBM-I + C-CBT). At pre-test, participants completed measures of social anxiety, interpretative bias, cognitive distortions, and social and work adjustment. They were exposed to 6 × 30 min sessions of web-based interventions including three sessions of either positive or neutral CBM-I and three sessions of C-CBT, one session per day. At post-test and two-week follow-up, participants completed the baseline measures. A combined positive CBM-I + C-CBT produced less negative interpretations of ambiguous situations than neutral CBM-I + C-CBT. The results also showed that both positive CBM-I + C-CBT and neutral CBM-I + C-CBT reduced social anxiety and cognitive distortions as well as improving work and social adjustment. However, greater effect sizes were observed in the positive CBM-I + C-CBT condition than the control. This indicates that adding positive CBM-I to C-CBT enhanced the training effects on social anxiety, cognitive distortions, and social and work adjustment compared to the neutral CBM-I + C-CBT condition.

Subjects: Cognitive Science; Psychiatry & Clinical Psychology - Adult; Psychological Disorders - Adult

Keywords: social anxiety; cognitive bias modification; computerised cognitive behaviour therapy

ABOUT THE AUTHORS

Authors have been involved in developing the laboratory-based paradigms in modifying cognitive biases in anxiety over a decade. They have published extensively in the area of cognitive bias modification for anxiety disorders, both from a theoretical perspective and applied research.

PUBLIC INTEREST STATEMENT

People with social anxiety tend to interpret ambiguous situations in a negative manner. We developed a computerised treatment i.e. cognitive bias modification for interpretative biases (CBM-I) which aims to modify negative interpretations. We combined CBM-I with another treatment method, i.e. computerised cognitive behaviour therapy (C-CBT) and examined the effects of both CBM-I and C-CBT on social anxiety and negative interpretations. The results showed that combining both treatments produced better treatment outcomes.

Enhanced Effects Of Combined Cognitive Bias Modification

R Sandford



Enhanced Effects Of Combined Cognitive Bias Modification:

Interpretational Processing Biases in Emotional Psychopathology Marcella L. Woud,2023-03-28 The primary aim of this book is to bridge the gap between lab based and clinical research by disseminating the latest interdisciplinary scientific findings on interpretational processing biases in the context of emotional psychopathology It is designed to help the practitioner by drawing explicit links between the basic science and implications for clinical practice This enables an enhanced interaction between science and practice strengthening bi directional translational links and the potential to produce more meaningful and significant advances in the treatment of emotional psychopathology This in turn will facilitate an innovative step change in the area of both research and clinical practice The book focuses on cognitive processing biases that are common across a wide range of psychological disorders meaning that the conclusions drawn have relevance across the whole spectrum of psychopathology and will stimulate and inspire a broad range of discussions and future work From the foreword by Nikolaos Kazantzis The practice of CBT is complex and requires a tailored approach Every technique has a specific target but may be used for multiple purposes simultaneously in support of the client s therapeutic goals The purpose of Dr Woud s book is to elucidate the ways in which interpretational biases can be a focus of intervention for CBT therapists at all stages of professional development from those undertaking training to master clinicians Dr Woud has succeeded admirably in this regard

Charney & Nestler's Neurobiology of Mental Illness Dennis S. Charney MD, Eric J. Nestler MD, PhD, Pamela Sklar MD, PhD, Joseph D. Buxbaum PhD,2017-11-29 In the years following publication of the DSM 5 the field of psychiatry has seen vigorous debate between the DSM s more traditional diagnosis oriented approach and the NIMH s more biological dimension based RDoC approach Charney Nestler s Neurobiology of Mental Illness is an authoritative foundation for translating information from the laboratory to clinical treatment and its fifth edition extends beyond its reference function to acknowledge and examine the controversies different camps and thoughts on the future of psychiatric diagnosis In this wider context this book provides information from numerous levels of analysis including molecular biology and genetics cellular physiology neuroanatomy neuropharmacology epidemiology and behavior Sections and chapters are edited and authored by experts at the top of the field No other book distills the basic science and underpinnings of mental disorders and explains the practical clinical significance to the scope and breadth of this classic text **Positive**

Neuroscience: the Neuroscience of Human Flourishing Feng Kong, Aaron Shain Heller, Carien M. van Reekum, Wataru Sato,2020-04-13 How collages reveal your deepest thoughts Philipp Pachler,2012-05-23 Thesis M A from the year 2010 in the subject Business economics Offline Marketing and Online Marketing grade 1 0 University of Innsbruck Institut f r Strategisches Management Marketing und Tourismus language English abstract A deeper understanding of how consumers think feel and act is vital to the success of management and provides valuable information for managerial decision making in many areas of marketing One key to this understanding is brand knowledge Customer brand knowledge is the representation

of a brand in consumers minds This thesis focuses on a visual based view stating that brand knowledge is rather image based as opposed to word based Unfortunately a substantial amount of relevant knowledge within consumers minds is unconscious and cannot be retrieved accessed and recalled by customers As a consequence certain methods of retrieval are required such as projective techniques The method this thesis works with is the collage technique an expressive projective method This diploma thesis creates a multi layered approach that facilitates the interpretation of collages without the need of any additional information given by the participants based on metaphor analysis color theory a communication model and structural analysis The thesis answers following research questions Is it possible to interpret collages without any additional information from respondents What information can be gained from this interpretation Are there any differences between the results of visual and verbal analysis

Management Angelo Kinicki,Denise Breaux Soignet,2002 How Collages Reveal Your Deepest Thoughts Philipp Pachler,2012-05-28 Thesis M A from the year 2010 in the subject Business economics Marketing Corporate Communication CRM Market Research Social Media grade 1 0 University of Innsbruck Institut f r Strategisches Management Marketing und Tourismus language English abstract A deeper understanding of how consumers think feel and act is vital to the success of management and provides valuable information for managerial decision making in many areas of marketing One key to this understanding is brand knowledge Customer brand knowledge is the representation of a brand in consumers minds This thesis focuses on a visual based view stating that brand knowledge is rather image based as opposed to word based Unfortunately a substantial amount of relevant knowledge within consumers minds is unconscious and cannot be retrieved accessed and recalled by customers As a consequence certain methods of retrieval are required such as projective techniques The method this thesis works with is the collage technique an expressive projective method This diploma thesis creates a multi layered approach that facilitates the interpretation of collages without the need of any additional information given by the participants based on metaphor analysis color theory a communication model and structural analysis The thesis answers following research questions Is it possible to interpret collages without any additional information from respondents What information can be gained from this interpretation Are there any differences between the results of visual and verbal analysis

Augmenting Interpretative Cognitive Bias Modification Using Memory Reconsolidation Updating Michael David Lee,2017 Research suggests that interpretative cognitive biases can be attenuated by cognitive bias modification for interpretation CBM I However small effect sizes and a lack of follow up data highlight a need to increase the potency and durability of CBM I Recent findings have suggested that reactivating a fear memory briefly before behavioral intervention may suppress later return of fear through utilization of a process known as reconsolidation updating The current experiment investigated the efficacy of a CBM I augmentation that involved administering a brief fear reactivation procedure prior to CBM I 74 adults with clinical social anxiety were randomly assigned to give an impromptu speech either 10 minutes prior to interpretation bias training CBM FRT 24 hours prior to training CBM or 24 hours prior to

placebo training CONTROL Social anxiety symptomology and interpretation bias were assessed using self report questionnaires and a behavioral task at baseline BL post training POST 1 week follow up FU1 and 2 week FU2 follow up Mixed effects regression models revealed that as hypothesized the CBM FRT group had significantly lower interpretation bias than the CBM group at FU2 but not at POST or FU1 However there were no significant between group differences in self reported anxiety symptoms at any assessment Additionally no difference in interpretation bias between CBM and CONTROL was found at POST Findings provide support for continued investigation of brief fear network reactivation as a means of enhancing anxiety treatment However a failure to find effects of non augmented CBM I suggests that further scrutiny is necessary to determine CBM s clinical utility

CURRENT Diagnosis & Treatment in Family Medicine, 4th Edition Jeannette E. South-Paul, Samuel C. Matheny, Evelyn L. Lewis, 2015-03-13 Provide continuous comprehensive care of patients throughout their lifetimes with this evidence based guide A Doody s Core Title for 2019 Organized according to the developmental lifespan beginning with childhood and adolescence and progressing through adulthood and senior years Evidence based recommendations Conservative and pharmacologic therapies Complementary and alternative therapies when relevant Suggestions for collaborations with other healthcare providers Attention to the mental and behavioral health of patients as solitary as well as comorbid conditions Recognition of impact of illness on the family Patient education information End of life issues AN EASY TO USE GUIDE TO THE DIAGNOSIS TREATMENT AND MANAGEMENT of the full range of clinical conditions seen in primary care NEW CHAPTERS on prenatal care tick borne infections diagnosis and management of tuberculosis HIV diagnosis and management and PTSD TBI Great for USMLE Step 3 review board certification and maintenance or recertification Essential for primary care trainees practicing physicians advanced practice nurses and physician assistants

Cognitive Neuroscience Society ... Annual Meeting Abstract Program Cognitive Neuroscience Society. Meeting, 2008 **Dissertation Abstracts International** ,2008 **Handbook of Applied Cognition** Raymond S. Nickerson, 1999-07-09 Cognitive psychology is the basis of many applications in almost every area of technology business industry and education This book provides workers in applied arenas with presentations of research aimed directly at the problems and issues that confront them It will cover key areas including business and industry computers and technology education and information and health and law **Social Psychology** Steven Penrod, 1933 *The Journal of Neuroscience* ,2009 Index to Theses with Abstracts Accepted for Higher Degrees by the Universities of Great Britain and Ireland and the Council for National Academic Awards ,2006 **Abstracts of the ... Annual Meeting of the European Neuroscience Association ... and ... Annual Meeting of the European Brain and Behaviour Society** European Neuroscience Association. Meeting, 1994 **American Journal of Public Health** ,1992 Includes section Books and reports Toward a Unified Theory of Development John P. Spencer, Michael S. C. Thomas, James L. McClelland, 2009 From William James to Sigmund Freud to Jean Piaget to B F Skinner scholars and parents have wondered how children move

from the blooming buzzing confusion of infancy through the tumult of childhood and adolescence into adulthood Does development occur continuously over time or in a series of dramatic stages Is development driven by learning or by biological maturational processes What is the nature of experience and how does it generate change The study of development has always been organized around these big questions And answers to these questions have a profound influence on daily life forming a framework for how parents think about their own children and influencing both national policy and educational curricula This book defines and refines two major theoretical approaches within developmental science that address the central issues of development connectionism and dynamical systems theory Spencer Thomas and McClelland have brought together chapters that provide an introduction overview and critical evaluation of each approach including three sets of case studies that illustrate how both approaches have been used to study topics ranging from early motor development to the acquisition of grammar They also present a collection of commentaries by leading scholars which offer a critical view from both an outsiders s and an insider s perspective The book is unique in the range of its treatment it begins to delineate how developmental science can incorporate advances within neuroscience and computational modeling and brings the new ideas of connectionism and dynamic systems theory into sharper focus clarifying their usefulness and explanatory power

Theoretical and Experimental Bases of the Behaviour Therapies Maurice Philip Feldman, Anne Broadhurst, 1976

Student Guide Explorations Psychology Doyle, King, 1987-02

Proceedings of the National Academy of

Sciences of the United States of America National Academy of Sciences (U.S.), 2007

Enhanced Effects Of Combined Cognitive Bias Modification Book Review: Unveiling the Magic of Language

In a digital era where connections and knowledge reign supreme, the enchanting power of language has become more apparent than ever. Its ability to stir emotions, provoke thought, and instigate transformation is truly remarkable. This extraordinary book, aptly titled "**Enhanced Effects Of Combined Cognitive Bias Modification**," compiled by a highly acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound effect on our existence. Throughout this critique, we will delve into the book's central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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