

a mismatch between a current sound and the memory formed of a repetitious sequence. MMN can be conceptualized as occurring when a sound violates the context established by preceding events. Individuals with schizophrenia are known to show impairments in the ability to use context when processing the relevance of an event. In this study, we examined whether this impairment in using context would result in insensitivity to the effects of temporal context on MMN. Specifically, we explore how temporal context affects the MMN produced by healthy controls and individuals with schizophrenia.

Method: Eighteen patients and age- and sex-matched controls were presented with two sound sequences over headphones, with attention directed toward a silent movie with subtitles. In the Fixed stimulus onset asynchrony (SOA) sequence, MMN was measured to a 100-ms duration deviant among 50-ms standard tones at a regular 500-ms SOA. The same tones were used in the jittered SOA sequence, with irregular SOAs ranging from 250 to 750 ms.

Results: In controls, the MMN elicited by duration deviants with jittered SOA was significantly reduced compared with the same deviant occurring in a sequence with fixed SOA. However, changing temporal context/regularity had no significant impact on the MMN produced by the schizophrenia group.

Conclusions: The results indicate that individuals with schizophrenia have difficulty encoding and forming a model of the temporal context in which a sound occurs.

Research priorities in suicide prevention

J Robinson¹, E Schindeler², M Dudley², D De Leo³, T Jorm¹, S Harrigan¹, S Niner⁴, K Kryszynska³, J Pirkis⁴

¹ORYGEN Research Centre; ²Suicide Prevention Australia; ³Australian Institute for Suicide Research and Prevention; and ⁴Program Evaluation Unit, School of Population Health, The University of Melbourne, Melbourne, Australia

Background: Consistent with the evidence-based approach of the National Suicide Prevention Strategy and the goals of the LIFE Framework, the Commonwealth Department of Health and Ageing has funded a project designed to identify future areas of research to be addressed in suicide prevention.

Aims: The project aims to identify current priorities, as evidenced by research that has been funded and published over the course of the strategy (1999–2006), and to identify future priorities, by considering the gaps in existing research and by consulting with stakeholders.

Methods: There are four components to the project: 1) a systematic review of the published literature, 2) a review of suicide prevention research projects funded by key granting bodies, 3) a series of stakeholder focus groups and 4) a questionnaire for representatives from key stakeholder groups.

Results: Initial findings indicate that the majority of published literature is epidemiological, focusing on rates of suicide. There is little intervention research and little program or service evaluation. In contrast, the majority of funded projects are intervention studies. With regard to stakeholder priorities, several recurring themes emerged including the need for evaluating the efficacy of interventions, necessity of balancing individual risk factors with societal influences on suicide and the need for consideration of protective factors. The results from each component of the project will be presented in more detail.

Conclusions: The implications of these findings for future suicide prevention research will be discussed and recommendations for a national research agenda will be made.

Adaptation of a resilience program in NSW: the rural RAP

T Robinson

Centre for Rural and Remote Mental Health, Orange, Australia

Aim: To document the process of adapting an emotional resilience program for indigenous students.

Background: There are a number of programs in schools to enhance the emotional resilience of young people, but few studies have adapted programs for use with indigenous youth. During 2005, the Resourceful Adolescent Program (RAP) was adapted in collaboration with Aboriginal workers and community members from Bourke, Dubbo and Wellington prior to its implementation in four local high schools. This presentation will provide an overview of the adaptation process.

Methods: A steering committee comprising cultural consultants, representatives from the Department of Education and health workers oversaw the adaptation of RAP. An overarching participatory action framework was used to facilitate inductive knowledge about the adaptation of RAP.

Results: A total of 26 Aboriginal education consultants, assistants, tutors and community members participated in the adaptation and implementation of RAP. In terms of content, the overarching metaphor for well-being was adapted for rural youth and self-esteem activities were broadened to include cultural identity. In addition, process issues about small group facilitation with Aboriginal students were

identified. Quantitative and qualitative data show that the program was equally effective for Aboriginal and non-Aboriginal students. Furthermore, participants identified changes in their relationships with young people in the classroom subsequent to the program's implementation.

Conclusions: There is a need to ensure that resilience programs are adapted to enhance their cultural safety and relevance. To articulate the impact of adapted programs, mixed methodologies are essential.

Autumn birth and the cognitive deficit schizophrenia subtype

D Rock, A Jablensky, S Howell

Clinical Research and Neurophysiology, Centre for Clinical Research in Neuropsychiatry, University of Western Australia, Perth, Australia

Background: Seasonal asymmetry of schizophrenia births is a well-documented phenomenon, with most studies finding a winter/early spring excess. This effect is consistent in the northern hemisphere but rare in the southern hemisphere. In Western Australia, using an endophenotype-based approach, we delineated a discrete, genetically distinct subtype of schizophrenia characterized by pervasive cognitive deficits (CDs), with the residual cases being cognitively spared (CS) (Hallmayer et al. 2005).

Purpose: We compared birth seasonality in Australian-born patients with CD and CS subtypes.

Methods: Data were grouped according to month of birth, with calendar adjustment. Season of birth was calculated using the Kuipers grouped method (Freedman 1979).

Results: The CD, but not the CS, subtype showed a significant season-of-birth effect, with an autumn peak (April) and a summer trough.

Conclusions: Analysis of northern hemisphere studies (Messias et al. 2004) found that the deficit syndrome of schizophrenia (Kirkpatrick et al. 2001), sharing some characteristics with our CD subtype, has a peak of summer births, at variance with the winter peak for all schizophrenia. Although the peak for CD is in autumn, it too contrasts with the spring peak of all schizophrenia births in Western Australia (Morgan et al. 2000). Despite numerous studies showing birth seasonality in schizophrenia, its cause remains elusive. Geographical differences in exposure to circannually fluctuating, nongenetic risk factor(s) may underlie this phenomenon (McGrath & Welham 1999). A challenge for future studies is to map the seasonal relationship between schizophrenia endophenotypes and risk factors such as low birth weight.

Using the semantic priming task in schizophrenia research: methodological and theoretical considerations

A Stefanovic, S Rossell

Mental Health Research Institute, Melbourne, Australia

Background: Schizophrenia is characterized by disturbances in language and thought. Semantic priming (SP) paradigms have been frequently used to investigate language function in schizophrenia. The SP effect is the reaction time advantage that is achieved by priming a target to which a participant is responding with a semantically or associatively related word. In schizophrenia, this area of research has produced many contradictory results.

Methods: This is a comprehensive up-to-date review of research on SP in schizophrenia. It considers the significance of the specific task parameters used and the characteristics of the patient sample as possible reasons underlying discrepancies.

Results: From this review, it has been established that there are two robust variables that produce different results in schizophrenia. First, the relatedness proportion effect, where low proportions of related prime-target pairs result in reduced or normal SP in people with schizophrenia, while higher proportions lead to increased SP. Second, using indirectly related prime-target pairs results in increased SP in schizophrenia. Further, in terms of patient characteristics, patients with thought disorder produce the most consistently abnormal SP results.

Conclusions: The results indicate that enhanced automatic spread of activation might be one of the causes of language deficits in schizophrenia. In the framework of distributed network models, it is possible that the patterns of representations overlap more between different or unusual concepts in people with schizophrenia compared with healthy people, especially those with the symptom of thought disorder.

Reduced dysbindin (DTNBP1) mRNA in hippocampus of patients with schizophrenia

CS Weickert¹, R Straub², J Kleinman², T Hyde², D Rothmond³

¹Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD);

²CBDB, NIMH; and ³MINDS Unit, NIMH, USA

Dysbindin has been implicated as an etiological factor in schizophrenia by genetic linkage studies, genetic association studies and molecular studies of postmortem brains of patients with schizophrenia. In this report, we