Tobacco Smoking is Associated with Better Cognitive Performance in Smokers with Schizophrenia

A thesis presented in partial fulfilment of the requirements for the degree of Masters in Science in Psychology at Massey University

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1999
Abstract

Past research argues people with schizophrenia (P/S) exhibit a specific cognitive deficit. This study argues dopamine deficiency and debilitating anxiety reduce cognitive functioning in P/S and over 80 per cent of P/S actively smoke to replenish dopamine and reduce debilitating anxiety, which relates to improved cognition. Comparing 18 smokers and 8 non-smokers with schizophrenia, with each other, and with 20 smoking and 20 non-smoking non-psychiatric people we used an independent samples between groups 2 by 2 correlational design to determine two main hypotheses: smokers with schizophrenia, after smoking one cigarette, in comparison to non-smokers with schizophrenia, will score fewer Wisconsin Card Sorting Test (WCST) errors; non-psychiatric people will perform better than P/S on the WCST. Results showed smokers with schizophrenia performed better on the WCST than non-smokers with schizophrenia. Smoking accounted for 11.2 % and facilitating-anxiety 41.3 % of the variance between schizophrenia groups. When controlling for facilitating-anxiety the significant difference dissolved. Smoking did not influence subjective affect or physiological arousal. Diagnosis did not influence cognitive functioning and the influence of smoking on cognitive performance did not depend on diagnosis. The discussion made four main conclusions: tobacco smoking and facilitating-anxiety directly related to cognitive performance in smokers with schizophrenia when completing the WCST, smoking does not influence subjective affect in smokers with schizophrenia when subjectively relaxed, schizophrenia does not exhibit a specific cognitive deficit, although smokers with schizophrenia did not gain the most from smoking clinical observation and literature review implies they actively smoke to obtain medicinal and psychological benefits.
Acknowledgments

One participant with schizophrenia asked, “What is schizophrenia?” I sat, thinking how to reply, for what seemed an inordinate amount of time before replying, “I do not know”. He replied, “I do not know either”. I firstly acknowledge the people with schizophrenia who participated in this study and thank you with my deepest gratitude for your unselfish generosity. Without your participation this study would not have been possible.

I completed this thesis for three reasons. First, to meet the requirements for a Masters Degree in Science. Second, to provide evidence showing P/S do not exhibit a specific cognitive deficit. Finally, to provide evidence showing P/S are more alike than unlike non-psychiatric people and thereby support a move towards normalising schizophrenia.

Thank you Dr Arnold Chamove for supervising my thesis and Kathy Macdonald for grammar checking the final draft. Thank you to the professional staff at the Hastings Psychiatric Unit, and Taharoto Psychiatric Unit in Auckland, who participated in the non-psychiatric comparison groups, and to the staff who provided assistance during cognitive testing. Thank you to the Hastings Psychiatric Hospital manger Rose Shooter, and charge nurse Karen Grainger, and Taharoto Psychiatric Unit manager Robin Shearer for allowing completion of the research in your communities. Thank you to Dr Jim Rankin from Hastings and Dr John Tompkinson and Dr Falicity Plunkett from Auckland for your consultation on participant suitability. Thank you Dewke from the Hastings Community Health Centre and Andrea Broadhurst from the Napier Community Health Centre for access to your communities. Thank you to the Hawke’s Bay Medical Research Foundation for providing Studentship Funding. HBMRF support of this research does not imply they support tobacco smoking. Special thanks to Judith Baxter for your time and effort during my application for the studentship grant.

Thank you to my family for their words of support and to Barbie Harding-Moller for your grammatical advice in the early stages of the thesis. Finally, thanks to my devoted partner Sarah-Jane for your love, analytical proof-reading and uncompromising support throughout the completion of this thesis. Without your spiritual richness and culinary delights my journey would have been far more arduous, lonely and hungry.

David. R. Galbraith
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