Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
THE ROLE OF UNUSUAL CONSCIOUS EXPERIENCES
IN MENTAL ILLNESS:

AN EXPLORATION GUIDED BY PROCESS MODELS OF SYMPTOM FORMATION
AND BY A HIERARCHICAL THEORY OF PERSONAL ILLNESS

A thesis presented in partial fulfilment
of the requirements for the degree of Master
of Arts in Psychology at Massey University

John Craster Barclay
2001
The relationship between non-clinical unusual conscious experiences and mental illness was explored cross-sectionally in 104 users of community mental health services. Morris (1997) organised unusual conscious experiences and psychiatric symptoms according to the cognitive process errors believed to underlie them, and highlighted the role in the formation of symptoms of difficulties in determining the intentions of the self and others. Foulds’s (1976) hierarchical theory of personal illness predicted that progressively more serious layers of symptoms would be experienced, in addition to those already present, as the ability to discern intentionality diminished. Participants completed the Delusions-Symptoms-States Inventory and the Conscious Experiences Questionnaire, and their primary clinicians provided Global Assessment of Functioning ratings. Foulds’s hierarchical theory was found to be valid, and the frequency of unusual conscious experiences and deficits in determining intentionality increased the higher participants were placed on his hierarchy. Global functioning, although unrelated to position on the hierarchy or symptom related distress (findings attributed to the failure to assess negative symptoms) was weakly associated with the frequency of unusual conscious experiences. Cognitive process errors were positively correlated with each other, consistent with the errors occurring in the course of a single underlying process. Predicted associations were found between: delusions of persecution and difficulties in determining the intentions of others; hallucinations and the attribution of imagined percepts to external sources; grandiose delusions and the attribution of the actions of others to the self; conversion symptoms and the attribution of actions of the self to external sources; dissociative symptoms and the attribution of percepts with an external origin to the imagination; and delusions (of grandiosity, persecution, contrition, and passivity) and the attribution of events to an unseen power or force. Predicted associations were not found for passivity delusions or delusions of contrition. The implications for dimensional conceptions of mental illness are discussed, and research recommended to isolate the trait component of unusual conscious experiences. The utility of the cognitive process and intentionality findings are discussed in terms of generating hypotheses for future research, and guiding cognitive behaviour therapy and clinical management.
ACKNOWLEDGEMENTS

Thank you to my supervisor, Malcolm Johnson, for his guidance and patience, and for helping me to “seize the day”. Thank you to Reg Morris and Alan Bedford for their ideas and encouragement. Thank you to John Spicer for his statistical guidance, and for reminding me that statistics can be fun.

My grateful thanks to the participants, for the generous sharing of their experiences and time. This thesis would not have seen the light of day without them. Likewise, thank you to the MidCentral Community Mental Health team, for making it happen, and for the fun along the way. Thank you also to the Schizophrenia Fellowship and Massey University for their financial assistance.

Thank you to my friends for their support. Veronique for her help in negotiating ethics. Lizzy Chambers for her company and assistance in preparing GAF training sessions. Julie Mickleson for cups of tea and common sense. Gina Madigan for her sense of perspective. Kirsten Forsyth for good cooking and belly laughs. Ian White for computer nous and an impressive ability to lose golf balls. Phil Straker for his generosity. Mike Hills for “Super 2” rugby encounters. Tony Clear for lunches in the sun. The “John Marks bridge club” for teaching me finesse. The yoga crowd for teaching me the advantages of flexibility. The list goes on. You all know who you are.

Thank you also to my family. To my mother, Judy, for her generosity, love, and wisdom. To the little people in my life - Bea, Shannon, and Lee - for giving me joy, and for not knowing what a thesis is. To my sisters Mary and Jenny, for knowing what a thesis is, and for being completely bewildered as to why I should do one.

Finally, special thanks to my darling Clare - I could not have done this without you – and to Henry, not yet born, for the hope you bring.
# Table of Contents

ABSTRACT.................................................................................................................. ii
ACKNOWLEDGEMENTS............................................................................................ iii
TABLE OF CONTENTS................................................................................................ iv
LIST OF FIGURES AND TABLES................................................................................ v

## CHAPTER 1: INTRODUCTION

1.1 Overview............................................................................................................. 1

## CHAPTER 2: UNUSUAL CONSCIOUS EXPERIENCES

2.1 Schizotypy – What is it?.................................................................................... 3
2.2 Clinical diagnostic criteria and blood relationship.............................................. 4
2.3 Psychometric schizotypy.................................................................................... 6
2.4 Categorical and dimensional perspectives.......................................................... 10
2.5 Predicting psychosis.......................................................................................... 12
2.6 Relationship to other clinical phenomena......................................................... 13
2.7 Synopsis............................................................................................................. 14

## CHAPTER 3: THE SYMPTOMS OF PSYCHIATRIC ILLNESS

3.1 The positive symptoms of schizophrenia......................................................... 16
3.2 The dimensions of schizophrenia.................................................................... 17
3.3 The dimensions of psychiatric symptoms generally............................................ 19
3.4 Why the focus on schizophrenia?...................................................................... 22
3.5 The benefits of a symptom approach................................................................ 22
3.6 The benefits of a hierarchical approach............................................................ 23
3.7 Foulds’s (1976) hierarchical model of psychiatric illness................................. 24
3.8 The present study.............................................................................................. 31

## CHAPTER 4: PROCESS MODELS OF SYMPTOM FORMATION

4.1 Process models of symptom formation.............................................................. 32
4.2 A process based questionnaire.......................................................................... 39
4.3 The present study.............................................................................................. 40

## CHAPTER 5: FUNCTIONING AND UNUSUAL CONSCIOUS EXPERIENCES

5.1 Functioning and unusual conscious experiences............................................. 42
5.2 The present study.............................................................................................. 44

## CHAPTER 6: THE PRESENT RESEARCH

6.1 The validity of Foulds’s (1976) hierarchical theory (Hypothesis 1)......................... 45
6.2 The relationship between the frequency of unusual conscious experiences and the severity of psychiatric symptoms (Hypotheses 2) ................................................................. 45
6.3 The relationship between deficits in the ability to determine intentionality and the severity of psychiatric symptoms (Hypotheses 3) ................................................................. 46
6.4 Relationships to functioning (Hypotheses 4 to 6) ................................................................. 46
6.5 Interrelationships between unusual conscious experiences (Hypotheses 7 and 8) ................................................................. 47
6.6 Relationship between cognitive processes and symptoms (Hypotheses 9 to 15) ................................................................. 48

CHAPTER 7: METHOD
7.1 Design ........................................................................................................ 49
7.2 Participants ................................................................................................. 49
7.3 Measures .................................................................................................... 51
  7.3.1 Unusual conscious experiences, cognitive processes, and awareness of intentionality:
    The Conscious Experiences Questionnaire (CEQ) ....................................... 51
  7.3.2 Psychological symptoms, Foulds's hierarchical theory, and symptom related distress:
    The Delusions-Symptoms-States Inventory (DSSI) .................................. 53
  7.3.3 Global functioning:
    The Global Assessment of Functioning (GAF) ........................................ 56
7.4 Procedure ................................................................................................... 57
7.5 Missing data and data management .............................................................. 61
7.6 Data analysis .............................................................................................. 61

CHAPTER 8: RESULTS
8.1 Descriptive statistics .................................................................................. 63
8.2 The role of gender: preliminary analyses ...................................................... 64
8.3 Hypothesis 1 ............................................................................................... 65
8.4 Hypotheses 2 ............................................................................................... 65
8.5 Hypotheses 3 ............................................................................................... 67
CHAPTER 9: DISCUSSION

9.1 Brief summary of the main findings .......................................................... 81
9.2 Descriptive statistics ..................................................................................... 82
9.3 Hypothesis 1 .................................................................................................... 83
9.4 Hypotheses 2 .................................................................................................. 84
9.5 Hypotheses 3 .................................................................................................. 84
9.6 Hypotheses 4 to 6 .......................................................................................... 85
9.7 Hypotheses 7 and 8 ....................................................................................... 89
9.8 Hypotheses 9 to 15 ......................................................................................... 90
9.9 An integration of the findings ......................................................................... 94
9.10 Implications of the research ......................................................................... 97
9.11 Limitations of the study and suggestions for further research ................. 98

REFERENCES ........................................................................................................ 100

APPENDICES

Appendix A: Information Sheet and Consent Form ........................................... 113
Appendix B: Clinician’s Information Sheet, Clinician’s Report Form, and the GAF .......................................................... 116
Appendix C: The Cover Sheet, the CEQ (Questionnaire I), the DSSI (Questionnaire II) .......................................................... 119
Appendix D: Means and standard deviations for males and females for the study variables; Levine’s test p values for equality of variances; and the t values applicable to group differences (two-tailed, and without adjustment for multiple comparisons) ................. 135
## List of Figures and Tables

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Patterns conforming with the Foulds hierarchical model (adapted from Bedford &amp; Deary, 1999)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>Combined mean scores of intentionality, intentions of others, intentions of self, and non-intentionality subscales, by the highest class of symptoms experienced in Foulds’s (1976) hierarchy.</td>
<td>69</td>
</tr>
<tr>
<td>3</td>
<td>Mean global functioning score by gender and class on Foulds’s (1976) hierarchy</td>
<td>70</td>
</tr>
<tr>
<td>4</td>
<td>Mean global functioning score by gender and broad DSM-IV diagnostic grouping</td>
<td>72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scales loading onto the “Aberrant Perceptions And Beliefs” factor</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>The positive symptoms of schizophrenia</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Factor analysis of schizotypy scales, compared with factor analyses of symptom scales (participants with schizophrenia)</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Factor analyses of symptom scales (heterogeneous groups of Psychiatric patients)</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>DSSI studies reporting the percentages fitting the hierarchy of classes of personal illness model</td>
<td>29</td>
</tr>
<tr>
<td>6</td>
<td>Kinds of monitoring error, the applicable domain, and applicable CEQ subscale</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
<td>Sample characteristics</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>Descriptive statistics, Cronbach alpha coefficients and test-retest statistics for the CEQ and its subscales.</td>
<td>52</td>
</tr>
<tr>
<td>9</td>
<td>Descriptive statistics for the study variables</td>
<td>64</td>
</tr>
<tr>
<td>10</td>
<td>Means and standard deviations of Foulds’s (1976) classes by total unusual conscious experiences, together with the significance of group differences (Bonferroni adjusted)</td>
<td>66</td>
</tr>
<tr>
<td>11</td>
<td>Means and standard deviations for Foulds’s (1976) classes of</td>
<td>68</td>
</tr>
</tbody>
</table>
scores on subscales measuring and not measuring intentionality, together with the significance of p values (Bonferroni adjusted).

12 Means and standard deviations global functioning scores for each gender in relation to the highest class satisfied on Foulds's hierarchy

13 Mean global functioning scores by DSM-IV diagnostic grouping and gender

14 Correlations between subscales of the Conscious Experiences Questionnaire.